SUMMARY OF ANALYSES CONDUCTED TO DETERMINE AT-SEA MONITORING REQUIREMENTS FOR MULTISPECIES SECTORS FY2013

INTRODUCTION

This document explains and justifies the appropriate level of at-sea observer coverage needed to monitor and enforce catch levels for fishing year (FY) 2013 for vessels participating in Northeast (NE) multispecies sectors. NOAA Fisheries is responsible for setting the required coverage levels for at-sea observer coverage of trips made by vessels on sector trips. In 2012 Oceana brought suit against NOAA Fisheries alleging that the agency failed to demonstrate that the observer coverage rate (percent of trips) set for FY 2012 would be sufficient to accurately monitor the catch and adequately enforce catch limits in the NE multispecies fishery. As part of a settlement of that suit, NOAA Fisheries has agreed to publish this summary of the analysis regarding the appropriate level of observer coverage for FY 2013.

BACKGROUND

In 2009 the New England Fishery Management Council (Council) submitted Amendment 16 (Amendment 16) to the NE Multispecies Fishery Management Plan to NOAA Fisheries for review. Amendment 16 was approved and implemented for the fishing year that began on May 1, 2010 (FY 2010). Amendment 16 was a major amendment that made a number of changes to the management program for the Northeast multispecies (groundfish) fishery. The provisions of significance to the establishment of at-sea monitoring requirements are the measures that established Annual Catch Limits (ACLs) and Accountability Measures (AMs) for specific components of the fishery, and the expansion of the sector management program.

ACLs are specified by species, unless a species is defined into separate stocks—in those cases, the ACLs are specified by stock. For instance, separate ACLs are specified for the Gulf of Maine cod stock and the Georges Bank cod stock, because those stocks are biologically distinct. ACLs account for the catch of a stock (landed fish and discarded fish), so in order to monitor ACLs, discards must be calculated.

The overall ACL for each stock is divided into sub-ACLs and/or sub-components that are allocated to the various fisheries that catch each stock. The largest sub-ACL for the groundfish fishery is for vessels in the commercial fishery, with other sub-ACLs allocated to recreational fisheries, non-groundfish fisheries that have incidental catches, and state waters fisheries.

Amendment 16 expanded and revised the fishing sector program that was originally established in 2004. The groundfish sector management system allows self-selecting groups of groundfish vessel owners to voluntarily form into groups, called sectors. Sectors are allocated a portion of each stock in the form of Annual Catch Entitlements (ACE). Sector ACE allocations are based on the collective fishing history of the sector members. Vessel owners who do not choose to join

a sector are grouped into a common pool fleet, which fishes under a different set of regulations than sector vessels (common pool vessels do not have annual ACE allocations). Both the sector vessels and common pool vessels fish under the sub-ACL for the commercial groundfish fishery, and both groups have their own sub-component of the commercial sub-ACL. Sector vessels have accounted for over 90% of the catch in the NE multispecies commercial fishery since FY 2010.

The groundfish that are allocated to the sectors as ACE consist of 13 species, some of which are further defined as stocks. The 20 allocated stocks are: Georges Bank (GB) cod, Gulf of Maine (GOM) cod, GB haddock, GOM haddock, GB yellowtail flounder, Southern New England/Mid-Atlantic (SNE/MA) yellowtail flounder, Cape Cod/GOM yellowtail flounder, plaice, witch flounder, GB winter flounder, GOM winter flounder, redfish, white hake, and pollock. There is a further suballocation of GB cod and GB haddock into Eastern GB and Western GB components—when this analysis refers to 22 stocks, the term includes these suballocations. The New England Fishery Management Council has proposed to allocate SNE/MA winter flounder to sectors in Framework 50 which, if approved, is anticipated to become effective on May 1, 2013.

Several groundfish stocks are not currently allocated to the sectors by Amendment 16, but ACLs are specified. Landings are prohibited for several of these stocks (ocean pout, windowpane flounder, SNE/MA winter flounder, and wolfish). Atlantic halibut is also a non-allocated stock, but limited landings are permitted. For non-allocated stocks, discards are monitored using the same methods used for the allocated stocks.

Each year, NOAA Fisheries is required to specify the necessary level of observer coverage for sectors. For FY 2012, which began on May 1, 2012, NOAA Fisheries determined that the total amount of observer coverage needed was 25 percent if trips. The Northeast Fisheries Observer Program (NEFOP) program provides at-sea observers to regional fisheries, including the multispecies fishery, and the coverage provided to sectors by that program partially satisfies the sector-specific at-sea monitoring requirement. As a result, the observer coverage level for sector fishery trips is determined by considering available NEFOP coverage and the additional ASM Program coverage necessary; thus, in these documents the term total observer coverage represents a combination of NEFOP and At-Sea Monitoring (ASM) Program coverage.

For FY 2012, NEFOP planned to provide 8 percent observer coverage to meet other program requirements, including the Standardized Bycatch Reporting Methodology (SBRM) requirements for the fishing year. This meant that an additional 17 percent observer coverage had to be provided for sector vessels by the ASM Program in FY 2012.

In 2012, an environmental organization, Oceana, brought suit against NOAA Fisheries challenging the approval of the 2012 sector operations plans primarily on grounds that the agency failed to adequately justify and explain that the at-sea observer coverage rate specified for FY 2012 would be sufficient to accurately monitor the catch in order to effectively enforce catch limits in the groundfish fishery. Oceana and NOAA Fisheries signed a settlement agreement on January 29, 2013, that specifies that the agency will publish this summary of the analyses regarding the appropriate level of at-sea observer coverage, to include:

1. A description of the data upon which the Service relied;
2. Summary tables or graphs of the data prepared by the Service, for data from FY10 forward;
3. Presentation of data from FY10 forward for each sector, by stock and gear, including the number of unique vessels, discarded pounds, number of subtrips, number of observed subtrips, percent of subtrips observed, realized CV, and percent observer coverage required to achieve the minimum CV30;
4. An explanation of the standards applied to the data to determine the appropriate level of coverage, including but not limited to, the target CV and the standards used to ensure observer data from both the NEFOP and at-sea monitors, is accurate and timely;

This document explains and justifies the appropriate level of observer coverage needed to monitor compliance with specified catch levels and contains the elements required by the settlement agreement. Both parties acknowledged in the settlement agreement that data would only be released at the level of resolution described if there is no violation of the data confidentiality requirements of Section 402(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). NOAA Fisheries has determined that presenting the data outlined in Item 3 would violate these confidentiality provisions because the level of detail would disclose confidential business information of individuals participating in the sector program. As a result, the data tables in Appendix E summarize the data by stock and gear only, because displaying the data by sector generates confidential information. Note that this differs from the information in Appendix B, which shows similar information presented in July 2012 by sector and stock area, without gear information. It is the combination of all three attributes (sector/gear/stock area) that refines the data to the level that confidential information is released.

The Fisheries Sampling Branch (FSB) at the Northeast Fisheries Science Center (NEFSC) collects, maintains, and distributes data from fishing trips that carry at-sea observers. FSB manages two separate but related observer programs: the Northeast Fisheries Observer Program (NEFOP) and the At-Sea Monitoring (ASM) Program. Although each program is tailored to meet specific monitoring objectives, the programs function similarly. Priorities for the NEFOP observer program are determined by national priorities (endangered or protected species), fishery management priorities determined by the New England and Mid-Atlantic Fishery Management Councils, and scientific priorities related to stock assessments. The ASM Program was implemented in FY 2010 to support the NE multispecies sector management program, and collects data to verify fishing vessel catch (landings and discards), by species, gear type and area, for the purpose of monitoring sector catch. NEFOP observers collect the same fishing vessel catch information, but with an additional focus on biological sampling of catch, including any incidental take of a marine mammal, seabird, or sea turtle. The NEFOP program's resources are finite, and the allocation of NEFOP coverage to fishing trips is guided by program priorities that include those determined by using a Standardized Bycatch Reporting Methodology (SBRM) that identifies relative fleet contribution to discards.

In developing Amendment 16, the Council anticipated that NEFOP might not have sufficient resources to effectively monitor sector catch, so Amendment 16 specified that starting in FY 2012, sectors would design, implement, and pay for ASM Program coverage necessary to monitor sector catch, unless the agency was able to provide the funding. The NEFOP program

provides at-sea observers to regional fisheries, including the multispecies fishery, and the coverage provided to sectors by that program partially satisfies the sector-specific at-sea monitoring requirement. As a result, the observer coverage level for sector fishery trips is determined by considering available NEFOP coverage and the additional ASM Program coverage necessary; thus, in these documents the term total observer coverage represents a combination of NEFOP and ASM Program coverage. This analysis assumes that the Amendment 16 requirement for sector to pay for ASM is not eliminated as proposed by the New England Fishery Management Council in Framework 48. This assumption is based on NMFS statements that it is unlikely that such a measure can be approved.

NOAA Fisheries provided funding for the full amount of the ASM Program coverage for sector vessels for FY 2010 and FY 2011. NOAA Fisheries was also able to provide funding for the additional ASM Program coverage of 17 percent required for FY 2012 (total at-sea observer coverage was 25 percent; 8 percent from NEFOP and 17 percent from the ASM Program). A full discussion of the operations of the NEFOP and ASM programs is provided in Appendix A, including a complete description of the measures established to provide data that is accurate and timely.

OBSERVER COVERAGE REQUIREMENTS FOR SECTORS

The regulation implementing requirements for the observer coverage rate standard reads as follows:

> Beginning in fishing year 2012, coverage levels for an at-sea monitoring program shall be specified by NMFS, but shall be less than 100 percent of all sector trips. Such coverage levels must be sufficient to at least meet the coefficient of variation [CV] specified in the Standardized Bycatch Reporting Methodology and accurately monitor sector operations. [50 CFR 648.87(b)(1)(v)(B)(*3*)(*ii*)].

Amendment 16 also stated that NOAA Fisheries may consider factors other than the CV standard when determining appropriate at-sea observer coverage levels to accurately monitor sector operations. The agency has interpreted the requirement to accurately monitor sector operations in the context of the National Standards and other requirements of the MSA, therefore, and determined that the appropriate level of observer coverage should be set at the level that meets the CV requirement at the overall stock level for all sectors and gears combined, and also minimizes the cost burden to sectors and NMFS, while still providing a reliable estimate of overall catch by sectors to monitor annual catch levels. This interpretation is justifiable in light of the requirement for conservation and management measures to be consistent with all National Standards. Specifically noted are National Standards 2, 7, and 8, which speak, respectively, to the need to use the best scientific information available; the need to minimize costs and avoid unnecessary duplication, where practicable; and the need to take into account impacts on fishing communities and minimize adverse economic impacts, to the extent practicable.

Moreover, this interpretation is consistent with the Council's proposed measures in Framework 48, which would amend the goals and objectives of the sector monitoring program. Framework 48 proposes that the prescribed CV should be determined at the overall stock level, which is consistent with the level NOAA Fisheries determined was necessary in FY 2012. Framework 48 also amends the goals of the sector monitoring program to achieve an accuracy level sufficient to

minimize effects of potential monitoring bias, "to the extent practicable while maintaining as much flexibility as possible to enhance fleet viability."

The level of observer coverage, ultimately, should provide confidence that the overall catch estimate is accurate enough to ensure that sector fishing activities are consistent with National Standard 1 requirements to prevent overfishing while achieving on a continuing basis optimum yield from each fishery. To that end, significant additional uncertainty buffers are established in the setting of ACLs which help make up for any lack of absolute precision and accuracy in estimating overall catch by sector vessels.

Pursuant to its interpretation of observer requirements described above, NOAA Fisheries has conducted analyses, and fully considered both the CV requirement and accuracy issues in determining, for FY 2013, the appropriate level of observer coverage that meets the CV standard at the overall stock level, and, minimizes the cost burden to sectors and NMFS, while still providing a reliable calculation of overall catch. To do this, the costs and benefits of providing additional coverage, particularly in light of the requirement for sectors to fund the coverage if the agency cannot, were taken into account. The analysis is based on trip-level observer data collected by NEFOP and ASM Program observers for FY10-FY11, and on the sector catch figures compiled by the Northeast Regional Office (NERO) using the Data Matching and Imputation System.

NOAA Fisheries concludes that for FY 2013, which begins on May 1, 2013, at-sea observer coverage of 22 percent of trips will provide a reliable estimation of catch needed to monitor sector ACE and ACLs while still meeting at least the required CV30 precision standard, notwithstanding potential sources of bias inherent in the at-sea observer program.

In deriving this level of observer coverage, the cost of coverage to the industry and the agency was considered--consistent with NS 7 and 8. The NEFOP program plans to provide 8 percent observer coverage to meet other program requirements, and the remaining 14 percent coverage must be provided by the ASM Program. Sectors are responsible for the costs of the ASM Program coverage to the extent it is not funded by NOAA Fisheries. For FY 2013, the seagoing component of the ASM Program sea-days (4,104 sea days) is estimated at $2.5 million total. The costs are based on a minimum estimate of $600/day to cover the seagoing component of an ASM Program observer only—the costs do not reflect other necessary components of the program such as data processing, data auditing, administration, and the identification of trips required to carry ASM Program observers.

Calculating Overall Catch

NOAA Fisheries relies on a number of data sources to monitor groundfish catch: groundfish vessels are required to have an operational Vessel Monitoring System (VMS) and must use VMS to notify the agency when they are taking a groundfish trip; vessels must also submit vessel logbook reports, which are used to determine catch, gear and fishing area; depending upon their fishing activity, some vessels are also required to submit daily VMS catch reports to further refine catch by fishing area; dealers are required to report all purchases from groundfish vessels, which are used to determine landings. The detailed discard information provided by at-sea observers is critical for determining total catch (pounds, gear used, stock area).

Discard Calculation

The way that discards are calculated depends on whether a sector fishing trip is observed or unobserved by an at-sea observer. On trips with observers, if 100% of the hauls are observed, the actual pounds of observed discards are added to the landings to calculate total catch of each stock for the trip. If less than 100% of the hauls are observed, the discards from the observed hauls are used to calculate the amount of discards for the unobserved hauls and these trip-specific discards are added to the landings to determine the trips catch (catch = landings + observed discards + calculated unobserved discards).

Unobserved trips have discards calculated for each trip based on data from observed trips. To calculate discards, all groundfish trips are assigned to a stratum, which is a way to group trips that are similar to one another. Each stratum is made up of all of the trips made by members of the same sector (or common pool), that used the same gear type and fished in the same stock area.

The data for all of the observed trips in a stratum are used to calculate discards on the unobserved trips in that stratum. A discard ratio is calculated for each stock using the data from all of the observed trips within the stratum. For example, if 100 pounds of pollock was discarded on the observed trips within a specific stratum, and 10,000 pounds was landed of all species, then the discard ratio would be 0.01 (100/10,000 = 0.01). This discard ratio would be used to calculate the amount of pollock discarded by the unobserved trips in the stratum. For example, an unobserved trip that landed 3,000 pounds of all species would also be calculated to have discards of 30 pounds of pollock (0.01 discard ratio * 3,000 lb = 30 lb).

In order to develop a robust method for discard estimation, a peer review was conducted in 2010 of the proposed method of calculating discards. The peer review concluded that a cumulative method, that re-calculates discards for the each stratum using updated discard ratios over the course of the fishing year, should be used. The peer review report and a description of the specific methods used to calculate discards for the sector program are respectively posted at:

http://nefsc.noaa.gov/groundfish/discard/

http://www.nero.noaa.gov/nero/regs/infodocs/DiscardCalculations.pdf

SUMMARY OF OBSERVER COVERAGE REQUIREMENTS ANALYSIS

Consideration of the CV30 precision standard

Based on these methods for calculating catch and discards, NOAA Fisheries must determine what level of observer coverage is needed to achieve at least the CV30 precision required by Amendment 16 in order to calculate discards for each stock, for all sectors and gears combined. Precision is a qualitative term that address the uncertainty of an estimate. The quantitative measure that is used to define an acceptable level of precision for discard estimation by Amendment 16 is a CV of the total discards of 30 percent. The CV is the ratio of the standard error of the estimate divided by the mean value. For the purposes of this report, CV is expressed

as a percentage and denoted as CV30. Amendment 16 did not specify how the CV30 requirement should be applied to evaluate discards. While developing the observer coverage requirement for FY 2012, NOAA Fisheries considered a number of factors to determine whether CV30 should be attained for each sector/stock allocation (the ACE level), or for each stock for all sectors combined. It determined that coverage should be specified to meet the CV requirement at the stock level for all sectors combined. That determination has been made for FY 2013 as well, for the reasons discussed in this document. The aggregate analysis for determining the precision standard incorporates the more refined strata (stock, sector, gear) used to support ACE monitoring and ACE trading at the individual sector level, and allows a reasonable level of precision across those strata.

The CV is defined as the ratio of an estimate's standard deviation to its average (mean, or expected) value. The standard deviation, in turn, is a measure of how much the estimate is expected to vary from the average value. The smaller the standard deviation, the closer individual estimates will tend to be to the average value. The CV can be defined as a measure of an estimate's consistency (precision, or reproducibility) relative to its average value.

Given a CV30, an estimate with an average of 100 units would have a standard deviation of 0.30 * 100 = 30 units. Assuming a normal distribution, a 95 percent interval for the estimate would be 100 ± 1.96 * 30, or between 41.2 and 158.8 units. Increasing the risk to a CV40 would give a 95% interval of 21.6 to 178.2 units.

For calculating groundfish discards, this point is directly related to the amount and consistency of the discards made by different gear types used in the fishery. For the same CV, a gear type that generates a high amount of discards consistently in relation to its expected number of discards will have a lower required observer coverage rate than a gear type that generates a small amount of discards inconsistently in relation to its expected number of discards.

Holding the performance of the estimate consistent, the way to increase precision and reduce the CV is to increase the sampling rate (observer coverage). However, the gain in information is not linear. Figure 1 illustrates how the estimate of the estimate's uncertainty would decrease to zero as percent coverage of a fixed normal population increases to 100 percent. The gain in information and precision will decrease as percent coverage increases. The graph is intended to illustrate the standard pattern in decreasing information and not to define a specific optimum coverage level.

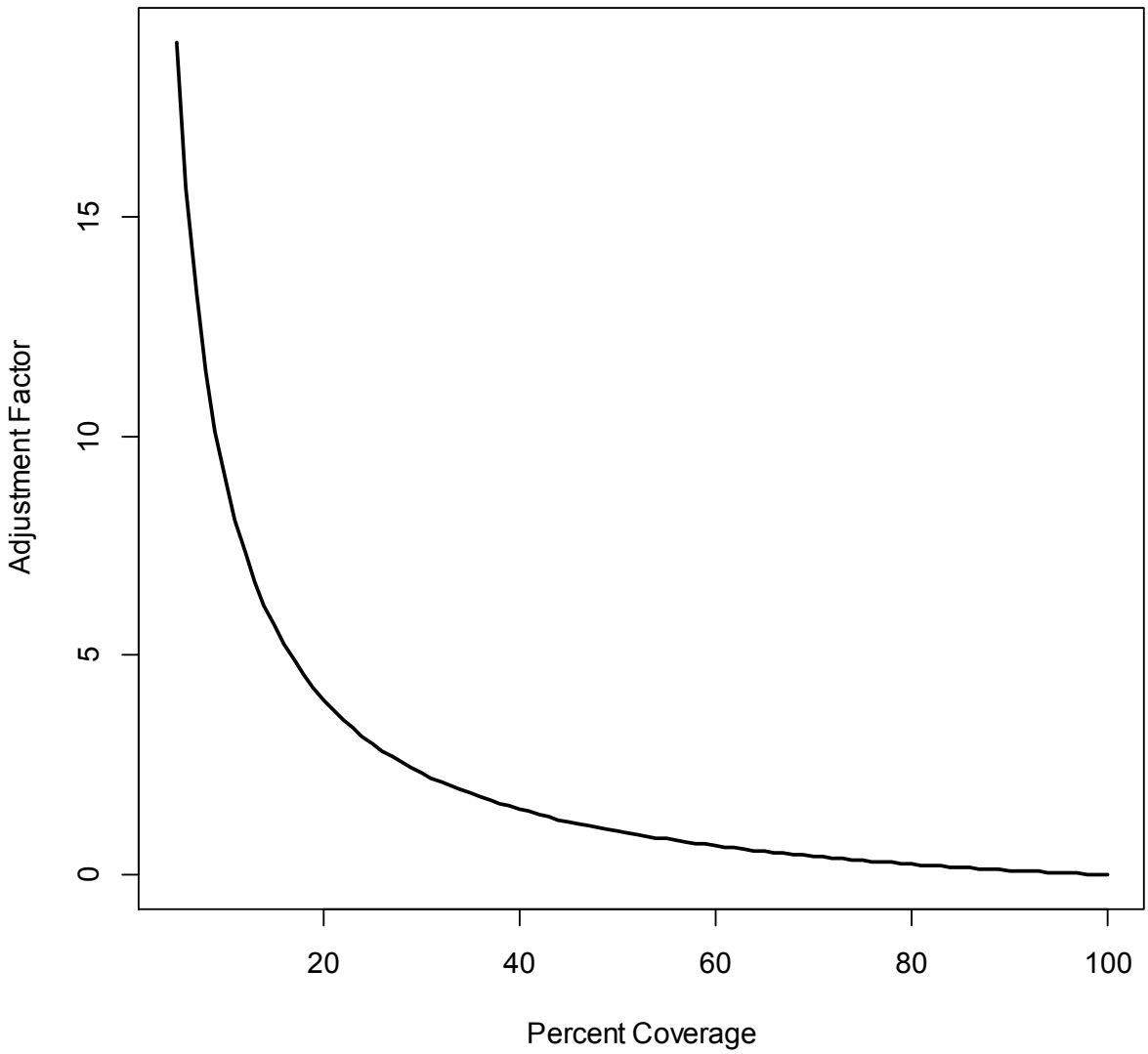

Figure 1: Standard Deviation Adjustment Factor by Percent Observer Coverage

When calculated at the level of individual sector and stock allocation, the observer coverage levels must be very high (near 100%) to attain the 30% CV in every case. This approach could be implemented in one of two ways: (1) ASM coverage could be set at near 100% for all sectors, or (2) ASM coverage could vary by sector.

NOAA Fisheries determined that requiring nearly 100% observer coverage for all sectors would create unnecessary costs and be inconsistent with the applicable National Standards and the Amendment 16 provision that observer coverage levels be less than 100%. A stratum is made up of trips by members of the same sector, or members of the common pool, with the same gear type and in the same stock area. With 16 sectors generating discards, 22 stocks, and 7 gear

types, there are 2,464 (16 x 22 x 7) possible strata. There was fishing activity in FY 2011 in 863 strata of the 2,464 possible strata. In some of the strata, activity was very limited. Requiring each stratum to receive enough monitoring to calculate a discard ratio with a CV30 through simple random sampling would require high level of observer coverage and high resulting costs. As shown in Figure 5, there is a trade-off when costs are considered in terms of the associated increase in precision because the amount of total discard generated in strata with limited activity is minor in terms of pounds of fish discarded.

FY 2011 data was examined in detail to evaluate the extent to which unobserved discards affect total catch. In FY2011 (Figure 2), the total discards of the allocated groundfish stocks ranged from 0.7% of the total calculated catch for Georges Bank Winter Flounder to 20.4% for Georges Bank East Cod. The catch of non-allocated groundfish stocks is theoretically composed entirely of discards, because no landings are allowed. The exception is Atlantic halibut because limited landings are allowed; for that stock the catch was 75.1% discard in FY 2011. Discards as a percentage of stock sub-ACLs are given in Figures 3A and 3B. Figure 4 further examines FY 2011 discards by showing pounds by stock, and percent of total discards for each stock.

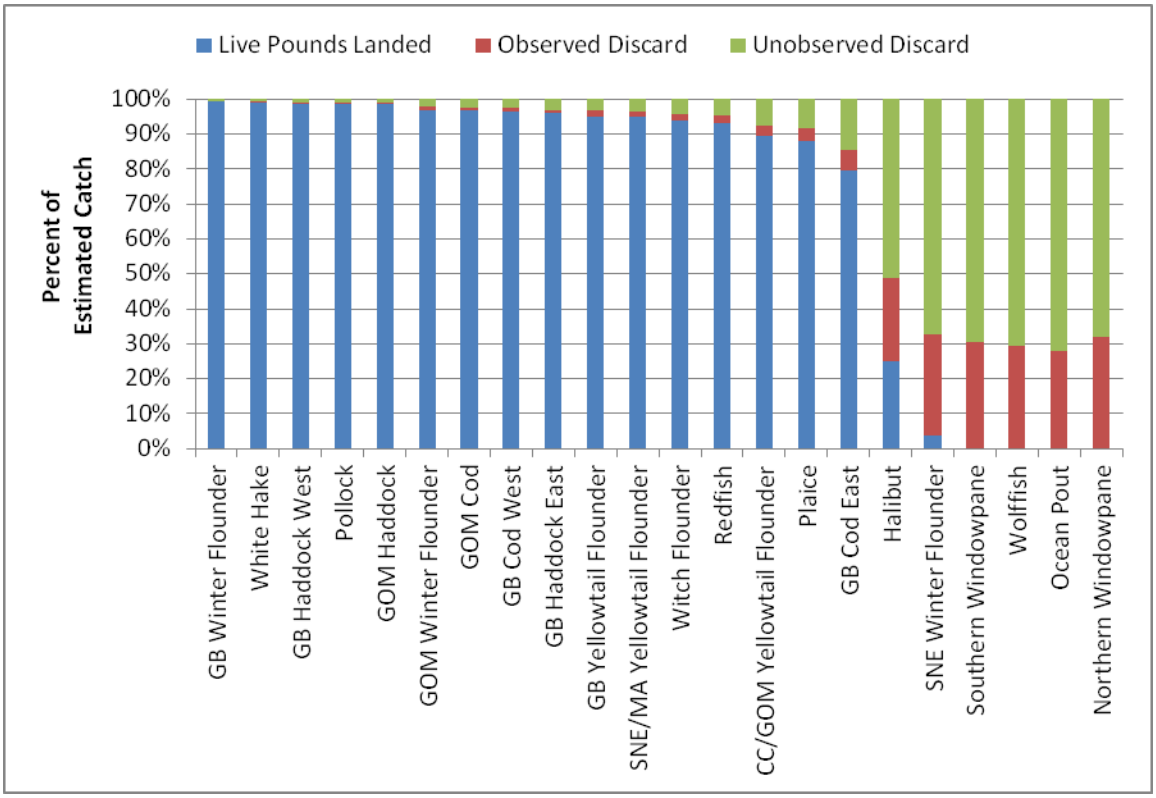

Figure 2: Fishing Year 2011 Groundfish Discards as a Percentage of Catch

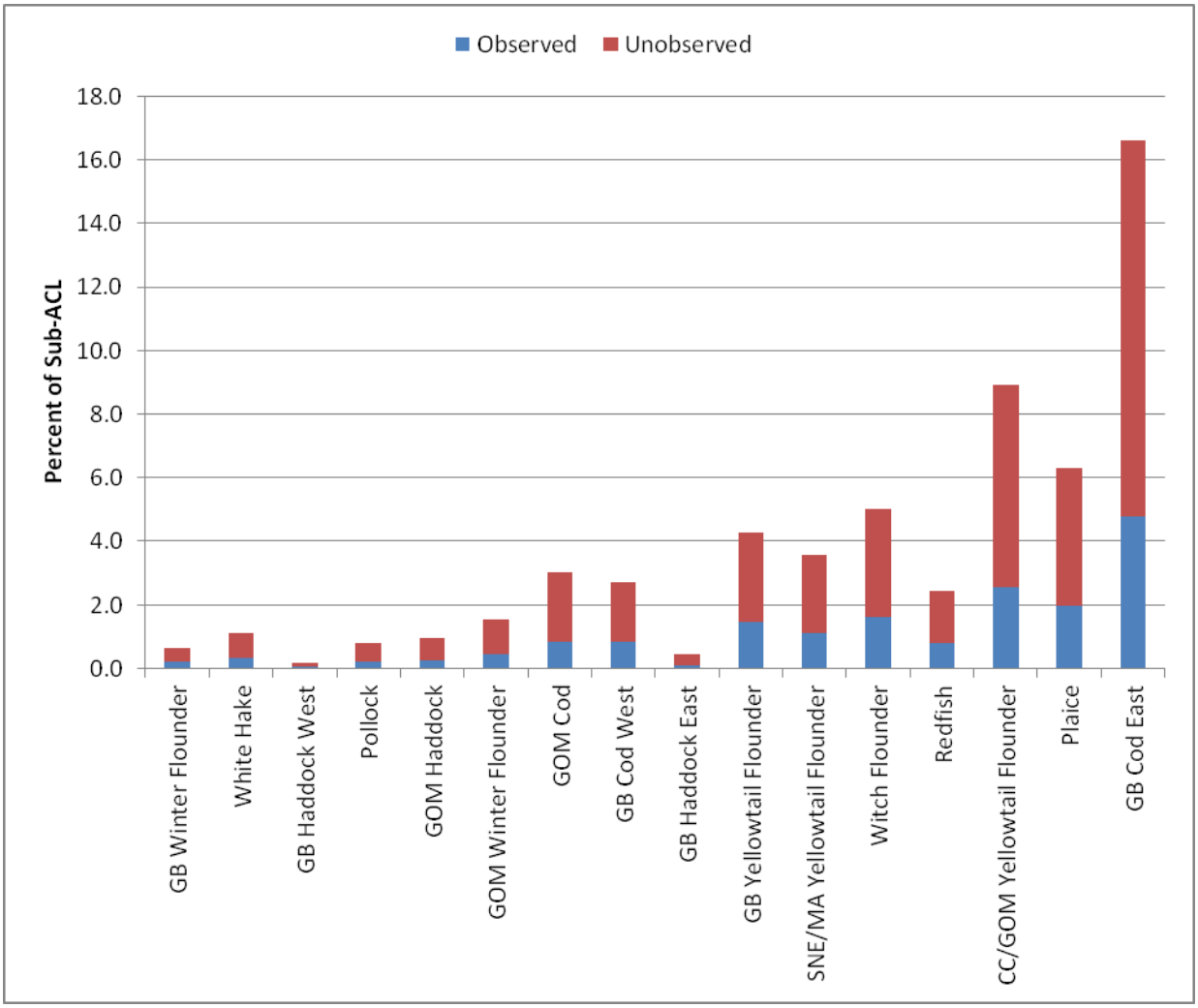

Figure 3A: Fishing Year 2011 Allocated Groundfish Discards as a Percentage of Sub-ACL

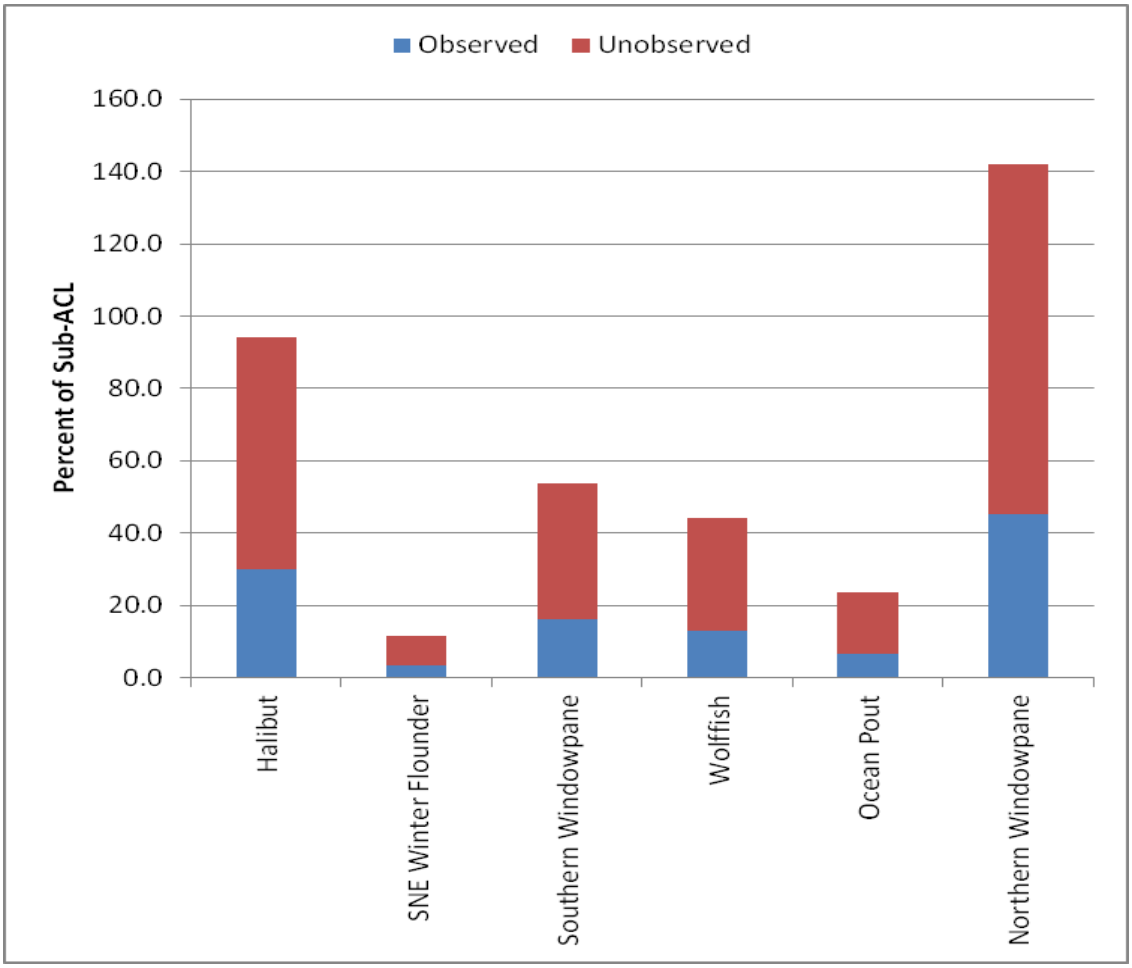

Figure 3B: Fishing Year 2011 Non-allocated Groundfish Discards as a Percentage of Sub-ACL

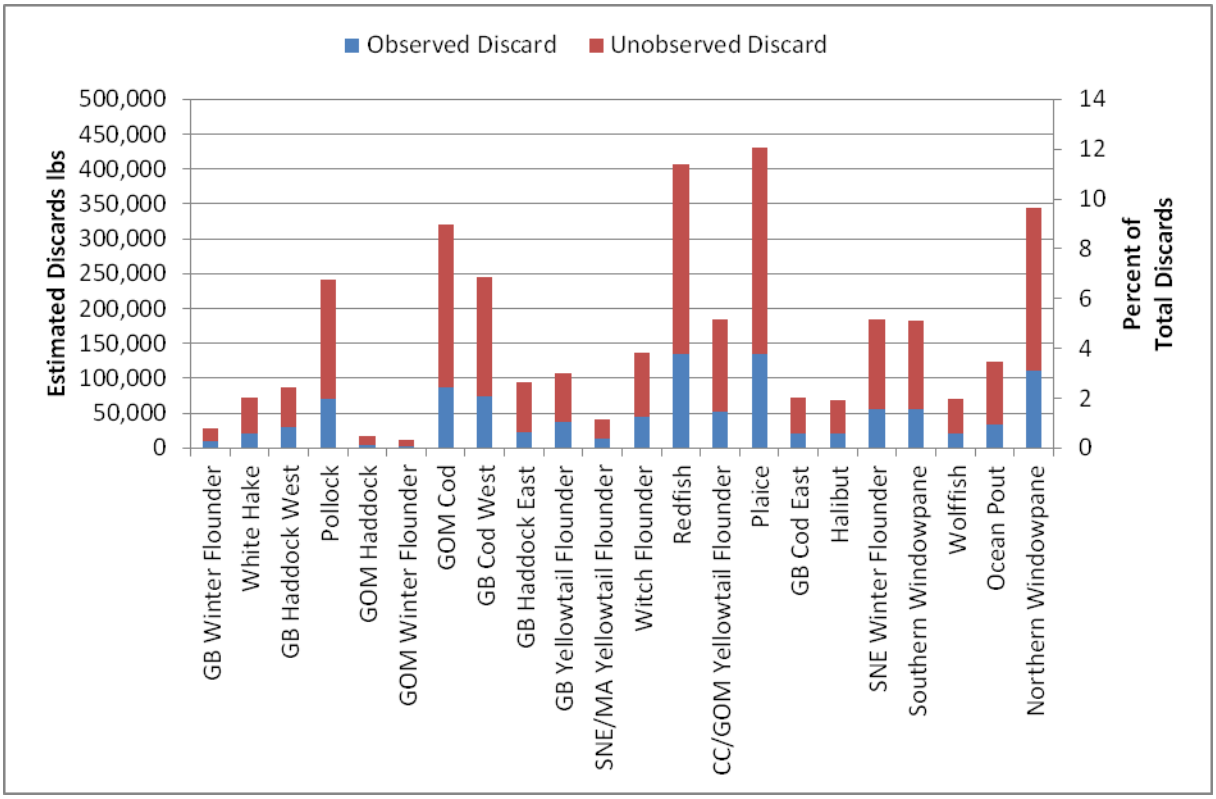

Figure 4: Fishing Year 2011 Discards (Live lbs and Percent of Total Discards)

The data for both FY 2010 and FY 2011 was used to calculate the realized aggregate stock-level CVs each year, and the percent of trips that would have had to have been assigned an at-sea observer to achieve a CV30 for the stock, for all sectors combined. The realized at-sea observer coverage for the entire sector fishery as a whole (at the sub-trip level) was 32% in FY 2010 and 27% in FY 2011. Tables 1A and 1B show the realized stock-level CVs each year.

Table 1A: FY2010 Realized Groundfish Stock CV		
Stock	Realized Stock CV	Percent Observer Coverage Required for CV30
GB Cod East	9.73	3.9
GB Cod West	6.27	2.16
GOM Cod	4.74	1.33
Plaice	4.96	1.23
GB Winter Flounder	16.29	8.77
GOM Winter Flounder	10.56	6.19
Witch Flounder	5.76	1.6
CC/GOM Yellowtail Flounder	8.66	4.19
GB Yellowtail Flounder	11.13	4.29
SNE/MA Yellowtail Flounder	13.95	10.44
GB Haddock East	12.73	6.43
GB Haddock West	13.31	9.05
GOM Haddock	9.94	5.56
White Hake	9.21	4.15
Pollock	8.01	3.19
Redfish	11.51	6.15
SNE/MA Winter Flounder	10.61	7.2
Southern Windowpane	9.12	4.75
Northern Windowpane	13.22	8.08
Ocean Pout	9.69	4.58
Halibut	6.34	2.01
Wolffish	6.66	2.18

Table 1B: FY2011 Realized Groundfish Stock CV		
Stock	Realized Stock CV	Percent Observer Coverage Required for CV30
GB Cod East	15.44	11.29
GB Cod West	9.85	4.09
GOM Cod	4.74	1.04
Plaice	4.36	0.76
GB Winter Flounder	27.67	21.71
GOM Winter Flounder	8.81	3.5
Witch Flounder	5.11	1.06
CC/GOM Yellowtail Flounder	6.9	2.07

GB Yellowtail Flounder	10.36	3.69
SNE/MA Yellowtail Flounder	9.39	4.15
GB Haddock East	17.36	13.97
GB Haddock West	10.1	4.37
GOM Haddock	9.11	3.68
White Hake	7.76	2.36
Pollock	6.91	1.88
Redfish	8.98	3.11
SNE/MA Winter Flounder	12.85	7.74
Southern Windowpane	8.22	3.23
Northern Windowpane	9.04	3.05
Ocean Pout	9.38	3.36
Halibut	6.95	1.93
Wolffish	7	1.9

Tables 1A and 1B demonstrate several important points:

- In FY 2010, each stock's CV was well under CV30, indicating that the calculated discards for the stocks were more precise than required by the FMP.
- In FY 2010, total observer coverage of 11% would have been sufficient to achieve CV30 for every stock.
- In FY 2011, only one stock CV approached the CV30 level (GB winter flounder).
- In FY 2011, total observer coverage of 22% would have been sufficient to achieve CV30 for every stock.

The information from these two fishing years provides the best available information for analysis because these are the most recent completed fishing years, and had the highest at-sea observer coverage ever available for the multispecies fishery. Therefore, this data was used to recommend a level of total at-sea observer coverage that will be sufficient to achieve CV30 for each stock using the observer program's random sampling method. In making both the FY 2012 and FY 2013 recommendations, NOAA Fisheries considered the feasibility of establishing different coverage requirements for each sector or for other sub-stock strata such as gear type was considered. However, this approach would vastly complicate the deployment of observers on appropriate trips, and would require substantial changes to the observer deployment program. This issue is discussed further below.

Using the data from the two most recent complete fishing years as the best available information, 22 percent total at-sea observer coverage would assure that the discards for each stock achieve CV30. This is based on the analyses of the two-year period that indicates that the GB winter flounder stock in FY 2011 required the highest coverage level (22%) of any stock to achieve CV30. This level represents the point at which additional coverage, while providing marginal improvement in precision, would not be consistent with National Standards 7 and 8, which relate to reducing costs and mitigating unnecessary impacts on fishing communities that would be affected if sectors have to pay for coverage provided by the ASM Program.

Figure 5 below was used this year, and a similar figure was used last year, to compare costs and benefits associated with various observer coverage levels to support the coverage determination. The aggregate data presented in the graph is composed of the strata level data used to monitor the fishery (stock/sector/gear). At the individual strata level, some CVs are higher than CV30 and some CVs are lower than CV30. This graph focusses on evaluating the extent to which an overall coverage level will achieve a CV30, and the associated costs of various coverage levels. Appendix E of this document presents individual graphs for each stock.

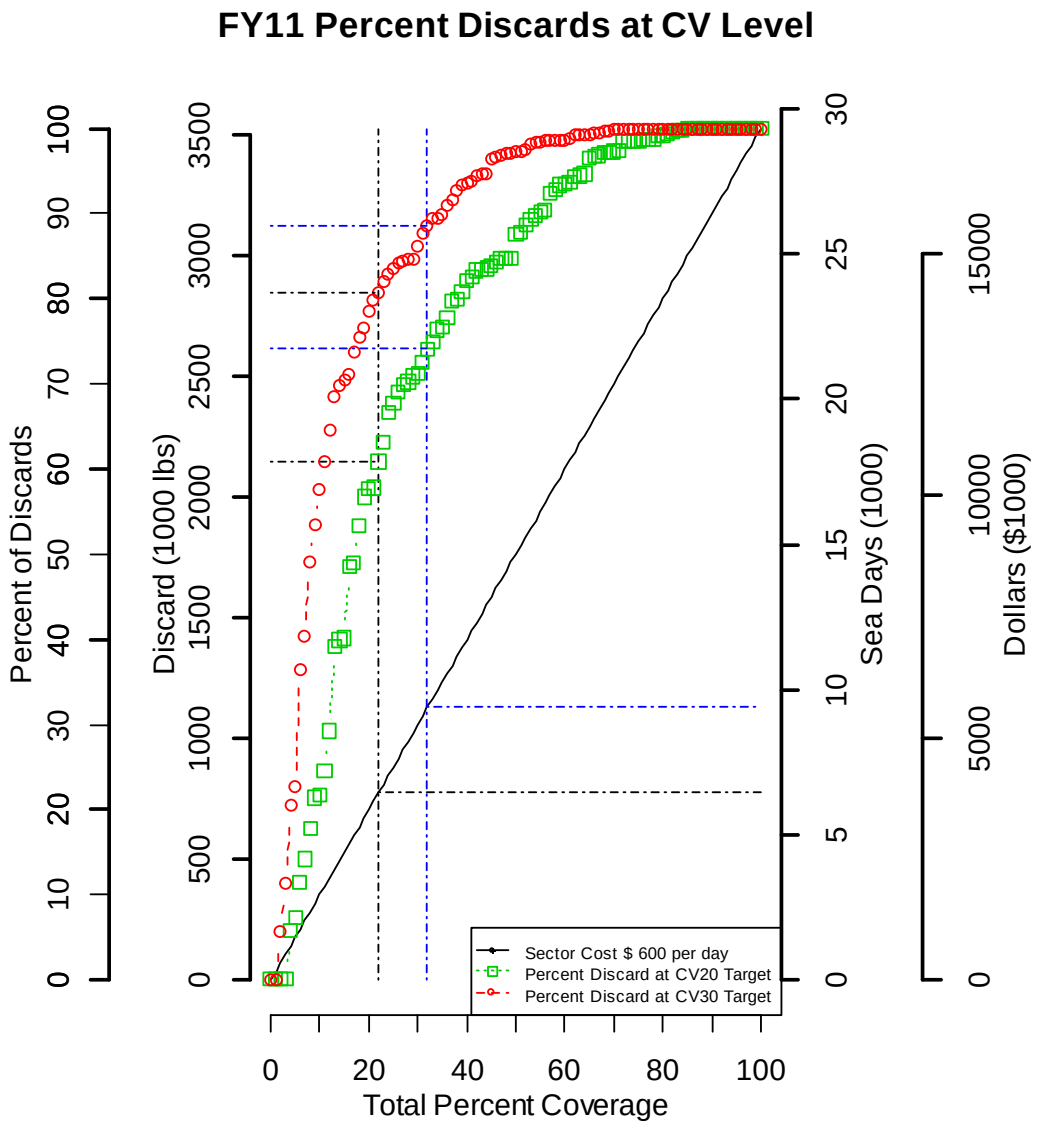

Figure 5. FY11 Percent Discards at CV Level

The horizontal axis of Figure 5 presents the total observer coverage rates, including the 8 percent NEFOP coverage which is funded by the agency. The black vertical line indicates the recommended 22 percent observer coverage level. The blue vertical line indicates the realized level of observer coverage achieved in FY 2010 at the sub-trip level of 32 percent.

Each of the vertical axes provide a scale against which to measure the impacts of various coverage levels on the catch of all stocks by the group of sectors. The red curve shows the percent of discards estimated at CV30 or better. To provide an indication of the extent to which the CV is more precise, the green curve shows the percent of discards estimated at CV20 or better. As the total percent observer coverage increases, the percent of discards estimated at a given CV level increases. The discard information on the left-hand axis shows the change in both the relative percent of discards and the relative amount of discards (000's lb) for which the respective CVs are achieved as the overall observer rate is increased. The right-hand vertical axis provides a scale to estimate the sea days and costs of various observer levels. Note that the costs estimated off of this graph include the 8 percent coverage that is planned by the NEFOP program, as well as the ASM Program coverage that must be funded separately. The costs are based on a minimum estimate of $600/day to cover the seagoing component of an observer only—the costs do not reflect other necessary components of the program such as data processing, data auditing, administration, and the identification of trips required to carry observers.

The graph evaluates the extent to which an overall coverage level will achieve a CV of 30 percent, and it is implicit that the selected coverage level will result in some CVs higher than CV30 and some lower than CV30 at the stock/sector/gear strata level.

The figure supports the following conclusions about integrating the observer coverage level with the precision level and associated program cost:

- Total observer coverage of 22 percent would be sufficient to estimate 81 percent of the discarded pounds of all stocks, for all sectors combined, with a precision level of CV30 or better;

- Total observer coverage of 22 percent would be sufficient to estimate 61 percent of the discarded pounds of all stocks, for all sectors combined, with a precision level of CV20 or better;

- Total observer coverage of 22 percent would require 6,500 days of at sea observer coverage at an assumed seagoing cost of $600 per sea day, with total cost of $3.9 million. This cost estimate does not reflect other NEFOP costs incurred for both NEFOP and ASM Program observers, such as data processing, data auditing, administration, and the identification of trips required to carry observers.

- For comparison, increasing total observer coverage to 32 percent of trips (the realized coverage level in FY 2010) would increase the percentage of pounds from 81 percent to 89 percent—this is the percentage of all stocks, for all sectors combined, estimated with a precision of CV30 or better. The increase of 8 percent would equate to about 276,294 lb

of fish, and would require an additional 3,000 days of at-sea observer coverage, costing about $1.8 million (about $6.52/lb of fish).

Examining the coverage by strata (sector/gear/stock area) using FY 2011 data shows that there was fishing activity in 863 of the 2,264 possible strata. Figure 6 illustrates this analysis:

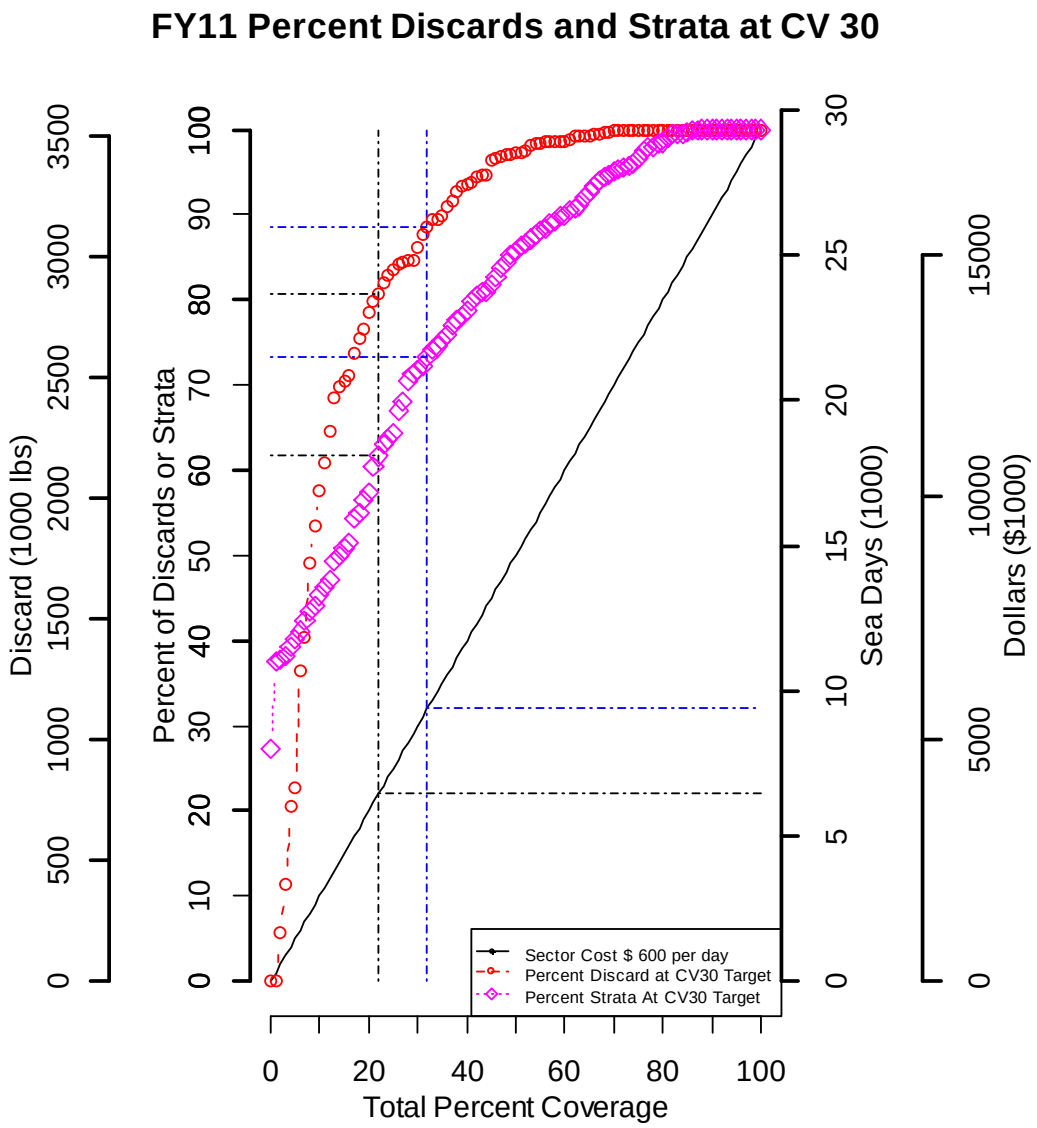

Figure 6. Percent Discards and Strata at CV30 in FY 2011

In Figure 6, the horizontal axis presents the total observer coverage rates, including the 8 percent NEFOP coverage which is funded by the agency. The total level of observer coverage required for FY 2013 (22 percent of trips) is compared to the realized level of observer coverage achieved in FY 2010 (32 percent of trips). The vertical axes show the same values as in Figure 5. The

orange curve shows the percentage of total discards calculated at a precision level of CV30 or better. The red curve shows the percentage of strata with FY 2011 fishing activity for which discards are calculated at a precision level of CV30 or better. The graph illustrates the following points:

- Total observer coverage of 22 percent would be sufficient to calculate the discards in 61 percent of the individual strata (sector/gear/stock area) with CV30 precision or better;
- Total observer coverage of 32 percent would be sufficient to calculate the discards in 73 percent of the individual strata (sector/gear/stock area) with CV30 precision or better;
- The shore-side costs of increasing the total observer coverage level from 22 percent to 32 percent would be $1.8 million, as noted in the discussion of Figure 5.

There were 863 strata (sector/gear/fishing area) with fishing activity in FY 2011. While there is no requirement to evaluate the CV30 standard for each sector ACE, this analysis indicates that the discards for 526 strata (863 * 0.61) are expected to be calculated with CV30 or better. With 16 fishing sectors, each allocated 22 stocks, the sectors have a total of 352 ACE allocations. NOAA Fisheries concludes that there is a reasonable expectation that this coverage achieves CV30 at the ACE level in many cases, especially for those ACEs where the discard is a small proportion of the catch (see Figure 2).

Setting the Same Observer Coverage Rate for All Sectors

NOAA Fisheries determined that the alternative that would have established different observer coverage requirements for each of the sectors would greatly complicate the implementation of the deployment of observers on appropriate trips. As described in Appendix A, all at-sea observers are deployed by the observer program to ensure that trip selection is random, and that the coverage provided through the ASM Program is integrated into overall coverage requirements. If observer deployment for sectors also required the trip selection process to achieve different coverage rates for the 16 sectors that have active vessels, this would add substantial amount of complexity to the program, and would require substantial program changes, with associated costs but only marginal improvement in our estimation of catch at the ACL level.

It could also require regulatory changes to make some aspects of trip declarations binding upon vessel operators. For example, if observer coverage requirements were determined based on the gear used, assuring coverage by gear would mean that a vessel owner would have to declare to the observer program the gear to be used and be required to use only the declared gear on the observed trip, to assure that the coverage requirement was met.

In addition, specifying different coverage requirements for each of sector would have differing economic impacts on similar vessel operations solely because of their sector membership. The CV measures the precision of the calculated discards, and varies depending on the consistency of individual trip activity in comparison to the average trip activity within a stratum. This approach could have imposed additional observer costs on a group of gillnet vessel owners in Sector A solely due to the consistency of their discard rates, not the pounds of fish they discard. A group of gillnet vessel owners in Sector B could have more consistent discard rates, but higher discarded poundage, and the consistency of their activity would mean a lower coverage level

would be sufficient to attain a CV30. These concerns about inequitable impacts were a major factor in the decision to determine observer coverage level by aggregating all of the sectors. This is consistent with the Council's proposed Framework 48, which specifies that the CV should be applied at the stock level.

These competing requirements are best balanced by specifying the overall observer coverage rate at a level that meets the 30% CV for each stock for all sectors combined. This means that the observer coverage will likely result in CVs higher than 30% for some stocks at the individual sector level. The PDT reviewed a detailed analysis of realized CVs by sector and stock for FY 2010 and FY 2011 at a meeting held July 27, 2012. That analysis and the meeting minutes are presented in Appendix B. The values in these tables vary to a limited extent from the CV analysis conducted for the observer coverage determination because, in the intervening time, there have been some data corrections, and some corrections to the methodology used to calculate CVs. The current method treats the performance of each gear type as independent of other gear types. The previous method averaged the performance of all gear types in determining the CV of a stock..

The tables in Appendix B show the realized CV calculations that were reviewed by the Council's Groundfish Plan Development Team (PDT) in July 2012. The tables provide some illustrative comparisons of the cost-benefit considerations of additional observer coverage. For instance, Appendix B, Table 2A shows FY10 realized groundfish CVs by sector and stock. For the Fixed Gear Sector, the CV of 8.07 for the catch of GB West cod was well under the CV30 level, while the CV of 80.9 for GOM haddock was well over the CV30 standard. A literal interpretation of the application of the CV30 requirement could require increased observer coverage to achieve a CV30 for GOM haddock, despite the fact the total discard of haddock was calculated to be only 9 lb.

The NE multispecies FMP includes control rules to account for scientific uncertainty when setting stock ABCs, and to account for uncertainty regarding the effectiveness of management measures when setting ACLs. These buffers are expected to help account for several uncertainties, including ACE carryover from FY 2012 to FY 2013.

Consideration of accuracy

While it is required that the overall observer coverage level must meet at least a CV30 precision standard, that level of coverage also must produce a reliable discard estimate when factoring in possible observer bias. In order to assure accuracy (i.e., zero bias), 100% observer coverage would be required. Complete coverage is not only prohibited by Amendment 16, it would be expensive, not in the public interest, and inconsistent with the relevant National Standards discussed above.

The primary concern about the accuracy of calculated discards is the potential for bias in observer data. Bias is concerned with systematic error and is a quantitative term describing the difference between the measurements of a process and the true value of the process. The concerns about bias in calculated discard focus on the potential for systematic differences between these measured values on trips that carry an at-sea observer and trips that are conducted without an at-sea observer on board. In other words, are trips with observers on board

representative of the true magnitude of discarding that occurs on trips when observers are not on board?

If the presence of an observer creates systematic error (bias) in the estimate of the discard rate, the calculated total discards will be incorrect. More importantly, if the bias is large enough, the true amount of discard will fall outside of the estimated confidence interval of the discard total. Potential sources of bias in the groundfish discard estimation can include: (1) sampling bias caused by procedures and problems with sample vessel selection or factors preventing the deployment of observers on selected vessels; and (2) observer bias (i.e., measurement errors caused by changes in fishing behavior in the presence of observers).

During FY2012, this issue was examined by the Council's PDT. The PDT discussed the matter at a meeting on July 27, 2012 (see Appendix C). In brief, the PDT concluded that a fixed CV standard implies that it is just as important to have a precise value for a small number as it is to have a precise value for a large number. If the concern is accurate calculations of sector catches for each stock, this may not be the case. In examples considered by the PDT, the PDT noted that to achieve the target CV, many more trips would have to be observed to get a precise calculation of a small amount of discards, and this would not be cost effective. The PDT concluded by noting that a biased discard calculation will have more influence on the accuracy of sector catches than the CV standard. It is therefore critical to have enough coverage that the presence of bias can be detected; ideally coverage should provide a way to calculate the amount of bias.

Some preliminary work was done by Chad Demarest, an economist at the Northeast Fisheries Science Center and Groundfish PDT member, to determine if there were indications of an observer effect (see Appendix A). Such an effect could result in either systematic or localized biases, meaning that the observer data used to generate discard estimates may not be representative. The analysis essentially looked for differences in performance when a vessel carried an observer and when it did not. Trip/vessel combinations were included in the analysis when an individual vessel had at least three sequences of three or more trips in any 21-day window and when those sequences did not straddle a fishing year. The analysis was limited to vessels fishing with trawl or gillnet gear.

Three different statistical tests were used to evaluate the significance of differences in eight trip attributes (metrics) that may indicate behavior change in the presence of an at-sea observer. The information for these metrics was drawn from the Vessel Trip Reports (VTRs) submitted by vessel operators for trips landing at least one pound of groundfish from 2007-2012. Revenue was calculated by multiplying poundage from VTRs by fish prices obtained from federal dealer data.

The eight metrics are:

1. Total landed pounds;
2. Total roundfish pounds;
3. Total groundfish pounds;
4. Total non-groundfish pounds;
5. Total cod pounds;
6. Total groundfish value;

7. Total non-groundfish value;
8. Trip duration.

Mr. Demarest concluded that fishing behavior across the eight metrics was variable, but that statistically significant differences in reporting were observed across all eight metrics and that the strength of the statistical signal varied depending on how the data were parsed. The variability in reported behaviors with and without an observer may be due to natural fluctuations or to variable incentives that lead to altered fishing behavior. For example, prior to the implementation of stock-level quotas for vessels fishing in sectors, there may have been an incentive to discard species such as cod in the Gulf of Maine due to trip limits. This incentive could result in significant differences in metrics other than cod kept and, in fact, the total non-groundfish pounds kept on an unobserved trip during this time period is higher than on an observed trip. Additionally, there may be off-setting incentives due to quota allocations, fishing preferences or other factors. One vessel may attempt to minimize observed discarding of flatfish at the expense of cod, while another vessel may take the exact opposite approach. Statistical tests become valuable in these cases.

Mr. Demarest noted that a fleet-wide analysis across all five years of data may mask local tendencies, either by gear type, time period or area fished. All of his statistical tests are somewhat sensitive to the number of data points and using larger datasets may risk determining statistical differences that are practically meaningless. Conversely, using fine scale data can make the statistical tests lack power. In general, with larger datasets he found more metrics for which statistically significant differences between observed and unobserved trips may be found. When data from fishing years 2007-2012 are combined, significant shifts in the median of the distribution are observed for seven of the eight metrics. The differences are on the order of 1-4%, and positive, indicating that vessels tend to catch more of everything (roundfish, groundfish, non-groundfish) and fish longer when they do not have an observer on board. Tests looking at the differences in the shape of the distributions when vessels are carrying (vs. not carrying) a fisheries observer indicated significant differences across several metrics as well.

Mr. Demarest concludes that his analyses point towards a highly variable but relatively consistent pattern of different fishing behaviors when an observer is on board and when one is not. He notes that his approach focused on the differences in behavior across various metrics for the same vessel, but that there can be personnel changes (e.g., different vessel captains over time) that can also affect the analysis. This may be important as ultimately an observer effect analysis is attempting to learn about human behavior using vessel activity as a proxy. While the data point to a trend of differential behavior with respect to observers--and in fact in almost all circumstances vessels appear to retain more fish and fish for longer durations when they have no observer on board—it is not possible to extend this analysis beyond its natural scope. It may be possible to examine these data and conclude that vessels behave differently with an observer, but this provides almost no insight into the impact of this on discarding behavior or catch accounting.

Implications of discard estimation bias for monitoring quotas

During the development of the FY13 recommendation, Dr. Paul Rago, Northeast Fisheries Science Center, prepared an analysis (Appendix D) to approach the issue as a statistical control problem in which the question is, "How much would the discard rate have to increase on the unobserved trips to exceed a biological threshold (ACL), assuming a hypothetical increase in the rate of discarding on unobserved trips?" While actual measures of bias cannot be constructed at this time, his work provides a context for the evaluation of actual measures should they be devised in the future. Moreover, these results can be used to assess the plausibility of alternative discard estimates.

The current monitoring program relies on the assumption that calculated discard rates on observed trips can be applied to unobserved trips. However, if vessel operators discard fish at higher rates when there are no observers on board, then the catch (and overall mortality of fish) will be higher than predicted. Various analyses of vessel performance have been used to infer the potential for bias. In general these studies rely on the analyses of observable properties of vessels with and without observers on board, as was done in Chad Demarest's analysis. Examples include comparisons of trip duration, total landings, species composition of landings and area fished. Irrespective of whether differences were found, the primary problem of inference remains—what is the discard rate on the unobserved trips? At this point, the observable differences between the two groups cannot be used to predict the discard rate differential.

Summaries of total catch and precision for each stock by fishing year are provided in Appendix D, Table 2. The CVs of the catch are less than 11% for all stocks—generally, much less. A small fraction of total catch comes from total discards for the allocated stocks. Analyses of the uncertainty of the total catch suggest that the chance of exceeding the stock ACL is near zero for most stocks. The exception is the Northern windowpane flounder stock (an unallocated stock which must all be discarded). The analysis results are expected and confirm the stock's catch performance in both FY 2010 and FY 2011, when the catch by sectors exceeded the ACL by about 40% each year. For the other unallocated stocks, the discard rate on unobserved trips would have to increase by 3-fold or more to constitute an appreciable risk of exceeding the catch limit.

The results presented in Appendix D, Table 2 all assume zero bias in the calculated discards. An analysis of the increase in the discard rate on unobserved trips that would be necessary to raise the probability of total catch exceeding the ACL to 5% is shown in Appendix D, Table 3. For the allocated stocks, the adjustment factors (multipliers) that would be necessary for the catch of each stock to exceed the ACL range from 1 to 1,014, with the largest values corresponding to stocks whose total catches are well below the ACL. For cod stocks the discard rate on unobserved trips would have to be 4 to 13 times higher than presently observed. For the allocated flounder stocks (plaice, winter flounder, yellowtail flounder and witch flounder) the average adjustment factor was 12.9. The average adjustment factor for the unallocated stocks was 7.2 in FY2010 and 4.1 in FY2011. Overall, the rate of increase in discards necessary to increase the probability of exceeding the ACL to 5% seems implausibly large. None of the bias analyses conducted to date suggest behavioral differences of this magnitude.

As a further check on the magnitude of the risk of exceeding an ABC and an OFL, an additional sensitivity analysis was conducted. These results are summarized by stock in Appendix D, Tables 4 to 23. The results of these sensitivity analyses suggest that the bias in discard rates would have to be at least 5 to 10 times greater than presently observed in order to pose appreciable risk of exceeding the ABC or OFL. Given the current pattern of landings that are well below the total sector ACLs, setting an observer coverage rate that meets the CV30 at the stock level provides a reasonable level of certainty that observer bias would have to be much larger than is plausible before the risk of exceeding an OFL would exceed 5%. Accordingly, the 22 percent coverage rate required for FY 2013 is expected to provide discard estimates accurate enough to monitor sector ACEs and ACLs.

CONCLUSION

NOAA Fisheries has interpreted the requirement to accurately monitor sector operations in the context of the National Standards and other requirements of the MSA, and determined that the appropriate level of observer coverage should be set at the level that meets the CV requirement at the overall stock level, and also minimize the cost burden to sectors and NMFS, while still providing a reliable estimate of overall catch by sectors to monitor annual catch levels.

In applying the above-described standard to determine the appropriate level of observer coverage, NOAA Fisheries has determined that the combined NEFOP and ASM Program coverage of 22 percent of trips meets the CV requirement of at least 30% on an overall stock basis, and provides, while minimizing costs to the sectors and NMFS, a reliable estimate of overall catch necessary to ensure that sectors do not exceed their ACEs and ACLs, and ultimately the OFL for each stock. NOAA Fisheries acknowledges that it must continue to evaluate new data and assumptions to refine its future determinations of the appropriate observer coverage level.

APPENDIX A

NEFOP and ASM Program Data Collection and Processing

Northeast Observer Goals and Sampling Priorities

The National Marine Fisheries Service (NMFS) Northeast Fisheries Science Center (NEFSC) Fisheries Sampling Branch (FSB) collects, maintains, and distributes data for scientific and management purposes in the Northwest Atlantic. FSB manages two separate but related observer programs: the Northeast Fisheries Observer Program (NEFOP) and the At-Sea Monitoring (ASM) Program. Although each program is tailored to meet specific monitoring objectives, both programs operate within and are governed by the same laws, and are subject to the same standards in regards to data quality and confidentiality, safety, and harassment.

NEFOP Observers

NMFS is required to collect scientific, management, regulatory compliance, and economic data for fisheries by placing observers aboard U.S. domestic fishing vessels. These data are needed for the management of fisheries occurring in the U.S. Exclusive Economic Zone (EEZ) and the high seas beyond the EEZ. Observers are the only independent data source for some types of at-sea monitoring such as bycatch composition and mortality, and marine mammal, sea bird and sea turtle interactions. These data are the foundation of scientific advice, which provides information to management to support decision-making. Observer programs provide unique opportunities to collect scientific data on gear performance, assist in the monitoring of new or experimental fisheries, and provide economic information on revenue and costs.

Priorities for the NEFOP observer programs are determined by national priorities (endangered or protected species), priorities of Fishery Management Councils (Northeast and Mid-Atlantic), and scientific priorities related to stock assessment activities. The NEFOP program monitors several fisheries, including the Northeast (NE) multispecies, Atlantic herring, Atlantic longfin, and Atlantic sea scallop fisheries. The NEFOP priorities focus on the following objectives:

- Collecting discard data in fisheries that interact with groundfish and other species (tow-by-tow basis),
- Monitoring catch in experimental fisheries and special management programs such as Special Access Programs (SAPs) and fishing in the U.S./Canada Management Area,
- Monitoring catches in scallop access areas,
- Sampling fish and crustacean catches in fisheries throughout the Northeast and Mid-Atlantic regions, and
- Collecting biological samples (age structures, length, etc.) for fish, invertebrates, and protected species.

The NEFOP focuses on biological sampling of catch. Biological sampling involves collecting data on the biology and life history of targeted species, discarded species, and protected species. The particular activities an observer conducts during a trip may vary depending on the statistical and management needs of the particular fishery, the Agency's regional priorities and the availability of funds for measuring bycatch and protected species monitoring. Observers

routinely collect detailed biological information, such as size, age structures, length measurements, and gender from some species or portion of the catch. Age structures (e.g., otoliths, scales, spines, vertebrate) are collected to determine the age of fish and are typically coupled with length calculates in order to provide ratio to determine the health of the fish stock and project biomass of fish available for harvest. Observers also document any entanglement or incidental take of a marine mammal, seabird, or sea turtle during fishing operations. The biological sampling of incidental takes includes sex determination, various length measurements, assessment of animal condition or state of decomposition. These data are used in scientific studies of life history for genetic studies that examine the distribution of stock, matriarchal lines, and contaminate and food habit studies.

At-Sea Monitors

The ASM Program was implemented May 1, 2010 as a vital component of the expanded sector management program for the New England multispecies fishery. The ASM Program is an integral part of sector management, as ASMs collect data to verify area fished and catch (landings and discards), by species and gear type, for the purpose of monitoring sector ACE utilization.

At-Sea Monitors collect a similar data set to NEFOP observers; however, they collect a reduced set of data with an emphasis on quantifying catch (determining weights of kept and discarded fish) and less of an emphasis on biological sampling. The ASM program was created to provide monitoring service specifically for the NE multispecies fishery, which encompasses the gillnet, bottom otter trawl, and longline fisheries. The primary focus of the monitoring program is to provide bycatch information needed to successfully manage a sector's ACE. Specific ASM priorities focus on the following objectives:

- Collecting select information on fishing gear to categorize effort,
- Collecting accurate calculates on discard data in the NE multispecies fishery (tow-by-tow basis),
- Sampling fish catch in fisheries throughout the Northeast and Mid-Atlantic regions, and
- Collecting select information on interactions with protected species (photo, tagging).

The cornerstone of the ASM programs relies on providing accurate weights of bycatch, preferably in actual calculates. Monitors focus on these priorities and to lesser extent collect information on gear, economic variables, and protected species interactions. Monitors do not collect age structures and have limited biological sampling requirements for fish and protected species.

Provider approval and contracting process

Currently the Fisheries Sampling Branch (FSB) has a contract for the At-Sea Monitoring Program (ASM) with 3 providers; East West Technical Services LLC, AIS., Inc and MRAG Americas. FSB has a contract for the Northeast Fisheries Observer Program (NEFOP) with one provider: MRAG Americas. These contract durations vary with each contract (ASM – 1 year base period with an option to extend 1 additional year and NEFOP – 5 year base period with an option to extend an additional 6 months).

Seaday schedule and Pre-Trip Notification System

Participants in the Northeast multispecies groundfish fishery are required to notify the program of their intention to make a fishing trip 48 hrs prior to departing on their fishing trips. General notification instructions can be found at the Northeast Fisheries Observer Program website (http://www.nefsc.noaa.gov/fsb/notification.html). Vessel representatives notify for Northeast multispecies groundfish trips via an online Pre-trip Notification System website (https://fish.nefsc.noaa.gov/cgi-bin/PTNS/login.pl. Vessel selection for the multispecies groundfish fishery is based on the use of an algorithm that individually selects trips for observer coverage based on a 3 factors: the specific groundfish sector, gear type and mesh size fished in order to achieve a target coverage rate. For fishing year 2012, the targeted coverage rate was 25% (8% NEFOP and 17% ASM).

The Pre-Trip Notification System (PTNS) was designed and implemented in order to provide a fast, simple, and efficient way for groundfish trips to be randomly selected for observer coverage. It is used to assign Northeast Fisheries Observer Program (NEFOP) coverage, as well as ASM coverage, and it is also used to select trips for NEFOP coverage in the longfin squid fishery. Coverage must satisfy the requirements of the Standardized Bycatch Reporting Methodology (SBRM) sea-day schedule, specified Special Management Program (SMP) coverage levels, Protected Species Branch (PSB) sea-day requirements, NMFS-funded At-Sea Monitoring (ASM) requirements, and industry-funded ASM requirements. Vessel representatives must give a notification of trip sail 48 hours in advance, at minimum, and observer providers then cover the selected trips based on observer availability.

The web-based PTNS system uses an algorithm to select individual trips for coverage, based on target and realized coverage rates for each stratum (gear, area fished, and sector). When no trips are observed in a stratum, observer coverage is assigned at 100% (1.0), and when the observer coverage in a stratum is equal to the target coverage level, any additional trips are assigned observers at a probability equal to the target observer coverage rate. The probability of a trip being assigned an observer follows a linear regression until the probability reaches the desired coverage level.

The PTNS calculates coverage rates, and, therefore, selection probabilities, based on data within the system itself. The Fisheries Sampling Branch (FSB) cancels unsailed trips in the system twice a week. Trips are matched with observer data to ensure all observed trips are counted. The system and its data are monitored for errors and updates. A monitoring tool was developed to provide feedback on system performance, coverage rates, sea day accomplishments, and other concerns. It provides real-time information on many aspects of the system via tables and graphs. Sector managers receive a weekly coverage rate report, which can alert them to possible compliance issues. FSB monitors observer provider performance, as well, to ensure proper vessel coverage.

NEFOP Seaday Schedule Coverage: In addition to multispecies groundfish coverage, NEFOP observers cover fisheries with the objective of fulfilling seaday requirements based on the Standardized Bycatch Reporting Methodology (SBRM) Omnibus Amendment, (http://www.nefsc.noaa.gov/fsb/SBRM/). Although the Amendment has been vacated since September 2011, the need to annually allocate seadays coverage among the Northeast and Mid-

Atlantic fisheries remains. Once funding is set for the fiscal year, the NEFOP Branch Chief will alert the data end-users of the amount of funding available. The Populations Dynamic Branch (PDB) will allocate seadays according to the amount of funds available. The NEFOP Branch Chief creates a seaday schedule based on the information received from the PDB and issues the schedule to the observer service provider. The seaday schedule is provided by the NEFOP to the observer service provider at the beginning of the coverage cycle for planning purposes (refer to 'Projected Sea Day Schedule 2012-2013' at http://www.nefsc.noaa.gov/fsb/program.html). Vessels that are not required to notify are selected for observer coverage at the docks in person, via a selection letter sent to an owner or operator and/or following specific vessel selection criteria. These trips, referred to as "solicited trips," fulfill SBRM requirements and satisfy seaday schedule tasked days. Selection guidelines, vessel selection letters, and lists of prior vessel fishing activity are provided as tools to assist the observer service provider in achieving the seadays necessary to support the SBRM seaday allocation. Seaday schedule meetings with NEFOP staff and the observer service provider occur monthly, and seaday achievements are discussed and priorities set.

Data Editing Process

Observers submit electronic data, paper logs, and biological samples to FSB within timelines specified in contracts or regulations. FSB follows check-in procedures to track receipt and process the data. Reports on outstanding data due are run daily and reported to the service providers for reconciliation. Editors (termed debriefers in other regions) receive electronic data and paper logs and work with the observers to ensure that data collection and recording standards are being met. Groundfish electronically uploaded trips are available to be edited as soon as they are uploaded by the observer. In either case, the editor will then sign out for the trip in the database master trip tracker and record "begin edit" time.

Electronic trips are edited and debriefed (if necessary) the same day they are received and the data is uploaded as "preliminary" but available. After the paper logs are received for these electronic trips, they will be compared, further edited and debriefed again with the observer if necessary. Typically the comparison is finalized within 30 days. If there are questionable data, the paper logs will be reviewed as soon as they arrive.

Non-groundfish paper log trips will be completely edited within 45 days of the end of the month in which they landed. Scallop trips will be completely edited within 30 days of the end of the month in which they landed.

Editors check each and every field on each and every log on the trip and verify that all fields are formatted correctly and fall within the expected range of values. If they do not fall within the range, the editor will investigate issues with the observer and check past data on the vessel or other vessels using similar gear. They will confirm reasons for blank values or unknown values. All mathematics used to calculate species weights will be checked and verified. All photos submitted with the trip will be reviewed and used to verify gear configuration, catch calculating, or species identification. Electronic auditing tests that have raised warning or fatal error flags will be addressed and corrected.

Editors will check all biological samples such as scales, otoliths, whole fish or vertebrae submitted with the trip and compare to what is recorded on logs. These samples will then be added to the inventory of samples in the appropriate place.

Editors debrief the observer on any issues that were flagged on the trip. Finally, they will sign off on the trip in the database master trip tracking as "edit end".

Computer Audits and Data Loading

There are a several layers of audits and tests that are run. These tests mainly depend on the type of trip - program, fishery, and gear type. Groundfish ("Sector Monitoring") trips are run through a set of tests on those fields that are made available in the "Sector" views for in-season quota monitoring. These tests run automatically once the trip is uploaded by the At-Sea Monitor and NEFOP Observer and received by FSB. Trip data are reviewed, corrections are made as necessary, and data are made available in the "Sector" views. Trips are made available on an individual basis, preliminary data within 48 hours of the landing date of the vessel of the trip and the entire trip approximately 15 days after the landing date of the vessel. In total there are 14 tables consisting of 251 fields that are reviewed and tested for Sector Monitoring trips.

Standard Northeast Fisheries Observer Program (NEFOP) trips and Industry Funded Scallop (IFS) trips, after review by data editors, are turned over to data entry staff. Each trip is entered and an initial "audit" is performed to check the expected ranges for every field. Next, each trip is tested to compare values from related fields and to perform additional checks related to each specific gear, fishery, species, etc. Scallop trips (dredge and trawl) are processed individually and made available 45 days after the landing date of the vessel. All other trips are processed by gear category (i.e., all bottom otter trawl trips together, all gillnet trips together, etc.) and month. These trips are made available 90 days after the last day of the month. For both the NEFOP and IFS trips combined there are a total of 46 tables consisting of 2,464 fields with more than 1,300 tests currently in place.

APPENDIX B

New England Fishery Management Council
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C. M. "Rip" Cunningham, Jr., *Chairman* | Paul J. Howard, *Executive Director*

MEMORANDUM

DATE: July 27, 2012

TO: Groundfish Oversight Committee

FROM: Groundfish Plan Development Team

SUBJECT: **PDT Conference Call, July 25, 2012**

1. The PDT held a conference call to discuss at-sea monitoring issues, sub-ACLs for SNE/MA windowpane flounder, changes to the sector ACE carry-over provisions, and ABCs for FY 2013 – 2015. Staff participating in the call were Tom Nies and Fiona Hogan (NEFMC), Steve Correia (Mass DMF), Michael Ruccio and Dan Caless (NMFS NERO), Chad Demarest, Paul Nitschke, and Evan Bing-Sawyer (NMFS NEFSC), Sally Roman (SMAST), and Sally Sherman (Maine DMR). Michael Palmer (NMFS NEFSC) and J. Michael Lanning (NMFS NERO) also participated in the call, as did Jenny Sun and Jessica Joyce (GMRI).

2. The PDT referred to several draft documents during the call: a draft report on discard length frequencies, a report on landings and discards proportional monitoring, a summary of realized stock and sector specific CVs for FY 2010 and 2011, a report on how CV affects catch estimates for sectors, a May 25, 2012 NERO letter to the Council on carry-over, and a straw man revision to carry-over provisions.

At –Sea Monitoring Issues

3. There were three sub-topics discussed: discard length frequencies, FY 2010 observer coverage in relation to the concept of allocating coverage by landings or discards, and determining the appropriate standard to use to determine the appropriate level of observer coverage.

Discard Length-Frequencies (l-f)

4. The Committee asked the PDT to investigate the l-f of discards. This request was to support a possible alternative that would reduce minimum sizes, as an alternative to the option that would

require full retention and would eliminate minimum size requirements. A report was prepared that summarizes the discarded l-f of groundfish stocks in several ways: by year, quarter, trawl mesh shape, trawl mesh size, statistical area, and depth (see enclosure (1), a separate document). The report will be incorporated into the analysis of a full retention policy since many of the issues overlap (the full retention report is enclosure (5), provided as a separate document).

5. The overall conclusion is that minor (e.g. 1 inch) reductions in minimum size would likely convert discards to landings for most, but not all, groundfish stocks. Table 1 lists each species and qualitatively summarizes the likely effects. The table also shows the minimum size that would be needed to reduce almost all of the current sub-legal discards.

6. The PDT considered whether there was a clear advantage to either eliminating the minimum size or making a change. The issues associated with each are similar, and the impacts largely on whether there are behavioral changes in the fishery that result from a change or elimination in minimum sizes. The paper explores these issues, but in brief:

- Changes to minimum size could lead to changes in behavior that result in changes in the size of fish captured. If the selectivity pattern of a species shifts to smaller fish, there are likely to be changes in the F_{MSY} (or its proxy), reductions in MSY values, and reductions in yields.
- For many groundfish stocks, smaller fish are less fecund, have lower egg survival, and are not as successful at spawning. These factors are not explicitly evaluated in the attached paper but need to be considered, as they could further affect long-term yields.
- There could be short-term delays in rebuilding programs for some stocks.
- If fishermen are required to land small fish that are not marketable, there could be issues related to the handling and reporting of these fish. For example, there have reportedly been some problems with dealers not reporting hagfish that cannot be sold.
- As noted previously, full retention is sometimes claimed to increase the efficacy of electronic monitoring (EM). Any exemption from this requirement (such as requiring fish to be discarded that are not allocated) will reduce the strength of this argument.

7. The PDT notes that there are tradeoffs that need to be considered between these two approaches, but does not have a recommendation for one over the other.

Distribution of Observer Coverage/Catch Proportional Monitoring

8. The PDT reviewed a draft paper prepared by Jenny Sun of GMRI that analyzed observer coverage for FY 2010 in order to determine if observer coverage is assigned equally to all categories. Trips were categorized as day trips (less than or equal to 24 hours) or multi-day trips (greater than 24 hours), and were binned according to vessel size in three size categories. The coverage was summarized based on number of trips, and then based on number of trips weighted

by groundfish landings or groundfish discards. A hypothesis test was used to test for equality of proportions.

9. The analyses will help address the question of whether observer coverage is distributed evenly. This may help in the evaluation of whether discard estimates may be biased. The draft results indicated that the conclusions may depend on which metric is used to measure coverage rates: trips, trips weighted by landings, or trips weighted by discards. This may complicate interpretation.

10. The PDT suggested expanding or modifying the analysis in several ways before finalizing it, and the GMRI representatives agreed to do so. The suggestions were:

- The distribution of trip lengths for fixed gear vessels suggests that a more appropriate break point for "day" (or short) and multi-day (or long) trips is 48 hours. Almost all fixed gear trips are less than 26 hours; a trip of just over one day would seem to be better binned with other day trips, rather than multi-day trips.
- The PDT requested an explanation of the weighting method and the hypothesis test.
- The PDT suggested that there may be difference between stocks that are important. One way to explore this would be to run the analyses for three stocks (GOM cod, GB haddock, and pollock were suggested).
- When FY 2011 data is available, the analysis should be repeated for 2011.

11. There was some discussion about how this information could be used. It is not clear that the ASM program should be designed to have equal coverage rates in all categories. While the language in Amendment 16 is not specific, it does state that sectors are responsible for designing an ASM program that at least meets the CV standard. It is conceivable that a homogenous sector might need fewer trips to meet such a standard, which would argue for difference coverage rates (however measured) between sectors. There was some discussion about using the information on different coverage rates to select trips at different rates within the categories.

12. Next the PDT reviewed the results of a simulation study that assigned different observer coverage rates to day and multi-day trips. Using a simulation tool developed to investigate the best way to estimate sector discards, the effects of targeting coverage on one trip length category over the other was investigated at different levels of observer coverage. These categories were not defined as a new stratum. When there are differences in discard rates between the two categories, allocating observer coverage in this way (without stratification) results in a bias in the discard estimate. The magnitude of the bias increases with higher levels of observer coverage. This suggests that if coverage is shifted to target specific categories, then it may be necessary to impose additional levels of stratification on the discard estimation process. Increased stratification usually requires higher overall observer coverage rates in order to meet a level of precision for each stratum.

Coefficient of Variation (CV) – What is the Correct Level of Observer Coverage? What is the Correct Standard?

13. Amendment 16 specifies that sector at sea monitoring will at least meet the CV requirement specified in the SBRM (30% CV). The amendment is not clear how this standard is to be applied, which has caused some confusion, and there is also some question about whether this is the correct standard to use to determine coverage levels. The PDT explored the implications of using CV as a standard for sector monitoring coverage by reviewing two documents: realized CVs by sector and stock for FY 2010 and FY 2011 (enclosure (2), separate document provided by NERO), and an exploration of the effects of CV and discard estimate bias on catch estimates (enclosure (3), separate document).

14. A review of other catch share monitoring programs uncovered surprisingly little analytic support for the levels of observer coverage that were adopted. In some cases the level of coverage was selected in order to have a high certainty of capturing rare, but important, takes of valuable (protected r endangered) species. Table 2 below gives an overview of the priorities of several at-sea monitoring programs that require 100 percent observer coverage.

15. Two of the objectives of the sector monitoring program are:

- Determine total catch and effort, for each sector and common pool, of target or regulated species
- Achieve coverage level sufficient to minimize effects of potential monitoring bias while maintaining as much flexibility as possible to enhance fleet viability

A question that needs to be answered is what level of observer coverage is needed to meet these two goals?

16. Enclosure (2) summarizes the sector and stock-specific CVs that were realized in FY 2010 and FY 2011. Solely on a stock basis, all CVs were lower than the 30% standard. On a sector and stock basis, however, there were many instances where the realized CV exceeded the standard. As noted before, Amendment 16 is not clear on how the standard should be applied. At the stock level, it would seem there was more coverage than needed to meet the standard; at the sector-stock level, it appears there was not enough. But there is another question that needs to be considered – is CV the correct standard for determining the coverage needed?

17. CV is nothing more than a measure of variability around an estimate of discards. A fixed CV standard implies that it is just as important to have a precise estimate of a small number as it is to have a precise estimate of a large number. If the concern is accurate estimates of sector catches for each stock (as suggested by the monitoring objective shown above), this may not be the case. This can be illustrated with actual results from the FY 2010 tables. A few examples are summarized in the table below (Table 3). They show that in order to achieve the target CV, many more trips would have to be observed to get a precise estimate of a small amount of discards. This would not be cost effective.

18. If the objective is to be certain that a sector has not exceeded its ACE, then there are three factors that interact: the amount of landings, the amount of discards and the uncertainty around both. It is generally assumed landings are known without error (or with very small errors) and so the uncertainty around the discard estimate is more important. Enclosure xxx explores the interaction between these factors.

19. If the nominal catch (landings plus the discard estimate) is less than the total ACE, the amount of the discards and the amount of the uncertainty in that discard estimate can be used to determine the probability that true catch (the landings plus the true discards) exceeds ACE. This is explored by determining the maximum nominal catch that will have a very low probability (2.5 pct. in the paper) that true catch exceeds the ACE. At low levels of discards <u>and without any bias in the discard estimate</u>, the CV has little influence on this maximum ACE. At least for a single stock, the increase in maximum ACE that results from a better CV may not be worth the cost of the additional observer coverage.

20. The presence of observer bias, however, has a large influence on the maximum ACE, and if observer bias is present then CV has more importance. This was explored by assuming that the true discards were two or three times the nominal discards. The effect is to reduce the maximum ACE by a considerable amount. For a discard rate of 10 percent, and different CVs, the influence of the bias on the maximum ACE is compared to the no bias case in Figure 1.

21. If the true discards are larger than the nominal estimate, it means that the discard rate on unobserved trips must be higher than the discard rate on observed trips. How much higher is a function of the observer coverage level and the bias. Higher levels of observer coverage mean that for a given bias the discard rate on observed trips must be much higher than on unobserved trips.

22. The implications of these analyses are:

- CV, by itself, may not be the appropriate standard for determining observer coverage levels needed to monitor sector catch quotas.
- A biased discard estimate will have more influence on the accuracy of sector catches than the CV standard. It is therefore critical to have enough coverage that the presence of bias can be detected; ideally coverage should provide a way to estimate the amount of bias.
- If CV is used as a standard, in whole or in part, it should be clarified how it is to be applied.

23. Next steps: the PDT is continuing to analyze data to determine if bias is present, and to attempt to quantify that bias. The goal is to link these analyses to together to create an ASM monitoring standard for sectors.

Additional Sub-ACLs for SNE/MA Windowpane Flounder

24. In August the Committee will discuss adopting additional sub-ACLs for SNE/MA windowpane flounder for the fluke, scup, and squid fisheries. The PDT reviewed estimates of catch by these fisheries provided by NERO. There are only two years of data, and unlike the scallop fishery which is primarily a dredge fishery, there is some question about the binning of catches to various FMPs. NERO representatives urged caution in using the data to specify and monitor sub-ACLs for these fisheries.

25. In light if the NERO comments, the PDT suggests that an alternative way to address the issue is to make the area-based accountability measures applicable across all trawl fisheries. This would remove the necessity to track catches by FMP, which can be difficult when trips are not declared into a specific fishery. NERO agreed to develop catch estimates by different trawl mesh categories in order to explore this concept. NOAA GC will be contacted to determine if this approach would meet legal requirements.

Carry-Over

26. Recent guidance on carry-over from NERO was reviewed and discussed by the PDT. The PDT summarized the key elements of the guidance as follows:

- When is carry-over allowed?
    - No change in biomass expected due to under-harvest:
        - Small amount may be allowed as long it does not result in exceeding the ACL or ABC in the fishing year the carryover applies. Analysis would need to show this small amount would likely be offset by other under – harvests such that it would not increase the likelihood total catch would not exceed thee ACL or ABC in year 2. Could be accounted for in management uncertainty.
    - Under harvest leads to appreciable increase over original projection in biomass in year 2
        - Impact of under harvest needs to be evaluated and year 2 ABC and ACL updated. Change could be result of an assessment update, or rerunning projection model with new catch and applying the ABC control rule to get a new value for ABC and ACL. Might be possible to do this formulaically. Another alternative – redistribute ABC that relies on regular under-harvest by other fishery components.

- Carry-over cannot result in authorizing a catch amount that exceeds the ABC set by the SSC.

27. Based on the guidance, the PDT outlined a carry-over approach that would comply with the legal and policy guidance (enclosure (4), attached). There could be three options that might be considered for the framework:

- No action: Carry-over limited to 10 percent of a sector's ACE. Justification would need to be provided to show this complies with legal requirements.

- Modified no action: Carry-over would be limited to some small amount (perhaps 10 percent, perhaps another value), but provisions would be added to restrict carry-over should stock conditions require it.

- Flexible carry-over approach: Based on the straw man, this approach would calculate the amount of carry-over that would be permitted each year, based on the under-harvest.

28. There are several questions that need to be addressed to fully develop the straw man approach:

- What is the purpose of carry-over? Is it to accommodate minor year-end shortfalls in catch, or is intended to serve as an ACE "savings bank"?
- How will it be administered?
- Should there be a minimum amount?
- What if stock conditions differ dramatically from what is expected?

29. The straw man approach is likely to create an annual large administrative burden that will detract from the time available to address other management issues. It should be clearly understood that in most cases, because of the requirement that allocations not exceed the ABC and that overfishing not occur in any given year, each pound not harvested in year 1 will not be available for harvest in year 2. Two examples are shown below (Table 4). One example is for a stock without a stock-recruit relationship (GOM cod), and the second is for a stock with a stock-recruit relationship (GB winter flounder). In both examples the increase in ABC in year two is not equal to the under-harvest in year 1. This raises a question of why any sector would choose to carry-over fish into the next year. It is likely that a large under-harvest will more likely be the result of an inability to catch a quota rather than a rationale decision to delay harvest for future benefits. This implies the under harvest is due to an over-allocation – the quota was set too high due to errors in the assessment. In such a situation, carry-over could adversely affect the stock. Another interesting observation is that in the GOM cod example, the increase in catch in year 3 is larger than the increase in catch in year 2, but the benefits of this higher catch would accrue to the entire fishery and not be limited to the sectors that reduced their catch in year 1.

ABCs

30. Because of a lack of time little progress was made on ABC issues. The PDT will schedule another call or meeting to address these issues.

Enclosures:

(1) Discard length-frequencies (separate document)
(2) FY 2010 and FY 2011 realized stock and stock/sector specific CVs for discard estimates (separate document)
(3) Effect of CV and bias on catch estimates (separate document)
(4) Strawman ACE carry-over concept (attached)
(5) Analysis of full retention (separate document)

Table 1 - Qualitative summary of impact on discards of changes in minimum size of one inch

Species	Discards affected by 1 inch reduction	Size (inches)	Minimum Size to reduce most discards
Cod	Yes	22 (55.9 cm)	18.9 in. (48 cm)
Haddock	Yes	18 (45.7 cm)	15.7 in (40 cm)
Pollock	No	19 (48.3 cm)	14.2 in. (36 cm)
Witch Flounder (gray sole)	Yes	14 (35.6 cm)	10.6 in. (27 cm)
Yellowtail Flounder	Yes	13 (33.0 cm)	11.8 in (30 cm)
American Plaice (dab)	Yes	14 (35.6 cm)	5.5 in. (25 cm)
Atlantic Halibut	No	41 (104.1 cm)	
Winter Flounder (blackback)	Yes	12 (30.5 cm)	7.5 in. (19 cm)
Redfish	No	9 (22.9 cm)	7.1 in. (18 cm)

Table 2 – Comparison of observer program priorities Extracted from "Comparison of At-Sea Catch Monitoring Programs with Full Observer Coverage to the Directed Atlantic herring Fishery – New England"; June 2012; a report prepared by MRAG Americas, Inc.

	NE Herring	HI Swordfish Longline	AK Pollock	WC At-Sea Hake	WC Trawl IFQ
Issues and Priority of Data collection (if applicable) *Data collection priority ranked in order or importance (1 is top priority);* *where lesser priority data would not be collected if time and conditions would not permit.*					
Federal Obs	No	No	No	No	No
Obs Primary Concern	Bycatch - River Herring, Tuna, MMs, seabirds	Bycatch - Turtles, MM, sharks	Bycatch - salmon	Bycatch - rebuilding stocks	Discard analysis
Obs Secondary Concern	Discard Analysis	Biological Sampling	Species Composition	Species Composition	Bycatch - critical stocks
Compliance Monitoring	4	4	6	6	5
MM Collection	5	4	4	5	6
Seabird Collection	5	4	4	5	6
Biological Samples	5	2	3	3	4
Length Frequencies	5	3	3	3	4
Observer Training Center Determination	6	3	5	4	3
Discard Weights	2	No	5	4	1
Species Composition Sampling	3	5	2	2	3
Prohibited Species Monitoring	1	1	1	1	2
Fishing Effort Data	4	5	6	6	5
Gear Measurements	4	No	No	6	No
Processor Recovery Rates	7	No	No	No	No
Shore Side Sampling	No	No	100%	100%	100%

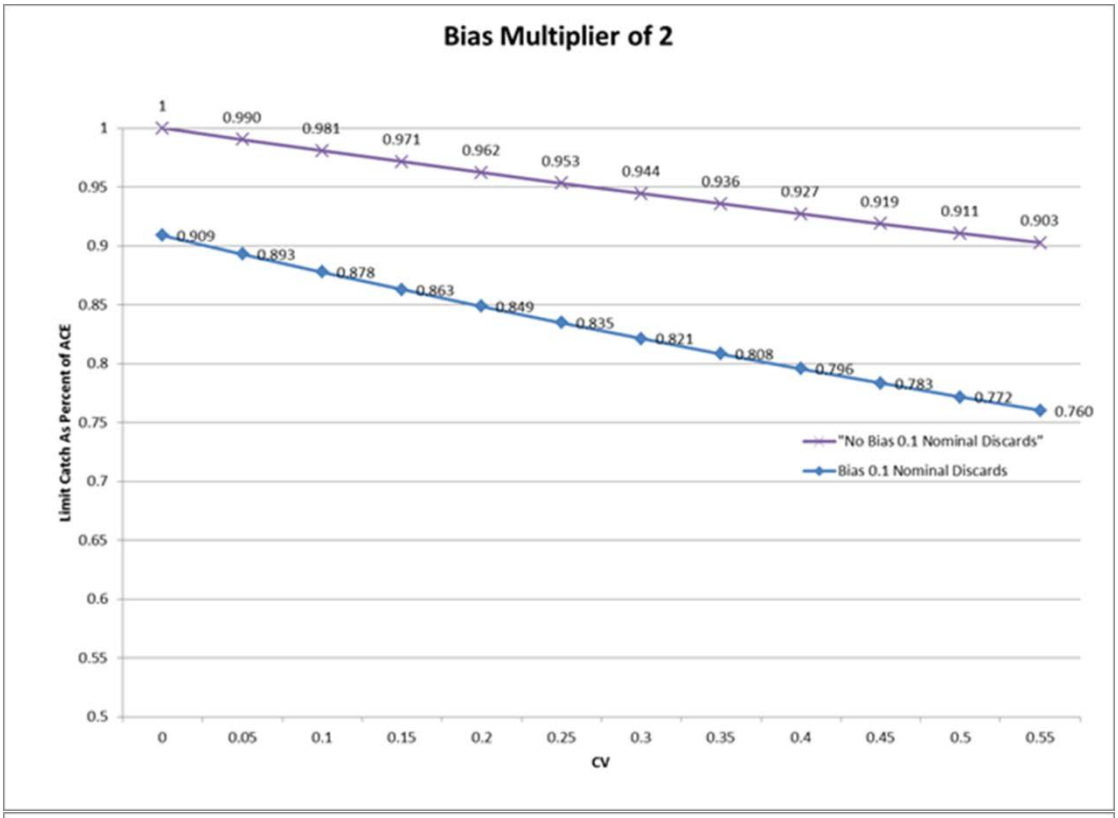
Table 3 – Examples of cost to achieve a stock- sector specific CV of 30 percent in FY 2010. Marginal cost calculated as $750 per additional trip; this estimate will be in error if trip length differs from one day.

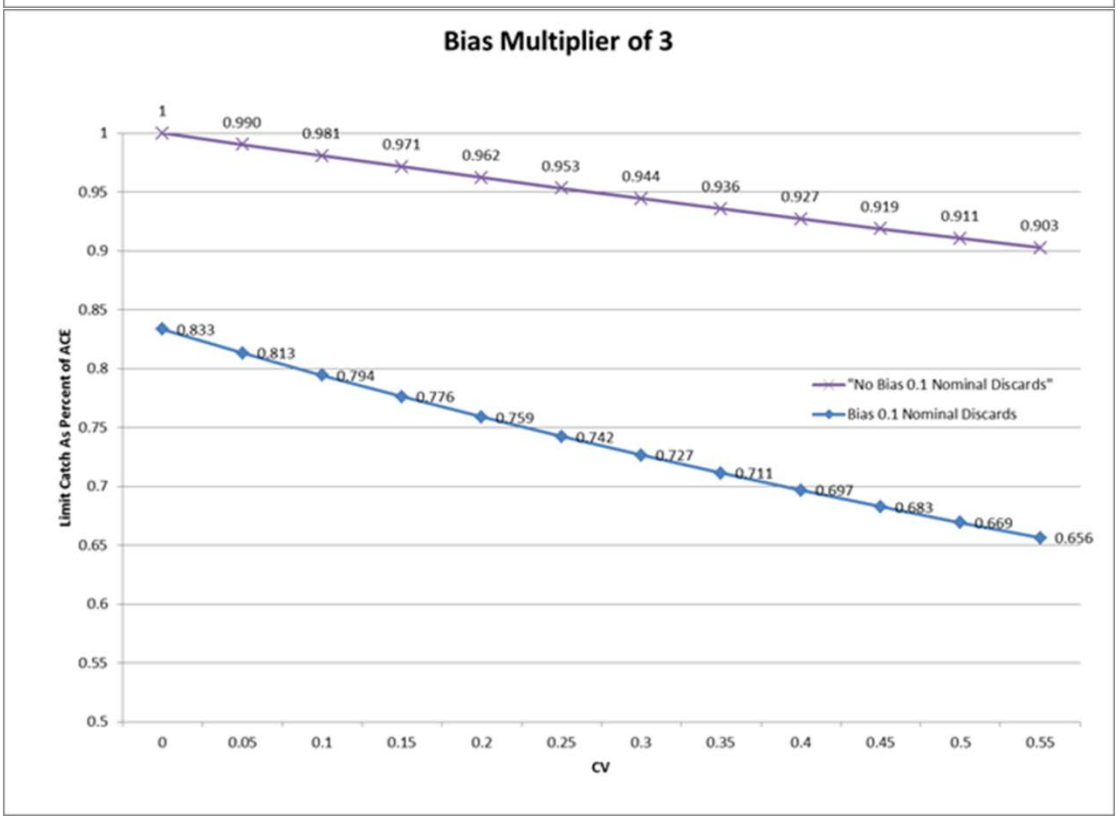
Sector	Stock	Discards (lbs.)	Number of strata sub-trips	Number observed sub-trips	Percent sub-trips observed	Realized stock CV	Percent observer coverage required for CV30	Catch	Percent of ACE Caught	Marginal Cost to Achieve CV30 in FY 2010
SUST HARV 1	GB Winter Flounder	1,707	417	104	24.94	43.73	41.49	256,853	70.6	$ 51,760
NEFS 7	CC/GOM Yellowtail Flounder	618	73	20	27.4	66.57	65.75	38,544	60.1	$ 20,998
NEFS 9	GOM Haddock	59	50	14	28	44.61	48	13,285	63.8	$ 7,500

Table 4 – Example of effect of reduced catch in 2013 on catches in 2014 and 2015 at 75% of FMSY

GOM Cod (no s-r example)								
Year	Catch				Year	SSB		
2012	6,700	6,700	6,700		2012	8,618	8,618	8,618
2013	1,496	1,296	1,096		2013	10,323	10,360	10,396
2014	2,524	2,554	2,582		2014	16,754	16,967	17,144
2015	3,572	3,615	3,643		2015	23,692	23,959	24,142
GB Winter Flounder (s-r example)								
Year	Catch				Year	SSB		
2012	3,753	3,753	3,743		2012	14,173	14,173	14,173
2013	3,750	3,250	2,750		2013	12,909	13,055	13,192
2014	3,598	3,729	3,851		2014	12,904	13,361	13,799
2015	3,720	3,797	3,880		2015	13,313	13,569	13,859

Figure 1 – Maximum nominal catch that has a very low probability that actual catch exceeds ACE. Shown for a discard rate of 10 percent, two discard bias multipliers, and various CVs.





Enclosure (4)

Strawman Carry-over Approach

Determine total sector under-harvest in year 1 *(should total under-harvest be used, rather than sector under-harvest?*)

Determine impact of under-harvest on year 2 ABC (calculate new ABC/ACL)

Evaluate impact of new ABC/ACL on rebuilding program

Determine difference between new year 2 ABC and old Year 2 ABC (ACL?)

Compare under-harvest to difference

Carryover amount allowed each sector is:
Sector under-harvest * (difference/total sector under harvest)

Confirm carry-over will not adversely affect stock conditions

Increase ACL and ABC – but don't change fishery component values except for increased groundfish sub-ACL due to sector carry-over

Modify sector ACE to reflect carry-over

Should there be a minimum carry-over amount?

Advantages:

- Carry-over will always be equal to the increase in catch that results from the under-harvest; so it will not affect management uncertainty buffers
- Benefits of carry-over accrue directly to those that under harvest
- Approach will work whether stock increases or decreases (I think)
- Larger under harvest leads to larger carry-over

Disadvantages:

- Carry-over amount varies from year to year, and won't be known until catch info is available
- Lots of calculations need to be done quickly to distribute carry-over
- Always possible NERO may have to play the trump card due to poor stock conditions
- Can we change ABC/ACL without an actual Council action? Can we modify how the ABC/ACL is distributed without an amendment?
- ABCs and ACLs will constantly change if there is an under harvest

FY 2010 and FY 2011 Realized CVs
Groundfish PDT Report, July 27, 2012
Enclosure (2)

Table 1A: FY2010 Realized Groundfish Stock CV						
Stock	Discards (lbs)	Number of strata sub-trips	Number observed sub-trips	Percent sub-trips observed	Realized stock CV	Percent observer coverage required for CV30
GB Cod East	33,664	463	132	28.51	13.28	7.34
GB Cod West	228,695	5,195	1,732	33.34	6.4	2.23
GOM Cod	177,643	7,585	2,644	34.86	5.47	1.75
Plaice	391,821	13,211	4,178	31.63	4.79	1.17
GB Winter Flounder	41,798	1,612	420	26.05	15.73	8.87
GOM Winter Flounder	3,526	7,585	2,644	34.86	10.31	5.95
Witch Flounder	130,375	13,211	4,178	31.63	5.33	1.44
CC/GOM Yellowtail Flounder	134,063	10,203	3,526	34.56	7.93	3.56
GB Yellowtail Flounder	148,644	1,612	420	26.05	10.3	4.03
SNE/MA Yellowtail Flounder	9,409	1,395	427	30.61	12.97	7.67
GB Haddock East	36,004	463	132	28.51	12.35	6.48
GB Haddock West	50,051	5,195	1,732	33.34	14.85	10.93
GOM Haddock	5,798	7,585	2,644	34.86	10.84	6.54
White Hake	71,276	13,211	4,178	31.63	8.79	3.82
Pollock	171,801	13,211	4,178	31.63	9.81	4.72
Redfish	341,123	13,211	4,178	31.63	11.94	6.83
SNE/MA Winter Flounder	73,787	4,031	1,513	37.53	7.75	3.87
Southern Windowpane	110,095	1,395	427	30.61	8.8	3.73
Northern Windowpane	345,804	11,817	3,768	31.89	11.17	6.1
Ocean Pout	126,770	13,211	4,178	31.63	9.23	4.19
Halibut	44,370	13,211	4,178	31.63	5.3	1.42
Wolffish	42,836	13,211	4,178	31.63	6.45	2.1

Table 1B: FY2011 Realized Groundfish Stock CV						
Stock	Discards (lbs)	Number of strata sub-trips	Number observed sub-trips	Percent sub-trips observed	Realized stock CV	Percent observer coverage required for CV30
GB Cod East	73,475	481	152	31.6	13.95	9.15
GB Cod West	251,340	6,230	1,694	27.19	9.92	3.93
GOM Cod	322,451	10,320	2,986	28.93	4.6	0.95
Plaice	443,138	17,020	4,436	26.06	4.3	0.72
GB Winter Flounder	29,363	1,643	399	24.28	28.94	23.01
GOM Winter Flounder	11,088	10,320	2,986	28.93	9.71	4.1
Witch Flounder	140,105	17,020	4,436	26.06	4.99	0.97
CC/GOM Yellowtail Flounder	188,796	13,433	3,732	27.78	6.96	2.03
GB Yellowtail Flounder	105,824	1,643	399	24.28	10.52	3.83
SNE/MA Yellowtail Flounder	39,884	1,952	538	27.56	9.99	4.1
GB Haddock East	93,137	481	152	31.6	16.48	12.27
GB Haddock West	88,701	6,230	1,694	27.19	10.09	4.06
GOM Haddock	16,481	10,320	2,986	28.93	8	2.82
White Hake	72,090	17,020	4,436	26.06	8.3	2.63
Pollock	243,236	17,020	4,436	26.06	8.26	2.61
Redfish	415,048	17,020	4,436	26.06	9.27	3.26
SNE/MA Winter Flounder	189,565	5,074	1,503	29.62	12.09	6.41
Southern Windowpane	177,208	1,952	538	27.56	8.49	2.97
Northern Windowpane	348,789	15,071	3,931	26.08	9.04	3.11
Ocean Pout	129,689	17,020	4,436	26.06	10.02	3.79
Halibut	68,897	17,020	4,436	26.06	6.6	1.68
Wolffish	72,463	17,020	4,436	26.06	6.81	1.79

Table 2A: FY2010 Realized Groundfish Stock CV for Sector and Stock

Sector	Stock	Discards (lbs)	Number of strata sub-trips	Number observed sub-trips	Percent sub-trips observed	Realized stock CV	Percent observer coverage required for CV30
FIXED GEAR	GB Cod East	13,723	56	12	21.43	12.57	5.36
FIXED GEAR	GB Cod West	40,223	1,851	761	41.11	8.07	4.86
FIXED GEAR	GOM Cod	29,409	151	53	35.1	15.94	13.91
FIXED GEAR	Plaice	446	2,058	824	40.04	27.49	35.96
FIXED GEAR	GB Winter Flounder	64	87	37	42.53	41.69	59.77
FIXED GEAR	GOM Winter Flounder	33	151	53	35.1	34.86	42.38
FIXED GEAR	Witch Flounder	106	2,058	824	40.04	49.75	64.77
FIXED GEAR	CC/GOM Yellowtail Flounder	766	1,807	746	41.28	16.48	17.54
FIXED GEAR	GB Yellowtail Flounder	13	87	37	42.53	53.59	71.26
FIXED GEAR	SNE/MA Yellowtail Flounder	27	167	59	35.33	53.03	63.47
FIXED GEAR	GB Haddock East	8,344	56	12	21.43	27.72	19.64
FIXED GEAR	GB Haddock West	8,708	1,851	761	41.11	17.8	19.77
FIXED GEAR	GOM Haddock	9	151	53	35.1	80.9	80.13
FIXED GEAR	White Hake	5,982	2,058	824	40.04	22.98	28.18
FIXED GEAR	Pollock	27,975	2,058	824	40.04	18.37	20.07
FIXED GEAR	Redfish	319	2,058	824	40.04	19.2	21.53
FIXED GEAR	SNE/MA Winter Flounder	6,807	1,822	750	41.16	13.27	12.07
FIXED GEAR	Southern Windowpane	54	167	59	35.33	61.34	70.06
FIXED GEAR	Northern Windowpane	801	1,892	767	40.54	31.06	42.23
FIXED GEAR	Ocean Pout	2,516	2,058	824	40.04	26.91	34.99
FIXED GEAR	Halibut	1,184	2,058	824	40.04	20.07	23.03
FIXED GEAR	Wolffish	5,300	2,058	824	40.04	12.35	10.2
NCCS	GOM Cod	250	41	18	43.9	62.44	78.05
NCCS	Plaice	-	41	18	43.9		
NCCS	GOM Winter Flounder	-	41	18	43.9		
NCCS	Witch Flounder	-	41	18	43.9		
NCCS	CC/GOM Yellowtail Flounder	-	41	18	43.9		
NCCS	GOM Haddock	37	41	18	43.9	49.93	70.73
NCCS	White Hake	89	41	18	43.9	51.61	70.73
NCCS	Pollock	1	41	18	43.9	83.64	87.8
NCCS	Redfish	2	41	18	43.9	83.22	87.8
NCCS	Northern Windowpane	-	41	18	43.9		
NCCS	Ocean Pout	-	41	18	43.9		
NCCS	Halibut	2,353	41	18	43.9	46.19	65.85
NCCS	Wolffish	155	41	18	43.9	81.28	85.37

PORT CYLDE	GOM Cod	3,440	488	161	32.99	11.49	6.76
PORT CYLDE	Plaice	10,133	488	161	32.99	20.5	18.85
PORT CYLDE	GOM Winter Flounder	65	488	161	32.99	72.76	74.39
PORT CYLDE	Witch Flounder	6,518	488	161	32.99	17.34	14.14
PORT CYLDE	CC/GOM Yellowtail Flounder	769	488	161	32.99	70.08	72.95
PORT CYLDE	GOM Haddock	155	488	161	32.99	23.64	23.57
PORT CYLDE	White Hake	3,023	488	161	32.99	19.68	17.62
PORT CYLDE	Pollock	4,290	488	161	32.99	27.08	28.69
PORT CYLDE	Redfish	1,722	488	161	32.99	20.36	18.65
PORT CYLDE	Northern Windowpane	224	488	161	32.99	78.81	77.46
PORT CYLDE	Ocean Pout	27	488	161	32.99	60.6	66.8
PORT CYLDE	Halibut	2,850	488	161	32.99	19.93	18.03
PORT CYLDE	Wolffish	634	488	161	32.99	23.23	22.95
SUST HARV 1	GB Cod East	3,181	158	44	27.85	42.15	43.67
SUST HARV 1	GB Cod West	31,096	600	208	34.67	21.56	21.67
SUST HARV 1	GOM Cod	20,242	973	317	32.58	12.92	8.32
SUST HARV 1	Plaice	173,053	1,715	402	23.44	8.48	2.39
SUST HARV 1	GB Winter Flounder	1,707	417	104	24.94	43.73	41.49
SUST HARV 1	GOM Winter Flounder	264	973	317	32.58	26.58	27.54
SUST HARV 1	Witch Flounder	52,197	1,715	402	23.44	9.4	2.97
SUST HARV 1	CC/GOM Yellowtail Flounder	9,498	1,243	354	28.48	35.12	35.32
SUST HARV 1	GB Yellowtail Flounder	16,550	417	104	24.94	16.78	9.59
SUST HARV 1	SNE/MA Yellowtail Flounder	688	57	12	21.05	36.21	28.07
SUST HARV 1	GB Haddock East	16,337	158	44	27.85	22.03	17.72
SUST HARV 1	GB Haddock West	15,467	600	208	34.67	35.1	42.17
SUST HARV 1	GOM Haddock	2,502	973	317	32.58	21.29	19.63
SUST HARV 1	White Hake	25,698	1,715	402	23.44	17.65	9.62
SUST HARV 1	Pollock	46,580	1,715	402	23.44	13.6	5.95
SUST HARV 1	Redfish	143,166	1,715	402	23.44	16.09	8.1
SUST HARV 1	SNE/MA Winter Flounder	2,932	342	160	46.78	25.55	39.18
SUST HARV 1	Southern Windowpane	4,764	57	12	21.05	49.08	42.11
SUST HARV 1	Northern Windowpane	18,053	1,658	391	23.58	22.44	14.78
SUST HARV 1	Ocean Pout	9,271	1,715	402	23.44	39.98	35.28
SUST HARV 1	Halibut	8,867	1,715	402	23.44	10.29	3.5
SUST HARV 1	Wolffish	9,022	1,715	402	23.44	19.15	11.14

TRI-STATE	GB Cod West	2,547	19	7	36.84	29.59	36.84
TRI-STATE	GOM Cod	445	92	24	26.09	26.36	21.74
TRI-STATE	Plaice	2,984	111	31	27.93	48.09	50.45
TRI-STATE	GB Winter Flounder	281	19	7	36.84	37.58	52.63
TRI-STATE	GOM Winter Flounder	22	92	24	26.09	45.89	45.65
TRI-STATE	Witch Flounder	845	111	31	27.93	25.73	22.52
TRI-STATE	CC/GOM Yellowtail Flounder	1,016	92	24	26.09	28	23.91
TRI-STATE	GB Yellowtail Flounder	4,731	19	7	36.84	24.61	31.58
TRI-STATE	GB Haddock West	3,418	19	7	36.84	50.26	63.16
TRI-STATE	GOM Haddock	-	92	24	26.09		
TRI-STATE	White Hake	608	111	31	27.93	56.49	58.56
TRI-STATE	Pollock	257	111	31	27.93	52.01	54.05
TRI-STATE	Redfish	-	111	31	27.93		
TRI-STATE	Northern Windowpane	3,459	111	31	27.93	33.6	33.33
TRI-STATE	Ocean Pout	1,381	111	31	27.93	26.24	23.42
TRI-STATE	Halibut	154	111	31	27.93	41.66	43.24
TRI-STATE	Wolffish	95	111	31	27.93	74.33	71.17
NEFS 2	GB Cod East	1,869	57	19	33.33	29.19	33.33
NEFS 2	GB Cod West	14,621	262	90	34.35	16.43	13.74
NEFS 2	GOM Cod	54,220	1,436	487	33.91	8.71	4.18
NEFS 2	Plaice	60,898	1,755	517	29.46	8.17	3.02
NEFS 2	GB Winter Flounder	1,955	128	40	31.25	39.81	44.53
NEFS 2	GOM Winter Flounder	1,998	1,436	487	33.91	16.57	13.58
NEFS 2	Witch Flounder	18,000	1,755	517	29.46	10.31	4.73
NEFS 2	CC/GOM Yellowtail Flounder	75,070	1,627	511	31.41	13.2	8.17
NEFS 2	GB Yellowtail Flounder	9,765	128	40	31.25	34.46	37.5
NEFS 2	GB Haddock East	3,582	57	19	33.33	28.5	31.58
NEFS 2	GB Haddock West	926	262	90	34.35	21.06	20.61
NEFS 2	GOM Haddock	811	1,436	487	33.91	17.2	14.48
NEFS 2	White Hake	3,102	1,755	517	29.46	22.22	18.69
NEFS 2	Pollock	13,416	1,755	517	29.46	17.34	12.25
NEFS 2	Redfish	128,389	1,755	517	29.46	23.02	19.77
NEFS 2	SNE/MA Winter Flounder	859	191	82	42.93	68.94	80.1
NEFS 2	Northern Windowpane	26,065	1,755	517	29.46	11.35	5.64
NEFS 2	Ocean Pout	4,035	1,755	517	29.46	13.49	7.81
NEFS 2	Halibut	7,917	1,755	517	29.46	10.3	4.73
NEFS 2	Wolffish	10,057	1,755	517	29.46	11.69	5.98

NEFS 3	GB Cod West	189	129	26	20.16	50.42	41.86
NEFS 3	GOM Cod	30,219	2,273	777	34.18	6.53	2.42
NEFS 3	Plaice	1,509	2,402	802	33.39	32.12	36.51
NEFS 3	GOM Winter Flounder	375	2,273	777	34.18	13.79	9.9
NEFS 3	Witch Flounder	83	2,402	802	33.39	22.31	21.73
NEFS 3	CC/GOM Yellowtail Flounder	14,332	2,279	779	34.18	13.83	9.96
NEFS 3	SNE/MA Yellowtail Flounder	47	123	23	18.7	57.08	45.53
NEFS 3	GB Haddock West	72	129	26	20.16	92.53	71.32
NEFS 3	GOM Haddock	1,329	2,273	777	34.18	14.75	11.17
NEFS 3	White Hake	725	2,402	802	33.39	22.66	22.27
NEFS 3	Pollock	7,613	2,402	802	33.39	22.33	21.77
NEFS 3	Redfish	401	2,402	802	33.39	17.19	14.15
NEFS 3	SNE/MA Winter Flounder	8	129	26	20.16	90.53	69.77
NEFS 3	Southern Windowpane	43	123	23	18.7	85.19	65.04
NEFS 3	Northern Windowpane	723	2,279	779	34.18	11.79	7.46
NEFS 3	Ocean Pout	645	2,402	802	33.39	26.1	27.52
NEFS 3	Halibut	1,822	2,402	802	33.39	14.93	11.07
NEFS 3	Wolffish	3,777	2,402	802	33.39	27.08	29.02
NEFS 5	GB Cod East	163	4	-	0		
NEFS 5	GB Cod West	25,336	628	236	37.58	15.58	14.01
NEFS 5	GOM Cod	5	1	-	0		
NEFS 5	Plaice	1,612	633	236	37.28	59.54	70.14
NEFS 5	GB Winter Flounder	516	59	12	20.34	39.05	30.51
NEFS 5	GOM Winter Flounder	-	1	-	0		
NEFS 5	Witch Flounder	1,799	633	236	37.28	24.11	27.8
NEFS 5	CC/GOM Yellowtail Flounder	25	3	-	0		
NEFS 5	GB Yellowtail Flounder	8,806	59	12	20.34	34.21	25.42
NEFS 5	SNE/MA Yellowtail Flounder	3,486	571	228	39.93	13.87	12.61
NEFS 5	GB Haddock East	429	4	-	0		
NEFS 5	GB Haddock West	2,766	628	236	37.58	37.57	48.73
NEFS 5	GOM Haddock	-	1	-	0		
NEFS 5	White Hake	496	633	236	37.28	38.23	49.13
NEFS 5	Pollock	19	633	236	37.28	75.17	78.99
NEFS 5	Redfish	83	633	236	37.28	61.5	71.56
NEFS 5	SNE/MA Winter Flounder	29,860	573	228	39.79	8.2	4.71
NEFS 5	Southern Windowpane	64,184	571	228	39.93	9.16	5.95
NEFS 5	Northern Windowpane	20,083	62	12	19.35	36.31	27.42
NEFS 5	Ocean Pout	13,919	633	236	37.28	23.04	26.07
NEFS 5	Halibut	49	633	236	37.28	49.52	61.93
NEFS 5	Wolffish	-	633	236	37.28		

NEFS 6	GB Cod East	131	12	1	8.33		
NEFS 6	GB Cod West	2,146	91	24	26.37	38.36	37.36
NEFS 6	GOM Cod	869	110	27	24.55	25.59	20
NEFS 6	Plaice	25,634	213	34	15.96	19.88	7.98
NEFS 6	GB Winter Flounder	70	26	5	19.23	29.73	19.23
NEFS 6	GOM Winter Flounder	119	110	27	24.55	63.97	60
NEFS 6	Witch Flounder	4,818	213	34	15.96	24.89	11.74
NEFS 6	CC/GOM Yellowtail Flounder	1,691	185	30	16.22	48.73	34.05
NEFS 6	GB Yellowtail Flounder	1,900	26	5	19.23	99.42	73.08
NEFS 6	SNE/MA Yellowtail Flounder	-	2	1	50		
NEFS 6	GB Haddock East	346	12	1	8.33		
NEFS 6	GB Haddock West	15	91	24	26.37	62.17	61.54
NEFS 6	GOM Haddock	4	110	27	24.55	74.37	67.27
NEFS 6	White Hake	297	213	34	15.96	63.92	46.48
NEFS 6	Pollock	3,660	213	34	15.96	38.45	23.94
NEFS 6	Redfish	5,678	213	34	15.96	27.07	13.62
NEFS 6	SNE/MA Winter Flounder	94	77	23	29.87	87.56	79.22
NEFS 6	Southern Windowpane	-	2	1	50		
NEFS 6	Northern Windowpane	938	211	33	15.64	39.12	24.17
NEFS 6	Ocean Pout	7,094	213	34	15.96	61.04	44.13
NEFS 6	Halibut	1,286	213	34	15.96	30.58	16.9
NEFS 6	Wolffish	648	213	34	15.96	53.57	38.03
NEFS 7	GB Cod East	223	24	12	50	50.26	75
NEFS 7	GB Cod West	7,575	402	94	23.38	23.82	16.17
NEFS 7	GOM Cod	295	3	-	0		
NEFS 7	Plaice	20,861	426	97	22.77	16.61	8.45
NEFS 7	GB Winter Flounder	5,909	188	49	26.06	39.22	37.77
NEFS 7	GOM Winter Flounder	3	3	-	0		
NEFS 7	Witch Flounder	10,183	426	97	22.77	21.18	12.91
NEFS 7	CC/GOM Yellowtail Flounder	618	73	20	27.4	66.57	65.75
NEFS 7	GB Yellowtail Flounder	10,607	188	49	26.06	18.24	11.7
NEFS 7	SNE/MA Yellowtail Flounder	1,049	165	41	24.85	62.38	59.39
NEFS 7	GB Haddock East	77	24	12	50	15.87	25
NEFS 7	GB Haddock West	3,053	402	94	23.38	18.62	10.7
NEFS 7	GOM Haddock	18	3	-	0		
NEFS 7	White Hake	7,365	426	97	22.77	27.39	19.95
NEFS 7	Pollock	1,625	426	97	22.77	66.82	59.62
NEFS 7	Redfish	2,028	426	97	22.77	33.42	27
NEFS 7	SNE/MA Winter Flounder	3,444	235	60	25.53	59.87	57.87
NEFS 7	Southern Windowpane	3,924	165	41	24.85	48.58	46.67
NEFS 7	Northern Windowpane	33,750	261	59	22.61	15.56	7.66
NEFS 7	Ocean Pout	10,597	426	97	22.77	32.13	25.35
NEFS 7	Halibut	1,050	426	97	22.77	24.42	16.43
NEFS 7	Wolffish	1,318	426	97	22.77	30.49	23.47

NEFS 8	GB Cod East	4,800	45	14	31.11	23.5	22.22
NEFS 8	GB Cod West	16,377	188	47	25	22.09	15.43
NEFS 8	GOM Cod	-	8	2	25		
NEFS 8	Plaice	20,100	232	49	21.12	25.38	16.38
NEFS 8	GB Winter Flounder	6,135	156	39	25	47.15	45.51
NEFS 8	GOM Winter Flounder	-	8	2	25		
NEFS 8	Witch Flounder	5,682	232	49	21.12	33.32	25
NEFS 8	CC/GOM Yellowtail Flounder	1,076	54	12	22.22	48.23	42.59
NEFS 8	GB Yellowtail Flounder	19,120	156	39	25	29.13	24.36
NEFS 8	SNE/MA Yellowtail Flounder	80	22	5	22.73	59.77	54.55
NEFS 8	GB Haddock East	2,471	45	14	31.11	31.21	33.33
NEFS 8	GB Haddock West	2,715	188	47	25	30.8	26.06
NEFS 8	GOM Haddock	-	8	2	25		
NEFS 8	White Hake	505	232	49	21.12	36.99	29.31
NEFS 8	Pollock	443	232	49	21.12	57.04	49.57
NEFS 8	Redfish	1,980	232	49	21.12	49.47	42.24
NEFS 8	SNE/MA Winter Flounder	8,828	72	20	27.78	59.9	61.11
NEFS 8	Southern Windowpane	2,503	22	5	22.73	62.65	59.09
NEFS 8	Northern Windowpane	34,473	210	46	21.9	12.16	4.76
NEFS 8	Ocean Pout	21,630	232	49	21.12	21.7	12.5
NEFS 8	Halibut	2,648	232	49	21.12	37.3	29.31
NEFS 8	Wolffish	259	232	49	21.12	45.37	38.36
NEFS 9	GB Cod East	8,741	83	23	27.71	13.96	8.43
NEFS 9	GB Cod West	70,335	441	86	19.5	13.75	4.99
NEFS 9	GOM Cod	789	50	14	28	37.55	38
NEFS 9	Plaice	44,543	571	95	16.64	15.41	5.08
NEFS 9	GB Winter Flounder	19,795	336	74	22.02	24.57	16.07
NEFS 9	GOM Winter Flounder	6	50	14	28	88.21	78
NEFS 9	Witch Flounder	21,214	571	95	16.64	17.42	6.48
NEFS 9	CC/GOM Yellowtail Flounder	2,893	211	56	26.54	46.79	46.92
NEFS 9	GB Yellowtail Flounder	62,433	336	74	22.02	20.88	12.2
NEFS 9	SNE/MA Yellowtail Flounder	-	22	1	4.55		
NEFS 9	GB Haddock East	3,861	83	23	27.71	17.53	12.05
NEFS 9	GB Haddock West	10,368	441	86	19.5	24.73	14.29
NEFS 9	GOM Haddock	59	50	14	28	44.61	48
NEFS 9	White Hake	13,386	571	95	16.64	19.07	7.53
NEFS 9	Pollock	6,089	571	95	16.64	27.74	14.71
NEFS 9	Redfish	46,832	571	95	16.64	25.35	12.61
NEFS 9	SNE/MA Winter Flounder	9,045	183	52	28.42	34.58	34.97
NEFS 9	Southern Windowpane	336	22	1	4.55		
NEFS 9	Northern Windowpane	149,337	549	95	17.3	25.4	13.11
NEFS 9	Ocean Pout	32,507	571	95	16.64	15.58	5.25
NEFS 9	Halibut	5,829	571	95	16.64	19.2	7.71
NEFS 9	Wolffish	5,558	571	95	16.64	22.93	10.51

NEFS 10	GB Cod West	1,108	122	44	36.07	25.82	29.51
NEFS 10	GOM Cod	11,584	623	265	42.54	9.45	6.9
NEFS 10	Plaice	6,448	745	304	40.81	15.55	15.7
NEFS 10	GOM Winter Flounder	407	623	265	42.54	18.76	22.47
NEFS 10	Witch Flounder	1,077	745	304	40.81	17.27	18.66
NEFS 10	CC/GOM Yellowtail Flounder	17,846	727	301	41.4	11.28	9.22
NEFS 10	SNE/MA Yellowtail Flounder	-	18	3	16.67		
NEFS 10	GB Haddock West	19	122	44	36.07	56.11	66.39
NEFS 10	GOM Haddock	100	623	265	42.54	35.03	50.24
NEFS 10	White Hake	898	745	304	40.81	26.85	35.57
NEFS 10	Pollock	1,723	745	304	40.81	32.49	44.83
NEFS 10	Redfish	595	745	304	40.81	53.65	68.86
NEFS 10	SNE/MA Winter Flounder	682	122	44	36.07	28.15	33.61
NEFS 10	Southern Windowpane	-	18	3	16.67		
NEFS 10	Northern Windowpane	5,547	727	301	41.4	17.56	19.53
NEFS 10	Ocean Pout	2,913	745	304	40.81	17.77	19.6
NEFS 10	Halibut	918	745	304	40.81	16.74	17.72
NEFS 10	Wolffish	3,256	745	304	40.81	12.25	10.34
NEFS 11	GB Cod West	-	114	13	11.4		
NEFS 11	GOM Cod	24,090	1,270	470	37.01	14.5	12.13
NEFS 11	Plaice	4,968	1,384	483	34.9	26.73	29.91
NEFS 11	GOM Winter Flounder	130	1,270	470	37.01	24.79	28.66
NEFS 11	Witch Flounder	1,178	1,384	483	34.9	30.84	36.2
NEFS 11	CC/GOM Yellowtail Flounder	1,621	1,270	470	37.01	33.58	42.44
NEFS 11	SNE/MA Yellowtail Flounder	-	114	13	11.4		
NEFS 11	GB Haddock West	-	114	13	11.4		
NEFS 11	GOM Haddock	774	1,270	470	37.01	16.36	14.88
NEFS 11	White Hake	4,354	1,384	483	34.9	40.12	48.99
NEFS 11	Pollock	57,358	1,384	483	34.9	20.42	19.94
NEFS 11	Redfish	3,515	1,384	483	34.9	39.26	47.9
NEFS 11	SNE/MA Winter Flounder	-	114	13	11.4		
NEFS 11	Southern Windowpane	-	114	13	11.4		
NEFS 11	Northern Windowpane	57	1,270	470	37.01	50.45	62.44
NEFS 11	Ocean Pout	12	1,384	483	34.9	57.16	66.11
NEFS 11	Halibut	4,074	1,384	483	34.9	17.28	15.1
NEFS 11	Wolffish	1,176	1,384	483	34.9	20.45	19.94

NEFS 12	GOM Cod	1,786	60	27	45	28.43	43.33
NEFS 12	Plaice	1,938	60	27	45	23.07	33.33
NEFS 12	GOM Winter Flounder	30	60	27	45	37.99	58.33
NEFS 12	Witch Flounder	316	60	27	45	41.85	61.67
NEFS 12	CC/GOM Yellowtail Flounder	2,776	60	27	45	40.72	61.67
NEFS 12	GOM Haddock	-	60	27	45		
NEFS 12	White Hake	-	60	27	45		
NEFS 12	Pollock	9	60	27	45	76.46	85
NEFS 12	Redfish	39	60	27	45	38.01	58.33
NEFS 12	Northern Windowpane	164	60	27	45	29.05	45
NEFS 12	Ocean Pout	3	60	27	45	74.72	85
NEFS 12	Halibut	9	60	27	45	73.73	83.33
NEFS 12	Wolffish	465	60	27	45	32.59	50
NEFS 13	GB Cod East	833	24	7	29.17	19.48	16.67
NEFS 13	GB Cod West	17,142	348	96	27.59	20.92	15.8
NEFS 13	GOM Cod	-	6	2	33.33		
NEFS 13	Plaice	16,694	377	98	25.99	37.3	35.28
NEFS 13	GB Winter Flounder	5,366	196	53	27.04	41.14	41.33
NEFS 13	GOM Winter Flounder	74	6	2	33.33	113.09	100
NEFS 13	Witch Flounder	6,359	377	98	25.99	30.96	27.32
NEFS 13	CC/GOM Yellowtail Flounder	4,066	43	17	39.53	80.43	83.72
NEFS 13	GB Yellowtail Flounder	14,719	196	53	27.04	23.35	18.37
NEFS 13	SNE/MA Yellowtail Flounder	4,032	134	41	30.6	25.29	23.88
NEFS 13	GB Haddock East	557	24	7	29.17	23.47	20.83
NEFS 13	GB Haddock West	2,524	348	96	27.59	29.42	27.01
NEFS 13	GOM Haddock	-	6	2	33.33		
NEFS 13	White Hake	4,748	377	98	25.99	46.29	45.62
NEFS 13	Pollock	743	377	98	25.99	72.1	67.11
NEFS 13	Redfish	6,374	377	98	25.99	44.93	44.3
NEFS 13	SNE/MA Winter Flounder	11,228	171	55	32.16	24.18	23.98
NEFS 13	Southern Windowpane	34,287	134	41	30.6	21.64	19.4
NEFS 13	Northern Windowpane	52,130	243	61	25.1	33.09	29.22
NEFS 13	Ocean Pout	20,220	377	98	25.99	32.58	29.44
NEFS 13	Halibut	3,360	377	98	25.99	26.33	21.49
NEFS 13	Wolffish	1,116	377	98	25.99	32.72	29.71

Table 2B: FY2011 Realized Groundfish Stock CV for Sector and Stock

Sector	Stock	Discards (lbs)	Number of strata sub-trips	Number observed sub-trips	Percent sub-trips observed	Realized stock CV	Percent observer coverage required for CV30
FIXED GEAR	GB Cod East	9306	31	5	16.13	23.97	12.9
FIXED GEAR	GB Cod West	29408	2381	624	26.21	14.26	7.43
FIXED GEAR	GOM Cod	24009	254	29	11.42	40.73	19.29
FIXED GEAR	Plaice	180	2666	662	24.83	18.17	10.84
FIXED GEAR	GB Winter Flounder	44	42	8	19.05	69.04	57.14
FIXED GEAR	GOM Winter Flounder	24	254	29	11.42	34.35	14.57
FIXED GEAR	Witch Flounder	4	2666	662	24.83	86.72	73.44
FIXED GEAR	CC/GOM Yellowtail Flounder	243	2376	597	25.13	31.36	26.85
FIXED GEAR	GB Yellowtail Flounder	35	42	8	19.05	53.57	45.24
FIXED GEAR	SNE/MA Yellowtail Flounder	0	248	55	22.18		
FIXED GEAR	GB Haddock East	13559	31	5	16.13	41.85	29.03
FIXED GEAR	GB Haddock West	2275	2381	624	26.21	29.25	25.24
FIXED GEAR	GOM Haddock	1564	254	29	11.42	45.29	22.83
FIXED GEAR	White Hake	4418	2666	662	24.83	16.22	8.81
FIXED GEAR	Pollock	18920	2666	662	24.83	17.43	10.05
FIXED GEAR	Redfish	333	2666	662	24.83	36	32.26
FIXED GEAR	SNE/MA Winter Flounder	2926	2370	620	26.16	14.5	7.68
FIXED GEAR	Southern Windowpane	0	248	55	22.18		
FIXED GEAR	Northern Windowpane	417	2418	608	25.14	18.61	11.46
FIXED GEAR	Ocean Pout	8699	2666	662	24.83	50.63	48.5
FIXED GEAR	Halibut	4942	2666	662	24.83	68.13	63.02
FIXED GEAR	Wolffish	4551	2666	662	24.83	17	9.6
NCCS	GB Cod West	42	18	0	0		
NCCS	GOM Cod	4350	60	14	23.33	13.36	6.67
NCCS	Plaice	58	78	14	17.95	23.38	12.82
NCCS	GOM Winter Flounder	0	60	14	23.33		
NCCS	Witch Flounder	19	78	14	17.95	23.94	12.82
NCCS	CC/GOM Yellowtail Flounder	0	60	14	23.33		
NCCS	SNE/MA Yellowtail Flounder	10	18	0	0		
NCCS	GB Haddock West	7	18	0	0		
NCCS	GOM Haddock	0	60	14	23.33		
NCCS	White Hake	7	78	14	17.95	23.94	12.82
NCCS	Pollock	33	78	14	17.95	27.69	16.67
NCCS	Redfish	44	78	14	17.95	23.94	12.82
NCCS	SNE/MA Winter Flounder	36	18	0	0		
NCCS	Southern Windowpane	136	18	0	0		
NCCS	Northern Windowpane	0	60	14	23.33		
NCCS	Ocean Pout	235	78	14	17.95	30.48	19.23
NCCS	Halibut	4	78	14	17.95	23.94	12.82
NCCS	Wolffish	180	78	14	17.95	46.76	35.9

PORT CYLDE	GB Cod West	28	1	1	100		
PORT CYLDE	GOM Cod	7544	765	195	25.49	10.31	3.92
PORT CYLDE	Plaice	11228	766	195	25.46	22.48	16.19
PORT CYLDE	GB Winter Flounder	0	1	1	100		
PORT CYLDE	GOM Winter Flounder	10	765	195	25.49	38.67	36.34
PORT CYLDE	Witch Flounder	9466	766	195	25.46	17.33	10.31
PORT CYLDE	CC/GOM Yellowtail Flounder	75	765	195	25.49	41.23	39.35
PORT CYLDE	GB Yellowtail Flounder	0	1	1	100		
PORT CYLDE	GB Haddock West	0	1	1	100		
PORT CYLDE	GOM Haddock	580	765	195	25.49	41.26	39.35
PORT CYLDE	White Hake	10411	766	195	25.46	13.27	6.27
PORT CYLDE	Pollock	23247	766	195	25.46	13.19	6.27
PORT CYLDE	Redfish	1817	766	195	25.46	18.26	11.36
PORT CYLDE	Northern Windowpane	0	766	195	25.46		
PORT CYLDE	Ocean Pout	9	766	195	25.46	86.56	74.02
PORT CYLDE	Halibut	3841	766	195	25.46	17.21	10.18
PORT CYLDE	Wolffish	1229	766	195	25.46	19.03	12.14
SUST HARV 1	GB Cod East	15729	194	54	27.84	30.83	29.38
SUST HARV 1	GB Cod West	48313	570	195	34.21	25.35	27.19
SUST HARV 1	GOM Cod	44129	1068	327	30.62	13.08	7.77
SUST HARV 1	Plaice	166124	1817	400	22.01	7.36	1.71
SUST HARV 1	GB Winter Flounder	1353	452	105	23.23	23.7	15.93
SUST HARV 1	GOM Winter Flounder	698	1068	327	30.62	25.71	24.53
SUST HARV 1	Witch Flounder	58295	1817	400	22.01	8.2	2.09
SUST HARV 1	CC/GOM Yellowtail Flounder	9089	1306	353	27.03	26.89	22.97
SUST HARV 1	GB Yellowtail Flounder	9765	452	105	23.23	21.87	13.94
SUST HARV 1	SNE/MA Yellowtail Flounder	3002	63	15	23.81	26.96	20.63
SUST HARV 1	GB Haddock East	48902	194	54	27.84	27.45	24.74
SUST HARV 1	GB Haddock West	22657	570	195	34.21	15.93	12.81
SUST HARV 1	GOM Haddock	2892	1068	327	30.62	11.71	6.37
SUST HARV 1	White Hake	5254	1817	400	22.01	24.18	15.52
SUST HARV 1	Pollock	60306	1817	400	22.01	16.35	7.76
SUST HARV 1	Redfish	247642	1817	400	22.01	13.37	5.34
SUST HARV 1	SNE/MA Winter Flounder	25722	312	151	48.4	31.72	51.28
SUST HARV 1	Southern Windowpane	13123	63	15	23.81	37.91	33.33
SUST HARV 1	Northern Windowpane	13465	1756	388	22.1	24.22	15.6
SUST HARV 1	Ocean Pout	8829	1817	400	22.01	14.43	6.16
SUST HARV 1	Halibut	21599	1817	400	22.01	8.69	2.37
SUST HARV 1	Wolffish	12800	1817	400	22.01	16.57	7.98

TRI-STATE	GB Cod West	1119	16	4	25	6.28	6.25
TRI-STATE	GOM Cod	751	41	9	21.95	15.89	7.32
TRI-STATE	Plaice	557	57	13	22.81	28.69	22.81
TRI-STATE	GB Winter Flounder	3	16	4	25	72.31	68.75
TRI-STATE	GOM Winter Flounder	12	41	9	21.95	18.33	9.76
TRI-STATE	Witch Flounder	74	57	13	22.81	36.8	31.58
TRI-STATE	CC/GOM Yellowtail Flounder	2132	41	9	21.95	21.72	14.63
TRI-STATE	GB Yellowtail Flounder	1093	16	4	25	29.1	25
TRI-STATE	GB Haddock West	1624	16	4	25	28.42	25
TRI-STATE	GOM Haddock	0	41	9	21.95		
TRI-STATE	White Hake	194	57	13	22.81	63.71	57.89
TRI-STATE	Pollock	194	57	13	22.81	91.59	73.68
TRI-STATE	Redfish	0	57	13	22.81		
TRI-STATE	Northern Windowpane	380	57	13	22.81	22.87	15.79
TRI-STATE	Ocean Pout	484	57	13	22.81	27.78	21.05
TRI-STATE	Halibut	118	57	13	22.81	63.43	57.89
TRI-STATE	Wolffish	184	57	13	22.81	38.97	33.33
NEFS 2	GB Cod East	16474	53	19	35.85	50.61	62.26
NEFS 2	GB Cod West	21441	295	95	32.2	21.13	19.32
NEFS 2	GOM Cod	98823	2172	540	24.86	9.22	3.04
NEFS 2	Plaice	102651	2520	564	22.38	9.14	2.62
NEFS 2	GB Winter Flounder	1954	134	39	29.1	33.21	33.58
NEFS 2	GOM Winter Flounder	3811	2172	540	24.86	16.64	9.25
NEFS 2	Witch Flounder	21361	2520	564	22.38	10.28	3.29
NEFS 2	CC/GOM Yellowtail Flounder	66613	2390	556	23.26	12.54	5.06
NEFS 2	GB Yellowtail Flounder	4333	134	39	29.1	43.65	47.01
NEFS 2	GB Haddock East	15365	53	19	35.85	32.73	41.51
NEFS 2	GB Haddock West	11221	295	95	32.2	28.77	30.51
NEFS 2	GOM Haddock	4461	2172	540	24.86	22.37	15.56
NEFS 2	White Hake	4723	2520	564	22.38	36.24	29.64
NEFS 2	Pollock	14534	2520	564	22.38	15.84	7.46
NEFS 2	Redfish	83468	2520	564	22.38	13.69	5.67
NEFS 2	SNE/MA Winter Flounder	797	216	84	38.89	44.84	58.8
NEFS 2	Northern Windowpane	30922	2520	564	22.38	11.06	3.81
NEFS 2	Ocean Pout	6379	2520	564	22.38	10.04	3.13
NEFS 2	Halibut	7097	2520	564	22.38	12.61	4.88
NEFS 2	Wolffish	29298	2520	564	22.38	11.4	4.01

NEFS 3	GB Cod West	23	195	38	19.49	53.92	44.1
NEFS 3	GOM Cod	60245	2921	950	32.52	5.27	1.47
NEFS 3	Plaice	2449	3116	986	31.64	11.63	6.51
NEFS 3	GOM Winter Flounder	764	2921	950	32.52	8.27	3.56
NEFS 3	Witch Flounder	512	3116	986	31.64	27.29	27.73
NEFS 3	CC/GOM Yellowtail Flounder	25304	2924	951	32.52	10.08	5.2
NEFS 3	SNE/MA Yellowtail Flounder	10	192	35	18.23	90.65	67.19
NEFS 3	GB Haddock West	3	195	38	19.49	90.82	69.23
NEFS 3	GOM Haddock	3431	2921	950	32.52	11.3	6.44
NEFS 3	White Hake	5524	3116	986	31.64	18.3	14.73
NEFS 3	Pollock	26944	3116	986	31.64	25.41	24.94
NEFS 3	Redfish	446	3116	986	31.64	14.83	10.17
NEFS 3	SNE/MA Winter Flounder	29	195	38	19.49	54.6	44.62
NEFS 3	Southern Windowpane	0	192	35	18.23		
NEFS 3	Northern Windowpane	3387	2924	951	32.52	10.88	5.98
NEFS 3	Ocean Pout	676	3116	986	31.64	16.73	12.61
NEFS 3	Halibut	4028	3116	986	31.64	13.73	8.86
NEFS 3	Wolffish	4642	3116	986	31.64	8.94	3.98
NEFS 5	GB Cod East	86	5	2	40	53.64	80
NEFS 5	GB Cod West	2046	651	212	32.57	20.62	18.59
NEFS 5	Plaice	2958	656	212	32.32	60.43	66.01
NEFS 5	GB Winter Flounder	6	24	3	12.5	54.94	33.33
NEFS 5	Witch Flounder	2480	656	212	32.32	18.18	14.94
NEFS 5	GB Yellowtail Flounder	1834	24	3	12.5	42.95	25
NEFS 5	SNE/MA Yellowtail Flounder	19330	632	209	33.07	12.27	7.75
NEFS 5	GB Haddock East	49	5	2	40	73.02	80
NEFS 5	GB Haddock West	929	651	212	32.57	39.86	46.08
NEFS 5	White Hake	251	656	212	32.32	32.75	36.28
NEFS 5	Pollock	7	656	212	32.32	51.18	58.23
NEFS 5	Redfish	0	656	212	32.32		
NEFS 5	SNE/MA Winter Flounder	66287	632	209	33.07	8.65	3.96
NEFS 5	Southern Windowpane	114399	632	209	33.07	10.38	5.7
NEFS 5	Northern Windowpane	4744	24	3	12.5	64.48	41.67
NEFS 5	Ocean Pout	35975	656	212	32.32	23.19	22.26
NEFS 5	Halibut	145	656	212	32.32	52.22	59.15
NEFS 5	Wolffish	0	656	212	32.32		

NEFS 6	GB Cod East	311	5	2	40	56.44	80
NEFS 6	GB Cod West	4901	86	27	31.4	34.38	38.37
NEFS 6	GOM Cod	5684	127	42	33.07	30.24	33.86
NEFS 6	Plaice	11115	218	43	19.72	22.04	11.93
NEFS 6	GB Winter Flounder	7	18	3	16.67	102.59	72.22
NEFS 6	GOM Winter Flounder	359	127	42	33.07	27.73	29.92
NEFS 6	Witch Flounder	3023	218	43	19.72	21.53	11.47
NEFS 6	CC/GOM Yellowtail Flounder	5213	199	43	21.61	24.23	15.58
NEFS 6	GB Yellowtail Flounder	362	18	3	16.67	67.15	55.56
NEFS 6	SNE/MA Yellowtail Flounder	14	1	0	0		
NEFS 6	GB Haddock East	516	5	2	40	39.16	60
NEFS 6	GB Haddock West	2154	86	27	31.4	40.23	45.35
NEFS 6	GOM Haddock	453	127	42	33.07	42.99	50.39
NEFS 6	White Hake	1752	218	43	19.72	39.66	30.28
NEFS 6	Pollock	2320	218	43	19.72	27.15	16.97
NEFS 6	Redfish	11979	218	43	19.72	21.85	11.93
NEFS 6	SNE/MA Winter Flounder	1545	73	26	35.62	65.63	72.6
NEFS 6	Southern Windowpane	187	1	0	0		
NEFS 6	Northern Windowpane	5782	217	43	19.82	26.65	16.59
NEFS 6	Ocean Pout	5744	218	43	19.72	32.74	22.94
NEFS 6	Halibut	3080	218	43	19.72	22.17	11.93
NEFS 6	Wolffish	1306	218	43	19.72	32.24	22.48
NEFS 7	GB Cod East	1545	19	7	36.84	17.98	21.05
NEFS 7	GB Cod West	8345	404	100	24.75	27.81	22.28
NEFS 7	GOM Cod	672	25	11	44	24.48	36
NEFS 7	Plaice	18135	447	110	24.61	18.53	11.19
NEFS 7	GB Winter Flounder	447	143	32	22.38	30.55	23.08
NEFS 7	GOM Winter Flounder	1	25	11	44	70.89	84
NEFS 7	Witch Flounder	5367	447	110	24.61	17.2	9.84
NEFS 7	CC/GOM Yellowtail Flounder	3	70	18	25.71	82.15	72.86
NEFS 7	GB Yellowtail Flounder	6357	143	32	22.38	21.89	13.99
NEFS 7	SNE/MA Yellowtail Flounder	4986	235	65	27.66	37.03	37.02
NEFS 7	GB Haddock East	374	19	7	36.84	12.93	10.53
NEFS 7	GB Haddock West	5498	404	100	24.75	58.18	55.45
NEFS 7	GOM Haddock	41	25	11	44	30.75	48
NEFS 7	White Hake	2730	447	110	24.61	40.18	37.14
NEFS 7	Pollock	2935	447	110	24.61	44.42	41.83
NEFS 7	Redfish	1283	447	110	24.61	50.61	48.32
NEFS 7	SNE/MA Winter Flounder	7765	280	73	26.07	44.34	43.57
NEFS 7	Southern Windowpane	3869	235	65	27.66	40.17	40.85
NEFS 7	Northern Windowpane	28397	213	47	22.07	17.83	9.39
NEFS 7	Ocean Pout	3576	447	110	24.61	33.75	29.31
NEFS 7	Halibut	2661	447	110	24.61	21.81	14.77
NEFS 7	Wolffish	463	447	110	24.61	29.48	24.16

NEFS 8	GB Cod East	4452	33	19	57.58	23.35	45.45
NEFS 8	GB Cod West	9451	161	37	22.98	20.84	13.04
NEFS 8	GOM Cod	1068	13	6	46.15	51.29	76.92
NEFS 8	Plaice	13506	212	45	21.23	24.27	15.09
NEFS 8	GB Winter Flounder	1362	140	38	27.14	35.44	34.29
NEFS 8	GOM Winter Flounder	599	13	6	46.15	40.9	61.54
NEFS 8	Witch Flounder	6639	212	45	21.23	23.18	14.15
NEFS 8	CC/GOM Yellowtail Flounder	1239	52	18	34.62	62.37	71.15
NEFS 8	GB Yellowtail Flounder	18574	140	38	27.14	23.98	19.29
NEFS 8	SNE/MA Yellowtail Flounder	0	19	6	31.58		
NEFS 8	GB Haddock East	2784	33	19	57.58	21.28	42.42
NEFS 8	GB Haddock West	4335	161	37	22.98	23.27	15.53
NEFS 8	GOM Haddock	0	13	6	46.15		
NEFS 8	White Hake	3825	212	45	21.23	47.22	40.09
NEFS 8	Pollock	212	212	45	21.23	33.84	25.94
NEFS 8	Redfish	2683	212	45	21.23	32.42	24.06
NEFS 8	SNE/MA Winter Flounder	4836	58	21	36.21	56.26	67.24
NEFS 8	Southern Windowpane	0	19	6	31.58		
NEFS 8	Northern Windowpane	33012	193	44	22.8	28.14	20.73
NEFS 8	Ocean Pout	8820	212	45	21.23	27.41	18.4
NEFS 8	Halibut	2853	212	45	21.23	23.61	14.62
NEFS 8	Wolffish	719	212	45	21.23	36.91	29.25
NEFS 9	GB Cod East	22021	79	26	32.91	17.64	15.19
NEFS 9	GB Cod West	117093	585	137	23.42	16.76	8.72
NEFS 9	GOM Cod	10523	107	33	30.84	34.14	37.38
NEFS 9	Plaice	83820	771	140	18.16	11.87	3.37
NEFS 9	GB Winter Flounder	23810	409	110	26.89	33.82	32.03
NEFS 9	GOM Winter Flounder	905	107	33	30.84	35.3	38.32
NEFS 9	Witch Flounder	23397	771	140	18.16	17.71	7.26
NEFS 9	CC/GOM Yellowtail Flounder	13891	309	91	29.45	25.49	23.3
NEFS 9	GB Yellowtail Flounder	51084	409	110	26.89	17.23	11
NEFS 9	SNE/MA Yellowtail Flounder	1663	53	18	33.96	63.09	69.81
NEFS 9	GB Haddock East	8320	79	26	32.91	19.34	17.72
NEFS 9	GB Haddock West	30245	585	137	23.42	19.88	11.97
NEFS 9	GOM Haddock	1049	107	33	30.84	58.89	63.55
NEFS 9	White Hake	13708	771	140	18.16	24.63	13.1
NEFS 9	Pollock	4889	771	140	18.16	25.9	14.27
NEFS 9	Redfish	54833	771	140	18.16	19.75	8.82
NEFS 9	SNE/MA Winter Flounder	59329	255	89	34.9	36.66	44.71
NEFS 9	Southern Windowpane	2668	53	18	33.96	48.08	58.49
NEFS 9	Northern Windowpane	155056	718	139	19.36	17.27	7.38
NEFS 9	Ocean Pout	27069	771	140	18.16	14.23	4.8
NEFS 9	Halibut	11217	771	140	18.16	19.54	8.69
NEFS 9	Wolffish	4798	771	140	18.16	22.67	11.28

NEFS 10	GB Cod West	1627	166	48	28.92	28.3	27.11
NEFS 10	GOM Cod	37435	950	341	35.89	9.53	5.37
NEFS 10	Plaice	12057	1116	388	34.77	11.91	7.8
NEFS 10	GB Winter Flounder	0	5	1	20		
NEFS 10	GOM Winter Flounder	3662	950	341	35.89	17.26	15.68
NEFS 10	Witch Flounder	1838	1116	388	34.77	15.18	12.01
NEFS 10	CC/GOM Yellowtail Flounder	55661	1076	376	34.94	15.02	11.9
NEFS 10	GB Yellowtail Flounder	0	5	1	20		
NEFS 10	SNE/MA Yellowtail Flounder	0	35	12	34.29		
NEFS 10	GB Haddock West	188	166	48	28.92	48.48	51.81
NEFS 10	GOM Haddock	582	950	341	35.89	18.98	18.32
NEFS 10	White Hake	2915	1116	388	34.77	37.33	45.25
NEFS 10	Pollock	11865	1116	388	34.77	31.43	36.92
NEFS 10	Redfish	732	1116	388	34.77	25.11	27.24
NEFS 10	SNE/MA Winter Flounder	1834	161	48	29.81	28.78	28.57
NEFS 10	Southern Windowpane	2	35	12	34.29	83.32	82.86
NEFS 10	Northern Windowpane	28101	1081	376	34.78	18.01	16.19
NEFS 10	Ocean Pout	4900	1116	388	34.77	17.64	15.59
NEFS 10	Halibut	2042	1116	388	34.77	18.15	16.4
NEFS 10	Wolffish	9013	1116	388	34.77	27.95	31.72
NEFS 11	GB Cod West	0	142	23	16.2		
NEFS 11	GOM Cod	19529	1547	423	27.34	8.21	2.78
NEFS 11	Plaice	5973	1689	446	26.41	13.6	6.87
NEFS 11	GOM Winter Flounder	187	1547	423	27.34	16.64	10.41
NEFS 11	Witch Flounder	698	1689	446	26.41	11.53	5.09
NEFS 11	CC/GOM Yellowtail Flounder	4063	1547	423	27.34	29.52	26.76
NEFS 11	SNE/MA Yellowtail Flounder	0	142	23	16.2		
NEFS 11	GB Haddock West	0	142	23	16.2		
NEFS 11	GOM Haddock	1110	1547	423	27.34	19.61	13.9
NEFS 11	White Hake	3165	1689	446	26.41	14	7.28
NEFS 11	Pollock	27898	1689	446	26.41	22.07	16.28
NEFS 11	Redfish	1477	1689	446	26.41	20.33	14.15
NEFS 11	SNE/MA Winter Flounder	0	142	23	16.2		
NEFS 11	Southern Windowpane	12	142	23	16.2	65.56	48.59
NEFS 11	Northern Windowpane	697	1547	423	27.34	24.22	19.72
NEFS 11	Ocean Pout	254	1689	446	26.41	44.17	43.75
NEFS 11	Halibut	1916	1689	446	26.41	28.38	24.33
NEFS 11	Wolffish	1227	1689	446	26.41	21.72	15.87

NEFS 12	GB Cod West	242	38	10	26.32	75.97	71.05
NEFS 12	GOM Cod	7390	241	62	25.73	25.74	20.33
NEFS 12	Plaice	3030	279	71	25.45	26.15	20.79
NEFS 12	GB Winter Flounder	0	3	1	33.33		
NEFS 12	GOM Winter Flounder	56	241	62	25.73	49.57	48.96
NEFS 12	Witch Flounder	293	279	71	25.45	25.4	19.71
NEFS 12	CC/GOM Yellowtail Flounder	5034	241	62	25.73	39.31	37.34
NEFS 12	GB Yellowtail Flounder	0	3	1	33.33		
NEFS 12	SNE/MA Yellowtail Flounder	0	35	9	25.71		
NEFS 12	GB Haddock West	17	38	10	26.32	75.97	71.05
NEFS 12	GOM Haddock	289	241	62	25.73	18.71	12.03
NEFS 12	White Hake	10296	279	71	25.45	24.77	19
NEFS 12	Pollock	48725	279	71	25.45	19.51	12.9
NEFS 12	Redfish	1860	279	71	25.45	20.61	13.98
NEFS 12	SNE/MA Winter Flounder	0	35	9	25.71		
NEFS 12	Southern Windowpane	0	35	9	25.71		
NEFS 12	Northern Windowpane	621	244	62	25.41	39.04	36.89
NEFS 12	Ocean Pout	33	279	71	25.45	53.11	51.97
NEFS 12	Halibut	377	279	71	25.45	32.36	28.67
NEFS 12	Wolffish	497	279	71	25.45	41.63	39.78
NEFS 13	GB Cod East	3551	62	18	29.03	31.28	32.26
NEFS 13	GB Cod West	7261	521	143	27.45	20	14.4
NEFS 13	GOM Cod	299	29	4	13.79	57.35	37.93
NEFS 13	Plaice	9297	612	147	24.02	23.12	15.85
NEFS 13	GB Winter Flounder	377	256	54	21.09	34.87	26.56
NEFS 13	GOM Winter Flounder	0	29	4	13.79		
NEFS 13	Witch Flounder	6639	612	147	24.02	17.09	9.31
NEFS 13	CC/GOM Yellowtail Flounder	236	77	26	33.77	59.55	67.53
NEFS 13	GB Yellowtail Flounder	12387	256	54	21.09	23.64	14.45
NEFS 13	SNE/MA Yellowtail Flounder	10869	279	91	32.62	19.37	16.85
NEFS 13	GB Haddock East	3268	62	18	29.03	24.43	22.58
NEFS 13	GB Haddock West	7548	521	143	27.45	21.62	16.51
NEFS 13	GOM Haddock	29	29	4	13.79	61.21	41.38
NEFS 13	White Hake	2917	612	147	24.02	36.17	31.54
NEFS 13	Pollock	207	612	147	24.02	39.4	35.29
NEFS 13	Redfish	6451	612	147	24.02	23.77	16.67
NEFS 13	SNE/MA Winter Flounder	18459	327	112	34.25	16.68	14.07
NEFS 13	Southern Windowpane	42812	279	91	32.62	15.66	11.83
NEFS 13	Northern Windowpane	43808	333	61	18.32	23.04	11.71
NEFS 13	Ocean Pout	18007	612	147	24.02	28.47	22.22
NEFS 13	Halibut	2977	612	147	24.02	20.64	13.07
NEFS 13	Wolffish	1556	612	147	24.02	30.66	24.84

APPENDIX C

Evaluating the Possibility of an Observer Effect in Monitoring Discards Within the Groundfish Fishery

Draft
February 3, 2013

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Introduction

The Northeast Multispecies fishery is comprised of 22 individual fish stocks that are caught collectively by around 400 vessels licensed for and participating in this fishery (also called the groundfish fishery) (NEFMC 2012). The majority of the commercial fishery for groundfish (~98% of landings) is managed under what is known as the Sector system whereby individual vessels and owners pool stock-level quota into 15-18 "sectors" which then operate as collectives, pooling the quota and allocating it to individual member fisherman. Observers are deployed on board participating vessels to estimate the true catch of each of the 22 fish stocks on each trip. Observer coverage levels vary across stocks but in general observers have been on board trips accounting for between 20-50% of the landings for each stock. Actual discards are calculated by the discards observed for these trips. For trips where no observer is taken, discards are estimated based on the stock-level rates observed in each of the broad stock areas on trips by members of the same sector. For these trips, discards for all stocks in the stock area are assumed and the vessel's Sector incurs a quota charge regardless of whether or not an individual species was encountered on that trip. Sector's must have adequate quota reserves for all species in a given stock area prior to any member vessels fishing in that area.

There may be an incentive for fisherman to alter their fishing behavior when carrying an observer for at least two reasons: (1) trips carrying an observer may have higher costs than those without an observer, (2) observed discard rates effect not only the individual fisherman but all the members of a fisherman's Sector, as quota deductions for assumed discards increase the cost of fishing by placing quota costs on each trip regardless of the species encountered. Differences in observed and unobserved discard rates may be manifest through two primary pathways. In the first, the selection of trips observed is not representative of the universe of trips. In the second, changes in fishing behavior when an observer is on board result in discard data that are not representative of those from unobserved trips. The first is termed the "deployment effect" and the second the "observer effect." This analysis is restricted solely to the second pathway, the observer effect.

Methods

Following the procedure laid out in Benoit and Allard 2009, same-vessel trip sequences are analyzed to test for differences among various metrics (Benoit and Allard 2009). These trip sequence takes the form of either:

- Three unobserved trips in a row (UUU), or
- One observed trip between unobserved trips (UOU).

To restrict the potential of seasonal effects impacting catch composition, targeting behavior or other factors, only trips occurring within 21 days of each other are considered for sequencing. Trips are not included in multiple sequences. To mitigate against regulatory changes affecting fishing behavior within trip sequences, those sequences overlapping a fishing year change (May 1 of each year) are deleted from the analysis dataset. Vessels with less than three sequences are excluded from the analysis. Only vessels fishing with trawl or gillnet gears are included.

Triplet sequences are winnowed to pairs by taking the difference of either the

leading or lagging trip with respect to the middle trip. The variable U in equation (1) and U^2 in equation (2), below, are selected randomly as either the leading or trailing trip in the triplet sequence, while the middle trip in the sequence is always the reference trip (O or U^1, below).

Differences are calculated as

$$(1)\ \Delta O_{yfv} = \left(\frac{O-U}{\acute{U}}\right)100$$

$$(2)\ \Delta U_{yfv} = \left(\frac{U^1-U^2}{\acute{U}}\right)100.$$

Note that (1) and (2) scale the paired trip differences by the global unobserved (U) mean value for every vessel in the dataset.

The difference between the median values for ΔU's and ΔO's are calculated as

$$(3)\ M_{\Delta U-\Delta O} = median\{\Delta_U\} - median\{\Delta_O\}.$$

Distribution differences are tested in three ways:

1. Location differences are observed in the $M_{\Delta U-\Delta O}$, with 95% confidence intervals estimated using bootstrap sampling (5,000 replicates) from the ΔO_{yfv} and ΔU_{yfv} values. Lack of overlap with zero implies a 95% probability that the true median values for each population are significantly different.

2. The Kolmogorov-Smirnov statistic is used to test for general differences in shape of the two distributions.
3. The Kuiper statistic is used to test for differences in the extremities of the two distributions.

For hypothesis testing using the Kolmogorov-Smirnov (KSA) and Kuiper (KA) tests, multiple hypothesis tests were performed and, using the Sidak correction, a p-value of 0.006391 is considered to be significant. Eight metrics for detecting behavior change in the presence of an observer were selected:

1. All landed pounds (y1, delta_k_all)
2. Roundfish pounds (y2, delta_round_lbs)
3. Grounfish pounds (y3, delta_gfish_lbs)
4. Nongroundfish pounds (y4, delta_nongfish_lbs)
5. Cod pounds (y5, delta_cod_lbs)
6. Groundfish total value (y6, delta_gfish_val)
7. Nongroundfish total value (y7, delta_nongfish_val)
8. Trip duration (y8, delta_dur)

Data

The analysis draws from Vessel Trip Report (VTR) trips. The initial dataset includes all VTR trips landing at least one pound of groundfish from 2007 through 2012. From this dataset, annual fishing year datasets (May 1 – April 30) with same-vessel two-trip sequences are constructed from UUU and UOU triplets. These data may be partitioned in several ways:

- based on regulatory regime, with pre-Sector years (FY’s 2007-2009), and

Sector years (FY's 2010-2012 thru Jan 30 2013)

- based on gear type, distinguishing between trawl and fixed gears
- based on fishing locations of the reference trip (U^1 for UUU triplets and O for UOU triplets), distinguishing between trips made in the Gulf of Maine, on Georges Bank and in Southern New England and the Mid-Atlantic.

Observer trips are matched to VTR by a step-wise matching algorithm focusing on date and time sailed. For the post-Sector years, both OBS and ASM data are matched. Trips in the United States-Canada Resource Sharing Agreement Area (USCA area) are removed from the pre-sector (FY 2007-2009) dataset. These trips were subject to at sea monitoring at much higher rates than trips outside the area, and as fisherman were aware of this up-front it may be problematic to compare trips inside and outside of the USCA area within the triplet sequence framework. All USCA trips may, however, be analyzed separately.

Results

Equations (1) and (2) are scaled and differences in location are represented as percentages. For example, a median value of 4.18 for the kept_all variable may be interpreted to mean that across all vessels in the dataset, individual vessels catch roughly 4% more fish, measured in landed pounds, on unobserved trips than on observed trips. If the 95% confidence intervals fail to overlap with zero, the median value may be interpreted as significant.

Fishing behavior across the eight analysis metrics is highly variable. This may be due to natural fluctuations, or to variable incentives to alter fishing behavior. For example, prior to the implementation of stock-level quotas (the Sector system), there may have been an incentive to discard species due to trip limits. This incentive would, for example, leave the cod_kept metric (y5) in the Gulf of Maine identical on observed and unobserved trips, but one may expect to see changes in, for example, the total non-groundfish pounds

kept on a trip if the vessel were intentionally fishing after reaching a trip limit. After the implementation of the Sector system there is a substantial, though not significant, change the performance of this metric. There may in fact be off-setting incentives due to quota allocations, fishing preferences or other factors. One vessel may attempt to minimize observed discarding of flatfish at the expense of cod, while another vessel may take the exact opposite approach. Such offsetting behavior would result in little change in the central tendency of the distribution of $M_{\Delta U-\Delta O}$but may affect the shape of the distribution. This is where the Kuiper and Kolmogorov-Smirnov (K-S) tests become valuable. The K-S tests for changes in the shape of the distribution, while the Kuiper tests for changes in the extreme observations-the tails of the distribution.

Global analysis may mask local tendencies, either by gear type or area fished. However, all three tests are somewhat sensitive to the number of data points. Global analysis risks statistical differences that may be practically meaningless. Drill down too far into the data and the variance leaves the three statistical tests lacking in power. It is difficult to ascertain the appropriate data set size, and results at several levels of disaggregation are reported.

In general it can be said that the more data, the more metrics for which statistically significant differences between observed and unobserved trips may be found. When data from fishing years 2007-2012 are combined, significant shifts in the median of the distribution are observed for seven of the eight variables. The differences are, however, on the order of 1-4%, and positive, indicating that vessels tend to catch more of everything (roundfish, groundfish, non-groundfish) and fish longer when they do not have an observer on board. Significant differences in the distributions are seen for both the K-S and the Kuiper tests for all eight metrics, indicating significant differences in the shape of the metric distributions when vessels are carrying (vs. not carrying) a fisheries observer.

Discussion

These analyses point towards a highly variable but relatively consistent pattern of different fishing behaviors when an observer is on board and when one is not. The approach used here isolates vessel effects by focusing on the differences in behavior across various metrics for the same vessel. This does not control for personnel effects (e.g. captains), as reliable data on personnel matched to vessels and trips are not readily available. This may be important as ultimately an observer effect analysis is attempting to learn about peoples behavior using vessels as a hopefully acceptable proxy. While the data point to a trend of differential behavior with respect to observers--and in fact in almost all circumstances vessels appear to retain more fish and fish for longer durations when they have no observer on board-it is not possible to extend this analysis beyond its natural scope. It may be possible to examine these data and conclude that vessels behave differently with an observer, but this provides no insight into the impact of this on discarding behavior or catch accounting.

Table 1: Results of observer effect analysis for eight metrics (red rows indicate significant shifts in central tendency, blue columns for the Kuiper and K-S statistics indicate significant values)

VAR	n_u	n_o	delta_med	ci2_5	ci97_5	_KSA_	P_KSA	_KA_	P_KA	med_u	std_u	med_o	std_o	med_global	std_global
y1	25,347	4,295	4.32	2.55	6.23	4.76	0.0000	5.88	0.0000	-0.68	63.11	-5.00	67.76	-1.05	63.81
y2	22,832	3,970	2.26	0.62	4.53	4.99	0.0000	7.39	0.0000	0.00	85.13	-2.26	102.10	0.00	87.85
y3	25,347	4,295	3.19	1.39	5.13	5.26	0.0000	7.39	0.0000	-0.58	74.92	-3.77	90.89	-0.79	77.44
y4	18,943	3,478	0.83	0.12	1.93	1.85	0.0022	2.21	0.0022	-0.06	106.31	-0.89	112.73	-0.19	107.33
y5	19,436	3,602	0.20	0.00	2.35	6.88	0.0000	9.99	0.0000	0.00	71.13	-0.20	101.00	0.00	76.57
y6	25,347	4,295	3.58	1.79	5.43	5.09	0.0000	7.51	0.0000	-0.90	75.10	-4.49	98.68	-1.25	78.95
y7	18,941	3,478	2.15	0.38	4.15	1.88	0.0018	2.54	0.0001	-0.11	96.08	-2.26	102.77	-0.40	97.15
y8	25,347	4,295	1.85	0.79	2.77	4.33	0.0000	4.86	0.0000	0.00	55.07	-1.85	49.28	0.00	54.27

Table 2: Results of observer effect analysis for eight metrics and two time periods (reg environ=10 is FYs 2007-2009, = 11 is FYs 2010-2012, red rows indicate significant shifts in central tendency, blue columns for the Kuiper and K-S statistics indicate significant values)

reg_environ	_VAR_	n_u	n_o	delta_med	ci2_5	ci97_5	_KSA_	P_KSA	_KA_	P_KA	med_u	std_u	med_o	std_o	med_global	std_global
'07-'09	y1	19,939	1,759	2.88	0.44	5.53	2.91	0.0000	4.09	0.0000	-0.50	61.49	-3.39	68.60	-0.61	62.10
'07-'09	y2	17,644	1,514	0.04	0.00	2.78	2.67	0.0000	4.14	0.0000	0.00	77.30	-0.04	96.32	0.00	78.97
'07-'09	y3	19,939	1,759	2.01	-0.08	4.68	3.05	0.0000	4.44	0.0000	-0.36	68.34	-2.37	84.21	-0.42	69.76
'07-'09	y4	14,095	1,304	0.67	-0.70	2.31	1.22	0.0995	1.73	0.0557	0.00	104.45	-0.67	102.69	0.00	104.30
'07-'09	y5	15,751	1,354	0.00	0.00	0.00	3.45	0.0000	4.89	0.0000	0.00	61.66	0.00	85.80	0.00	63.91
'07-'09	y6	19,939	1,759	3.29	1.07	5.98	2.98	0.0000	4.51	0.0000	-0.68	68.00	-3.97	83.83	-0.85	69.41
'07-'09	y7	14,095	1,304	0.86	-1.31	3.54	0.90	0.3947	1.76	0.0469	0.00	98.01	-0.86	102.73	0.00	98.41
'07-'09	y8	19,939	1,759	1.27	0.00	2.63	2.68	0.0000	3.71	0.0000	0.00	57.10	-1.27	53.57	0.00	56.83
'10-'12	y1	5,408	2,536	4.46	0.92	7.38	1.98	0.0008	2.05	0.0070	-2.18	68.73	-6.64	67.12	-3.40	68.26
'10-'12	y2	5,188	2,456	1.87	-1.38	5.68	1.36	0.0491	1.50	0.1768	-2.50	107.60	-4.37	105.49	-2.97	106.92
'10-'12	y3	5,408	2,536	1.78	-1.17	5.91	1.87	0.0018	2.18	0.0027	-3.22	95.34	-5.01	95.23	-3.72	95.31
'10-'12	y4	4,848	2,174	0.55	-0.63	2.03	1.53	0.0183	1.82	0.0327	-0.48	111.50	-1.03	118.25	-0.70	113.64
'10-'12	y5	3,685	2,248	2.57	-1.58	6.10	1.84	0.0024	2.05	0.0071	-1.34	102.11	-3.91	109.14	-2.39	104.85
'10-'12	y6	5,408	2,536	2.20	-0.76	5.42	2.24	0.0001	2.77	0.0000	-2.46	96.91	-4.66	107.78	-3.14	100.50
'10-'12	y7	4,846	2,174	2.33	-0.67	5.30	1.73	0.0052	2.39	0.0005	-0.95	90.23	-3.28	102.77	-1.68	94.30
'10-'12	y8	5,408	2,536	2.38	0.57	3.46	2.39	0.0000	2.47	0.0002	-0.05	46.80	-2.43	46.08	-0.76	46.59

Table 3. Results of observer effect analysis across area, gear and regulatory environmanet strata for eight metrics (red rows indicate significant shifts in central tendency, blue columns for the Kuiper and K-S statistics indicate significant values)

area	gear	reg_environ	_VAR_	n_u	n_o	delta_med	ci2_5	ci97_5	_KSA_	P_KSA	_KA_	P_KA	med_u	std_u	med_o	std_o	med_global	std_global
GOM	trawl	'07-'09	y1	5,492	473	3.05	-2.18	8.20	1.75	0.0044	2.71	0.0000	-0.58	60.31	-3.63	72.30	-0.67	61.34
GOM	trawl	'07-'09	y2	5,348	459	0.00	-0.31	3.86	1.94	0.0011	3.22	0.0000	0.00	74.21	0.00	96.93	0.00	76.24
GOM	trawl	'07-'09	y3	5,492	473	2.90	-2.70	8.66	2.09	0.0003	3.20	0.0000	-0.41	64.28	-3.31	76.96	-0.46	65.37
GOM	trawl	'07-'09	y4	2,845	284	-2.25	-10.40	4.23	1.25	0.0884	1.94	0.0151	0.25	135.49	2.50	122.47	0.29	134.37
GOM	trawl	'07-'09	y5	5,007	435	0.00	0.00	4.29	2.78	0.0000	3.53	0.0000	0.00	68.16	0.00	93.33	0.00	70.51
GOM	trawl	'07-'09	y6	5,492	473	3.03	-2.20	9.48	1.99	0.0008	2.88	0.0000	-1.09	65.03	-4.13	70.65	-1.31	65.49
GOM	trawl	'07-'09	y7	2,845	284	-4.78	-18.03	7.47	1.46	0.0286	1.99	0.0108	0.41	117.02	5.19	119.95	0.52	117.29
GOM	trawl	'07-'09	y8	5,492	473	1.58	-0.92	5.59	1.18	0.1241	2.11	0.0045	-0.52	62.97	-2.10	55.41	-0.71	62.40
GOM	trawl	'10-'12	y1	1,431	621	5.64	-0.88	13.30	1.74	0.0045	1.80	0.0360	-4.21	71.72	-9.85	70.21	-6.16	71.39
GOM	trawl	'10-'12	y2	1,408	609	2.62	-4.61	12.00	1.36	0.0505	2.21	0.0022	-2.43	102.90	-5.05	103.79	-3.04	103.16
GOM	trawl	'10-'12	y3	1,431	621	6.46	-1.39	16.26	2.15	0.0002	2.52	0.0002	-2.98	79.17	-9.44	84.67	-4.34	80.99
GOM	trawl	'10-'12	y4	1,204	496	-0.25	-4.61	4.18	0.66	0.7812	1.16	0.5987	-1.83	146.25	-1.58	130.20	-1.75	141.72
GOM	trawl	'10-'12	y5	1,156	590	7.25	-2.57	17.68	1.60	0.0117	1.73	0.0538	-0.88	110.17	-8.14	108.46	-2.89	109.73
GOM	trawl	'10-'12	y6	1,431	621	7.79	-0.28	18.29	2.63	0.0000	2.80	0.0000	-0.74	80.61	-8.53	92.95	-2.16	84.66
GOM	trawl	'10-'12	y7	1,204	496	2.68	-5.27	9.21	0.66	0.7829	1.24	0.4696	-1.13	104.29	-3.82	108.75	-1.88	105.58
GOM	trawl	'10-'12	y8	1,431	621	4.38	0.25	7.86	2.43	0.0000	2.64	0.0000	-0.45	39.01	-4.83	41.40	-1.58	39.83
GOM	gillnet	'07-'09	y1	8,939	558	1.40	-0.93	5.16	1.47	0.0266	1.87	0.0231	-0.23	53.91	-1.62	56.67	-0.25	54.07
GOM	gillnet	'07-'09	y2	8,880	550	0.00	0.00	2.80	1.55	0.0161	1.99	0.0106	0.00	59.09	0.00	64.12	0.00	59.40
GOM	gillnet	'07-'09	y3	8,939	558	0.66	-0.37	4.28	1.61	0.0113	2.07	0.0060	-0.12	57.55	-0.78	62.00	-0.15	57.82
GOM	gillnet	'07-'09	y4	5,895	336	0.15	-1.02	1.69	0.69	0.7342	1.07	0.7312	0.00	97.17	-0.15	92.74	0.00	96.93
GOM	gillnet	'07-'09	y5	8,860	548	0.00	0.00	0.00	2.17	0.0002	2.49	0.0002	0.00	42.10	0.00	42.44	0.00	42.12
GOM	gillnet	'07-'09	y6	8,939	558	2.99	0.21	6.63	1.80	0.0031	2.22	0.0020	-0.22	47.16	-3.21	50.66	-0.33	47.38
GOM	gillnet	'07-'09	y7	5,895	336	2.17	-0.90	7.29	1.06	0.2146	1.33	0.3579	0.00	100.99	-2.17	97.63	0.00	100.81
GOM	gillnet	'07-'09	y8	8,939	558	1.98	0.00	3.64	2.65	0.0000	2.78	0.0000	0.00	50.36	-1.98	47.25	0.00	50.20
GOM	gillnet	'10-'12	y1	1,821	1,095	1.74	-2.20	5.67	1.56	0.0155	2.13	0.0039	-1.28	69.11	-3.02	62.54	-2.00	66.73
GOM	gillnet	'10-'12	y2	1,794	1,090	-0.52	-4.17	2.92	0.65	0.7924	1.10	0.6892	-1.25	89.28	-0.73	89.84	-1.07	89.48
GOM	gillnet	'10-'12	y3	1,821	1,095	-1.07	-5.19	2.83	0.65	0.7921	1.25	0.4599	-2.41	81.13	-1.34	80.06	-1.88	80.72
GOM	gillnet	'10-'12	y4	1,538	887	0.44	-0.38	1.32	1.30	0.0671	1.92	0.0170	-0.06	115.70	-0.50	112.91	-0.23	114.67
GOM	gillnet	'10-'12	y5	1,777	1,076	-1.30	-6.82	1.34	1.51	0.0209	2.11	0.0045	-1.30	91.56	0.00	102.77	-0.35	95.93
GOM	gillnet	'10-'12	y6	1,821	1,095	-1.96	-6.32	2.56	0.77	0.5857	1.40	0.2698	-3.15	78.38	-1.19	78.79	-2.56	78.52
GOM	gillnet	'10-'12	y7	1,536	887	1.82	-0.98	5.41	1.91	0.0014	2.05	0.0072	-0.24	94.97	-2.07	92.98	-0.89	94.28
GOM	gillnet	'10-'12	y8	1,821	1,095	2.19	-0.18	3.32	1.58	0.0140	1.68	0.0724	-0.11	41.27	-2.30	41.29	-0.79	41.33
GB	trawl	'07-'09	y1	408	183	-3.31	-14.80	13.32	0.62	0.8366	0.98	0.8452	-5.91	71.68	-2.60	74.74	-5.08	72.64
GB	trawl	'07-'09	y2	397	176	0.25	-24.29	17.02	0.76	0.6063	1.05	0.7577	-4.71	101.80	-4.95	106.71	-4.93	103.39
GB	trawl	'07-'09	y3	408	183	2.13	-15.57	17.16	0.90	0.3901	1.37	0.3000	-2.66	86.01	-4.79	85.12	-3.44	85.72
GB	trawl	'07-'09	y4	392	171	-4.10	-19.82	10.11	0.77	0.5940	1.05	0.7618	-2.71	104.15	1.39	106.34	-0.40	104.85
GB	trawl	'07-'09	y5	381	174	-8.30	-32.39	11.06	1.15	0.1430	1.51	0.1684	0.00	95.64	8.30	109.55	1.84	100.47
GB	trawl	'07-'09	y6	408	183	6.41	-13.24	17.26	0.77	0.5891	1.47	0.1986	-2.73	78.58	-9.15	88.43	-3.52	81.84
GB	trawl	'07-'09	y7	392	171	-7.66	-24.43	10.60	0.83	0.4906	1.21	0.5128	0.16	89.25	7.81	103.72	2.35	93.97
GB	trawl	'07-'09	y8	408	183	-8.38	-18.56	1.54	1.38	0.0453	1.53	0.1559	-0.29	60.83	8.10	52.65	1.87	58.44
GB	trawl	'10-'12	y1	542	378	7.69	-1.59	16.72	1.67	0.0074	2.21	0.0022	-1.35	54.86	-9.04	80.80	-3.56	66.71
GB	trawl	'10-'12	y2	538	372	9.71	-3.74	24.06	1.48	0.0252	2.08	0.0057	-5.30	92.46	-15.01	130.49	-8.16	109.57
GB	trawl	'10-'12	y3	542	378	6.76	-7.48	18.74	1.04	0.2300	1.45	0.2227	-5.08	85.75	-11.84	118.76	-6.73	100.58
GB	trawl	'10-'12	y4	528	368	2.01	-4.45	12.05	1.98	0.0008	2.63	0.0001	-1.17	73.14	-3.18	119.44	-1.65	94.93
GB	trawl	'10-'12	y5	367	326	14.08	0.19	34.86	1.60	0.0121	1.82	0.0322	-7.81	114.15	-21.89	111.97	-11.96	113.26
GB	trawl	'10-'12	y6	542	378	6.46	-5.27	18.39	1.16	0.1333	1.57	0.1263	-2.86	89.11	-9.32	130.02	-4.97	107.75
GB	trawl	'10-'12	y7	528	368	1.50	-8.94	9.14	0.73	0.6629	1.45	0.2175	-3.06	75.70	-4.55	114.06	-3.78	93.34
GB	trawl	'10-'12	y8	542	378	3.33	-2.26	9.87	1.13	0.1567	1.51	0.1720	2.93	40.71	-0.40	49.63	1.37	44.58

Table 3. Results of observer effect analysis across area, gear and regulatory environmanet strata for eight metrics (red rows indicate significant shifts in central tendency, blue columns for the Kuiper and K-S statistics indicate significant values)

area	gear	reg_environ	_VAR_	n_u	n_o	delta_med	ci2_5	ci97_5	_KSA_	P_KSA	_KA_	P_KA	med_u	std_u	med_o	std_o	med_global	std_global
GB	gillnet	'07-'09	y1	1,119	177	-1.32	-9.42	8.78	0.64	0.8067	1.18	0.5719	-3.26	61.08	-1.94	62.14	-3.25	61.21
GB	gillnet	'07-'09	y2	1,082	175	-2.43	-14.22	9.23	0.76	0.6056	0.96	0.8721	-2.43	81.72	0.00	106.78	-2.23	85.77
GB	gillnet	'07-'09	y3	1,119	177	-3.12	-14.47	9.20	0.88	0.4222	1.10	0.6837	-3.12	77.16	0.00	104.11	-2.78	81.50
GB	gillnet	'07-'09	y4	1,057	158	0.50	-2.06	3.51	0.98	0.2936	1.45	0.2235	0.00	81.80	-0.50	93.02	-0.01	83.31
GB	gillnet	'07-'09	y5	1,052	160	-0.32	-10.64	4.25	0.69	0.7240	0.87	0.9420	-0.16	81.61	0.16	102.93	0.00	84.79
GB	gillnet	'07-'09	y6	1,119	177	-1.88	-16.37	9.83	1.05	0.2203	1.33	0.3526	-2.72	76.55	-0.84	107.40	-2.55	81.54
GB	gillnet	'07-'09	y7	1,057	158	1.33	-4.71	9.14	0.73	0.6629	1.25	0.4569	0.37	76.65	-0.96	98.86	0.03	79.84
GB	gillnet	'07-'09	y8	1,119	177	0.00	-3.58	4.97	1.20	0.1126	1.76	0.0460	0.00	41.75	0.00	47.83	0.00	42.63
GB	gillnet	'10-'12	y1	263	171	6.07	-9.47	20.88	0.83	0.4930	1.38	0.2940	-1.64	49.85	-7.71	50.87	-6.01	50.20
GB	gillnet	'10-'12	y2	262	170	2.21	-11.85	13.81	0.44	0.9913	0.75	0.9903	-3.52	98.39	-5.73	90.24	-4.95	95.16
GB	gillnet	'10-'12	y3	263	171	2.78	-11.31	13.76	0.48	0.9734	0.79	0.9820	-3.08	97.39	-5.86	84.57	-4.95	92.46
GB	gillnet	'10-'12	y4	236	158	1.15	-5.34	12.24	0.75	0.6257	1.38	0.2881	-1.20	76.35	-2.35	147.31	-1.55	110.25
GB	gillnet	'10-'12	y5	242	160	3.73	-8.64	14.74	0.69	0.7313	1.10	0.6889	-2.03	108.13	-5.76	134.79	-3.67	119.29
GB	gillnet	'10-'12	y6	263	171	2.15	-9.79	15.07	0.58	0.8878	0.89	0.9345	-4.27	96.79	-6.43	85.35	-5.69	92.35
GB	gillnet	'10-'12	y7	236	158	8.71	-4.34	22.21	1.28	0.0763	1.73	0.0556	-1.03	64.22	-9.73	117.28	-4.82	89.27
GB	gillnet	'10-'12	y8	263	171	1.74	-2.22	4.79	0.71	0.6895	0.98	0.8488	0.00	43.39	-1.74	37.36	-0.46	41.08
MA_SNE	trawl	'07-'09	y1	3,910	350	4.81	-2.83	15.46	1.35	0.0524	1.59	0.1161	-1.31	76.77	-6.11	80.53	-1.64	77.08
MA_SNE	trawl	'07-'09	y2	1,888	145	3.01	-2.87	20.26	1.09	0.1858	1.34	0.3377	-0.33	132.52	-3.34	153.51	-0.42	134.10
MA_SNE	trawl	'07-'09	y3	3,910	350	3.08	-1.88	9.58	1.52	0.0199	1.78	0.0421	-1.57	88.44	-4.65	107.98	-1.88	90.21
MA_SNE	trawl	'07-'09	y4	3,839	338	2.61	-2.80	11.73	1.24	0.0913	1.60	0.1117	-1.30	94.12	-3.91	97.61	-1.47	94.40
MA_SNE	trawl	'07-'09	y5	405	29	1.63	-32.41	31.16	0.85	0.4633	1.27	0.4372	2.37	156.74	0.74	206.31	2.20	160.26
MA_SNE	trawl	'07-'09	y6	3,910	350	3.89	-0.41	9.50	1.42	0.0357	1.96	0.0135	-1.17	100.26	-5.06	119.09	-1.40	101.93
MA_SNE	trawl	'07-'09	y7	3,839	338	3.63	-3.56	12.67	1.22	0.1000	1.85	0.0278	-0.81	82.15	-4.44	94.01	-0.97	83.18
MA_SNE	trawl	'07-'09	y8	3,910	350	1.52	-0.68	4.94	1.01	0.2603	1.05	0.7563	0.00	66.05	-1.52	62.82	0.00	65.81
MA_SNE	trawl	'10-'12	y1	1,298	260	9.06	-0.54	20.15	1.51	0.0215	1.69	0.0699	-2.24	73.42	-11.30	65.28	-3.83	72.24
MA_SNE	trawl	'10-'12	y2	1,143	206	9.41	0.65	23.69	1.68	0.0073	1.84	0.0281	-3.96	142.62	-13.37	139.59	-5.53	142.23
MA_SNE	trawl	'10-'12	y3	1,298	260	13.35	0.50	23.34	1.84	0.0023	2.12	0.0044	-4.30	127.85	-17.65	134.71	-5.46	129.09
MA_SNE	trawl	'10-'12	y4	1,293	256	4.45	-5.50	16.02	1.00	0.2688	1.14	0.6250	-0.60	85.55	-5.06	89.01	-1.30	86.18
MA_SNE	trawl	'10-'12	y5	102	87	14.15	-13.65	56.51	1.00	0.2668	1.15	0.6083	3.51	120.92	-10.64	120.44	-0.97	120.64
MA_SNE	trawl	'10-'12	y6	1,298	260	7.57	-0.73	18.96	1.59	0.0128	2.31	0.0009	-2.57	132.97	-10.14	190.62	-3.49	144.16
MA_SNE	trawl	'10-'12	y7	1,293	256	1.61	-7.61	13.28	0.79	0.5668	1.39	0.2847	-1.75	80.48	-3.36	97.57	-2.05	83.51
MA_SNE	trawl	'10-'12	y8	1,298	260	1.22	-2.63	7.73	0.85	0.4630	1.47	0.2019	-0.44	62.19	-1.67	69.41	-0.75	63.42
MA_SNE	gillnet	'07-'09	y1	71	18	12.33	-6.36	44.74	1.40	0.0405	1.41	0.2563	-2.59	44.55	-14.92	40.76	-5.39	45.03
MA_SNE	gillnet	'07-'09	y2	49	9	4.86	-109.76	84.22	0.88	0.4276	1.16	0.6000	0.00	93.24	-4.86	89.67	-0.24	92.17
MA_SNE	gillnet	'07-'09	y3	71	18	5.48	-10.27	79.25	0.92	0.3629	1.18	0.5602	0.32	91.12	-5.16	102.48	-0.22	93.04
MA_SNE	gillnet	'07-'09	y4	67	17	14.02	-2.58	76.17	1.66	0.0083	1.66	0.0831	-1.57	91.36	-15.59	40.72	-4.33	85.30
MA_SNE	gillnet	'07-'09	y5	46	8	-0.08	-120.38	86.18	0.75	0.6239	0.98	0.8470	0.00	84.29	0.08	95.60	0.00	85.13
MA_SNE	gillnet	'07-'09	y6	71	18	7.95	-10.53	54.84	0.92	0.3707	1.07	0.7282	0.65	100.28	-7.30	82.69	0.13	96.94
MA_SNE	gillnet	'07-'09	y7	67	17	10.07	-1.48	72.79	1.60	0.0122	1.65	0.0845	2.14	125.29	-7.93	40.63	-0.94	115.06
MA_SNE	gillnet	'07-'09	y8	71	18	5.94	-5.81	49.18	1.14	0.1475	1.35	0.3297	0.00	20.99	-5.94	34.11	0.00	24.33
MA_SNE	gillnet	'10-'12	y1	53	11	-10.29	-70.45	31.17	0.83	0.4988	1.03	0.7836	-0.98	64.55	9.32	64.73	1.22	64.30
MA_SNE	gillnet	'10-'12	y2	43	9	-14.27	-201.30	78.70	0.72	0.6794	1.36	0.3161	2.16	97.33	16.44	139.81	3.68	104.97
MA_SNE	gillnet	'10-'12	y3	53	11	0.91	-166.34	63.15	0.80	0.5402	1.45	0.2167	0.91	89.30	0.00	125.13	0.50	95.45
MA_SNE	gillnet	'10-'12	y4	49	9	-1.94	-28.84	103.10	0.71	0.7003	1.08	0.7120	-0.34	68.97	1.61	58.19	0.22	67.51
MA_SNE	gillnet	'10-'12	y5	41	9	-10.51	-202.99	79.07	0.71	0.7000	1.38	0.2889	4.79	98.21	15.31	138.52	6.79	105.56
MA_SNE	gillnet	'10-'12	y6	53	11	0.46	-164.63	62.21	0.75	0.6348	1.28	0.4141	0.46	97.85	0.00	130.83	0.23	103.24
MA_SNE	gillnet	'10-'12	y7	49	9	-11.86	-47.83	86.10	0.75	0.6266	1.38	0.2914	-3.42	56.12	8.44	58.40	-3.30	56.29
MA_SNE	gillnet	'10-'12	y8	53	11	-11.06	-39.65	-0.82	1.62	0.0108	1.67	0.0759	0.23	52.13	11.29	29.40	1.90	49.03

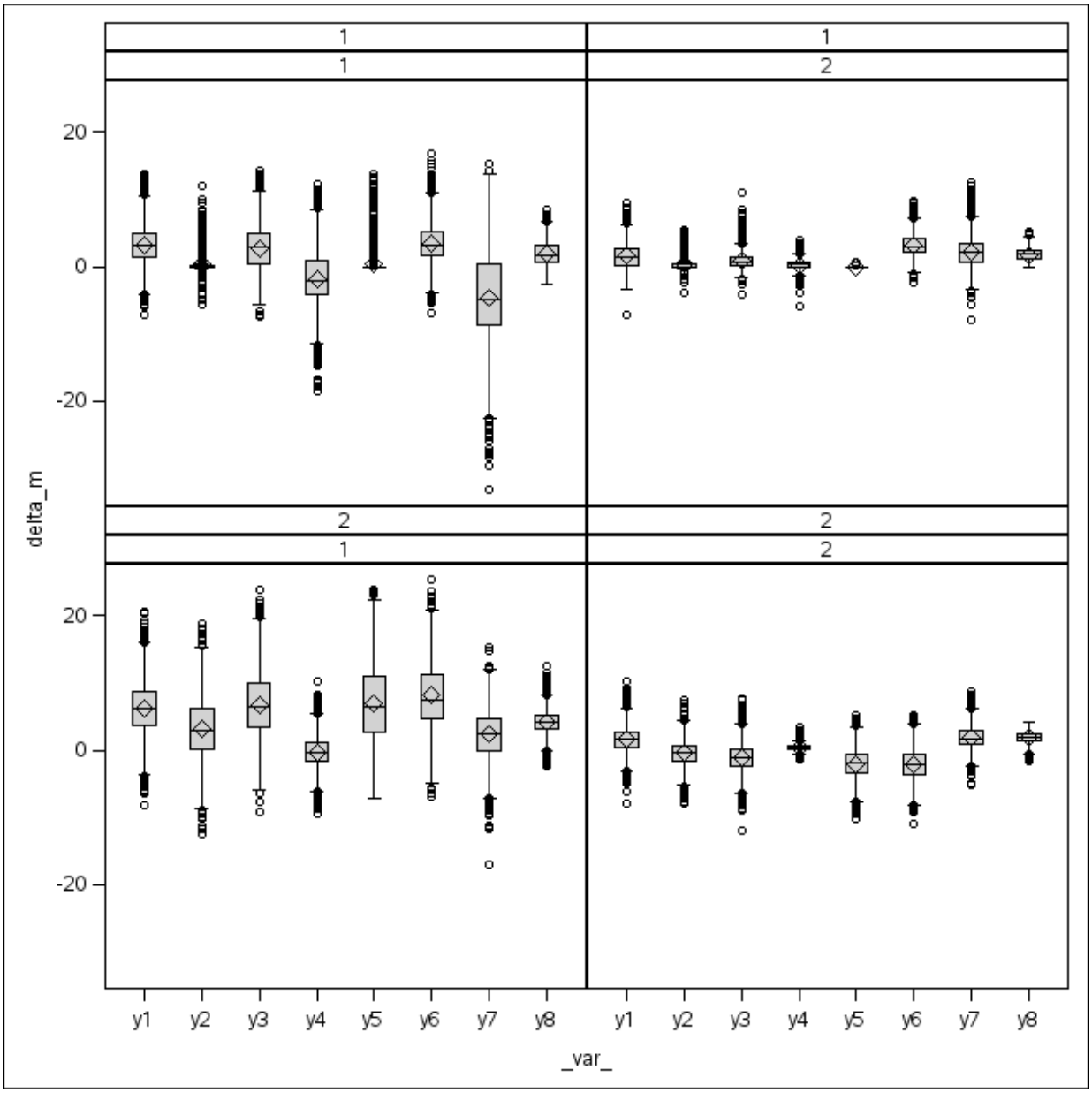

Table 4: Distribution of delta_m values for trawl (1, left panels) and fixed (2, right panels) gears and pre-(1, upper panels) and post-(2, lower panels) Sector in the Gulf of Maine region

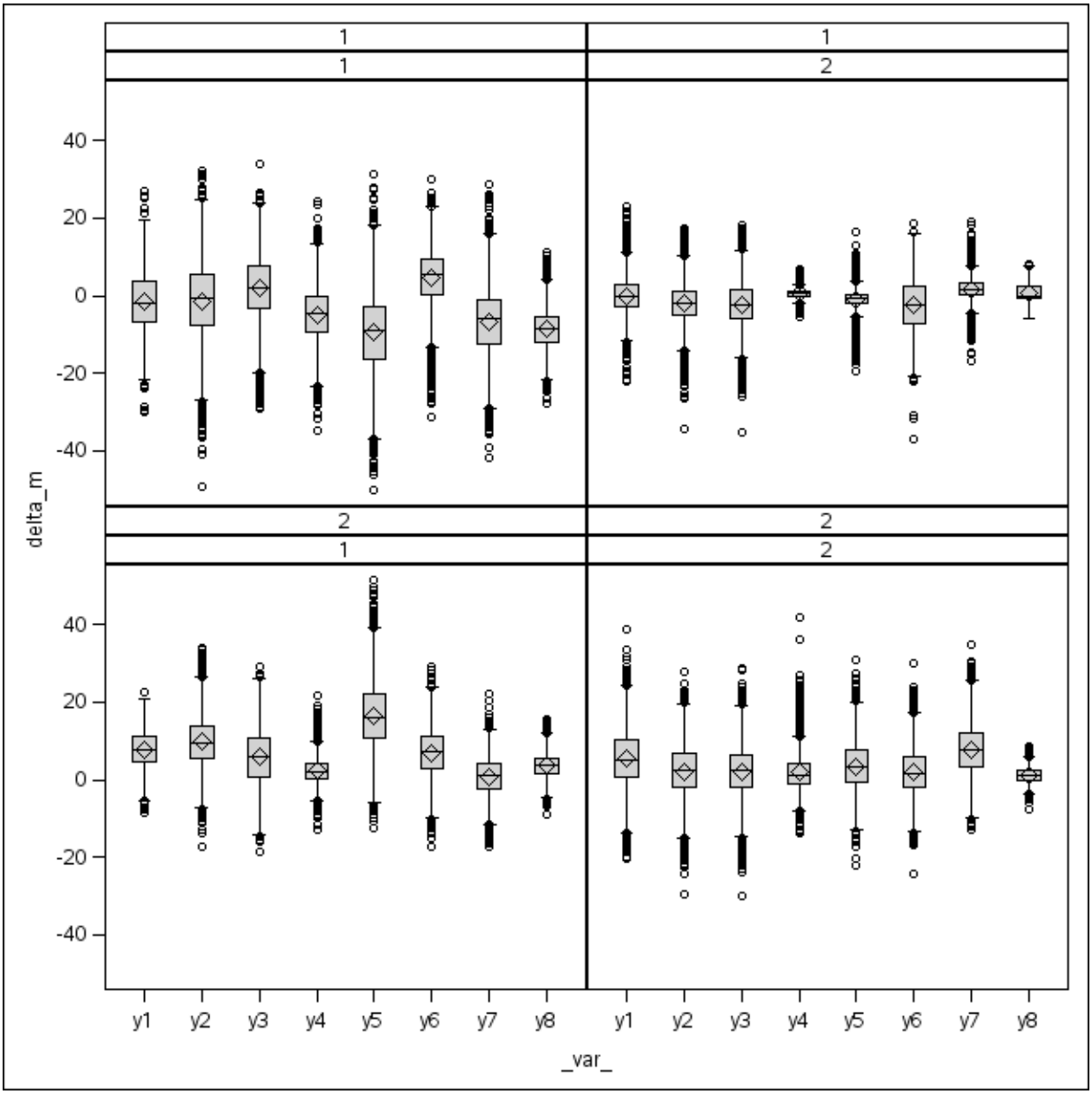

Table 5 -Distribution of delta_m values for trawl (1, left panels) and fixed (2, right panels) gears and pre-(1, upper panels) and post-(2, lower panels) Sector on Georges Bank

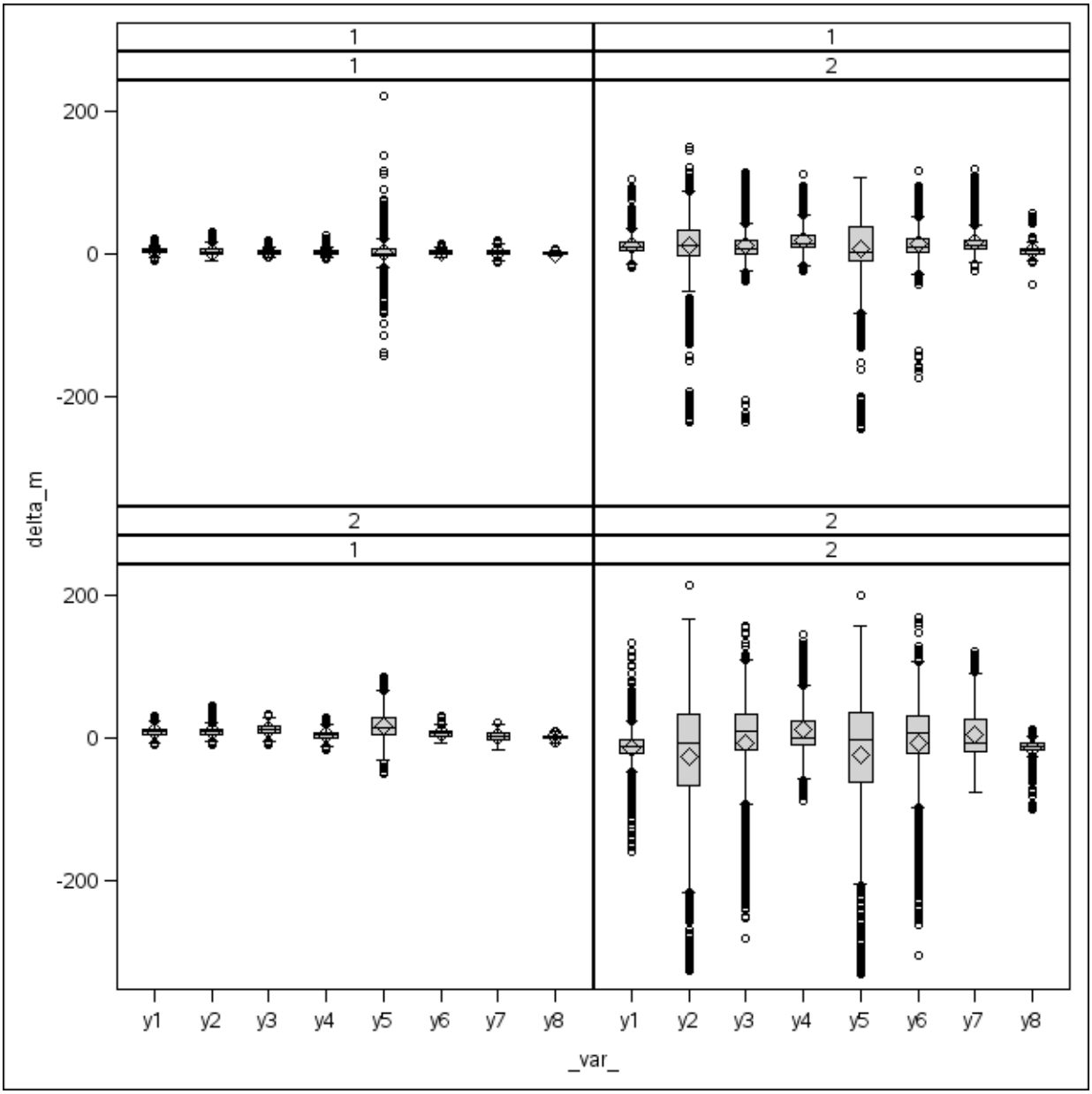

Table 6 -Distribution of delta_m values for trawl (1, left panels) and fixed (2, right panels) gears and pre-(1, upper panels) and post-(2, lower panels) Sector in the Southern New England and Mid-Atlantic regions

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APPENDIX D

Evaluation of the Efficacy of Sector Monitoring Program for Discards
Estimation of Total Catch for Risk analyses
Draft January 31, 2013

This information is distributed solely for the purpose of pre-dissemination review. It has not been formally disseminated by NOAA. It has no official status with the agency and does not represent final agency determination or policy.

Introduction

Purpose—evaluate probability of exceeding catch limits by stock based on analyses of precision of discard estimates and scenarios based on alternative discard rates on unobserved trips.

The following analyses examine the efficacy of the current monitoring programs for Sectors in terms of their ability to control fishing mortality on individual stocks. The emphasis is on stocks, rather than sectors per se or gears within sectors, because the primary biological concern is the likelihood of exceeding overfishing limits. In contrast, the issues of exceeding Annual Catch Entitlements are primary economic, affecting individual firms.

A central issue is the potential bias of discard rates on unobserved trips. The current monitoring program relies on the assumption that estimates of discard rates on observed trips can be applied to unobserved trips. If unobserved vessels discard at higher rates, then overall mortality will be higher than predicted. Various analyses of vessels performance have been used to infer the potential for bias. In general these studies rely on the analyses of observable properties of vessels with and without observers on board. Examples include comparisons of trip duration, total landings, species composition of landings and area fished. Irrespective of whether differences were found, the primary problem of inference remains—what is the discard rate on the unobserved trips? Can the differences in the observable differences between the two groups be used to predict the discard rate differential.

The following analyses approach the issue as a statistical control problem in which question is recast as—how much the discard rate have to increase on the unobserved trips in order to exceed a biological threshold. In this way one can investigate the probability of exceeding a biological threshold based on a hypothetical increase in the rate of discarding on unobserved trips. The following analyses also provide a context for the evaluation of actual measures of bias, should they be devised.

Methods

Total catch C_T is defined as sum of landings L_T and total discards D_T.

$$C_T=L_T+D_T \qquad (1)$$

Total landings are based on a census of landings from Vessel Trip Reports, Dealer Records, and Sector Manager Reports. They are usually assumed to be measured without statistical error.

Statistical error refers to errors arising from the expansion of sample data to the entire population. Errors that may arise from misreporting, malfeasance or clerical errors are not considered in this analysis.
Discards on the other hand are based on a sampling program. Total discards can be expressed as the sum of discards on observed and unobserved trips, denoted as Do and Du, respectively.

$$D_T=D_o+D_u \qquad (2)$$

The discard rate for a given stock r_o is defined as the ratio of discards observed for that stock (D_o) to the total kept landings of all species on observed trips (K_o). The estimate of total discards can be expressed as

$$D_T=r_oK_o+r_uK_u \qquad (2)$$

Where r_u is the discard rate on unobserved trips and K_u is the total kept of all species on the unobserved trips. The total kept is observable whereas the discard rate on an observed trip is equal to that on an unobserved trip (ie., $r_o=r_u$). One way of addressing the issue of bias is to assume that the discard rate on unobserved trips can be expressed as a scalar multiple of the observed rate

$$r_u=\beta r_o \qquad (3)$$

Substitution of Eq. 3 into 2 gives

$$D_T=r_oK_o+\beta r_oK_u \qquad (4)$$

Since Ku generally exceeds Ko, Eq. 4 allows total discards to increase rapidly if, in fact, the discard rate on unobserved trips is higher. If $\beta > 1$ the amount of bias in the discard rate is $(\beta-1)r_o$ and the bias in total discards is assumed to be $(\beta-1)r_oK_u$.

By substituting Eq. 4 into 1 total catch can be expressed as

$$C_T=L_T+ r_oK_o+\beta r_oK_u \qquad (5)$$

Total catch is now expressed in terms of known quantities, L_T, K_o, K_u , and estimated quantity r_o and a hypothesized value β. The variance of total catch can now be expressed as a function of the variance of the estimate of r_o.

The variance of total catch for a given gear.

$$V(C_T) =V(L_T+D_o+D_u) \qquad (6)$$

As noted above, landings (L) represent a census of removals and assumed to have negligible variance so the variance of catch is a function of only the variability of discards. Therefore,

$$V(C_T) = V(D_o + D_u) \qquad (7)$$

since V(L) is assumed to be zero. Substituting Eq. 4 into Eq. 7 gives

$$V(C_T) = V(K_o r_o + K_u \beta\, r_o) \qquad (8)$$
$$= V((K_o + K_u * \beta) * r_o)$$

Since $(K_o + K_u * \beta)$ can be viewed as a constant then,

$$V(C_T) = (K_o + K_u \beta)^2\, V(r_o) \qquad (9)$$

The variance of the discard rate was estimated using a ratio estimator. Further insight into the properties of Eq. 9 can be obtained by noting that variance of total catch increases as the square of the total kept on the observed K_o plus the bias adjusted total kept on unobserved trips $K_u\beta$.

The estimation of discard rates is typically stratified into homogeneous groups based on observable properties of the fleets. A primary group for stratification is gear type and mesh size. The variance of total catch of a given stock over all gears g=1, 2, …G is expressed as

$$V(C_T) = V(C_1 + C_2 + \ldots + C_G) \qquad (10)$$

Assuming that the variances of the catches across gears are independent, the total variance is can be estimated as the sum of the individual variances as follows:

$$V(C_T) = V(C_1) + V(C_2) + \ldots + V(C_G) \qquad (11)$$

$$V(C_T) = \sum_{g=1}^{G} V(C_g) \qquad (12)$$

The overall variance of total catch for given stock can be estimated by substituting the variances defined in Eq. 9 into Eq. 12.

The aggregate catch estimates are assumed to be distributed normally with mean equal to C_T and variance equal to $V(C_T)$, i.e.,

$$C \sim N(C_T, V(C_T)) \qquad (13)$$

The probability that the catch exceeds the threshold upper bound, say ACL, ABC or OFL, can be computed as the integral

$$P(C > ACL) = 1 - \int_{-\infty}^{ACL} \Phi(x|C_T, V(C_T))\, dx \qquad (14)$$

Where $\Phi(.)$ is the cumulative normal distribution with mean $=C_T$ and variance $V(C_T)$. The probability of exceeding the ABC or OFL can also be estimated by replacing the variable ACL with ABC or OFL in Eq. 14.

Equations 1 to 14 were applied to each groundfish stock. All of the variables used in this analysis are summarized in Table 1. The bias scalar β was varied over a range of one to 50. In addition, Eq. 14 was modified to find a value of β that would result in a 5% chance of exceeding the overall ACL for the stock. It must be remembered that the usual threshold for determining whether a stock exceeds the threshold occurs when the total catch exceeds the ACL. In probabilistic terms, this corresponds to a 50% probability of exceeding the ACL.

Results

Summaries of total catch and precision for each stock by fishing year are provided in Table 2. The coefficient of variation of catch are less than 11% for all stocks and in generally much less. This can be attributed to the small fraction of total catch coming from total discards for the so-called allocated stocks. Allocated stocks are those with sector specific catch limits. Unallocated stocks are those which cannot be landed. Instead, total catch is equivalent to the total discards. Analyses of the uncertainty total catch suggest that the chance of exceeding the stock specific ACL is near zero for most stocks with the exception of the Northern windowpane flounder (an unallocated stock) in FY2010 ($P<0.20$) and FY2011 ($P<0.41$).

Results presented in Table 2 all assume zero bias in the discard estimate. An analysis of the increase in discard rate necessary to raise the probability of total catch exceeding the ACL to 5% is summarized in Table 3. The adjustment factor β for allocated stocks ranges from 1 to 1014, with the largest values corresponding to stocks whose total catches are well below the ACL. For cod stocks the discard rate on unobserved trips would have to be 4 to 13 times higher than presently observed. For the allocated flounder stocks (plaice, winter flounder, yellowtail flounder and witch flounder) the average β was 12.9. Average β for the unallocated stocks was 7.2 in FY2010 and 4.1 in FY2011. Overall, the rate of increase in discards necessary to increase the probability of exceeding the ACL to 5% seemed implausibly large. None of the bias analyses conducted to date seem to suggest behavioral differences of this magnitude.

As a further check on the magnitude of exceeding the ACL, ABC and OFL, a sensitivity analysis was conducted. These results are summarized by stock in Tables 4 to 23. The results of these sensitivity analyses suggest that the bias in discard rates would have to be at least 5 to 10 times greater than presently observed in order to pose appreciable risk of exceeding the ABC or OFL.

Table 1. Definition of variables used in the analysis of bias of total catch estimates.

Definition	***Variable***	***Equation***
Total estimated discards on observed trips	D_o	Do=sum of discards on observed trips $=K_o\ r_o$
Total landings (i.e., Kept) of all species on observed trips	K_o	Ko = sum of Kept_all on observed trips
Discard rate of stock on observed trips by gear type	r_o	$r_o=D_o/K_o$
Scalar multiplier for assumed discard rate on unobserved trips	β	
Discard rate on unobserved trips	r_u	$r_u=\beta r_o$
Total landings (i.e., Kept) of all species on unobserved trips	K_u	
Total estimated discard on unobserved trips	D_u	$D_u=K_u\ r_u$
Total discards	D_T	$D_T= D_o + D_u$
Total landings of stock on observed trips	L_o	
Total landings of stock on unobserved trips	L_u	
Total landings of stock	L_T	$L_T=L_o+L_u$
Variance operator	V(.)	
Coefficient of variation	CV(.)	sqrt[V(.)]/Expected value
Fraction of trips observed	p_t	n_o/n_T
Fraction of landings observed	pK	Lo/L_T
Probability that the random variable X exceeds the random variable Y	P(X>Y)	$1-\int_{-\infty}^{Y}\Phi(x\|\mu,\sigma^2)\,dx$ where $\Phi(.)$ is the cumulative normal distribution with mean μ and variance $=\sigma^2$.

Table 2. Summary of total catch, relative precision and probability of exceeding stock specific ACLs by stock for fishing years 2010 and 2011.

				90% Confidence Interval (lbs)				
Fishing Year	Stock	Total Catch (lbs)	CV of Total Catch	5th percentile	95th percentile	Ratio of total discards to total catch	Sector ACL (lbs)	P(C>ACL)
FY10	GB Cod	6,193,323	0.00243	6,168,535	6,218,110	0.04330	8,377,480	0
FY10	GOM Cod	9,492,559	0.00995	9,337,191	9,647,928	0.02168	18,805,238	0
FY10	Plaice	3,291,641	0.00535	3,262,701	3,320,582	0.11532	6,957,718	0
FY10	GB Winter Flounder	3,113,421	0.00233	3,101,513	3,125,328	0.01410	4,523,839	0
FY10	GOM Winter Flounder	177,773	0.00218	177,136	178,410	0.01989	524,695	0
FY10	Witch Flounder	1,550,191	0.00448	1,538,764	1,561,617	0.08275	2,081,142	0
FY10	CC/GOM Yellowtail Flounder	1,246,908	0.00951	1,227,394	1,266,423	0.10921	1,902,570	0
FY10	GB Yellowtail Flounder	1,666,387	0.01101	1,636,204	1,696,570	0.09763	2,645,520	7.46E-09
FY10	SNE/MA Yellowtail Flounder	330,871	0.00297	329,252	332,489	0.02377	1,086,868	0
FY10	GB Haddock	18,457,010	0.00039	18,445,127	18,468,892	0.00466	98,993,154	0
FY10	GOM Haddock	812,051	0.00069	811,135	812,966	0.00683	2,788,819	0
FY10	White Hake	4,850,146	0.00127	4,839,977	4,860,315	0.01407	6,243,427	0
FY10	Pollock	11,956,201	0.00124	11,931,899	11,980,504	0.01415	7,259,748	0
FY10	Redfish	4,600,058	0.00873	4,533,967	4,666,148	0.07235	16,724,096	0
FY10	SNE/MA Winter Flounder	98,223	0.06224	88,168	108,278	0.82432	1,419,762	0
FY10	Southern Windowpane	103,128	0.08335	88,989	117,267	0.99764	522,490	0
FY10	Northern Windowpane	320,181	0.12629	253,669	386,693	0.99804	372,577	0.195
FY10	Ocean Pout	117,485	0.09482	99,161	135,809	0.99895	597,447	0
FY10	Halibut	52,707	0.04098	49,154	56,260	0.74672	156,527	0
FY10	Wolffish	40,797	0.06449	36,470	45,125	0.98718	182,982	0
FY11	GB Cod	7,143,044	0.00356	7,101,260	7,184,828	0.04408	12,381,034	0
FY11	GOM Cod	9,619,868	0.00143	9,597,309	9,642,428	0.03355	19,867,855	0
FY11	Plaice	3,629,441	0.00514	3,598,762	3,660,119	0.11935	7,592,642	0
FY11	GB Winter Flounder	4,339,155	0.00211	4,324,098	4,354,211	0.00720	4,903,030	1.21E-09
FY11	GOM Winter Flounder	347,731	0.00298	346,027	349,436	0.02983	524,695	0
FY11	Witch Flounder	2,205,015	0.00319	2,193,441	2,216,589	0.06328	3,018,097	0
FY11	CC/GOM Yellowtail Flounder	1,755,596	0.00770	1,733,357	1,777,834	0.10601	2,294,989	0
FY11	GB Yellowtail Flounder	2,261,570	0.00526	2,242,013	2,281,127	0.04856	2,383,173	0
FY11	SNE/MA Yellowtail Flounder	800,746	0.00482	794,403	807,089	0.04947	1,514,560	0
FY11	GB Haddock	8,844,695	0.00194	8,816,448	8,872,942	0.01993	103,140,006	0
FY11	GOM Haddock	1,063,041	0.00125	1,060,853	1,065,229	0.01542	2,658,748	0
FY11	White Hake	6,663,852	0.00084	6,654,636	6,673,067	0.01057	7,264,157	1
FY11	Pollock	16,712,373	0.00107	16,682,902	16,741,844	0.01421	7,259,748	0
FY11	Redfish	6,001,260	0.00632	5,938,843	6,063,678	0.06787	18,421,638	0
FY11	SNE/MA Winter Flounder	198,527	0.11128	162,187	234,866	0.96551	1,977,526	0
FY11	Southern Windowpane	179,964	0.08303	155,386	204,542	0.99806	522,490	0
FY11	Northern Windowpane	347,628	0.09333	294,263	400,993	1.00000	372,577	0.410835
FY11	Ocean Pout	135,064	0.10293	112,197	157,931	0.99993	597,447	0
FY11	Halibut	90,538	0.05077	82,978	98,099	0.74648	171,959	0
FY11	Wolffish	70,444	0.06815	62,548	78,341	0.99973	182,982	0

Table 3. Summary of adjusted total catch and relative precision necessary to raise the probability of exceeding the ACL to 5%.

Total catch and its variance increase because of the adjustment factor.

Fishing Year	Stock	Adjusted Total Catch (lbs)	Adjusted CV of Total Catch	90% Confidence Interval (lbs) 5th percentile	95th percentile	Adjusted Ratio of total discards to total catch	Probability that Catch exceeds ACL	Expansion Factor for discards necessary to achieve P(C>ACL)=0.05
FY10	GB Cod	7,164,236	0.0098	7,049,199	7,279,273	0.1730	0.05	5.8
FY10	GOM Cod	9,392,955	0.0095	9,246,535	9,539,375	0.1746	0.05	13.2
FY10	Plaice	5,837,428	0.0231	5,615,643	6,059,212	0.5011	0.05	10.1
FY10	GB Winter Flounder	3,814,878	0.0325	3,610,668	4,019,088	0.1954	0.05	20.9
FY10	GOM Winter Flounder	274,900	0.0405	256,600	293,201	0.3662	0.05	40.5
FY10	Witch Flounder	1,790,364	0.0112	1,757,467	1,823,262	0.2058	0.05	3.5
FY10	CC/GOM Yellowtail Flounder	1,544,492	0.0246	1,481,877	1,607,107	0.2808	0.05	4.1
FY10	GB Yellowtail Flounder	1,728,156	0.0148	1,686,119	1,770,192	0.1299	0.05	1.5
FY10	SNE/MA Yellowtail Flounder	485,030	0.0416	451,834	518,225	0.3340	0.05	32.7
FY10	GB Haddock	80,002,887	0.0652	71,417,371	88,588,404	0.7704	0.05	1014.5
FY10	GOM Haddock	1,618,222	0.0538	1,475,052	1,761,392	0.5016	0.05	219.8
FY10	White Hake	5,425,904	0.0109	5,328,808	5,523,000	0.1187	0.05	12.7
FY10	Pollock	32,711,551	0.0551	29,746,169	35,676,933	0.6397	0.05	179.7
FY10	Redfish	13,122,270	0.0819	11,354,504	14,890,037	0.6748	0.05	36.3
FY10	SNE/MA Winter Flounder	1,188,423	0.0740	1,043,788	1,333,058	0.9855	0.05	20.1
FY10	Southern Windowpane	436,181	0.0835	376,303	496,060	0.9994	0.05	6.3
FY10	Northern Windowpane	293,995	0.1261	233,031	354,959	0.9979	0.05	0.9
FY10	Ocean Pout	482,129	0.0953	406,537	557,720	0.9997	0.05	5.3
FY10	Halibut	140,555	0.0500	128,986	152,124	0.9050	0.05	4.1
FY10	Wolffish	153,277	0.0654	136,793	169,762	0.9966	0.05	4.9
FY11	GB Cod	8,990,874	0.0193	8,705,575	9,276,173	0.2405	0.05	8.9
FY11	GOM Cod	10,335,732	0.0043	10,263,445	10,408,019	0.1005	0.05	4.0
FY11	Plaice	6,464,563	0.0218	6,232,739	6,696,386	0.5056	0.05	10.1
FY11	GB Winter Flounder	4,365,767	0.0039	4,337,849	4,393,685	0.0133	0.05	2.1
FY11	GOM Winter Flounder	640,497	0.0472	590,732	690,263	0.4733	0.05	40.5
FY11	Witch Flounder	2,623,483	0.0107	2,577,137	2,669,829	0.2127	0.05	5.2
FY11	CC/GOM Yellowtail Flounder	1,965,596	0.0146	1,918,278	2,012,914	0.2015	0.05	2.6
FY11	GB Yellowtail Flounder	2,424,885	0.0122	2,376,122	2,473,647	0.1126	0.05	3.0
FY11	SNE/MA Yellowtail Flounder	872,768	0.0124	854,900	890,637	0.1279	0.05	3.8
FY11	GB Haddock	58,685,497	0.0866	50,323,996	67,046,998	0.8523	0.05	375.4
FY11	GOM Haddock	1,619,781	0.0293	1,541,633	1,697,930	0.3538	0.05	47.8
FY11	White Hake	6,663,852	0.0008	6,654,636	6,673,067	0.0106	1.00	1.0
FY11	Pollock	28,971,654	0.0326	27,417,794	30,525,514	0.4313	0.05	72.9
FY11	Redfish	15,081,535	0.0590	13,618,578	16,544,493	0.6291	0.05	32.5
FY11	SNE/MA Winter Flounder	1,561,039	0.1147	1,266,611	1,855,468	0.9956	0.05	11.1
FY11	Southern Windowpane	436,222	0.0831	376,578	495,866	0.9992	0.05	3.2
FY11	Northern Windowpane	347,628	0.0933	294,263	400,993	1.0000	0.41	1.0
FY11	Ocean Pout	476,764	0.1032	395,806	557,723	1.0000	0.05	4.5
FY11	Halibut	152,841	0.0582	138,204	167,479	0.8498	0.05	2.3
FY11	Wolffish	152,599	0.0679	135,544	169,654	0.9999	0.05	2.6

Table 4. Sensitivity analyses for potential bias of discard rates for

Georges Bank cod

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.043300661
FY 2010	1.5	0	0	0	0.058527981
FY 2010	2	0	0	0	0.073278163
FY 2010	2.5	0	0	0	0.087573289
FY 2010	3	0	0	0	0.101434096
FY 2010	3.5	0	0	0	0.114880081
FY 2010	4	0	0	0	0.127929592
FY 2010	4.5	9.53682E-13	0	0	0.140599911
FY 2010	5	1.17539E-06	0	0	0.152907327
FY 2010	6	0.119052855	0	0	0.176494084
FY 2010	7	0.91846837	0	0	0.198802907
FY 2010	8	0.999597598	0	0	0.219934916
FY 2010	9	0.999999491	1.8683E-08	0	0.239980835
FY 2010	10	1	0.000561912	0	0.259022295
FY 2010	15	1	0.99982454	0	0.34151096
FY 2010	20	1	1	0	0.407473438
FY 2010	25	1	1	0	0.461423935
FY 2010	30	1	1	5.4947E-08	0.506369763
FY 2010	35	1	1	0.019943154	0.544391678
FY 2010	40	1	1	0.652710974	0.576975203
FY 2010	45	1	1	0.989282825	0.605209264
FY 2010	50	1	1	0.999935615	0.629910267
FY 2011	1	0	0	0	0.044075669
FY 2011	1.5	0	0	0	0.0593962
FY 2011	2	0	0	0	0.074233395
FY 2011	2.5	0	0	0	0.088609772
FY 2011	3	0	0	0	0.102546471
FY 2011	3.5	0	0	0	0.116063358
FY 2011	4	0	0	0	0.129179121
FY 2011	4.5	0	0	0	0.141911353
FY 2011	5	0	0	0	0.154276636
FY 2011	6	0	0	0	0.17796803
FY 2011	7	3.8277E-08	0	0	0.200368251
FY 2011	8	0.000598317	0	0	0.221580053
FY 2011	9	0.059320812	0	0	0.241695566
FY 2011	10	0.41861374	0	0	0.26079764
FY 2011	15	0.999956362	2.35612E-12	0	0.343487104
FY 2011	20	0.999999999	0.015714538	0	0.409538011
FY 2011	25	1	0.768211557	3.76921E-13	0.463513244
FY 2011	30	1	0.996178563	4.1873E-05	0.50844702
FY 2011	35	1	0.999974919	0.053410268	0.546435584
FY 2011	40	1	0.999999829	0.552949936	0.578973657
FY 2011	45	1	0.999999998	0.93241557	0.60715575
FY 2011	50	1	1	0.995126865	0.63180171

Table 5. Sensitivity analyses for potential bias of discard rates for

GOM Cod

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.021683728
FY 2010	1.5	0	0	0	0.029069614
FY 2010	2	0	0	0	0.036344815
FY 2010	2.5	0	0	0	0.043511801
FY 2010	3	0	0	0	0.050572967
FY 2010	3.5	0	0	0	0.057530642
FY 2010	4	0	0	0	0.064387082
FY 2010	4.5	0	0	0	0.071144482
FY 2010	5	0	0	0	0.077804972
FY 2010	6	0	0	0	0.090843444
FY 2010	7	0	0	0	0.103518367
FY 2010	8	0	0	0	0.115844736
FY 2010	9	0	0	0	0.127836735
FY 2010	10	3.9968E-15	0	0	0.139507787
FY 2010	15	0.767507543	0	0	0.19347151
FY 2010	20	0.99999978	0	0	0.241066237
FY 2010	25	1	0	0	0.283356676
FY 2010	30	1	0	0	0.321182743
FY 2010	35	1	0	0	0.355215915
FY 2010	40	1	0	0	0.385999439
FY 2010	45	1	0	0	0.413977543
FY 2010	50	1	0	0	0.439517017
FY 2011	1	0	0	0	0.033548333
FY 2011	1.5	0	0	0	0.045314524
FY 2011	2	0	0	0	0.056797663
FY 2011	2.5	0	0	0	0.068007842
FY 2011	3	0	0	0	0.078954679
FY 2011	3.5	2.34506E-07	0	0	0.089647348
FY 2011	4	0.039858406	0	0	0.100094597
FY 2011	4.5	0.804795844	0	0	0.11030478
FY 2011	5	0.998575844	0	0	0.120285876
FY 2011	6	1	0	0	0.139590971
FY 2011	7	1	0	0	0.15806697
FY 2011	8	1	0	0	0.175766161
FY 2011	9	1	0	0	0.192736525
FY 2011	10	1	0	0	0.209022173
FY 2011	15	1	0	0	0.281497171
FY 2011	20	1	0	0	0.34180561
FY 2011	25	1	0	0	0.392773896
FY 2011	30	1	0	0	0.436415891
FY 2011	35	1	3.44204E-10	0	0.474205322
FY 2011	40	1	0.006698256	0	0.507245488
FY 2011	45	1	0.658367116	0	0.536378766
FY 2011	50	1	0.996706757	0	0.562259437

Table 6. Sensitivity analyses for potential bias of discard rates for

Plaice

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.115322353
FY 2010	1.5	0	0	0	0.151351785
FY 2010	2	0	0	0	0.184561385
FY 2010	2.5	0	0	0	0.215269725
FY 2010	3	0	0	0	0.243749133
FY 2010	3.5	0	0	0	0.270233787
FY 2010	4	0	0	0	0.294926171
FY 2010	4.5	0	0	0	0.318002259
FY 2010	5	0	0	0	0.339615721
FY 2010	6	0	0	0	0.378977841
FY 2010	7	0	0	0	0.413911567
FY 2010	8	2.67564E-14	0	0	0.445124417
FY 2010	9	5.37783E-06	0	0	0.473180811
FY 2010	10	0.029905415	0	0	0.498536509
FY 2010	15	0.999999997	0.89395795	0	0.595805495
FY 2010	20	1	1	0.040038279	0.661470197
FY 2010	25	1	1	0.997974834	0.70878109
FY 2010	30	1	1	0.999999999	0.744489679
FY 2010	35	1	1	1	0.772397741
FY 2010	40	1	1	1	0.794809618
FY 2010	45	1	1	1	0.813203384
FY 2010	50	1	1	1	0.828570723
FY 2011	1	0	0	0	0.119349268
FY 2011	1.5	0	0	0	0.155499917
FY 2011	2	0	0	0	0.188799634
FY 2011	2.5	0	0	0	0.219572873
FY 2011	3	0	0	0	0.248096653
FY 2011	3.5	0	0	0	0.274608924
FY 2011	4	0	0	0	0.299315218
FY 2011	4.5	0	0	0	0.322393987
FY 2011	5	0	0	0	0.344000923
FY 2011	6	0	0	0	0.383328723
FY 2011	7	0	0	0	0.41820775
FY 2011	8	0	0	0	0.449352463
FY 2011	9	1.86507E-06	0	0	0.47733211
FY 2011	10	0.025607189	0	0	0.502605832
FY 2011	15	1	0.969687155	0	0.5994494
FY 2011	20	1	1	0.100247726	0.664727566
FY 2011	25	1	1	0.999797812	0.71171043
FY 2011	30	1	1	1	0.747143999
FY 2011	35	1	1	1	0.774820707
FY 2011	40	1	1	1	0.797036374
FY 2011	45	1	1	1	0.81526218
FY 2011	50	1	1	1	0.830484406

Table 7. Sensitivity analyses for potential bias of discard rates for

GB Winter Flounder

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.014104097
FY 2010	1.5	0	0	0	0.019663048
FY 2010	2	0	0	0	0.025159662
FY 2010	2.5	0	0	0	0.030594982
FY 2010	3	0	0	0	0.035970029
FY 2010	3.5	0	0	0	0.041285798
FY 2010	4	0	0	0	0.046543265
FY 2010	4.5	0	0	0	0.051743383
FY 2010	5	0	0	0	0.056887087
FY 2010	6	0	0	0	0.067008884
FY 2010	7	0	0	0	0.076915726
FY 2010	8	0	0	0	0.08661439
FY 2010	9	0	0	0	0.096111369
FY 2010	10	0	0	0	0.10541289
FY 2010	15	2.2344E-06	0	0	0.149189476
FY 2010	20	0.024342187	2.6169E-10	0	0.188881527
FY 2010	25	0.347663483	7.47702E-05	0	0.225035219
FY 2010	30	0.747137133	0.014916596	0	0.258103505
FY 2010	35	0.922571291	0.155657002	3.78586E-14	0.28846519
FY 2010	40	0.976785318	0.443958778	3.26606E-09	0.316439508
FY 2010	45	0.992545441	0.704677145	3.43265E-06	0.342297388
FY 2010	50	0.997360305	0.860283549	0.000277337	0.366270259
FY 2011	1	1.21316E-09	0	0	0.007203901
FY 2011	1.5	0.000311391	0	0	0.009854636
FY 2011	2	0.024779509	0	0	0.012491253
FY 2011	2.5	0.154070906	0	0	0.015113865
FY 2011	3	0.360452715	0	0	0.017722585
FY 2011	3.5	0.552629708	0	0	0.020317521
FY 2011	4	0.694654799	0	0	0.022898782
FY 2011	4.5	0.790465099	0	0	0.025466478
FY 2011	5	0.853373225	0	0	0.028020713
FY 2011	6	0.92248763	0	0	0.033089226
FY 2011	7	0.954669753	0	0	0.038105153
FY 2011	8	0.971094015	9.13047E-13	0	0.043069307
FY 2011	9	0.980223312	1.52985E-09	0	0.047982486
FY 2011	10	0.9856818	2.50478E-07	0	0.052845471
FY 2011	15	0.995123366	0.011345778	0	0.076433739
FY 2011	20	0.997330003	0.188919418	0	0.098875656
FY 2011	25	0.998179219	0.485502719	0	0.120252804
FY 2011	30	0.998602168	0.70212139	3.60925E-11	0.140639206
FY 2011	35	0.99884793	0.825613859	1.5884E-07	0.160102178
FY 2011	40	0.999005957	0.893006802	2.484E-05	0.178703072
FY 2011	45	0.999115052	0.930691341	0.000609479	0.196497923
FY 2011	50	0.999194409	0.95272872	0.00501033	0.213538014

Table 8. Sensitivity analyses for potential bias of discard rates for

GOM Winter Flounder

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.019889508
FY 2010	1.5	0	0	0	0.026627818
FY 2010	2	0	0	0	0.033274108
FY 2010	2.5	0	0	0	0.039830251
FY 2010	3	0	0	0	0.046298068
FY 2010	3.5	0	0	0	0.052679331
FY 2010	4	0	0	0	0.058975768
FY 2010	4.5	0	0	0	0.065189058
FY 2010	5	0	0	0	0.071320837
FY 2010	6	0	0	0	0.083346196
FY 2010	7	0	0	0	0.095064107
FY 2010	8	0	0	0	0.10648621
FY 2010	9	0	0	0	0.117623568
FY 2010	10	0	0	0	0.128486697
FY 2010	15	0	0	0	0.179022843
FY 2010	20	0	0	0	0.224019368
FY 2010	25	0	0	0	0.264339799
FY 2010	30	5.13183E-08	0	0	0.300677049
FY 2010	35	0.000493685	0	0	0.333593574
FY 2010	40	0.038540312	0	0	0.363550691
FY 2010	45	0.281744487	0	0	0.390930336
FY 2010	50	0.646727494	0	0	0.416051432
FY 2011	1	0	0	0	0.029831897
FY 2011	1.5	0	0	0	0.040063924
FY 2011	2	0	0	0	0.050082376
FY 2011	2.5	0	0	0	0.059893871
FY 2011	3	0	0	0	0.069504757
FY 2011	3.5	0	0	0	0.078921123
FY 2011	4	0	0	0	0.088148816
FY 2011	4.5	0	0	0	0.097193451
FY 2011	5	0	0	0	0.106060421
FY 2011	6	0	0	0	0.123281902
FY 2011	7	0	0	0	0.139852391
FY 2011	8	0	0	0	0.155808116
FY 2011	9	0	0	0	0.171182664
FY 2011	10	0	0	0	0.186007221
FY 2011	15	0	6.69237E-11	0	0.252828279
FY 2011	20	0	0.008358313	0	0.309510864
FY 2011	25	0	0.520123601	0	0.358199673
FY 2011	30	7.5133E-09	0.95449539	0	0.400474329
FY 2011	35	0.000283966	0.99792526	0	0.437523984
FY 2011	40	0.037545336	0.999912229	0	0.470260945
FY 2011	45	0.315465655	0.999995546	0	0.499396814
FY 2011	50	0.712684801	0.999999706	0	0.525494798

Table 9. Sensitivity analyses for potential bias of discard rates for

Witch Flounder

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.082749775
FY 2010	1.5	0	0	0	0.109952019
FY 2010	2	0	0	0	0.135587296
FY 2010	2.5	0	0	0	0.159787215
FY 2010	3	6.438E-07	0	0	0.182669042
FY 2010	3.5	0.034194862	0	0	0.204337612
FY 2010	4	0.692342446	0	0	0.224886927
FY 2010	4.5	0.990560745	0	0	0.244401525
FY 2010	5	0.999940531	1.74226E-08	0	0.262957638
FY 2010	6	1	0.040189261	0	0.297463646
FY 2010	7	1	0.83964931	0	0.328883225
FY 2010	8	1	0.998957166	0	0.357612751
FY 2010	9	1	0.9999988	0	0.383983515
FY 2010	10	1	0.999999999	3.56177E-10	0.408274552
FY 2010	15	1	1	0.966945658	0.505726597
FY 2010	20	1	1	0.999999998	0.57561854
FY 2010	25	1	1	1	0.628193278
FY 2010	30	1	1	1	0.66917742
FY 2010	35	1	1	1	0.702023301
FY 2010	40	1	1	1	0.728936021
FY 2010	45	1	1	1	0.751390026
FY 2010	50	1	1	1	0.770408588
FY 2011	1	0	0	0	0.063279376
FY 2011	1.5	0	0	0	0.084062292
FY 2011	2	0	0	0	0.103943009
FY 2011	2.5	0	0	0	0.122979026
FY 2011	3	0	0	0	0.141223057
FY 2011	3.5	0	0	0	0.158723522
FY 2011	4	6.21725E-14	0	0	0.17552497
FY 2011	4.5	1.8168E-06	0	0	0.191668463
FY 2011	5	0.008984988	0	0	0.207191906
FY 2011	6	0.864512706	0	0	0.236516252
FY 2011	7	0.999858187	6.2771E-09	0	0.263748679
FY 2011	8	0.999999986	0.003966103	0	0.289105325
FY 2011	9	1	0.395657985	0	0.312773545
FY 2011	10	1	0.952113421	0	0.334916545
FY 2011	15	1	1	4.70269E-06	0.427197396
FY 2011	20	1	1	0.934418359	0.496990376
FY 2011	25	1	1	0.999999839	0.551622779
FY 2011	30	1	1	1	0.595550467
FY 2011	35	1	1	1	0.631638941
FY 2011	40	1	1	1	0.661814744
FY 2011	45	1	1	1	0.687420938
FY 2011	50	1	1	1	0.709422444

Table10. Sensitivity analyses for potential bias of discard rates for

CC/GOM Yellowtail Flounder

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.109207729
FY 2010	1.5	0	0	0	0.142603284
FY 2010	2	0	0	0	0.173585341
FY 2010	2.5	0	0	0	0.202406409
FY 2010	3	5.04142E-09	0	0	0.229284963
FY 2010	3.5	0.000206588	0	0	0.254410986
FY 2010	4	0.033275494	0	0	0.277950468
FY 2010	4.5	0.313809761	2.13163E-14	0	0.30004908
FY 2010	5	0.730392774	3.36613E-09	0	0.320835188
FY 2010	6	0.989159711	0.000930017	0	0.358911392
FY 2010	7	0.999786218	0.124430111	0	0.39294489
FY 2010	8	0.999995835	0.632474322	7.77156E-15	0.423547071
FY 2010	9	0.999999896	0.934753425	7.81881E-09	0.451211958
FY 2010	10	0.999999996	0.993051247	2.95076E-05	0.476343081
FY 2010	15	1	0.999999956	0.836150544	0.573905615
FY 2010	20	1	1	0.999787377	0.640823751
FY 2010	25	1	1	0.999999797	0.68957587
FY 2010	30	1	1	0.999999999	0.726675114
FY 2010	35	1	1	1	0.75585343
FY 2010	40	1	1	1	0.779402885
FY 2010	45	1	1	1	0.798809008
FY 2010	50	1	1	1	0.81507686
FY 2011	1	0	0	0	0.106012818
FY 2011	1.5	0	0	0	0.138861499
FY 2011	2	5.69435E-08	0	0	0.16938175
FY 2011	2.5	0.022586763	0	0	0.197812669
FY 2011	3	0.626884867	0	0	0.2243617
FY 2011	3.5	0.979925021	3.20582E-08	0	0.249209705
FY 2011	4	0.999646776	0.00063524	0	0.27251509
FY 2011	4.5	0.999995686	0.068788161	0	0.294417183
FY 2011	5	0.999999946	0.472271736	0	0.315039025
FY 2011	6	1	0.981987221	0	0.35286617
FY 2011	7	1	0.999881824	1.29491E-09	0.386733944
FY 2011	8	1	0.999999469	0.000156494	0.417233074
FY 2011	9	1	0.999999997	0.039737912	0.44484234
FY 2011	10	1	1	0.39767295	0.469953896
FY 2011	15	1	1	0.999991441	0.567720755
FY 2011	20	1	1	1	0.635037912
FY 2011	25	1	1	1	0.684214028
FY 2011	30	1	1	1	0.72171148
FY 2011	35	1	1	1	0.751248983
FY 2011	40	1	1	1	0.775117934
FY 2011	45	1	1	1	0.794807243
FY 2011	50	1	1	1	0.811326362

Table 11. Sensitivity analyses for potential bias of discard rates for

GB Yellowtail Flounder

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	7.4587E-09	0	0	0.097634022
FY 2010	1.5	0.05632249	0	0	0.130564226
FY 2010	2	0.750095202	0	0	0.161175596
FY 2010	2.5	0.982662273	0	0	0.189704729
FY 2010	3	0.999053002	0	0	0.216357091
FY 2010	3.5	0.99993722	0	0	0.24131198
FY 2010	4	0.999994382	0	0	0.264726557
FY 2010	4.5	0.999999322	7.77156E-15	0	0.286739163
FY 2010	5	0.999999893	4.2879E-10	0	0.307472055
FY 2010	6	0.999999995	7.83725E-05	0	0.345520552
FY 2010	7	1	0.018932676	0	0.379605911
FY 2010	8	1	0.215965753	0	0.41031668
FY 2010	9	1	0.58912671	0	0.438130369
FY 2010	10	1	0.85060726	0	0.463438455
FY 2010	15	1	0.999772685	0	0.562066776
FY 2010	20	1	0.999999005	0	0.630066316
FY 2010	25	1	0.999999982	0	0.679786995
FY 2010	30	1	0.999999999	0	0.717725854
FY 2010	35	1	1	0	0.747627022
FY 2010	40	1	1	0	0.771800128
FY 2010	45	1	1	3.03772E-10	0.791747254
FY 2010	50	1	1	1.17497E-06	0.808487508
FY 2011	1	0	0	0	0.048555403
FY 2011	1.5	0	3.6018E-07	0	0.065388722
FY 2011	2	1.57355E-10	0.026521281	0	0.081636753
FY 2011	2.5	0.000180787	0.509463989	0	0.097329501
FY 2011	3	0.048744451	0.918660565	0	0.112494951
FY 2011	3.5	0.403377232	0.992052848	0	0.127159243
FY 2011	4	0.800281087	0.999295382	0	0.141346813
FY 2011	4.5	0.955934198	0.999931299	0	0.155080538
FY 2011	5	0.991948247	0.999992084	0	0.168381851
FY 2011	6	0.999746773	0.999999817	0	0.193766435
FY 2011	7	0.999989613	0.999999992	0	0.217647228
FY 2011	8	0.999999379	0.999999999	0	0.240154011
FY 2011	9	0.999999946	1	0	0.261402052
FY 2011	10	0.999999994	1	0	0.281494076
FY 2011	15	1	1	0	0.36752053
FY 2011	20	1	1	0	0.435149835
FY 2011	25	1	1	0	0.489713391
FY 2011	30	1	1	0	0.534664045
FY 2011	35	1	1	0	0.572336509
FY 2011	40	1	1	0	0.604366067
FY 2011	45	1	1	0	0.631932244
FY 2011	50	1	1	0	0.65590724

Table 12. Sensitivity analyses for potential bias of discard rates for

SNE/MA Yellowtail Flounder

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.023766579
FY 2010	1.5	0	0	0	0.030886434
FY 2010	2	0	0	0	0.037903189
FY 2010	2.5	0	0	0	0.044819066
FY 2010	3	0	0	0	0.051636226
FY 2010	3.5	0	0	0	0.058356766
FY 2010	4	0	0	0	0.064982727
FY 2010	4.5	0	0	0	0.071516091
FY 2010	5	0	0	0	0.077958786
FY 2010	6	0	0	0	0.090579615
FY 2010	7	0	0	0	0.102859603
FY 2010	8	0	0	0	0.114812374
FY 2010	9	0	0	0	0.126450834
FY 2010	10	0	0	0	0.137787221
FY 2010	15	0	0	0	0.190324583
FY 2010	20	1.54321E-14	0	0	0.236827129
FY 2010	25	2.73053E-06	0	0	0.278278186
FY 2010	30	0.006334128	0	0	0.315458452
FY 2010	35	0.15480684	0	0	0.348995634
FY 2010	40	0.538774057	0	0	0.379400172
FY 2010	45	0.833152279	0	0	0.407091402
FY 2010	50	0.951976307	0	0	0.432417015
FY 2011	1	0	0	0	0.04947409
FY 2011	1.5	0	0	0	0.064695527
FY 2011	2	0	0	0	0.079437145
FY 2011	2.5	1.62859E-11	0	0	0.093721278
FY 2011	3	1.15532E-05	0	0	0.107568899
FY 2011	3.5	0.007590882	0	0	0.120999715
FY 2011	4	0.153236458	0	0	0.134032265
FY 2011	4.5	0.540939529	0	0	0.146684006
FY 2011	5	0.847175462	0	0	0.158971387
FY 2011	6	0.992728901	0	0	0.182514269
FY 2011	7	0.999754268	0	0	0.204774973
FY 2011	8	0.999990765	0	0	0.225855466
FY 2011	9	0.99999955	0	0	0.245847182
FY 2011	10	0.999999971	0	0	0.264832349
FY 2011	15	1	0	0	0.347023089
FY 2011	20	1	1.3266E-05	0	0.412684195
FY 2011	25	1	0.086210889	0	0.466346546
FY 2011	30	1	0.706412087	0	0.511023729
FY 2011	35	1	0.972148287	0	0.548798111
FY 2011	40	1	0.998388164	0	0.581154735
FY 2011	45	1	0.999911942	0	0.609181165
FY 2011	50	1	0.999994513	0	0.63369213

Table 13. Sensitivity analyses for potential bias of discard rates for

GB Haddock

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.004656422
FY 2010	1.5	0	0	0	0.006291156
FY 2010	2	0	0	0	0.007920529
FY 2010	2.5	0	0	0	0.009544567
FY 2010	3	0	0	0	0.011163297
FY 2010	3.5	0	0	0	0.012776744
FY 2010	4	0	0	0	0.014384934
FY 2010	4.5	0	0	0	0.015987894
FY 2010	5	0	0	0	0.017585648
FY 2010	6	0	0	0	0.020765641
FY 2010	7	0	0	0	0.023925114
FY 2010	8	0	0	0	0.027064264
FY 2010	9	0	0	0	0.030183288
FY 2010	10	0	0	0	0.033282377
FY 2010	15	0	0	0	0.048485399
FY 2010	20	0	0	0	0.063217646
FY 2010	25	0	0	0	0.077500651
FY 2010	30	0	0	0	0.091354655
FY 2010	35	0	0	0	0.1047987
FY 2010	40	0	0	0	0.117850716
FY 2010	45	0	0	0	0.130527606
FY 2010	50	0	0	0	0.142845312
FY 2011	1	0	0	0	0.01993166
FY 2011	1.5	0	0	0	0.027252781
FY 2011	2	0	0	0	0.034465336
FY 2011	2.5	0	0	0	0.041571721
FY 2011	3	0	0	0	0.048574264
FY 2011	3.5	0	0	0	0.055475223
FY 2011	4	0	0	0	0.062276795
FY 2011	4.5	0	0	0	0.06898111
FY 2011	5	0	0	0	0.075590239
FY 2011	6	0	0	0	0.088530937
FY 2011	7	0	0	0	0.101114326
FY 2011	8	0	0	0	0.113355004
FY 2011	9	0	0	0	0.125266783
FY 2011	10	0	0	0	0.136862744
FY 2011	15	0	0	0	0.19051754
FY 2011	20	0	0	0	0.237892096
FY 2011	25	0	0	0	0.280028092
FY 2011	30	0	0	0	0.317748905
FY 2011	35	0	0	0	0.351713948
FY 2011	40	0	0	0	0.382457549
FY 2011	45	0	0	0	0.410417269
FY 2011	50	0	0	0	0.435954856

Table 14. Sensitivity analyses for potential bias of discard rates for

GOM Haddock

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.043300661
FY 2010	1.5	0	0	0	0.058527981
FY 2010	2	0	0	0	0.073278163
FY 2010	2.5	0	0	0	0.087573289
FY 2010	3	0	0	0	0.101434096
FY 2010	3.5	0	0	0	0.114880081
FY 2010	4	0	0	0	0.127929592
FY 2010	4.5	9.53682E-13	0	0	0.140599911
FY 2010	5	1.17539E-06	0	0	0.152907327
FY 2010	6	0.119052855	0	0	0.176494084
FY 2010	7	0.91846837	0	0	0.198802907
FY 2010	8	0.999597598	0	0	0.219934916
FY 2010	9	0.999999491	1.8683E-08	0	0.239980835
FY 2010	10	1	0.000561912	0	0.259022295
FY 2010	15	1	0.99982454	0	0.34151096
FY 2010	20	1	1	0	0.407473438
FY 2010	25	1	1	0	0.461423935
FY 2010	30	1	1	5.4947E-08	0.506369763
FY 2010	35	1	1	0.019943154	0.544391678
FY 2010	40	1	1	0.652710974	0.576975203
FY 2010	45	1	1	0.989282825	0.605209264
FY 2010	50	1	1	0.999935615	0.629910267
FY 2011	1	0	0	0	0.015421952
FY 2011	1.5	0	0	0	0.020897606
FY 2011	2	0	0	0	0.026312693
FY 2011	2.5	0	0	0	0.031668211
FY 2011	3	0	0	0	0.036965138
FY 2011	3.5	0	0	0	0.04220443
FY 2011	4	0	0	0	0.047387023
FY 2011	4.5	0	0	0	0.052513833
FY 2011	5	0	0	0	0.057585754
FY 2011	6	0	0	0	0.067568422
FY 2011	7	0	0	0	0.07734182
FY 2011	8	0	0	0	0.086912461
FY 2011	9	0	0	0	0.09628659
FY 2011	10	0	0	0	0.105470198
FY 2011	15	0	0	0	0.148723878
FY 2011	20	0	0	0	0.187987551
FY 2011	25	0	0	0	0.223788974
FY 2011	30	0	0	0	0.256566757
FY 2011	35	2.00017E-11	0	0	0.286688427
FY 2011	40	8.86614E-06	0	0	0.314464264
FY 2011	45	0.006400754	0	0	0.340158034
FY 2011	50	0.14805465	0	0	0.363995385

Table 15. Sensitivity analyses for potential bias of discard rates for

White Hake

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.014069478
FY 2010	1.5	0	0	0	0.019036344
FY 2010	2	0	0	0	0.023953417
FY 2010	2.5	0	0	0	0.028821443
FY 2010	3	0	0	0	0.033641151
FY 2010	3.5	0	0	0	0.038413257
FY 2010	4	0	0	0	0.043138463
FY 2010	4.5	0	0	0	0.047817458
FY 2010	5	0	0	0	0.052450915
FY 2010	6	0	0	0	0.061583851
FY 2010	7	0	0	0	0.070542412
FY 2010	8	0	0	0	0.079331545
FY 2010	9	1.85888E-11	0	0	0.087956012
FY 2010	10	4.18436E-07	0	0	0.096420397
FY 2010	15	0.586996833	0	0	0.136490174
FY 2010	20	0.997742849	2.7256E-07	0	0.173157019
FY 2010	25	0.999995224	0.030365723	0	0.206836767
FY 2010	30	0.99999998	0.589709387	0	0.237880152
FY 2010	35	1	0.958601666	0	0.266585065
FY 2010	40	1	0.997941505	0	0.293206149
FY 2010	45	1	0.999912774	0	0.317962368
FY 2010	50	1	0.999995943	0	0.341043048
FY 2011	1	0	0	0	0.002973189
FY 2011	1.5	0	0	0	0.002973189
FY 2011	2	0	0	0	0.002973189
FY 2011	2.5	0	0	0	0.002973189
FY 2011	3	0	0	0	0.002973189
FY 2011	3.5	0	0	0	0.002973189
FY 2011	4	0	0	0	0.002973189
FY 2011	4.5	9.53682E-13	0	0	0.002973189
FY 2011	5	1.17539E-06	0	0	0.002973198
FY 2011	6	0.119052855	0	0	0.003883291
FY 2011	7	0.91846837	0	0	0.009951662
FY 2011	8	0.999597598	0	0	0.010563384
FY 2011	9	0.999999491	0	0	0.010566413
FY 2011	10	1	0	0	0.010566417
FY 2011	15	1	0	0	0.010566417
FY 2011	20	1	0	0	0.010566417
FY 2011	25	1	0	0	0.010566417
FY 2011	30	1	0	0	0.010566417
FY 2011	35	1	0	0	0.010566417
FY 2011	40	1	0	0	0.010566417
FY 2011	45	1	0	0	0.010566417
FY 2011	50	1	0	0	0.010566417

Table 16. Sensitivity analyses for potential bias of discard rates for

Pollock

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	1	1	0.014145946
FY 2010	1.5	0	1	1	0.018910614
FY 2010	2	0	1	1	0.023629448
FY 2010	2.5	0	1	1	0.028303107
FY 2010	3	0	1	1	0.032932235
FY 2010	3.5	0	1	1	0.037517466
FY 2010	4	0	1	1	0.042059422
FY 2010	4.5	0	1	1	0.046558712
FY 2010	5	0	1	1	0.051015935
FY 2010	6	0	1	1	0.059806517
FY 2010	7	0	1	1	0.068435737
FY 2010	8	0	1	1	0.076907997
FY 2010	9	0	1	1	0.085227541
FY 2010	10	0	1	1	0.093398462
FY 2010	15	0	1	1	0.132157146
FY 2010	20	0	1	1	0.167737706
FY 2010	25	0	1	1	0.200515647
FY 2010	30	0	1	1	0.230809556
FY 2010	35	0	1	1	0.258891499
FY 2010	40	0	1	1	0.284995208
FY 2010	45	0	1	1	0.309322607
FY 2010	50	0	1	1	0.332049041
FY 2011	1	0	1	1	0.004055261
FY 2011	1.5	0	1	1	0.004055261
FY 2011	2	0	1	1	0.004055261
FY 2011	2.5	0	1	1	0.004055261
FY 2011	3	0	1	1	0.004055261
FY 2011	3.5	0	1	1	0.004055261
FY 2011	4	0	1	1	0.004055261
FY 2011	4.5	9.53682E-13	1	1	0.004055261
FY 2011	5	1.17539E-06	1	1	0.004055273
FY 2011	6	0.119052855	1	1	0.005275198
FY 2011	7	0.91846837	1	1	0.013390048
FY 2011	8	0.999597598	1	1	0.014206195
FY 2011	9	0.999999491	1	1	0.014210234
FY 2011	10	1	1	1	0.014210239
FY 2011	15	1	1	1	0.014210239
FY 2011	20	1	1	1	0.014210239
FY 2011	25	1	1	1	0.014210239
FY 2011	30	1	1	1	0.014210239
FY 2011	35	1	1	1	0.014210239
FY 2011	40	1	1	1	0.014210239
FY 2011	45	1	1	1	0.014210239
FY 2011	50	1	1	1	0.014210239

Table 17. Sensitivity analyses for potential bias of discard rates for

Redfish

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.072354753
FY 2010	1.5	0	0	0	0.096052906
FY 2010	2	0	0	0	0.118570409
FY 2010	2.5	0	0	0	0.139993346
FY 2010	3	0	0	0	0.160399633
FY 2010	3.5	0	0	0	0.179859964
FY 2010	4	0	0	0	0.198438623
FY 2010	4.5	0	0	0	0.216194201
FY 2010	5	0	0	0	0.233180211
FY 2010	6	0	0	0	0.265035337
FY 2010	7	0	0	0	0.294349383
FY 2010	8	0	0	0	0.321414737
FY 2010	9	0	0	0	0.34648059
FY 2010	10	0	0	0	0.369760623
FY 2010	15	0	0	0	0.46504326
FY 2010	20	0	0	0	0.535299005
FY 2010	25	6.58974E-10	0	0	0.589243553
FY 2010	30	0.000103428	4.00707E-09	0	0.63196651
FY 2010	35	0.021612193	7.58345E-05	0	0.666639483
FY 2010	40	0.226340282	0.010754979	1.88713E-11	0.695341778
FY 2010	45	0.594670204	0.127604587	3.24308E-07	0.719493362
FY 2010	50	0.849303517	0.417932454	0.000123899	0.740097005
FY 2011	1	0	0	0	0.020861833
FY 2011	1.5	0	0	0	0.020861833
FY 2011	2	0	0	0	0.020861833
FY 2011	2.5	0	0	0	0.020861833
FY 2011	3	0	0	0	0.020861833
FY 2011	3.5	0	0	0	0.020861833
FY 2011	4	0	0	0	0.020861833
FY 2011	4.5	9.53682E-13	0	0	0.020861833
FY 2011	5	1.17539E-06	0	0	0.020861891
FY 2011	6	0.119052855	0	0	0.026705034
FY 2011	7	0.91846837	0	0	0.064204124
FY 2011	8	0.999597598	0	0	0.067848871
FY 2011	9	0.999999491	0	0	0.067866855
FY 2011	10	1	0	0	0.067866878
FY 2011	15	1	0	0	0.067866878
FY 2011	20	1	0	0	0.067866878
FY 2011	25	1	0	0	0.067866878
FY 2011	30	1	0	0	0.067866878
FY 2011	35	1	0	0	0.067866878
FY 2011	40	1	0	0	0.067866878
FY 2011	45	1	0	0	0.067866878
FY 2011	50	1	0	0	0.067866878

Table 18. Sensitivity analyses for potential bias of discard rates for

SNE/MA Winter Flounder

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.824317408
FY 2010	1.5	0	0	0	0.863950509
FY 2010	2	0	0	0	0.888993101
FY 2010	2.5	0	0	0	0.906249694
FY 2010	3	0	0	0	0.918862877
FY 2010	3.5	0	0	0	0.928484575
FY 2010	4	0	0	0	0.936066205
FY 2010	4.5	0	0	0	0.942194403
FY 2010	5	0	0	0	0.947250556
FY 2010	6	0	0	0	0.955104427
FY 2010	7	0	0	0	0.960922658
FY 2010	8	0	0	0	0.965405875
FY 2010	9	0	0	0	0.968966274
FY 2010	10	0	0	0	0.971862194
FY 2010	15	2.73661E-11	1.9984E-15	0	0.980813949
FY 2010	20	0.045516107	0.003790535	0	0.985444601
FY 2010	25	0.896691327	0.682783567	0	0.988274589
FY 2010	30	0.999413187	0.995162035	0	0.990183248
FY 2010	35	0.999998479	0.999979588	0	0.991557513
FY 2010	40	0.999999995	0.999999921	4.29823E-11	0.992594257
FY 2010	45	1	1	8.21063E-06	0.993404223
FY 2010	50	1	1	0.005230755	0.994054484
FY 2011	1	0	0	0	0.893444757
FY 2011	1.5	0	0	0	0.893444757
FY 2011	2	0	0	0	0.893444757
FY 2011	2.5	0	0	0	0.893444757
FY 2011	3	0	0	0	0.893444757
FY 2011	3.5	0	0	0	0.893444757
FY 2011	4	0	0	0	0.893444757
FY 2011	4.5	9.53682E-13	0	0	0.893444757
FY 2011	5	1.17539E-06	0	0	0.893445019
FY 2011	6	0.119052855	0	0	0.914673368
FY 2011	7	0.91846837	0	0	0.96350075
FY 2011	8	0.999597598	0	0	0.965504075
FY 2011	9	0.999999491	0	0	0.965513452
FY 2011	10	1	0	0	0.965513464
FY 2011	15	1	0	0	0.965513464
FY 2011	20	1	0	0	0.965513464
FY 2011	25	1	0	0	0.965513464
FY 2011	30	1	0	0	0.965513464
FY 2011	35	1	0	0	0.965513464
FY 2011	40	1	0	0	0.965513464
FY 2011	45	1	0	0	0.965513464
FY 2011	50	1	0	0	0.965513464

Table 19. Sensitivity analyses for potential bias of discard rates for

Southern Windowpane

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.99764371
FY 2010	1.5	0	0	0	0.99819732
FY 2010	2	0	0	0	0.998540281
FY 2010	2.5	0	0	0	0.998773604
FY 2010	3	0	0	0	0.998942617
FY 2010	3.5	0	0	0	0.999070688
FY 2010	4	0	0	0	0.999171087
FY 2010	4.5	1.34E-10	1.52434E-13	0	0.999251907
FY 2010	5	1.36421E-06	1.206E-08	0	0.999318367
FY 2010	6	0.014830571	0.001696973	0	0.999421207
FY 2010	7	0.37496742	0.164847556	4.44459E-08	0.999497083
FY 2010	8	0.865811192	0.700854296	0.000419713	0.999555372
FY 2010	9	0.98732848	0.956959077	0.040215145	0.999601552
FY 2010	10	0.999191679	0.996341956	0.324030941	0.999639042
FY 2010	15	0.999999999	0.999999992	0.999785967	0.999754525
FY 2010	20	1	1	0.999999987	0.999814025
FY 2010	25	1	1	1	0.999850309
FY 2010	30	1	1	1	0.999874746
FY 2010	35	1	1	1	0.999892324
FY 2010	40	1	1	1	0.999905575
FY 2010	45	1	1	1	0.999915922
FY 2010	50	1	1	1	0.999924226
FY 2011	1	0	0	0	0.998055167
FY 2011	1.5	0	0	0	0.998535676
FY 2011	2	0	0	0	0.998825788
FY 2011	2.5	1.43397E-06	1.26369E-08	0	0.999019954
FY 2011	3	0.010489729	0.001059266	0	0.999159018
FY 2011	3.5	0.299266108	0.11581861	7.55031E-09	0.999263521
FY 2011	4	0.805431703	0.604729053	0.000105734	0.999344923
FY 2011	4.5	0.975723158	0.924530714	0.016222601	0.999410121
FY 2011	5	0.99802734	0.991685348	0.1958559	0.999463516
FY 2011	6	0.999990816	0.999945794	0.868267385	0.999545752
FY 2011	7	0.999999946	0.999999637	0.994883387	0.999606128
FY 2011	8	0.999999999	0.999999996	0.999882097	0.999652337
FY 2011	9	1	1	0.999997362	0.999688842
FY 2011	10	1	1	0.999999929	0.999718409
FY 2011	15	1	1	1	0.999809106
FY 2011	20	1	1	1	0.999855612
FY 2011	25	1	1	1	0.999883897
FY 2011	30	1	1	1	0.999902915
FY 2011	35	1	1	1	0.99991658
FY 2011	40	1	1	1	0.999926873
FY 2011	45	1	1	1	0.999934905
FY 2011	50	1	1	1	0.999941347

Table 20. Sensitivity analyses for potential bias of discard rates for

Northern Windowpane

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0.194999846	0.097525757	6.84081E-06	0.998041731
FY 2010	1.5	0.934701064	0.884062256	0.154361287	0.9985726
FY 2010	2	0.997882182	0.995500093	0.809507717	0.998877027
FY 2010	2.5	0.999904208	0.999788954	0.982044341	0.999074428
FY 2010	3	0.999992794	0.999984381	0.998418823	0.999212804
FY 2010	3.5	0.999999149	0.999998219	0.999829176	0.999315186
FY 2010	4	0.999999856	0.999999709	0.999976041	0.999394002
FY 2010	4.5	0.999999967	0.999999937	0.999995689	0.999456548
FY 2010	5	0.999999991	0.999999983	0.999999035	0.999507391
FY 2010	6	0.999999999	0.999999998	0.999999918	0.999585036
FY 2010	7	1	1	0.999999988	0.999641537
FY 2010	8	1	1	0.999999997	0.999684495
FY 2010	9	1	1	0.999999999	0.999718259
FY 2010	10	1	1	1	0.999745495
FY 2010	15	1	1	1	0.999828426
FY 2010	20	1	1	1	0.999870593
FY 2010	25	1	1	1	0.999896123
FY 2010	30	1	1	1	0.999913239
FY 2010	35	1	1	1	0.999925513
FY 2010	40	1	1	1	0.999934744
FY 2010	45	1	1	1	0.99994194
FY 2010	50	1	1	1	0.999947706
FY 2011	1	0.410835291	0.220942894	2.3888E-06	0.999997123
FY 2011	1.5	0.996356911	0.988837413	0.306429213	0.999997889
FY 2011	2	0.999993723	0.999974715	0.967816983	0.999998332
FY 2011	2.5	0.999999977	0.999999904	0.999645414	0.999998622
FY 2011	3	1	0.999999999	0.999996037	0.999998826
FY 2011	3.5	1	1	0.999999932	0.999998977
FY 2011	4	1	1	0.999999998	0.999999094
FY 2011	4.5	1	1	1	0.999999187
FY 2011	5	1	1	1	0.999999262
FY 2011	6	1	1	1	0.999999378
FY 2011	7	1	1	1	0.999999462
FY 2011	8	1	1	1	0.999999527
FY 2011	9	1	1	1	0.999999577
FY 2011	10	1	1	1	0.999999618
FY 2011	15	1	1	1	0.999999742
FY 2011	20	1	1	1	0.999999805
FY 2011	25	1	1	1	0.999999844
FY 2011	30	1	1	1	0.999999869
FY 2011	35	1	1	1	0.999999888
FY 2011	40	1	1	1	0.999999902
FY 2011	45	1	1	1	0.999999913
FY 2011	50	1	1	1	0.999999921

Table 21. Sensitivity analyses for potential bias of discard rates for

Ocean Pout

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.998953057
FY 2010	1.5	0	0	0	0.998953057
FY 2010	2	0	0	0	0.998953057
FY 2010	2.5	0	0	0	0.998953057
FY 2010	3	0	0	0	0.998953057
FY 2010	3.5	0	0	0	0.998953057
FY 2010	4	0	0	0	0.998953057
FY 2010	4.5	0	0	0	0.998953057
FY 2010	5	0	0	0	0.998953057
FY 2010	6	0	0	0	0.998953057
FY 2010	7	0	0	0	0.998953057
FY 2010	8	0	0	0	0.998953057
FY 2010	9	0	0	0	0.998953057
FY 2010	10	0	0	0	0.998953057
FY 2010	15	0	0	0	0.998953057
FY 2010	20	0	0	0	0.998953057
FY 2010	25	0	0	0	0.998953057
FY 2010	30	0	0	0	0.998953057
FY 2010	35	0	0	0	0.998953057
FY 2010	40	0	0	0	0.998953057
FY 2010	45	0	0	0	0.998953057
FY 2010	50	0	0	0	0.998953057
FY 2011	1	0	0	0	0.999925961
FY 2011	1.5	0	0	0	0.999945644
FY 2011	2	0	0	0	0.99995706
FY 2011	2.5	0	0	0	0.999964513
FY 2011	3	1.41878E-11	2.66454E-15	0	0.999969761
FY 2011	3.5	2.71448E-06	1.3456E-08	0	0.999973657
FY 2011	4	0.001739302	6.69727E-05	0	0.999976664
FY 2011	4.5	0.051563183	0.007445873	5.21462E-11	0.999979055
FY 2011	5	0.281548755	0.09535908	3.53354E-07	0.999981001
FY 2011	6	0.84850927	0.660713626	0.003862774	0.999983978
FY 2011	7	0.986172697	0.952539617	0.160891571	0.999986149
FY 2011	8	0.999013606	0.99567633	0.61127726	0.999987802
FY 2011	9	0.999926503	0.999634231	0.900498011	0.999989102
FY 2011	10	0.999993573	0.999966164	0.981825763	0.999990152
FY 2011	15	0.999999999	0.999999997	0.99999742	0.999993353
FY 2011	20	1	1	0.999999997	0.999994984
FY 2011	25	1	1	1	0.999995972
FY 2011	30	1	1	1	0.999996635
FY 2011	35	1	1	1	0.999997111
FY 2011	40	1	1	1	0.999997468
FY 2011	45	1	1	1	0.999997747
FY 2011	50	1	1	1	0.999997971

Table 22. Sensitivity analyses for potential bias of discard rates for

Halibut

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.746720531
FY 2010	1.5	0	0	0	0.800519046
FY 2010	2	0	0	0	0.835467104
FY 2010	2.5	0	0	0	0.859995233
FY 2010	3	0	0	0	0.878158972
FY 2010	3.5	1.71279E-06	4.02486E-08	0	0.892150939
FY 2010	4	0.020214676	0.003581724	0	0.903260321
FY 2010	4.5	0.504772756	0.287011569	0	0.912294719
FY 2010	5	0.954416796	0.878727638	0	0.919785822
FY 2010	6	0.999989487	0.999931864	9.2093E-12	0.931489149
FY 2010	7	1	0.999999995	0.000388884	0.940212242
FY 2010	8	1	1	0.21023699	0.946964897
FY 2010	9	1	1	0.885686581	0.952347006
FY 2010	10	1	1	0.997641555	0.956737383
FY 2010	15	1	1	1	0.970381484
FY 2010	20	1	1	1	0.977482896
FY 2010	25	1	1	1	0.981837568
FY 2010	30	1	1	1	0.984780858
FY 2010	35	1	1	1	0.986903237
FY 2010	40	1	1	1	0.988506112
FY 2010	45	1	1	1	0.989759427
FY 2010	50	1	1	1	0.990766288
FY 2011	1	0	0	0	0.746477137
FY 2011	1.5	0	0	0	0.800129797
FY 2011	2	0.000177565	1.84759E-05	0	0.835040026
FY 2011	2.5	0.33517741	0.188498989	0	0.859568435
FY 2011	3	0.962978204	0.918718479	0	0.877746663
FY 2011	3.5	0.999694431	0.998989614	4.76711E-09	0.891758086
FY 2011	4	0.999998644	0.999994355	0.000307346	0.90288806
FY 2011	4.5	0.999999994	0.999999971	0.056314176	0.911942566
FY 2011	5	1	1	0.463994485	0.919452627
FY 2011	6	1	1	0.985994165	0.931189725
FY 2011	7	1	1	0.999944174	0.939941284
FY 2011	8	1	1	0.999999857	0.946717908
FY 2011	9	1	1	1	0.952120329
FY 2011	10	1	1	1	0.956528071
FY 2011	15	1	1	1	0.970230694
FY 2011	20	1	1	1	0.977365294
FY 2011	25	1	1	1	0.981741242
FY 2011	30	1	1	1	0.984699311
FY 2011	35	1	1	1	0.986832547
FY 2011	40	1	1	1	0.988443732
FY 2011	45	1	1	1	0.98970361
FY 2011	50	1	1	1	0.990715787

Table 23. Sensitivity analyses for potential bias of discard rates for

Wolffish

Fishing Year	Discard bias Adjustment Factor	P(C>ACL)	P(C>ABC)	P(C>OFL)	Discards/ Catch
FY 2010	1	0	0	0	0.987175596
FY 2010	1.5	0	0	0	0.990539944
FY 2010	2	0	0	0	0.992505934
FY 2010	2.5	0	0	0	0.993795379
FY 2010	3	0	0	0	0.994706235
FY 2010	3.5	1.21014E-14	0	0	0.995383893
FY 2010	4	2.61161E-07	2.02897E-11	0	0.995907745
FY 2010	4.5	0.001618816	6.3302E-06	4.05906E-11	0.996324818
FY 2010	5	0.104541618	0.005454697	3.73506E-06	0.996664739
FY 2010	6	0.907605671	0.594383223	0.081939438	0.997185391
FY 2010	7	0.999332632	0.988349447	0.804704636	0.99756544
FY 2010	8	0.999998269	0.99993151	0.994943435	0.997855064
FY 2010	9	0.999999996	0.999999754	0.999955708	0.998083105
FY 2010	10	1	0.999999999	0.999999725	0.998267317
FY 2010	15	1	1	1	0.99882966
FY 2010	20	1	1	1	0.999116425
FY 2010	25	1	1	1	0.999290316
FY 2010	30	1	1	1	0.999407018
FY 2010	35	1	1	1	0.999490758
FY 2010	40	1	1	1	0.999553774
FY 2010	45	1	1	1	0.999602911
FY 2010	50	1	1	1	0.9996423
FY 2011	1	0	0	0	0.999727444
FY 2011	1.5	0	0	0	0.999799636
FY 2011	2	1.92006E-09	3.28626E-14	0	0.999841594
FY 2011	2.5	0.010022742	0.000129414	8.25121E-09	0.999869021
FY 2011	3	0.575223385	0.172944436	0.004132885	0.999888353
FY 2011	3.5	0.980255079	0.858170498	0.341552733	0.999902712
FY 2011	4	0.999769973	0.995710395	0.905989889	0.999913798
FY 2011	4.5	0.999998356	0.999944829	0.996414026	0.999922616
FY 2011	5	0.999999989	0.999999457	0.999929566	0.999929798
FY 2011	6	1	1	0.999999983	0.999940788
FY 2011	7	1	1	1	0.999948803
FY 2011	8	1	1	1	0.999954907
FY 2011	9	1	1	1	0.99995971
FY 2011	10	1	1	1	0.999963589
FY 2011	15	1	1	1	0.99997542
FY 2011	20	1	1	1	0.999981448
FY 2011	25	1	1	1	0.999985102
FY 2011	30	1	1	1	0.999987553
FY 2011	35	1	1	1	0.999989312
FY 2011	40	1	1	1	0.999990635
FY 2011	45	1	1	1	0.999991667
FY 2011	50	1	1	1	0.999992494

APPENDIX E

Table E.1: RELEVANT INFORMATION

ITEM	DEFINITION
(a)	These data are the best available to NOAA's National Marine Fisheries Service (NMFS) when this report was compiled. Data for this report may be supplied to NOAA Fisheries Service (NMFS) from the following sources: (1) vessels via Vessel Monitoring System; (2) Vessel Trip Reports; (3) fish dealer purchase reports; and the (4) NOAA Fisheries Service Observer Program, through audited observer reports submitted by the Northeast Fisheries Science Center. Data in this report are for landings made through April 30 2012 and may be preliminary. Differences with data from previous reports are due to corrections made to the database and updates to observer data.
(b)	Data has been truncated due to confidentiality. Refer to Appendix G for more details.
(c)	Estimates for attributes are at the individual row level.
(d)	A subtrip is not necessarly unique to an individual strata (row) except in the case of unit stocks (Plaice, Witch Flounder,White Hake,Pollock,Redfish,Ocean Pout,Halibut,and Wolffish)

Table E.2: VARIABLE DEFINITIONS

ITEM	DEFINITION
Fishing Year	Groundfish fishing year which spans from May 1 of the year through April 30 of the following year
Stock	Allocated and Non-allocated Groundfish Stock
Gear	Vessel Gear Type
Sector	Sector Name
Number Vessels	Number unique vessels
Subtrips	Number of subtrips
Subtrips Observed	Number of subtrips observed
Subtrips Observed Percent	Percent of subtrips observed
Discard Ratio	Estimated Discard Ratio from observed trips: Discard Observed / Kept Observed
Discard Ratio Variance	Variance of the estimated discard ratio
CV	Realized Coefficient of Variation : (Discard Ratio Variance)ˆ0.5 / Discard Ratio
Subtrips CV30	Estimated number of subtrips required for a coefficient of variation of 30 percent
Subtrips CV30 Percent	Estimated percent of subtrips required for a coefficient of variation of 30 percent
Stock Landings	Stock live pounds landed
Kept All	Total live pounds of all species landed
Kept Observed	Live pounds of all species landed on observed trips
Discard Observed	Observed stock discard
Discard Unobserved	Estimated Discard on un-observed trips: Discard Ratio * Kept All
Days	Actual time absent on a fishing trip in days
Days Full	Sum of time absent on a fishing trips rounded to the full day: Example A trip of 1.1 days = 2 days
Days Observed	Actual time absent of observed fishing trips in days
Days Observed Full	Sum of time absent of observed fishing trips rounded to the full day

Table E.3 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear)

	Fishing Year	Stock	Gear	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1	2010	GB Cod East	Bottom Longline	7	56	12	21.43	0.03	0.00	0.13	3	5.36	174099	490159	84828.00	2375.00	13723	107.20	123	22.70	25
2	2010	GB Cod East	Haddock Otter Trawl	39	161	60	37.27	0.00	0.00	0.23	41	25.47	83015	2525943	808266.80	1766.00	5519	1051.90	1118	462.50	498
3	2010	GB Cod East	Bottom Otter Trawl	86	237	61	25.74	0.01	0.00	0.20	32	13.50	277748	3288845	437918.80	2219.00	16665	1574.60	1685	440.20	471
4	2010	GB Cod East	Ruhle Trawl	4	5	5	100.00	0.00	0.00	0.00	0	0.00	1109	31981	60788.40	261.00	137	23.80	26	35.70	38
5	2010	GB Cod West	Extra Large Mesh Gillnet	72	1307	442	33.82	0.00	0.00	0.24	322	24.64	10302	8388584	2552529.00	490.00	1610	727.50	1624	245.50	546
6	2010	GB Cod West	Large Mesh Gillnet	30	644	245	38.04	0.01	0.00	0.09	32	4.97	397708	2339695	572850.30	8366.00	34169	311.70	704	135.60	279
7	2010	GB Cod West	Handline	5	97	54	55.67	0.01	0.00	0.33	59	60.82	17873	175064	32889.10	219.00	1166	44.00	105	21.90	61
8	2010	GB Cod West	Bottom Longline	18	226	109	48.23	0.00	0.00	0.20	65	28.76	45557	751329	374177.40	1626.00	3265	144.50	285	77.30	143
9	2010	GB Cod West	Haddock Otter Trawl	49	189	104	55.03	0.00	0.00	0.21	73	38.62	403841	4599601	1869073.50	8008.00	19707	1012.40	1090	720.60	776
10	2010	GB Cod West	Bottom Otter Trawl	364	2638	753	28.54	0.00	0.00	0.08	73	2.77	4496473	37170217	9010098.20	41334.00	170519	8664.30	9806	3004.30	3404
11	2010	GB Cod West	Ruhle Trawl	11	25	25	100.00	0.00	0.00	0.00	0	0.00	17422	564197	389678.30	1170.00	1694	125.60	133	168.80	179
12	2010	GOM Cod	Extra Large Mesh Gillnet	57	1001	363	36.26	0.01	0.00	0.20	197	19.68	492466	3125062	586206.50	4189.00	22332	589.00	1212	205.50	423
13	2010	GOM Cod	Large Mesh Gillnet	111	3387	1235	36.46	0.00	0.00	0.04	40	1.18	2919058	8850943	3127445.70	12337.00	34915	1767.40	4007	715.40	1480
14	2010	GOM Cod	Handline	10	34	26	76.47	0.13	0.00	0.13	13	38.24	46005	43100	28571.40	3789.00	5716	30.70	47	13.30	26
15	2010	GOM Cod	Bottom Longline	21	232	67	28.88	0.07	0.00	0.15	23	9.91	192764	379604	90243.10	6731.00	28314	128.60	256	34.90	68
16	2010	GOM Cod	Haddock Otter Trawl	6	31	31	100.00	0.00	0.00	0.00	0	0.00	28163	139582	257901.50	421.00	228	92.20	99	229.70	246
17	2010	GOM Cod	Bottom Otter Trawl	229	2787	910	32.65	0.00	0.00	0.08	86	3.09	4074728	20609024	6106594.60	23806.00	80342	5384.50	6832	1955.10	2441
18	2010	Plaice	Extra Large Mesh Gillnet	129	2308	804	34.84	0.00	0.00	0.22	502	21.75	6620	11513645	3138735.50	125.00	459	1316.50	2836	448.50	966
19	2010	Plaice	Large Mesh Gillnet	141	4031	1475	36.59	0.00	0.00	0.10	236	5.85	11668	11190638	3700296.00	2000.00	6049	2062.20	4691	833.80	1739
20	2010	Plaice	Handline	15	131	80	61.07	0.00	0.00	0.00	0	0.00	4	218081	61460.50	0.00	0	74.70	152	35.30	87
21	2010	Plaice	Bottom Longline	46	514	185	35.99	0.00	0.00	0.34	213	41.44	111	1618233	549248.50	10.00	29	375.50	658	130.00	230
22	2010	Plaice	Haddock Otter Trawl	94	364	123	33.79	0.00	0.00	0.34	144	39.56	46766	7088786	2935241.80	6323.00	15270	1620.40	1740	871.80	937
23	2010	Plaice	Bottom Otter Trawl	679	5662	1466	25.89	0.01	0.00	0.05	49	0.87	2840723	60792463	15554611.60	91493.00	357584	11736.10	14120	3840.30	4626
24	2010	Plaice	Ruhle Trawl	16	27	27	100.00	0.00	0.00	0.00	0	0.00	6150	606283	450466.70	155.00	209	145.80	155	181.20	193
25	2010	GB Winter Flounder	Bottom Longline	14	84	34	40.48	0.00	0.00	0.42	49	58.33	962	617753	145592.00	15.00	64	139.20	166	50.80	62
26	2010	GB Winter Flounder	Haddock Otter Trawl	66	267	108	40.45	0.00	0.00	0.29	104	38.95	173773	5358570	2151726.10	729.00	1815	1387.40	1478	784.50	842
27	2010	GB Winter Flounder	Bottom Otter Trawl	244	1215	256	21.07	0.00	0.00	0.17	98	8.07	2881971	22265522	4143122.40	7811.00	41977	5745.00	6181	1803.90	1939
28	2010	GB Winter Flounder	Ruhle Trawl	14	25	25	100.00	0.00	0.00	0.00	0	0.00	12803	523354	449900.50	48.00	56	136.90	145	164.50	175
29	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	57	1001	363	36.26	0.00	0.00	0.44	553	55.24	8343	3125062	586206.50	10.00	53	589.00	1212	205.50	423
30	2010	GOM Winter Flounder	Large Mesh Gillnet	111	3387	1235	36.46	0.00	0.00	0.10	217	6.41	47990	8850943	3127445.70	202.00	572	1767.40	4007	715.40	1480
31	2010	GOM Winter Flounder	Handline	10	34	26	76.47	0.00	0.00	0.00	0	0.00	0	43017	28571.40	0.00	0	30.70	47	13.30	26
32	2010	GOM Winter Flounder	Bottom Longline	21	232	67	28.88	0.00	0.00	0.00	0	0.00	4	376745	90243.10	0.00	0	128.60	256	34.90	68
33	2010	GOM Winter Flounder	Haddock Otter Trawl	6	31	31	100.00	0.00	0.00	0.00	0	0.00	285	139582	257901.50	0.00	0	92.20	99	229.70	246
34	2010	GOM Winter Flounder	Bottom Otter Trawl	229	2787	910	32.65	0.00	0.00	0.13	237	8.50	117615	20609024	6106594.60	862.50	2911	5384.50	6832	1955.10	2441
35	2010	Witch Flounder	Extra Large Mesh Gillnet	129	2308	804	34.84	0.00	0.00	0.27	707	30.63	27849	11513645	3138735.50	38.00	139	1316.50	2836	448.50	966
36	2010	Witch Flounder	Large Mesh Gillnet	141	4031	1475	36.59	0.00	0.00	0.09	195	4.84	6595	11190638	3700296.00	235.00	711	2062.20	4691	833.80	1739
37	2010	Witch Flounder	Handline	15	131	80	61.07	0.00	0.00	0.00	0	0.00	4	218081	61460.50	0.00	0	74.70	152	35.30	87
38	2010	Witch Flounder	Bottom Longline	46	514	185	35.99	0.00	0.00	0.00	0	0.00	0	1618233	549248.50	0.00	0	375.50	658	130.00	230
39	2010	Witch Flounder	Haddock Otter Trawl	94	364	123	33.79	0.00	0.00	0.25	94	25.82	53670	7095878	2935241.80	1566.00	3786	1620.40	1740	871.80	937
40	2010	Witch Flounder	Bottom Otter Trawl	679	5662	1466	25.89	0.00	0.00	0.06	68	1.20	1327555	60756100	15554611.60	31639.00	123582	11736.10	14120	3840.30	4626
41	2010	Witch Flounder	Ruhle Trawl	16	27	27	100.00	0.00	0.00	0.00	0	0.00	6240	620200	450466.70	44.00	61	145.80	155	181.20	193
42	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	80	1756	679	38.67	0.00	0.00	0.30	683	38.90	20995	8121214	2320850.60	180.00	630	816.90	1987	311.70	744
43	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	132	4009	1470	36.67	0.00	0.00	0.11	267	6.66	230100	11075781	3667314.90	7759.00	23433	2034.90	4654	823.00	1726
44	2010	CC/GOM Yellowtail Flounder	Handline	13	129	78	60.47	0.00	0.00	0.00	0	0.00	0	217256	60413.60	0.00	0	72.70	149	32.00	82
45	2010	CC/GOM Yellowtail Flounder	Bottom Longline	30	428	166	38.79	0.00	0.00	0.78	348	81.31	6	997213	403656.50	4.00	10	243.40	501	96.90	191

Table E.3 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear)

	Fishing Year	Stock	Gear	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
46	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	22	88	66	75.00	0.00	0.00	0.15	39	44.32	21368	1753735	772502.70	184.00	418	497.30	543	455.10	491
47	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	312	3645	1056	28.97	0.00	0.00	0.10	170	4.66	838093	31575564	8739439.40	30911.00	111681	7674.00	9369	2724.30	3281
48	2010	GB Yellowtail Flounder	Bottom Longline	14	84	34	40.48	0.00	0.00	0.55	59	70.24	99	617753	145592.00	3.00	13	139.20	166	50.80	62
49	2010	GB Yellowtail Flounder	Haddock Otter Trawl	66	267	108	40.45	0.01	0.00	0.16	44	16.48	73752	5410277	2151726.10	10891.00	27384	1387.40	1478	784.50	842
50	2010	GB Yellowtail Flounder	Bottom Otter Trawl	244	1215	256	21.07	0.01	0.00	0.13	61	5.02	1405915	22319132	4143122.40	24973.00	134530	5745.00	6181	1803.90	1939
51	2010	GB Yellowtail Flounder	Ruhle Trawl	14	25	25	100.00	0.00	0.00	0.00	0	0.00	23925	577392	449900.50	599.00	769	136.90	145	164.50	175
52	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	48	551	125	22.69	0.00	0.00	0.38	177	32.12	3	3371525	817884.90	10.00	41	492.40	841	136.80	222
53	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	7	19	4	21.05	0.00	0.00	0.00	0	0.00	21	69331	7791.00	0.00	0	14.20	23	3.40	5
54	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	6	9	2	22.22	0.00	0.00	0.03	1	11.11	563	64529	11013.00	14.00	82	22.70	27	13.90	15
55	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	123	802	292	36.41	0.00	0.00	0.13	75	9.35	322419	6945182	2672049.80	2978.00	7740	1136.00	1589	340.90	507
56	2010	GB Haddock East	Bottom Longline	7	56	12	21.43	0.02	0.00	0.28	11	19.64	311731	490159	84828.00	1444.00	8344	107.20	123	22.70	25
57	2010	GB Haddock East	Haddock Otter Trawl	39	161	60	37.27	0.01	0.00	0.15	21	13.04	2052290	2523889	808266.80	6179.00	19295	1051.90	1118	462.50	498
58	2010	GB Haddock East	Bottom Otter Trawl	86	237	61	25.74	0.00	0.00	0.27	54	22.78	1675800	3313850	437918.80	932.00	7053	1574.60	1685	440.20	471
59	2010	GB Haddock East	Ruhle Trawl	4	5	5	100.00	0.01	0.00	0.00	0	0.00	25373	31981	60788.40	307.00	162	23.80	26	35.70	38
60	2010	GB Haddock West	Extra Large Mesh Gillnet	72	1307	442	33.82	0.00	0.00	0.35	542	41.47	1075	8388584	2552529.00	102.00	335	727.50	1624	245.50	546
61	2010	GB Haddock West	Large Mesh Gillnet	30	644	245	38.04	0.00	0.00	0.15	90	13.98	57824	2339695	572850.30	902.00	3684	311.70	704	135.60	279
62	2010	GB Haddock West	Handline	5	97	54	55.67	0.00	0.00	0.00	0	0.00	195	175064	32889.10	0.00	0	44.00	105	21.90	61
63	2010	GB Haddock West	Bottom Longline	18	226	109	48.23	0.01	0.00	0.21	73	32.30	384059	751329	374177.40	2303.00	4624	144.50	285	77.30	143
64	2010	GB Haddock West	Haddock Otter Trawl	49	189	104	55.03	0.00	0.00	0.31	107	56.61	3257160	4624907	1869073.50	5289.00	13087	1012.40	1090	720.60	776
65	2010	GB Haddock West	Bottom Otter Trawl	364	2638	753	28.54	0.00	0.00	0.15	240	9.10	10088771	37126269	9010098.20	6776.00	27921	8664.30	9806	3004.30	3404
66	2010	GB Haddock West	Ruhle Trawl	11	25	25	100.00	0.00	0.00	0.00	0	0.00	516787	570683	389678.30	983.00	1440	125.60	133	168.80	179
67	2010	GOM Haddock	Extra Large Mesh Gillnet	57	1001	363	36.26	0.00	0.00	0.20	197	19.68	5238	3125062	586206.50	149.00	794	589.00	1212	205.50	423
68	2010	GOM Haddock	Large Mesh Gillnet	111	3387	1235	36.46	0.00	0.00	0.11	232	6.85	96403	8850943	3127445.70	582.00	1647	1767.40	4007	715.40	1480
69	2010	GOM Haddock	Handline	10	34	26	76.47	0.00	0.00	0.00	0	0.00	49	43017	28571.40	0.00	0	30.70	47	13.30	26
70	2010	GOM Haddock	Bottom Longline	21	232	67	28.88	0.00	0.00	0.29	64	27.59	107659	376745	90243.10	104.00	434	128.60	256	34.90	68
71	2010	GOM Haddock	Haddock Otter Trawl	6	31	31	100.00	0.00	0.00	0.00	0	0.00	6656	139582	257901.50	283.00	153	92.20	99	229.70	246
72	2010	GOM Haddock	Bottom Otter Trawl	229	2787	910	32.65	0.00	0.00	0.19	469	16.83	589864	20609024	6106594.60	747.00	2521	5384.50	6832	1955.10	2441
73	2010	White Hake	Extra Large Mesh Gillnet	129	2308	804	34.84	0.00	0.00	0.27	707	30.63	90090	11513645	3138735.50	422.00	1548	1316.50	2836	448.50	966
74	2010	White Hake	Large Mesh Gillnet	141	4031	1475	36.59	0.00	0.00	0.18	683	16.94	585178	11190638	3700296.00	5012.00	15158	2062.20	4691	833.80	1739
75	2010	White Hake	Handline	15	131	80	61.07	0.00	0.00	0.00	0	0.00	0	218081	61460.50	0.00	0	74.70	152	35.30	87
76	2010	White Hake	Bottom Longline	46	514	185	35.99	0.00	0.00	0.24	139	27.04	13492	1618233	549248.50	713.00	2101	375.50	658	130.00	230
77	2010	White Hake	Haddock Otter Trawl	94	364	123	33.79	0.00	0.00	0.17	53	14.56	113554	7117630	2935241.80	819.00	1986	1620.40	1740	871.80	937
78	2010	White Hake	Bottom Otter Trawl	679	5662	1466	25.89	0.00	0.00	0.12	282	4.98	3973436	60765504	15554611.60	12138.00	47418	11736.10	14120	3840.30	4626
79	2010	White Hake	Ruhle Trawl	16	27	27	100.00	0.00	0.00	0.00	0	0.00	6157	643894	450466.70	20.00	29	145.80	155	181.20	193
80	2010	Pollock	Extra Large Mesh Gillnet	129	2308	804	34.84	0.00	0.00	0.18	384	16.64	281689	11513645	3138735.50	1794.00	6581	1316.50	2836	448.50	966
81	2010	Pollock	Large Mesh Gillnet	141	4031	1475	36.59	0.01	0.00	0.13	375	9.30	3236858	11190638	3700296.00	35159.00	106330	2062.20	4691	833.80	1739
82	2010	Pollock	Handline	15	131	80	61.07	0.00	0.00	0.58	113	86.26	8554	218081	61460.50	55.00	195	74.70	152	35.30	87
83	2010	Pollock	Bottom Longline	46	514	185	35.99	0.00	0.00	0.46	291	56.61	3092	1618233	549248.50	35.00	103	375.50	658	130.00	230
84	2010	Pollock	Haddock Otter Trawl	94	364	123	33.79	0.00	0.00	0.27	105	28.85	618426	7097329	2935241.80	4320.00	10446	1620.40	1740	871.80	937
85	2010	Pollock	Bottom Otter Trawl	679	5662	1466	25.89	0.00	0.00	0.12	285	5.03	7608565	60822724	15554611.60	11626.00	45461	11736.10	14120	3840.30	4626
86	2010	Pollock	Ruhle Trawl	16	27	27	100.00	0.00	0.00	0.00	0	0.00	29885	618035	450466.70	12.00	16	145.80	155	181.20	193
87	2010	Redfish	Extra Large Mesh Gillnet	129	2308	804	34.84	0.00	0.00	0.45	1250	54.16	5747	11513645	3138735.50	35.00	128	1316.50	2836	448.50	966
88	2010	Redfish	Large Mesh Gillnet	141	4031	1475	36.59	0.00	0.00	0.22	942	23.37	108352	11190638	3700296.00	2666.00	8063	2062.20	4691	833.80	1739
89	2010	Redfish	Handline	15	131	80	61.07	0.00	0.00	0.64	115	87.79	2	218081	61460.50	2.00	7	74.70	152	35.30	87
90	2010	Redfish	Bottom Longline	46	514	185	35.99	0.00	0.00	0.27	162	31.52	3189	1618233	549248.50	30.00	88	375.50	658	130.00	230

Table E.3 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear)

	Fishing Year	Stock	Gear	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
91	2010	Redfish	Haddock Otter Trawl	94	364	123	33.79	0.01	0.00	0.36	152	41.76	182483	7089941	2935241.80	15200.00	36715	1620.40	1740	871.80	937
92	2010	Redfish	Bottom Otter Trawl	679	5662	1466	25.89	0.00	0.00	0.13	359	6.34	3902898	60740138	15554611.60	73710.00	287835	11736.10	14120	3840.30	4626
93	2010	Redfish	Ruhle Trawl	16	27	27	100.00	0.00	0.00	0.00	0	0.00	64551	593845	450466.70	0.00	0	145.80	155	181.20	193
94	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	71	1306	442	33.84	0.00	0.00	0.68	945	72.36	5	8367677	2552529.00	270.00	885	720.20	1616	245.50	546
95	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	28	641	243	37.91	0.00	0.00	0.10	41	6.40	14	2294169	547660.20	1436.50	6018	292.90	684	119.00	261
96	2010	SNE/MA Winter Flounder	Handline	4	96	52	54.17	0.00	0.00	0.00	0	0.00	2	175064	32168.70	0.00	0	42.30	103	18.70	56
97	2010	SNE/MA Winter Flounder	Bottom Longline	11	198	100	50.51	0.00	0.00	0.50	147	74.24	1	623736	313413.40	9.00	18	117.10	249	62.60	124
98	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	22	83	53	63.86	0.00	0.00	0.37	61	73.49	109	1561597	525614.20	1046.50	3109	476.60	523	346.50	375
99	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	206	1660	621	37.41	0.00	0.00	0.08	75	4.52	17121	17891389	5304894.60	20969.00	70720	5281.00	6159	2113.30	2443
100	2010	Southern Windowpane	Extra Large Mesh Gillnet	48	551	125	22.69	0.00	0.00	0.89	397	72.05	0	3371525	817884.90	3.00	12	492.40	841	136.80	222
101	2010	Southern Windowpane	Large Mesh Gillnet	7	19	4	21.05	0.00	0.00	1.01	15	78.95	0	69331	7791.00	2.00	18	14.20	23	3.40	5
102	2010	Southern Windowpane	Haddock Otter Trawl	6	9	2	22.22	0.00	0.00	0.03	1	11.11	0	64529	11013.00	27.00	158	22.70	27	13.90	15
103	2010	Southern Windowpane	Bottom Otter Trawl	123	802	292	36.41	0.01	0.00	0.08	35	4.36	243	6945182	2672049.80	39511.00	102697	1136.00	1589	340.90	507
104	2010	Northern Windowpane	Extra Large Mesh Gillnet	81	1757	679	38.65	0.00	0.00	0.29	663	37.73	0	8142121	2320850.60	49.00	172	824.20	1995	311.70	744
105	2010	Northern Windowpane	Large Mesh Gillnet	134	4012	1471	36.67	0.00	0.00	0.13	400	9.97	91	11121307	3692505.00	596.00	1795	2048.00	4668	830.30	1734
106	2010	Northern Windowpane	Handline	14	130	80	61.54	0.00	0.00	0.00	0	0.00	0	217256	61134.00	0.00	0	74.50	151	35.30	87
107	2010	Northern Windowpane	Bottom Longline	44	512	185	36.13	0.00	0.00	0.00	0	0.00	24	1614965	549248.50	0.00	0	374.50	656	130.00	230
108	2010	Northern Windowpane	Haddock Otter Trawl	88	355	123	34.65	0.00	0.00	0.17	51	14.37	23	6923193	2924228.80	9241.00	21878	1605.00	1721	871.80	937
109	2010	Northern Windowpane	Bottom Otter Trawl	556	4860	1186	24.40	0.01	0.00	0.14	306	6.30	489	53718141	12882561.80	70642.00	294565	10899.80	12854	3581.00	4206
110	2010	Northern Windowpane	Ruhle Trawl	16	27	27	100.00	0.00	0.00	0.00	0	0.00	0	593845	450430.20	867.00	1143	145.80	155	181.20	193
111	2010	Ocean Pout	Extra Large Mesh Gillnet	129	2308	804	34.84	0.00	0.00	0.39	1085	47.01	0	11513645	3138735.50	48.00	176	1316.50	2836	448.50	966
112	2010	Ocean Pout	Large Mesh Gillnet	141	4031	1475	36.59	0.00	0.00	0.19	737	18.28	13	11190638	3700296.00	126.00	381	2062.20	4691	833.80	1739
113	2010	Ocean Pout	Handline	15	131	80	61.07	0.00	0.00	0.00	0	0.00	0	218081	61460.50	0.00	0	74.70	152	35.30	87
114	2010	Ocean Pout	Bottom Longline	46	514	185	35.99	0.00	0.00	0.22	116	22.57	50	1618233	549248.50	1210.00	3565	375.50	658	130.00	230
115	2010	Ocean Pout	Haddock Otter Trawl	94	364	123	33.79	0.00	0.00	0.36	154	42.31	0	6987722	2935241.80	3668.00	8732	1620.40	1740	871.80	937
116	2010	Ocean Pout	Bottom Otter Trawl	679	5662	1466	25.89	0.00	0.00	0.10	222	3.92	60	60663323	15554611.60	26700.00	104131	11736.10	14120	3840.30	4626
117	2010	Ocean Pout	Ruhle Trawl	16	27	27	100.00	0.00	0.00	0.00	0	0.00	0	593845	450466.70	286.00	377	145.80	155	181.20	193
118	2010	Halibut	Extra Large Mesh Gillnet	129	2308	804	34.84	0.00	0.00	0.15	267	11.57	1558	11513645	3138735.50	1015.00	3723	1316.50	2836	448.50	966
119	2010	Halibut	Large Mesh Gillnet	141	4031	1475	36.59	0.00	0.00	0.13	398	9.87	924	11190638	3700296.00	1132.00	3423	2062.20	4691	833.80	1739
120	2010	Halibut	Handline	15	131	80	61.07	0.00	0.00	0.00	0	0.00	47	218081	61460.50	0.00	0	74.70	152	35.30	87
121	2010	Halibut	Bottom Longline	46	514	185	35.99	0.00	0.00	0.34	217	42.22	391	1618233	549248.50	410.00	1208	375.50	658	130.00	230
122	2010	Halibut	Haddock Otter Trawl	94	364	123	33.79	0.00	0.00	0.18	60	16.48	785	7062383	2935241.80	1007.00	2423	1620.40	1740	871.80	937
123	2010	Halibut	Bottom Otter Trawl	679	5662	1466	25.89	0.00	0.00	0.07	101	1.78	9581	60678375	15554611.60	7307.00	28505	11736.10	14120	3840.30	4626
124	2010	Halibut	Ruhle Trawl	16	27	27	100.00	0.00	0.00	0.00	0	0.00	64	593845	450466.70	57.00	75	145.80	155	181.20	193
125	2010	Wolffish	Extra Large Mesh Gillnet	129	2308	804	34.84	0.00	0.00	0.19	417	18.07	0	11513645	3138735.50	348.00	1277	1316.50	2836	448.50	966
126	2010	Wolffish	Large Mesh Gillnet	141	4031	1475	36.59	0.00	0.00	0.10	237	5.88	10	11190638	3700296.00	1920.00	5807	2062.20	4691	833.80	1739
127	2010	Wolffish	Handline	15	131	80	61.07	0.00	0.00	0.63	115	87.79	0	218081	61460.50	10.00	35	74.70	152	35.30	87
128	2010	Wolffish	Bottom Longline	46	514	185	35.99	0.00	0.00	0.28	170	33.07	5	1618233	549248.50	1057.00	3114	375.50	658	130.00	230
129	2010	Wolffish	Haddock Otter Trawl	94	364	123	33.79	0.00	0.00	0.41	176	48.35	0	6987722	2935241.80	560.00	1333	1620.40	1740	871.80	937
130	2010	Wolffish	Bottom Otter Trawl	679	5662	1466	25.89	0.00	0.00	0.08	143	2.53	505	60663323	15554611.60	7361.00	28708	11736.10	14120	3840.30	4626
131	2010	Wolffish	Ruhle Trawl	16	27	27	100.00	0.00	0.00	0.00	0	0.00	4	593845	450466.70	0.00	0	145.80	155	181.20	193
132	2011	GB Cod East	Bottom Longline	3	31	5	16.13	0.05	0.00	0.24	4	12.90	95429	202322	19785.40	910.00	9306	65.90	78	11.30	14
133	2011	GB Cod East	Haddock Otter Trawl	35	120	36	30.00	0.01	0.00	0.32	40	33.33	35497	1780011	334581.50	3060.00	16280	775.60	827	266.60	286
134	2011	GB Cod East	Bottom Otter Trawl	84	315	106	33.65	0.01	0.00	0.16	42	13.33	154195	4305117	1026190.70	12177.00	51085	2200.40	2350	827.70	882
135	2011	GB Cod East	Ruhle Trawl	7	14	4	28.57	0.00	0.00	1.06	12	85.71	1948	88091	13387.10	3.00	20	99.00	106	32.00	35

Table E.3 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear)

	Fishing Year	Stock	Gear	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
136	2011	GB Cod West	Extra Large Mesh Gillnet	67	1836	466	25.38	0.00	0.00	0.28	421	22.93	2845	10832220	2785776.70	318.00	1237	1002.80	2213	262.40	571
137	2011	GB Cod West	Large Mesh Gillnet	32	743	235	31.63	0.01	0.00	0.13	57	7.67	235608	2266691	640358.10	3934.00	13925	347.90	838	131.60	283
138	2011	GB Cod West	Handline	4	99	35	35.35	0.01	0.00	0.42	51	51.52	38651	153649	39442.90	370.00	1441	57.20	117	14.10	39
139	2011	GB Cod West	Bottom Longline	14	216	32	14.81	0.02	0.00	0.34	40	18.52	117200	556322	91572.00	2199.00	13359	81.30	230	11.90	36
140	2011	GB Cod West	Haddock Otter Trawl	42	120	63	52.50	0.00	0.00	0.14	24	20.00	151990	1795716	800061.00	2284.00	5126	648.20	692	434.50	464
141	2011	GB Cod West	Bottom Otter Trawl	357	3013	859	28.51	0.01	0.00	0.11	160	5.31	5937619	40366497	11311651.50	56877.00	202970	10063.50	11291	3878.50	4322
142	2011	GB Cod West	Ruhle Trawl	22	59	11	18.64	0.00	0.00	0.82	38	64.41	57228	1053390	135799.60	11.00	85	326.50	351	74.30	79
143	2011	GOM Cod	Extra Large Mesh Gillnet	30	534	264	49.44	0.01	0.00	0.09	40	7.49	115429	1297682	338013.30	2191.00	8412	365.10	680	205.90	351
144	2011	GOM Cod	Large Mesh Gillnet	98	4672	1414	30.27	0.01	0.00	0.04	38	0.81	2874057	12761574	3527956.60	20877.00	75518	2810.00	5746	869.70	1723
145	2011	GOM Cod	Handline	9	54	20	37.04	0.07	0.00	0.12	5	9.26	36052	38413	8294.20	589.00	2728	23.20	54	8.90	20
146	2011	GOM Cod	Bottom Longline	24	478	102	21.34	0.06	0.00	0.09	12	2.51	538800	899832	147495.10	8609.00	52521	264.70	515	51.10	108
147	2011	GOM Cod	Haddock Otter Trawl	4	19	19	100.00	0.00	0.00	0.00	0	0.00	3786	111242	422245.30	874.00	230	64.50	70	140.10	148
148	2011	GOM Cod	Bottom Otter Trawl	264	4224	1164	27.56	0.01	0.00	0.07	81	1.92	5724679	29360911	8403145.80	52467.00	183322	7752.80	9852	2862.50	3483
149	2011	Plaice	Extra Large Mesh Gillnet	97	2370	730	30.80	0.00	0.00	0.31	771	32.53	1468	12129902	3123790.00	22.00	85	1367.90	2893	468.30	922
150	2011	Plaice	Large Mesh Gillnet	130	5415	1641	30.30	0.00	0.00	0.06	90	1.66	15338	15028265	4168314.70	1671.00	6025	3102.50	6524	959.20	1960
151	2011	Plaice	Handline	13	153	56	36.60	0.00	0.00	0.00	0	0.00	0	192062	47829.10	0.00	0	80.40	171	26.20	63
152	2011	Plaice	Bottom Longline	41	725	139	19.17	0.00	0.00	0.44	247	34.07	31	1658476	258852.50	4.00	26	409.70	819	74.30	158
153	2011	Plaice	Haddock Otter Trawl	81	253	74	29.25	0.00	0.00	0.21	45	17.79	54205	3542257	1556887.80	2129.00	4844	1145.20	1224	500.10	536
154	2011	Plaice	Bottom Otter Trawl	705	7552	1775	23.50	0.01	0.00	0.04	50	0.66	3109194	73825550	20740988.00	118613.00	422192	14253.10	17293	5123.10	6058
155	2011	Plaice	Ruhle Trawl	30	74	11	14.86	0.00	0.00	0.00	0	0.00	16034	1060675	149186.70	0.00	0	365.20	393	74.30	79
156	2011	GB Winter Flounder	Large Mesh Gillnet	4	9	4	44.44	0.00	0.00	0.00	0	0.00	0	68803	29273.60	0.00	0	54.20	57	23.50	25
157	2011	GB Winter Flounder	Bottom Longline	8	41	8	19.51	0.00	0.00	0.69	24	58.54	528	222753	25433.40	5.00	44	75.80	93	15.40	20
158	2011	GB Winter Flounder	Haddock Otter Trawl	67	209	63	30.14	0.00	0.00	0.25	48	22.97	191569	3176312	1003653.70	446.00	1411	1099.80	1175	441.20	473
159	2011	GB Winter Flounder	Bottom Otter Trawl	230	1306	313	23.97	0.00	0.00	0.31	324	24.81	4066147	21955849	5580389.80	7575.00	29804	6357.60	6794	2360.50	2522
160	2011	GB Winter Flounder	Ruhle Trawl	26	70	11	15.71	0.00	0.00	0.00	0	0.00	49652	1062144	149174.90	0.00	0	362.80	390	74.30	79
161	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	30	534	264	49.44	0.00	0.00	0.44	362	67.79	1183	1297682	338013.30	8.00	31	365.10	680	205.90	351
162	2011	GOM Winter Flounder	Large Mesh Gillnet	98	4672	1414	30.27	0.00	0.00	0.08	142	3.04	75716	12761574	3527956.60	326.00	1179	2810.00	5746	869.70	1723
163	2011	GOM Winter Flounder	Handline	9	54	20	37.04	0.00	0.00	0.00	0	0.00	0	38413	8294.20	0.00	0	23.20	54	8.90	20
164	2011	GOM Winter Flounder	Bottom Longline	24	478	102	21.34	0.00	0.00	0.57	236	49.37	74	899832	147495.10	1.00	6	264.70	515	51.10	108
165	2011	GOM Winter Flounder	Haddock Otter Trawl	4	19	19	100.00	0.00	0.00	0.00	0	0.00	0	111242	422245.30	5.00	1	64.50	70	140.10	148
166	2011	GOM Winter Flounder	Bottom Otter Trawl	264	4224	1164	27.56	0.00	0.00	0.11	216	5.11	260385	29360911	8403145.80	2620.50	9156	7752.80	9852	2862.50	3483
167	2011	Witch Flounder	Extra Large Mesh Gillnet	97	2370	730	30.80	0.00	0.00	0.44	1162	49.03	11422	12129902	3123790.00	10.00	39	1367.90	2893	468.30	922
168	2011	Witch Flounder	Large Mesh Gillnet	130	5415	1641	30.30	0.00	0.00	0.07	132	2.44	8090	15028265	4168314.70	233.00	840	3102.50	6524	959.20	1960
169	2011	Witch Flounder	Handline	13	153	56	36.60	0.00	0.00	0.00	0	0.00	0	192062	47829.10	0.00	0	80.40	171	26.20	63
170	2011	Witch Flounder	Bottom Longline	41	725	139	19.17	0.00	0.00	0.00	0	0.00	0	1658476	258852.50	0.00	0	409.70	819	74.30	158
171	2011	Witch Flounder	Haddock Otter Trawl	81	253	74	29.25	0.00	0.00	0.23	50	19.76	39104	3511105	1556887.80	600.00	1353	1145.20	1224	500.10	536
172	2011	Witch Flounder	Bottom Otter Trawl	705	7552	1775	23.50	0.00	0.00	0.05	67	0.89	2000926	73727828	20740988.00	38623.00	137293	14253.10	17293	5123.10	6058
173	2011	Witch Flounder	Ruhle Trawl	30	74	11	14.86	0.00	0.00	0.68	35	47.30	5940	1059048	149186.70	1.00	7	365.20	393	74.30	79
174	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	45	1575	554	35.17	0.00	0.00	0.43	828	52.57	1524	7702339	1999845.40	5.00	19	661.70	1743	290.00	642
175	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	120	5374	1631	30.35	0.00	0.00	0.09	201	3.74	220236	14876537	4106199.50	10120.00	36664	3060.50	6464	953.00	1950
176	2011	CC/GOM Yellowtail Flounder	Handline	13	153	52	33.99	0.00	0.00	0.00	0	0.00	0	192062	47697.60	0.00	0	80.40	171	19.40	54
177	2011	CC/GOM Yellowtail Flounder	Bottom Longline	33	684	132	19.30	0.00	0.00	0.00	0	0.00	29	1435723	233419.10	0.00	0	336.40	730	60.00	140
178	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	13	43	33	76.74	0.00	0.00	0.25	31	72.09	7018	375261	553217.00	71.00	48	216.30	232	231.10	244
179	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	341	5174	1322	25.55	0.00	0.00	0.09	148	2.86	1340372	42591918	11970064.90	41983.00	149384	10295.30	12655	3717.80	4419
180	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	3	3	0	0.00						300	44613	0.00	0.00		19.30	21	0.00	0

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	Fishing Year	Stock	Gear	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
181	2011	GB Yellowtail Flounder	Large Mesh Gillnet	4	9	4	44.44	0.00	0.00	0.00	0	0.00	0	68803	29273.60	0.00	0	54.20	57	23.50	25
182	2011	GB Yellowtail Flounder	Bottom Longline	8	41	8	19.51	0.00	0.00	0.53	18	43.90	19	222753	25433.40	4.00	35	75.80	93	15.40	20
183	2011	GB Yellowtail Flounder	Haddock Otter Trawl	67	209	63	30.14	0.00	0.00	0.21	37	17.70	87764	3102092	1003653.70	2357.00	7285	1099.80	1175	441.20	473
184	2011	GB Yellowtail Flounder	Bottom Otter Trawl	230	1306	313	23.97	0.00	0.00	0.12	59	4.52	1987635	21969499	5580389.80	25927.00	102072	6357.60	6794	2360.50	2522
185	2011	GB Yellowtail Flounder	Ruhle Trawl	26	70	11	15.71	0.00	0.00	0.59	30	42.86	76341	1096854	149174.90	57.00	419	362.80	390	74.30	79
186	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	51	794	177	22.29	0.00	0.00	0.30	174	21.91	43	4425899	1123944.60	38.00	150	707.00	1151	178.80	281
187	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	6	32	10	31.25	0.00	0.00	0.00	0	0.00	7	82925	32841.60	0.00	0	17.20	34	6.20	10
188	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	134	1072	349	32.56	0.00	0.00	0.10	53	4.94	761080	9317005	3190533.30	13515.00	39467	1864.00	2385	684.60	869
189	2011	GB Haddock East	Bottom Longline	3	31	5	16.13	0.07	0.00	0.42	9	29.03	101045	202322	19785.40	1326.00	13559	65.90	78	11.30	14
190	2011	GB Haddock East	Haddock Otter Trawl	35	120	36	30.00	0.02	0.00	0.33	42	35.00	1085666	1780317	334581.50	6078.00	32341	775.60	827	266.60	286
191	2011	GB Haddock East	Bottom Otter Trawl	84	315	106	33.65	0.01	0.00	0.20	59	18.73	1128967	4357698	1026190.70	9953.00	42265	2200.40	2350	827.70	882
192	2011	GB Haddock East	Ruhle Trawl	7	14	4	28.57	0.00	0.00	0.32	5	35.71	103693	97675	13387.10	4.00	29	99.00	106	32.00	35
193	2011	GB Haddock West	Extra Large Mesh Gillnet	67	1836	466	25.38	0.00	0.00	0.00	0	0.00	51	10832220	2785776.70	0.00	0	1002.80	2213	262.40	571
194	2011	GB Haddock West	Large Mesh Gillnet	32	743	235	31.63	0.00	0.00	0.27	204	27.46	10616	2266691	640358.10	199.00	704	347.90	838	131.60	283
195	2011	GB Haddock West	Handline	4	99	35	35.35	0.00	0.00	0.00	0	0.00	655	153649	39442.90	0.00	0	57.20	117	14.10	39
196	2011	GB Haddock West	Bottom Longline	14	216	32	14.81	0.00	0.00	0.49	68	31.48	76893	556322	91572.00	256.00	1555	81.30	230	11.90	36
197	2011	GB Haddock West	Haddock Otter Trawl	42	120	63	52.50	0.01	0.00	0.14	23	19.17	1016742	1764494	800061.00	4413.00	9733	648.20	692	434.50	464
198	2011	GB Haddock West	Bottom Otter Trawl	357	3013	859	28.51	0.00	0.00	0.12	170	5.64	4273927	40349762	11311651.50	20590.00	73447	10063.50	11291	3878.50	4322
199	2011	GB Haddock West	Ruhle Trawl	22	59	11	18.64	0.00	0.00	0.28	10	16.95	870152	1073289	135799.60	336.00	2656	326.50	351	74.30	79
200	2011	GOM Haddock	Extra Large Mesh Gillnet	30	534	264	49.44	0.00	0.00	0.18	138	25.84	1388	1297682	338013.30	99.00	380	365.10	680	205.90	351
201	2011	GOM Haddock	Large Mesh Gillnet	98	4672	1414	30.27	0.00	0.00	0.08	148	3.17	58696	12761574	3527956.60	1347.00	4872	2810.00	5746	869.70	1723
202	2011	GOM Haddock	Handline	9	54	20	37.04	0.00	0.00	0.00	0	0.00	196	38413	8294.20	0.00	0	23.20	54	8.90	20
203	2011	GOM Haddock	Bottom Longline	24	478	102	21.34	0.00	0.00	0.23	64	13.39	232691	899832	147495.10	438.00	2672	264.70	515	51.10	108
204	2011	GOM Haddock	Haddock Otter Trawl	4	19	19	100.00	0.00	0.00	0.00	0	0.00	1167	111242	422245.30	212.00	56	64.50	70	140.10	148
205	2011	GOM Haddock	Bottom Otter Trawl	264	4224	1164	27.56	0.00	0.00	0.13	292	6.91	752507	29360911	8403145.80	2408.00	8414	7752.80	9852	2862.50	3483
206	2011	White Hake	Extra Large Mesh Gillnet	97	2370	730	30.80	0.00	0.00	0.22	456	19.24	34672	12129902	3123790.00	576.00	2237	1367.90	2893	468.30	922
207	2011	White Hake	Large Mesh Gillnet	130	5415	1641	30.30	0.00	0.00	0.10	246	4.54	1241579	15028265	4168314.70	10478.00	37777	3102.50	6524	959.20	1960
208	2011	White Hake	Handline	13	153	56	36.60	0.00	0.00	0.00	0	0.00	8	192062	47829.10	0.00	0	80.40	171	26.20	63
209	2011	White Hake	Bottom Longline	41	725	139	19.17	0.00	0.00	0.59	350	48.28	15876	1658476	258852.50	31.00	199	409.70	819	74.30	158
210	2011	White Hake	Haddock Otter Trawl	81	253	74	29.25	0.00	0.00	0.42	114	45.06	118092	3532778	1556887.80	226.00	513	1145.20	1224	500.10	536
211	2011	White Hake	Bottom Otter Trawl	705	7552	1775	23.50	0.00	0.00	0.14	470	6.22	5179844	73734711	20740988.00	8351.00	29688	14253.10	17293	5123.10	6058
212	2011	White Hake	Ruhle Trawl	30	74	11	14.86	0.00	0.00	0.00	0	0.00	3367	1097802	149186.70	0.00	0	365.20	393	74.30	79
213	2011	Pollock	Extra Large Mesh Gillnet	97	2370	730	30.80	0.00	0.00	0.13	190	8.02	39846	12129902	3123790.00	1439.00	5588	1367.90	2893	468.30	922
214	2011	Pollock	Large Mesh Gillnet	130	5415	1641	30.30	0.01	0.00	0.09	200	3.69	5105583	15028265	4168314.70	45325.00	163413	3102.50	6524	959.20	1960
215	2011	Pollock	Handline	13	153	56	36.60	0.00	0.00	0.82	125	81.70	16599	192062	47829.10	3.00	12	80.40	171	26.20	63
216	2011	Pollock	Bottom Longline	41	725	139	19.17	0.00	0.00	0.40	212	29.24	13998	1658476	258852.50	177.00	1134	409.70	819	74.30	158
217	2011	Pollock	Haddock Otter Trawl	81	253	74	29.25	0.00	0.00	0.31	78	30.83	505657	3555911	1556887.80	3431.00	7836	1145.20	1224	500.10	536
218	2011	Pollock	Bottom Otter Trawl	705	7552	1775	23.50	0.00	0.00	0.17	686	9.08	10766133	73836018	20740988.00	16699.00	59447	14253.10	17293	5123.10	6058
219	2011	Pollock	Ruhle Trawl	30	74	11	14.86	0.00	0.00	0.68	35	47.30	27071	1060821	149186.70	8.00	57	365.20	393	74.30	79
220	2011	Redfish	Extra Large Mesh Gillnet	97	2370	730	30.80	0.00	0.00	0.51	1334	56.29	247	12129902	3123790.00	4.00	16	1367.90	2893	468.30	922
221	2011	Redfish	Large Mesh Gillnet	130	5415	1641	30.30	0.00	0.00	0.10	259	4.78	124081	15028265	4168314.70	1248.00	4499	3102.50	6524	959.20	1960
222	2011	Redfish	Handline	13	153	56	36.60	0.00	0.00	0.00	0	0.00	19	192062	47829.10	0.00	0	80.40	171	26.20	63
223	2011	Redfish	Bottom Longline	41	725	139	19.17	0.00	0.00	0.37	196	27.03	1684	1658476	258852.50	20.00	128	409.70	819	74.30	158
224	2011	Redfish	Haddock Otter Trawl	81	253	74	29.25	0.01	0.00	0.28	69	27.27	127067	3518478	1556887.80	12757.00	28830	1145.20	1224	500.10	536
225	2011	Redfish	Bottom Otter Trawl	705	7552	1775	23.50	0.01	0.00	0.10	245	3.24	5340470	73729649	20740988.00	105158.00	373814	14253.10	17293	5123.10	6058

Table E.3 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear)

	Fishing Year	Stock	Gear	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
226	2011	Redfish	Ruhle Trawl	30	74	11	14.86	0.00	0.00	0.00	0	0.00	405	1059048	149186.70	0.00	0	365.20	393	74.30	79
227	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	66	1835	466	25.40	0.00	0.00	0.54	969	52.81	1	10830555	2785776.70	25.00	97	1002.40	2212	262.40	571
228	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	28	734	232	31.61	0.00	0.00	0.14	67	9.13	25	2197888	611084.50	640.00	2302	310.30	799	111.70	262
229	2011	SNE/MA Winter Flounder	Handline	4	99	33	33.33	0.00	0.00	0.00	0	0.00	0	153649	39403.40	0.00	0	57.20	117	11.10	35
230	2011	SNE/MA Winter Flounder	Bottom Longline	9	206	30	14.56	0.00	0.00	0.59	83	40.29	0	535891	85924.00	77.00	480	73.80	219	8.90	32
231	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	10	31	22	70.97	0.00	0.00	0.37	25	80.65	3110	283040	130988.80	4.50	10	213.90	230	145.30	154
232	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	211	2022	720	35.61	0.01	0.00	0.12	157	7.76	3711	22515820	6757452.40	56660.00	188791	6863.10	7865	2899.30	3274
233	2011	SNE/MA Winter Flounder	Ruhle Trawl	3	3	1	33.33	0.00					0	37161	11.80	0.00	0	26.40	28	9.90	10
234	2011	Southern Windowpane	Extra Large Mesh Gillnet	51	794	177	22.29	0.00	0.00	0.44	303	38.16	0	4425899	1123944.60	4.00	16	707.00	1151	178.80	281
235	2011	Southern Windowpane	Large Mesh Gillnet	6	32	10	31.25	0.00	0.00	0.00	0	0.00	0	82925	32841.60	0.00	0	17.20	34	6.20	10
236	2011	Southern Windowpane	Bottom Otter Trawl	134	1072	349	32.56	0.02	0.00	0.08	39	3.64	350	9317005	3190533.30	61502.00	179598	1864.00	2385	684.60	869
237	2011	Northern Windowpane	Extra Large Mesh Gillnet	46	1576	554	35.15	0.00	0.00	0.68	1162	73.73	0	7704004	1999845.40	6.00	23	662.10	1744	290.00	642
238	2011	Northern Windowpane	Large Mesh Gillnet	124	5383	1631	30.30	0.00	0.00	0.09	198	3.68	1	14945340	4135473.10	1013.00	3661	3085.30	6490	953.00	1950
239	2011	Northern Windowpane	Handline	13	153	56	36.60	0.00	0.00	0.00	0	0.00	0	192062	47829.10	0.00	0	80.40	171	26.20	63
240	2011	Northern Windowpane	Bottom Longline	41	725	139	19.17	0.00	0.00	0.90	494	68.14	0	1658476	258852.50	2.00	13	409.70	819	74.30	158
241	2011	Northern Windowpane	Haddock Otter Trawl	80	252	74	29.37	0.00	0.00	0.29	72	28.57	0	3408667	1556870.70	2573.00	5633	1145.20	1224	500.10	536
242	2011	Northern Windowpane	Bottom Otter Trawl	571	6480	1457	22.48	0.01	0.00	0.10	189	2.92	0	64342156	17550454.70	91678.00	336103	13142.20	15707	4693.40	5463
243	2011	Northern Windowpane	Ruhle Trawl	29	73	11	15.07	0.00	0.00	0.67	35	47.95	0	1059042	149174.90	309.00	2194	365.20	393	74.30	79
244	2011	Ocean Pout	Extra Large Mesh Gillnet	97	2370	730	30.80	0.00	0.00	0.83	1836	77.47	0	12129902	3123790.00	2.00	8	1367.90	2893	468.30	922
245	2011	Ocean Pout	Large Mesh Gillnet	130	5415	1641	30.30	0.00	0.00	0.19	826	15.25	0	15028265	4168314.70	156.00	562	3102.50	6524	959.20	1960
246	2011	Ocean Pout	Handline	13	153	56	36.60	0.00	0.00	0.00	0	0.00	0	192062	47829.10	0.00	0	80.40	171	26.20	63
247	2011	Ocean Pout	Bottom Longline	41	725	139	19.17	0.01	0.00	0.42	230	31.72	10	1658476	258852.50	1300.00	8329	409.70	819	74.30	158
248	2011	Ocean Pout	Haddock Otter Trawl	81	253	74	29.25	0.00	0.00	0.21	43	17.00	0	3437851	1556887.80	992.00	2190	1145.20	1224	500.10	536
249	2011	Ocean Pout	Bottom Otter Trawl	705	7552	1775	23.50	0.00	0.00	0.11	295	3.91	0	73659160	20740988.00	34664.00	123105	14253.10	17293	5123.10	6058
250	2011	Ocean Pout	Ruhle Trawl	30	74	11	14.86	0.00	0.00	1.03	50	67.57	0	1059048	149186.70	121.00	859	365.20	393	74.30	79
251	2011	Halibut	Extra Large Mesh Gillnet	97	2370	730	30.80	0.00	0.00	0.35	909	38.35	962	12129902	3123790.00	2401.00	9323	1367.90	2893	468.30	922
252	2011	Halibut	Large Mesh Gillnet	130	5415	1641	30.30	0.00	0.00	0.10	255	4.71	2148	15028265	4168314.70	1612.00	5812	3102.50	6524	959.20	1960
253	2011	Halibut	Handline	13	153	56	36.60	0.00	0.00	0.00	0	0.00	37	192062	47829.10	0.00	0	80.40	171	26.20	63
254	2011	Halibut	Bottom Longline	41	725	139	19.17	0.00	0.00	0.89	492	67.86	288	1658476	258852.50	18.00	115	409.70	819	74.30	158
255	2011	Halibut	Haddock Otter Trawl	81	253	74	29.25	0.00	0.00	0.24	54	21.34	770	3437851	1556887.80	594.00	1312	1145.20	1224	500.10	536
256	2011	Halibut	Bottom Otter Trawl	705	7552	1775	23.50	0.00	0.00	0.06	96	1.27	18545	73659160	20740988.00	14337.00	50916	14253.10	17293	5123.10	6058
257	2011	Halibut	Ruhle Trawl	30	74	11	14.86	0.00	0.00	0.68	35	47.30	203	1059048	149186.70	15.00	106	365.20	393	74.30	79
258	2011	Wolffish	Extra Large Mesh Gillnet	97	2370	730	30.80	0.00	0.00	0.20	398	16.79	0	12129902	3123790.00	283.00	1099	1367.90	2893	468.30	922
259	2011	Wolffish	Large Mesh Gillnet	130	5415	1641	30.30	0.00	0.00	0.08	161	2.97	0	15028265	4168314.70	2399.00	8649	3102.50	6524	959.20	1960
260	2011	Wolffish	Handline	13	153	56	36.60	0.00	0.00	0.00	0	0.00	0	192062	47829.10	0.00	0	80.40	171	26.20	63
261	2011	Wolffish	Bottom Longline	41	725	139	19.17	0.00	0.00	0.20	70	9.66	0	1658476	258852.50	482.00	3088	409.70	819	74.30	158
262	2011	Wolffish	Haddock Otter Trawl	81	253	74	29.25	0.00	0.00	0.46	127	50.20	0	3437851	1556887.80	746.00	1647	1145.20	1224	500.10	536
263	2011	Wolffish	Bottom Otter Trawl	705	7552	1775	23.50	0.00	0.00	0.08	174	2.30	19	73659160	20740988.00	15752.00	55941	14253.10	17293	5123.10	6058
264	2011	Wolffish	Ruhle Trawl	30	74	11	14.86	0.00	0.00	0.00	0	0.00	0	1059048	149186.70	0.00	0	365.20	393	74.30	79

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1	2010	CC/GOM Yellowtail Flounder	Bottom Longline	Fixed Gear Sector	15	239	109	45.61	0.00	0.00	0.74	200	83.68	5	774668	345358.90	4.00	9	147.30	299	68.00	133
2	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.00	0	0.00	0	10907	1473.80	0.00	0	16.90	37	5.30	12
3	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 10	6	43	9	20.93	0.00	0.00	0.00	0	0.00	0	75215	13484.20	0.00	0	17.40	43	4.30	9
4	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 11																		
5	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 12																		
6	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 13																		
7	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 2																		
8	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 3	6	111	36	32.43	0.00	0.00	0.00	0	0.00	1	136422	43339.60	0.00	0	61.80	122	19.30	37
9	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 5																		
10	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 6																		
11	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 7																		
12	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 8																		
13	2010	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 9																		
14	2010	CC/GOM Yellowtail Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
15	2010	CC/GOM Yellowtail Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
16	2010	CC/GOM Yellowtail Flounder	Bottom Longline	Tri-State Sector																		
17	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
18	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NCCS																		
19	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.02	0.00	0.16	35	14.29	115941	606337	193252.90	3497.00	10972	117.30	254	41.50	92
20	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.01	0.00	0.49	29	55.77	8524	134828	41008.80	453.00	1489	25.70	55	8.40	18
21	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.02	0.00	0.41	37	61.67	15378	134601	45136.00	931.00	2776	24.50	63	11.40	27
22	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 13	9	42	16	38.10	0.01	0.00	0.82	35	83.33	13377	352145	64430.20	744.00	4066	212.40	232	92.60	101
23	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 2	74	1581	492	31.12	0.01	0.00	0.13	130	8.22	306877	7554861	2122639.30	20945.00	74547	1486.60	2302	517.90	787
24	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 3																		
25	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 5	3	3	0	0.00						0	11855	0.00	0.00		6.80	9	0.00	0
26	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 6	16	182	29	15.93	0.00	0.00	0.49	61	33.52	47013	2976334	515667.60	293.00	1691	521.90	576	127.80	141
27	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 7	6	47	11	23.40	0.00	0.00	0.69	30	63.83	36899	226341	31842.40	87.00	618	262.70	286	74.80	81
28	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 8	12	54	12	22.22	0.00	0.00	0.48	23	42.59	77801	697394	88120.00	136.00	1076	298.10	320	77.60	83
29	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 9	36	210	56	26.67	0.00	0.00	0.47	99	47.14	152814	3289956	902884.40	794.00	2893	1081.60	1170	455.20	483
30	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.73	97	78.23	939	404917	133989.40	240.00	725	207.90	266	76.50	98
31	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	114	1045	260	24.88	0.00	0.00	0.38	359	34.35	62530	15185994	4600468.40	2791.00	9213	3428.60	3836	1240.70	1370
32	2010	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	Tri-State Sector																		
33	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector	19	735	308	41.90	0.00	0.00	0.77	606	82.45	9	4820633	1645728.90	1.00	3	211.50	751	99.10	313
34	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NCCS																		
35	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 10	9	120	65	54.17	0.00	0.00	0.00	0	0.00	46	221531	79709.50	0.00	0	83.60	154	44.30	82
36	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 11	14	244	79	32.38	0.00	0.00	0.62	165	67.62	257	715197	106301.60	3.00	20	109.40	260	46.00	92
37	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 12																		
38	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 13																		
39	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 2																		
40	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 3	30	590	201	34.07	0.00	0.00	0.35	246	41.69	3313	1937098	372213.80	39.00	203	271.70	642	82.10	204
41	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 5																		
42	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 6																		
43	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 7																		
44	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 8																		
45	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 9																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
46	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
47	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	4	27	9	33.33	0.00	0.00	0.00	0	0.00	25	199524	15655.80	0.00	0	120.10	139	30.40	36
48	2010	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
49	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
50	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NCCS																		
51	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 10																		
52	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 11																		
53	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 12																		
54	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 13																		
55	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 2	7	20	12	60.00	0.00	0.00	0.29	12	60.00	115	355431	160186.20	27.00	60	88.50	96	85.60	92
56	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 3																		
57	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 5																		
58	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 6																		
59	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 7																		
60	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 8																		
61	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 9																		
62	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
63	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	14	67	41	61.19	0.00	0.00	0.22	32	47.76	21120	1397920	556118.50	128.00	322	408.40	446	277.40	301
64	2010	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	Tri-State Sector																		
65	2010	CC/GOM Yellowtail Flounder	Handline	Fixed Gear Sector	7	117	62	52.99	0.00	0.00	0.00	0	0.00	0	199851	43152.20	0.00	0	67.60	137	24.40	66
66	2010	CC/GOM Yellowtail Flounder	Handline	NCCS																		
67	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
68	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 11																		
69	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 12																		
70	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 13																		
71	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 2																		
72	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 3																		
73	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 5																		
74	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 6																		
75	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 7																		
76	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 8																		
77	2010	CC/GOM Yellowtail Flounder	Handline	NEFS 9																		
78	2010	CC/GOM Yellowtail Flounder	Handline	Port Clyde Community Groundfish Sector																		
79	2010	CC/GOM Yellowtail Flounder	Handline	Sustainable Harvest Sector 1																		
80	2010	CC/GOM Yellowtail Flounder	Handline	Tri-State Sector																		
81	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	Fixed Gear Sector	18	688	260	37.79	0.00	0.00	0.17	112	16.28	1102	2343386	574862.40	185.00	754	274.60	703	111.30	265
82	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NCCS																		
83	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.01	0.00	0.16	50	16.89	74431	719986	276616.50	2641.00	6874	139.10	327	66.50	142
84	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.24	275	28.59	270	2958754	1078659.60	41.00	112	548.00	1201	215.50	445
85	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 12																		
86	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 13																		
87	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 2																		
88	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 3	36	1505	532	35.35	0.00	0.00	0.14	155	10.30	143064	2841537	937580.10	4662.00	14129	529.10	1544	196.40	538
89	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 5																		
90	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 6																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
91	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 7	3	8	2	25.00	0.00	0.00	0.00	0	0.00	0	50202	10327.50	0.00	0	27.90	31	4.80	5
92	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 8																		
93	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 9																		
94	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.42	172	48.18	48	982739	310534.60	14.00	44	194.60	408	63.30	127
95	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	99	42	42.42	0.00	0.00	0.78	83	83.84	99	947670	433636.10	1.00	2	296.60	346	158.30	181
96	2010	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	Tri-State Sector																		
97	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	Fixed Gear Sector																		
98	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NCCS																		
99	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 10																		
100	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 11																		
101	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 12																		
102	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 13																		
103	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 2																		
104	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 3																		
105	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 5																		
106	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 6																		
107	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 7																		
108	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 8																		
109	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 9																		
110	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
111	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	Sustainable Harvest Sector 1																		
112	2010	CC/GOM Yellowtail Flounder	Ruhle Trawl	Tri-State Sector																		
113	2010	GB Cod East	Bottom Longline	Fixed Gear Sector	7	56	12	21.43	0.03	0.00	0.13	3	5.36	174099	490159	84828.00	2375.00	13723	107.20	123	22.70	25
114	2010	GB Cod East	Bottom Longline	NCCS																		
115	2010	GB Cod East	Bottom Longline	NEFS 10																		
116	2010	GB Cod East	Bottom Longline	NEFS 11																		
117	2010	GB Cod East	Bottom Longline	NEFS 12																		
118	2010	GB Cod East	Bottom Longline	NEFS 13																		
119	2010	GB Cod East	Bottom Longline	NEFS 2																		
120	2010	GB Cod East	Bottom Longline	NEFS 3																		
121	2010	GB Cod East	Bottom Longline	NEFS 5																		
122	2010	GB Cod East	Bottom Longline	NEFS 6																		
123	2010	GB Cod East	Bottom Longline	NEFS 7																		
124	2010	GB Cod East	Bottom Longline	NEFS 8																		
125	2010	GB Cod East	Bottom Longline	NEFS 9																		
126	2010	GB Cod East	Bottom Longline	Port Clyde Community Groundfish Sector																		
127	2010	GB Cod East	Bottom Longline	Sustainable Harvest Sector 1																		
128	2010	GB Cod East	Bottom Longline	Tri-State Sector																		
129	2010	GB Cod East	Bottom Otter Trawl	Fixed Gear Sector																		
130	2010	GB Cod East	Bottom Otter Trawl	NCCS																		
131	2010	GB Cod East	Bottom Otter Trawl	NEFS 10																		
132	2010	GB Cod East	Bottom Otter Trawl	NEFS 11																		
133	2010	GB Cod East	Bottom Otter Trawl	NEFS 12																		
134	2010	GB Cod East	Bottom Otter Trawl	NEFS 13	13	22	5	22.73	0.00	0.00	0.18	3	13.64	44069	193261	10830.70	46.00	821	143.30	151	32.90	35
135	2010	GB Cod East	Bottom Otter Trawl	NEFS 2	11	21	7	33.33	0.00	0.00	0.43	11	52.38	36929	435917	87400.60	232.00	1157	139.10	149	47.10	50

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
136	2010	GB Cod East	Bottom Otter Trawl	NEFS 3																		
137	2010	GB Cod East	Bottom Otter Trawl	NEFS 5																		
138	2010	GB Cod East	Bottom Otter Trawl	NEFS 6																		
139	2010	GB Cod East	Bottom Otter Trawl	NEFS 7	8	16	7	43.75	0.00	0.00	0.46	11	68.75	10593	140754	7904.90	8.00	142	120.40	129	47.30	50
140	2010	GB Cod East	Bottom Otter Trawl	NEFS 8	14	35	11	31.43	0.01	0.00	0.20	7	20.00	51521	456413	119197.20	1215.00	4652	209.50	222	67.80	72
141	2010	GB Cod East	Bottom Otter Trawl	NEFS 9	18	75	15	20.00	0.01	0.00	0.25	12	16.00	98391	1136868	88211.50	663.00	8545	498.20	538	116.30	125
142	2010	GB Cod East	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
143	2010	GB Cod East	Bottom Otter Trawl	Sustainable Harvest Sector 1	19	65	16	24.62	0.00	0.00	0.41	25	38.46	35625	883754	124373.90	55.00	391	441.10	471	128.80	139
144	2010	GB Cod East	Bottom Otter Trawl	Tri-State Sector																		
145	2010	GB Cod East	Extra Large Mesh Gillnet	Fixed Gear Sector																		
146	2010	GB Cod East	Extra Large Mesh Gillnet	NCCS																		
147	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 10																		
148	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 11																		
149	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 12																		
150	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 13																		
151	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 2																		
152	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 3																		
153	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 5																		
154	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 6																		
155	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 7																		
156	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 8																		
157	2010	GB Cod East	Extra Large Mesh Gillnet	NEFS 9																		
158	2010	GB Cod East	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
159	2010	GB Cod East	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
160	2010	GB Cod East	Extra Large Mesh Gillnet	Tri-State Sector																		
161	2010	GB Cod East	Haddock Otter Trawl	Fixed Gear Sector																		
162	2010	GB Cod East	Haddock Otter Trawl	NCCS																		
163	2010	GB Cod East	Haddock Otter Trawl	NEFS 10																		
164	2010	GB Cod East	Haddock Otter Trawl	NEFS 11																		
165	2010	GB Cod East	Haddock Otter Trawl	NEFS 12																		
166	2010	GB Cod East	Haddock Otter Trawl	NEFS 13																		
167	2010	GB Cod East	Haddock Otter Trawl	NEFS 2	10	36	12	33.33	0.00	0.00	0.36	16	44.44	13265	507634	176294.80	263.00	757	205.10	220	85.20	92
168	2010	GB Cod East	Haddock Otter Trawl	NEFS 3																		
169	2010	GB Cod East	Haddock Otter Trawl	NEFS 5																		
170	2010	GB Cod East	Haddock Otter Trawl	NEFS 6																		
171	2010	GB Cod East	Haddock Otter Trawl	NEFS 7																		
172	2010	GB Cod East	Haddock Otter Trawl	NEFS 8	6	10	3	30.00	0.00	0.00	0.71	8	80.00	8111	144734	28404.70	29.00	148	75.10	80	24.80	26
173	2010	GB Cod East	Haddock Otter Trawl	NEFS 9	3	8	8	100.00	0.01	0.00	0.00	0	0.00	6202	30746	102780.80	655.00	196	28.00	30	61.90	65
174	2010	GB Cod East	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
175	2010	GB Cod East	Haddock Otter Trawl	Sustainable Harvest Sector 1	16	92	27	29.35	0.00	0.00	0.45	45	48.91	38451	1680431	420003.80	713.00	2853	595.00	631	213.90	233
176	2010	GB Cod East	Haddock Otter Trawl	Tri-State Sector																		
177	2010	GB Cod East	Handline	Fixed Gear Sector																		
178	2010	GB Cod East	Handline	NCCS																		
179	2010	GB Cod East	Handline	NEFS 10																		
180	2010	GB Cod East	Handline	NEFS 11																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
181	2010	GB Cod East	Handline	NEFS 12																		
182	2010	GB Cod East	Handline	NEFS 13																		
183	2010	GB Cod East	Handline	NEFS 2																		
184	2010	GB Cod East	Handline	NEFS 3																		
185	2010	GB Cod East	Handline	NEFS 5																		
186	2010	GB Cod East	Handline	NEFS 6																		
187	2010	GB Cod East	Handline	NEFS 7																		
188	2010	GB Cod East	Handline	NEFS 8																		
189	2010	GB Cod East	Handline	NEFS 9																		
190	2010	GB Cod East	Handline	Port Clyde Community Groundfish Sector																		
191	2010	GB Cod East	Handline	Sustainable Harvest Sector 1																		
192	2010	GB Cod East	Handline	Tri-State Sector																		
193	2010	GB Cod East	Large Mesh Gillnet	Fixed Gear Sector																		
194	2010	GB Cod East	Large Mesh Gillnet	NCCS																		
195	2010	GB Cod East	Large Mesh Gillnet	NEFS 10																		
196	2010	GB Cod East	Large Mesh Gillnet	NEFS 11																		
197	2010	GB Cod East	Large Mesh Gillnet	NEFS 12																		
198	2010	GB Cod East	Large Mesh Gillnet	NEFS 13																		
199	2010	GB Cod East	Large Mesh Gillnet	NEFS 2																		
200	2010	GB Cod East	Large Mesh Gillnet	NEFS 3																		
201	2010	GB Cod East	Large Mesh Gillnet	NEFS 5																		
202	2010	GB Cod East	Large Mesh Gillnet	NEFS 6																		
203	2010	GB Cod East	Large Mesh Gillnet	NEFS 7																		
204	2010	GB Cod East	Large Mesh Gillnet	NEFS 8																		
205	2010	GB Cod East	Large Mesh Gillnet	NEFS 9																		
206	2010	GB Cod East	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
207	2010	GB Cod East	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
208	2010	GB Cod East	Large Mesh Gillnet	Tri-State Sector																		
209	2010	GB Cod East	Ruhle Trawl	Fixed Gear Sector																		
210	2010	GB Cod East	Ruhle Trawl	NCCS																		
211	2010	GB Cod East	Ruhle Trawl	NEFS 10																		
212	2010	GB Cod East	Ruhle Trawl	NEFS 11																		
213	2010	GB Cod East	Ruhle Trawl	NEFS 12																		
214	2010	GB Cod East	Ruhle Trawl	NEFS 13																		
215	2010	GB Cod East	Ruhle Trawl	NEFS 2																		
216	2010	GB Cod East	Ruhle Trawl	NEFS 3																		
217	2010	GB Cod East	Ruhle Trawl	NEFS 5																		
218	2010	GB Cod East	Ruhle Trawl	NEFS 6																		
219	2010	GB Cod East	Ruhle Trawl	NEFS 7																		
220	2010	GB Cod East	Ruhle Trawl	NEFS 8																		
221	2010	GB Cod East	Ruhle Trawl	NEFS 9																		
222	2010	GB Cod East	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
223	2010	GB Cod East	Ruhle Trawl	Sustainable Harvest Sector 1																		
224	2010	GB Cod East	Ruhle Trawl	Tri-State Sector																		
225	2010	GB Cod West	Bottom Longline	Fixed Gear Sector	16	224	108	48.21	0.00	0.00	0.20	66	29.46	43264	747072	372177.40	1608.00	3228	143.60	283	76.70	142

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
226	2010	GB Cod West	Bottom Longline	NCCS																		
227	2010	GB Cod West	Bottom Longline	NEFS 10																		
228	2010	GB Cod West	Bottom Longline	NEFS 11																		
229	2010	GB Cod West	Bottom Longline	NEFS 12																		
230	2010	GB Cod West	Bottom Longline	NEFS 13																		
231	2010	GB Cod West	Bottom Longline	NEFS 2																		
232	2010	GB Cod West	Bottom Longline	NEFS 3																		
233	2010	GB Cod West	Bottom Longline	NEFS 5																		
234	2010	GB Cod West	Bottom Longline	NEFS 6																		
235	2010	GB Cod West	Bottom Longline	NEFS 7																		
236	2010	GB Cod West	Bottom Longline	NEFS 8																		
237	2010	GB Cod West	Bottom Longline	NEFS 9																		
238	2010	GB Cod West	Bottom Longline	Port Clyde Community Groundfish Sector																		
239	2010	GB Cod West	Bottom Longline	Sustainable Harvest Sector 1																		
240	2010	GB Cod West	Bottom Longline	Tri-State Sector																		
241	2010	GB Cod West	Bottom Otter Trawl	Fixed Gear Sector																		
242	2010	GB Cod West	Bottom Otter Trawl	NCCS																		
243	2010	GB Cod West	Bottom Otter Trawl	NEFS 10																		
244	2010	GB Cod West	Bottom Otter Trawl	NEFS 11																		
245	2010	GB Cod West	Bottom Otter Trawl	NEFS 12																		
246	2010	GB Cod West	Bottom Otter Trawl	NEFS 13	62	328	76	23.17	0.00	0.00	0.24	54	16.46	420677	4074900	780625.80	3177.00	16584	965.00	1094	295.90	336
247	2010	GB Cod West	Bottom Otter Trawl	NEFS 2	30	236	74	31.36	0.00	0.00	0.16	28	11.86	742333	4275772	910380.40	2483.00	11662	938.50	1037	307.70	345
248	2010	GB Cod West	Bottom Otter Trawl	NEFS 3																		
249	2010	GB Cod West	Bottom Otter Trawl	NEFS 5	76	604	230	38.08	0.00	0.00	0.16	92	15.23	242933	6120366	2572383.00	10510.00	25006	737.60	1074	239.00	373
250	2010	GB Cod West	Bottom Otter Trawl	NEFS 6	10	91	24	26.37	0.00	0.00	0.38	34	37.36	308316	2015333	274194.00	292.00	2146	461.20	503	122.40	134
251	2010	GB Cod West	Bottom Otter Trawl	NEFS 7	27	243	49	20.16	0.00	0.00	0.26	40	16.46	295315	2943920	687964.30	1676.00	7172	807.00	893	263.30	289
252	2010	GB Cod West	Bottom Otter Trawl	NEFS 8	33	177	36	20.34	0.00	0.00	0.24	26	14.69	432979	3301463	551554.30	2719.00	16275	826.60	891	220.30	236
253	2010	GB Cod West	Bottom Otter Trawl	NEFS 9	58	431	78	18.10	0.01	0.00	0.14	21	4.87	1196150	7217048	1665165.70	16220.00	70300	1781.60	1937	612.50	655
254	2010	GB Cod West	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
255	2010	GB Cod West	Bottom Otter Trawl	Sustainable Harvest Sector 1	60	417	146	35.01	0.00	0.00	0.18	67	16.07	764953	6378221	1291179.60	3098.00	15304	1987.90	2163	877.90	950
256	2010	GB Cod West	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.30	7	36.84	33691	594126	196414.20	842.00	2547	108.20	118	47.10	52
257	2010	GB Cod West	Extra Large Mesh Gillnet	Fixed Gear Sector	29	891	363	40.74	0.00	0.00	0.26	305	34.23	8284	5878322	1977497.40	416.00	1237	386.60	1038	168.00	423
258	2010	GB Cod West	Extra Large Mesh Gillnet	NCCS																		
259	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 10	5	19	5	26.32	0.00	0.00	0.00	0	0.00	1268	97131	12535.50	0.00	0	29.70	42	7.10	10
260	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 11	8	114	13	11.40	0.00	0.00	0.00	0	0.00	0	416893	47045.20	0.00	0	59.40	123	6.50	13
261	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 12																		
262	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 13																		
263	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 2																		
264	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 3	13	117	24	20.51	0.00	0.00	0.59	59	50.43	0	815174	151424.20	32.00	172	107.40	182	25.60	40
265	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
266	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 6																		
267	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.49	57	43.85	231	1011612	325364.50	42.00	131	97.80	166	29.80	45
268	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 8																		
269	2010	GB Cod West	Extra Large Mesh Gillnet	NEFS 9																		
270	2010	GB Cod West	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
271	2010	GB Cod West	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	3	21	3	14.29	0.00	0.00	0.00	0	0.00	519	103957	12541.20	0.00	0	24.30	38	2.20	4
272	2010	GB Cod West	Extra Large Mesh Gillnet	Tri-State Sector																		
273	2010	GB Cod West	Haddock Otter Trawl	Fixed Gear Sector																		
274	2010	GB Cod West	Haddock Otter Trawl	NCCS																		
275	2010	GB Cod West	Haddock Otter Trawl	NEFS 10																		
276	2010	GB Cod West	Haddock Otter Trawl	NEFS 11																		
277	2010	GB Cod West	Haddock Otter Trawl	NEFS 12																		
278	2010	GB Cod West	Haddock Otter Trawl	NEFS 13																		
279	2010	GB Cod West	Haddock Otter Trawl	NEFS 2	14	25	16	64.00	0.00	0.00	0.31	17	68.00	62275	666002	236521.50	1051.00	2959	142.70	153	107.70	116
280	2010	GB Cod West	Haddock Otter Trawl	NEFS 3																		
281	2010	GB Cod West	Haddock Otter Trawl	NEFS 5																		
282	2010	GB Cod West	Haddock Otter Trawl	NEFS 6																		
283	2010	GB Cod West	Haddock Otter Trawl	NEFS 7	4	11	11	100.00	0.00	0.00	0.00	0	0.00	23226	198657	125792.30	193.00	305	55.40	59	74.90	81
284	2010	GB Cod West	Haddock Otter Trawl	NEFS 8																		
285	2010	GB Cod West	Haddock Otter Trawl	NEFS 9																		
286	2010	GB Cod West	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
287	2010	GB Cod West	Haddock Otter Trawl	Sustainable Harvest Sector 1	27	152	51	33.55	0.00	0.00	0.34	61	40.13	317870	3707387	1331035.60	5927.00	16509	796.80	859	345.80	374
288	2010	GB Cod West	Haddock Otter Trawl	Tri-State Sector																		
289	2010	GB Cod West	Handline	Fixed Gear Sector	5	97	54	55.67	0.01	0.00	0.33	59	60.82	17873	175064	32889.10	219.00	1166	44.00	105	21.90	61
290	2010	GB Cod West	Handline	NCCS																		
291	2010	GB Cod West	Handline	NEFS 10																		
292	2010	GB Cod West	Handline	NEFS 11																		
293	2010	GB Cod West	Handline	NEFS 12																		
294	2010	GB Cod West	Handline	NEFS 13																		
295	2010	GB Cod West	Handline	NEFS 2																		
296	2010	GB Cod West	Handline	NEFS 3																		
297	2010	GB Cod West	Handline	NEFS 5																		
298	2010	GB Cod West	Handline	NEFS 6																		
299	2010	GB Cod West	Handline	NEFS 7																		
300	2010	GB Cod West	Handline	NEFS 8																		
301	2010	GB Cod West	Handline	NEFS 9																		
302	2010	GB Cod West	Handline	Port Clyde Community Groundfish Sector																		
303	2010	GB Cod West	Handline	Sustainable Harvest Sector 1																		
304	2010	GB Cod West	Handline	Tri-State Sector																		
305	2010	GB Cod West	Large Mesh Gillnet	Fixed Gear Sector	17	609	231	37.93	0.02	0.00	0.08	28	4.60	384250	2169317	516185.30	8230.00	34587	248.70	625	99.40	236
306	2010	GB Cod West	Large Mesh Gillnet	NCCS																		
307	2010	GB Cod West	Large Mesh Gillnet	NEFS 10																		
308	2010	GB Cod West	Large Mesh Gillnet	NEFS 11																		
309	2010	GB Cod West	Large Mesh Gillnet	NEFS 12																		
310	2010	GB Cod West	Large Mesh Gillnet	NEFS 13																		
311	2010	GB Cod West	Large Mesh Gillnet	NEFS 2																		
312	2010	GB Cod West	Large Mesh Gillnet	NEFS 3	4	8	2	25.00	0.00	0.00	0.00	0	0.00	1991	37606	1117.80	0.00	0	8.00	13	1.70	3
313	2010	GB Cod West	Large Mesh Gillnet	NEFS 5																		
314	2010	GB Cod West	Large Mesh Gillnet	NEFS 6																		
315	2010	GB Cod West	Large Mesh Gillnet	NEFS 7	4	17	5	29.41	0.00	0.00	0.50	10	58.82	4480	60681	17558.50	47.00	162	18.80	24	7.20	8

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
316	2010	GB Cod West	Large Mesh Gillnet	NEFS 8																		
317	2010	GB Cod West	Large Mesh Gillnet	NEFS 9																		
318	2010	GB Cod West	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
319	2010	GB Cod West	Large Mesh Gillnet	Sustainable Harvest Sector 1	3	4	2	50.00	0.00	0.00	0.10	1	25.00	2460	48121	25190.10	34.00	65	19.90	22	16.60	18
320	2010	GB Cod West	Large Mesh Gillnet	Tri-State Sector																		
321	2010	GB Cod West	Ruhle Trawl	Fixed Gear Sector																		
322	2010	GB Cod West	Ruhle Trawl	NCCS																		
323	2010	GB Cod West	Ruhle Trawl	NEFS 10																		
324	2010	GB Cod West	Ruhle Trawl	NEFS 11																		
325	2010	GB Cod West	Ruhle Trawl	NEFS 12																		
326	2010	GB Cod West	Ruhle Trawl	NEFS 13	3	16	16	100.00	0.00	0.00	0.00	0	0.00	3111	334655	285418.40	613.00	719	42.90	45	104.30	110
327	2010	GB Cod West	Ruhle Trawl	NEFS 2																		
328	2010	GB Cod West	Ruhle Trawl	NEFS 3																		
329	2010	GB Cod West	Ruhle Trawl	NEFS 5	4	9	1	11.11	0.00					12941	132487	2033.00	7.00	456	56.80	61	2.50	3
330	2010	GB Cod West	Ruhle Trawl	NEFS 6																		
331	2010	GB Cod West	Ruhle Trawl	NEFS 7																		
332	2010	GB Cod West	Ruhle Trawl	NEFS 8																		
333	2010	GB Cod West	Ruhle Trawl	NEFS 9																		
334	2010	GB Cod West	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
335	2010	GB Cod West	Ruhle Trawl	Sustainable Harvest Sector 1	4	6	6	100.00	0.01	0.00	0.00	0	0.00	1371	97055	95871.40	553.00	560	25.90	27	38.90	42
336	2010	GB Cod West	Ruhle Trawl	Tri-State Sector																		
337	2010	GB Haddock East	Bottom Longline	Fixed Gear Sector	7	56	12	21.43	0.02	0.00	0.28	11	19.64	311731	490159	84828.00	1444.00	8344	107.20	123	22.70	25
338	2010	GB Haddock East	Bottom Longline	NCCS																		
339	2010	GB Haddock East	Bottom Longline	NEFS 10																		
340	2010	GB Haddock East	Bottom Longline	NEFS 11																		
341	2010	GB Haddock East	Bottom Longline	NEFS 12																		
342	2010	GB Haddock East	Bottom Longline	NEFS 13																		
343	2010	GB Haddock East	Bottom Longline	NEFS 2																		
344	2010	GB Haddock East	Bottom Longline	NEFS 3																		
345	2010	GB Haddock East	Bottom Longline	NEFS 5																		
346	2010	GB Haddock East	Bottom Longline	NEFS 6																		
347	2010	GB Haddock East	Bottom Longline	NEFS 7																		
348	2010	GB Haddock East	Bottom Longline	NEFS 8																		
349	2010	GB Haddock East	Bottom Longline	NEFS 9																		
350	2010	GB Haddock East	Bottom Longline	Port Clyde Community Groundfish Sector																		
351	2010	GB Haddock East	Bottom Longline	Sustainable Harvest Sector 1																		
352	2010	GB Haddock East	Bottom Longline	Tri-State Sector																		
353	2010	GB Haddock East	Bottom Otter Trawl	Fixed Gear Sector																		
354	2010	GB Haddock East	Bottom Otter Trawl	NCCS																		
355	2010	GB Haddock East	Bottom Otter Trawl	NEFS 10																		
356	2010	GB Haddock East	Bottom Otter Trawl	NEFS 11																		
357	2010	GB Haddock East	Bottom Otter Trawl	NEFS 12																		
358	2010	GB Haddock East	Bottom Otter Trawl	NEFS 13	13	22	5	22.73	0.00	0.00	0.67	14	63.64	78719	193261	10830.70	31.00	553	143.30	151	32.90	35
359	2010	GB Haddock East	Bottom Otter Trawl	NEFS 2	11	21	7	33.33	0.00	0.00	0.33	8	38.10	246355	432120	87400.60	139.00	687	139.10	149	47.10	50
360	2010	GB Haddock East	Bottom Otter Trawl	NEFS 3																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
361	2010	GB Haddock East	Bottom Otter Trawl	NEFS 5																		
362	2010	GB Haddock East	Bottom Otter Trawl	NEFS 6																		
363	2010	GB Haddock East	Bottom Otter Trawl	NEFS 7	8	16	7	43.75	0.00	0.00	0.00	0	0.00	47131	140754	7904.90	0.00	0	120.40	129	47.30	50
364	2010	GB Haddock East	Bottom Otter Trawl	NEFS 8	14	35	11	31.43	0.00	0.00	0.43	17	48.57	199822	456413	119197.20	415.00	1589	209.50	222	67.80	72
365	2010	GB Haddock East	Bottom Otter Trawl	NEFS 9	18	75	15	20.00	0.00	0.00	0.52	32	42.67	648970	1136868	88211.50	281.00	3622	498.20	538	116.30	125
366	2010	GB Haddock East	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
367	2010	GB Haddock East	Bottom Otter Trawl	Sustainable Harvest Sector 1	19	65	16	24.62	0.00	0.00	0.34	20	30.77	441207	912555	124373.90	66.00	484	441.10	471	128.80	139
368	2010	GB Haddock East	Bottom Otter Trawl	Tri-State Sector																		
369	2010	GB Haddock East	Extra Large Mesh Gillnet	Fixed Gear Sector																		
370	2010	GB Haddock East	Extra Large Mesh Gillnet	NCCS																		
371	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 10																		
372	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 11																		
373	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 12																		
374	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 13																		
375	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 2																		
376	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 3																		
377	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 5																		
378	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 6																		
379	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 7																		
380	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 8																		
381	2010	GB Haddock East	Extra Large Mesh Gillnet	NEFS 9																		
382	2010	GB Haddock East	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
383	2010	GB Haddock East	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
384	2010	GB Haddock East	Extra Large Mesh Gillnet	Tri-State Sector																		
385	2010	GB Haddock East	Haddock Otter Trawl	Fixed Gear Sector																		
386	2010	GB Haddock East	Haddock Otter Trawl	NCCS																		
387	2010	GB Haddock East	Haddock Otter Trawl	NEFS 10																		
388	2010	GB Haddock East	Haddock Otter Trawl	NEFS 11																		
389	2010	GB Haddock East	Haddock Otter Trawl	NEFS 12																		
390	2010	GB Haddock East	Haddock Otter Trawl	NEFS 13																		
391	2010	GB Haddock East	Haddock Otter Trawl	NEFS 2	10	36	12	33.33	0.01	0.00	0.33	14	38.89	406429	504983	176294.80	1036.00	2968	205.10	220	85.20	92
392	2010	GB Haddock East	Haddock Otter Trawl	NEFS 3																		
393	2010	GB Haddock East	Haddock Otter Trawl	NEFS 5																		
394	2010	GB Haddock East	Haddock Otter Trawl	NEFS 6																		
395	2010	GB Haddock East	Haddock Otter Trawl	NEFS 7																		
396	2010	GB Haddock East	Haddock Otter Trawl	NEFS 8	6	10	3	30.00	0.01	0.00	0.24	3	30.00	129906	144734	28404.70	173.00	882	75.10	80	24.80	26
397	2010	GB Haddock East	Haddock Otter Trawl	NEFS 9	3	8	8	100.00	0.01	0.00	0.00	0	0.00	20837	30746	102780.80	798.00	239	28.00	30	61.90	65
398	2010	GB Haddock East	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
399	2010	GB Haddock East	Haddock Otter Trawl	Sustainable Harvest Sector 1	16	92	27	29.35	0.01	0.00	0.19	14	15.22	1382721	1681029	420003.80	4071.00	16294	595.00	631	213.90	233
400	2010	GB Haddock East	Haddock Otter Trawl	Tri-State Sector																		
401	2010	GB Haddock East	Handline	Fixed Gear Sector																		
402	2010	GB Haddock East	Handline	NCCS																		
403	2010	GB Haddock East	Handline	NEFS 10																		
404	2010	GB Haddock East	Handline	NEFS 11																		
405	2010	GB Haddock East	Handline	NEFS 12																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
406	2010	GB Haddock East	Handline	NEFS 13																		
407	2010	GB Haddock East	Handline	NEFS 2																		
408	2010	GB Haddock East	Handline	NEFS 3																		
409	2010	GB Haddock East	Handline	NEFS 5																		
410	2010	GB Haddock East	Handline	NEFS 6																		
411	2010	GB Haddock East	Handline	NEFS 7																		
412	2010	GB Haddock East	Handline	NEFS 8																		
413	2010	GB Haddock East	Handline	NEFS 9																		
414	2010	GB Haddock East	Handline	Port Clyde Community Groundfish Sector																		
415	2010	GB Haddock East	Handline	Sustainable Harvest Sector 1																		
416	2010	GB Haddock East	Handline	Tri-State Sector																		
417	2010	GB Haddock East	Large Mesh Gillnet	Fixed Gear Sector																		
418	2010	GB Haddock East	Large Mesh Gillnet	NCCS																		
419	2010	GB Haddock East	Large Mesh Gillnet	NEFS 10																		
420	2010	GB Haddock East	Large Mesh Gillnet	NEFS 11																		
421	2010	GB Haddock East	Large Mesh Gillnet	NEFS 12																		
422	2010	GB Haddock East	Large Mesh Gillnet	NEFS 13																		
423	2010	GB Haddock East	Large Mesh Gillnet	NEFS 2																		
424	2010	GB Haddock East	Large Mesh Gillnet	NEFS 3																		
425	2010	GB Haddock East	Large Mesh Gillnet	NEFS 5																		
426	2010	GB Haddock East	Large Mesh Gillnet	NEFS 6																		
427	2010	GB Haddock East	Large Mesh Gillnet	NEFS 7																		
428	2010	GB Haddock East	Large Mesh Gillnet	NEFS 8																		
429	2010	GB Haddock East	Large Mesh Gillnet	NEFS 9																		
430	2010	GB Haddock East	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
431	2010	GB Haddock East	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
432	2010	GB Haddock East	Large Mesh Gillnet	Tri-State Sector																		
433	2010	GB Haddock East	Ruhle Trawl	Fixed Gear Sector																		
434	2010	GB Haddock East	Ruhle Trawl	NCCS																		
435	2010	GB Haddock East	Ruhle Trawl	NEFS 10																		
436	2010	GB Haddock East	Ruhle Trawl	NEFS 11																		
437	2010	GB Haddock East	Ruhle Trawl	NEFS 12																		
438	2010	GB Haddock East	Ruhle Trawl	NEFS 13																		
439	2010	GB Haddock East	Ruhle Trawl	NEFS 2																		
440	2010	GB Haddock East	Ruhle Trawl	NEFS 3																		
441	2010	GB Haddock East	Ruhle Trawl	NEFS 5																		
442	2010	GB Haddock East	Ruhle Trawl	NEFS 6																		
443	2010	GB Haddock East	Ruhle Trawl	NEFS 7																		
444	2010	GB Haddock East	Ruhle Trawl	NEFS 8																		
445	2010	GB Haddock East	Ruhle Trawl	NEFS 9																		
446	2010	GB Haddock East	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
447	2010	GB Haddock East	Ruhle Trawl	Sustainable Harvest Sector 1																		
448	2010	GB Haddock East	Ruhle Trawl	Tri-State Sector																		
449	2010	GB Haddock West	Bottom Longline	Fixed Gear Sector	16	224	108	48.21	0.01	0.00	0.21	73	32.59	384059	747072	372177.40	2303.00	4623	143.60	283	76.70	142
450	2010	GB Haddock West	Bottom Longline	NCCS																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
451	2010	GB Haddock West	Bottom Longline	NEFS 10																		
452	2010	GB Haddock West	Bottom Longline	NEFS 11																		
453	2010	GB Haddock West	Bottom Longline	NEFS 12																		
454	2010	GB Haddock West	Bottom Longline	NEFS 13																		
455	2010	GB Haddock West	Bottom Longline	NEFS 2																		
456	2010	GB Haddock West	Bottom Longline	NEFS 3																		
457	2010	GB Haddock West	Bottom Longline	NEFS 5																		
458	2010	GB Haddock West	Bottom Longline	NEFS 6																		
459	2010	GB Haddock West	Bottom Longline	NEFS 7																		
460	2010	GB Haddock West	Bottom Longline	NEFS 8																		
461	2010	GB Haddock West	Bottom Longline	NEFS 9																		
462	2010	GB Haddock West	Bottom Longline	Port Clyde Community Groundfish Sector																		
463	2010	GB Haddock West	Bottom Longline	Sustainable Harvest Sector 1																		
464	2010	GB Haddock West	Bottom Longline	Tri-State Sector																		
465	2010	GB Haddock West	Bottom Otter Trawl	Fixed Gear Sector																		
466	2010	GB Haddock West	Bottom Otter Trawl	NCCS																		
467	2010	GB Haddock West	Bottom Otter Trawl	NEFS 10																		
468	2010	GB Haddock West	Bottom Otter Trawl	NEFS 11																		
469	2010	GB Haddock West	Bottom Otter Trawl	NEFS 12																		
470	2010	GB Haddock West	Bottom Otter Trawl	NEFS 13	62	328	76	23.17	0.00	0.00	0.46	135	41.16	1820908	4074900	780625.80	397.00	2072	965.00	1094	295.90	336
471	2010	GB Haddock West	Bottom Otter Trawl	NEFS 2	30	236	74	31.36	0.00	0.00	0.31	77	32.63	1291564	4275772	910380.40	139.00	653	938.50	1037	307.70	345
472	2010	GB Haddock West	Bottom Otter Trawl	NEFS 3																		
473	2010	GB Haddock West	Bottom Otter Trawl	NEFS 5	76	604	230	38.08	0.00	0.00	0.39	310	51.32	589158	6118055	2572383.00	1145.00	2723	737.60	1074	239.00	373
474	2010	GB Haddock West	Bottom Otter Trawl	NEFS 6	10	91	24	26.37	0.00	0.00	0.62	56	61.54	94895	2015333	274194.00	2.00	15	461.20	503	122.40	134
475	2010	GB Haddock West	Bottom Otter Trawl	NEFS 7	27	243	49	20.16	0.00	0.00	0.20	26	10.70	570656	2974481	687964.30	655.00	2832	807.00	893	263.30	289
476	2010	GB Haddock West	Bottom Otter Trawl	NEFS 8	33	177	36	20.34	0.00	0.00	0.35	45	25.42	906704	3301463	551554.30	451.00	2700	826.60	891	220.30	236
477	2010	GB Haddock West	Bottom Otter Trawl	NEFS 9	58	431	78	18.10	0.00	0.00	0.26	60	13.92	2107136	7217048	1665165.70	2391.00	10363	1781.60	1937	612.50	655
478	2010	GB Haddock West	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
479	2010	GB Haddock West	Bottom Otter Trawl	Sustainable Harvest Sector 1	60	417	146	35.01	0.00	0.00	0.29	142	34.05	2321596	6306023	1291179.60	460.00	2247	1987.90	2163	877.90	950
480	2010	GB Haddock West	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.01	0.00	0.50	12	63.16	368005	594126	196414.20	1130.00	3418	108.20	118	47.10	52
481	2010	GB Haddock West	Extra Large Mesh Gillnet	Fixed Gear Sector	29	891	363	40.74	0.00	0.00	0.33	410	46.02	1012	5878322	1977497.40	102.00	303	386.60	1038	168.00	423
482	2010	GB Haddock West	Extra Large Mesh Gillnet	NCCS																		
483	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 10	5	19	5	26.32	0.00	0.00	0.00	0	0.00	63	97131	12535.50	0.00	0	29.70	42	7.10	10
484	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 11	8	114	13	11.40	0.00	0.00	0.00	0	0.00	0	416893	47045.20	0.00	0	59.40	123	6.50	13
485	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 12																		
486	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 13																		
487	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 2																		
488	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 3	13	117	24	20.51	0.00	0.00	0.00	0	0.00	0	815174	151424.20	0.00	0	107.40	182	25.60	40
489	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
490	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 6																		
491	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.00	0	0.00	0	1011612	325364.50	0.00	0	97.80	166	29.80	45
492	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 8																		
493	2010	GB Haddock West	Extra Large Mesh Gillnet	NEFS 9																		
494	2010	GB Haddock West	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
495	2010	GB Haddock West	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	3	21	3	14.29	0.00	0.00	0.00	0	0.00	0	103957	12541.20	0.00	0	24.30	38	2.20	4

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
496	2010	GB Haddock West	Extra Large Mesh Gillnet	Tri-State Sector																		
497	2010	GB Haddock West	Haddock Otter Trawl	Fixed Gear Sector																		
498	2010	GB Haddock West	Haddock Otter Trawl	NCCS																		
499	2010	GB Haddock West	Haddock Otter Trawl	NEFS 10																		
500	2010	GB Haddock West	Haddock Otter Trawl	NEFS 11																		
501	2010	GB Haddock West	Haddock Otter Trawl	NEFS 12																		
502	2010	GB Haddock West	Haddock Otter Trawl	NEFS 13																		
503	2010	GB Haddock West	Haddock Otter Trawl	NEFS 2	14	25	16	64.00	0.00	0.00	0.22	13	52.00	328536	666002	236521.50	97.00	273	142.70	153	107.70	116
504	2010	GB Haddock West	Haddock Otter Trawl	NEFS 3																		
505	2010	GB Haddock West	Haddock Otter Trawl	NEFS 5																		
506	2010	GB Haddock West	Haddock Otter Trawl	NEFS 6																		
507	2010	GB Haddock West	Haddock Otter Trawl	NEFS 7	4	11	11	100.00	0.00	0.00	0.00	0	0.00	106847	213123	125792.30	251.00	425	55.40	59	74.90	81
508	2010	GB Haddock West	Haddock Otter Trawl	NEFS 8																		
509	2010	GB Haddock West	Haddock Otter Trawl	NEFS 9																		
510	2010	GB Haddock West	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
511	2010	GB Haddock West	Haddock Otter Trawl	Sustainable Harvest Sector 1	27	152	51	33.55	0.00	0.00	0.40	72	47.37	2819935	3718228	1331035.60	4810.00	13437	796.80	859	345.80	374
512	2010	GB Haddock West	Haddock Otter Trawl	Tri-State Sector																		
513	2010	GB Haddock West	Handline	Fixed Gear Sector	5	97	54	55.67	0.00	0.00	0.00	0	0.00	195	175064	32889.10	0.00	0	44.00	105	21.90	61
514	2010	GB Haddock West	Handline	NCCS																		
515	2010	GB Haddock West	Handline	NEFS 10																		
516	2010	GB Haddock West	Handline	NEFS 11																		
517	2010	GB Haddock West	Handline	NEFS 12																		
518	2010	GB Haddock West	Handline	NEFS 13																		
519	2010	GB Haddock West	Handline	NEFS 2																		
520	2010	GB Haddock West	Handline	NEFS 3																		
521	2010	GB Haddock West	Handline	NEFS 5																		
522	2010	GB Haddock West	Handline	NEFS 6																		
523	2010	GB Haddock West	Handline	NEFS 7																		
524	2010	GB Haddock West	Handline	NEFS 8																		
525	2010	GB Haddock West	Handline	NEFS 9																		
526	2010	GB Haddock West	Handline	Port Clyde Community Groundfish Sector																		
527	2010	GB Haddock West	Handline	Sustainable Harvest Sector 1																		
528	2010	GB Haddock West	Handline	Tri-State Sector																		
529	2010	GB Haddock West	Large Mesh Gillnet	Fixed Gear Sector	17	609	231	37.93	0.00	0.00	0.15	83	13.63	56896	2169317	516185.30	900.00	3782	248.70	625	99.40	236
530	2010	GB Haddock West	Large Mesh Gillnet	NCCS																		
531	2010	GB Haddock West	Large Mesh Gillnet	NEFS 10																		
532	2010	GB Haddock West	Large Mesh Gillnet	NEFS 11																		
533	2010	GB Haddock West	Large Mesh Gillnet	NEFS 12																		
534	2010	GB Haddock West	Large Mesh Gillnet	NEFS 13																		
535	2010	GB Haddock West	Large Mesh Gillnet	NEFS 2																		
536	2010	GB Haddock West	Large Mesh Gillnet	NEFS 3	4	8	2	25.00	0.00	0.00	0.00	0	0.00	116	37606	1117.80	0.00	0	8.00	13	1.70	3
537	2010	GB Haddock West	Large Mesh Gillnet	NEFS 5																		
538	2010	GB Haddock West	Large Mesh Gillnet	NEFS 6																		
539	2010	GB Haddock West	Large Mesh Gillnet	NEFS 7	4	17	5	29.41	0.00	0.00	0.00	0	0.00	138	60681	17558.50	0.00	0	18.80	24	7.20	8
540	2010	GB Haddock West	Large Mesh Gillnet	NEFS 8																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
541	2010	GB Haddock West	Large Mesh Gillnet	NEFS 9																		
542	2010	GB Haddock West	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
543	2010	GB Haddock West	Large Mesh Gillnet	Sustainable Harvest Sector 1	3	4	2	50.00	0.00	0.00	1.14	4	100.00	69	48121	25190.10	2.00	4	19.90	22	16.60	18
544	2010	GB Haddock West	Large Mesh Gillnet	Tri-State Sector																		
545	2010	GB Haddock West	Ruhle Trawl	Fixed Gear Sector																		
546	2010	GB Haddock West	Ruhle Trawl	NCCS																		
547	2010	GB Haddock West	Ruhle Trawl	NEFS 10																		
548	2010	GB Haddock West	Ruhle Trawl	NEFS 11																		
549	2010	GB Haddock West	Ruhle Trawl	NEFS 12																		
550	2010	GB Haddock West	Ruhle Trawl	NEFS 13	3	16	16	100.00	0.00	0.00	0.00	0	0.00	280481	334655	285418.40	457.00	536	42.90	45	104.30	110
551	2010	GB Haddock West	Ruhle Trawl	NEFS 2																		
552	2010	GB Haddock West	Ruhle Trawl	NEFS 3																		
553	2010	GB Haddock West	Ruhle Trawl	NEFS 5	4	9	1	11.11	0.00					110403	130534	2033.00	7.00	449	56.80	61	2.50	3
554	2010	GB Haddock West	Ruhle Trawl	NEFS 6																		
555	2010	GB Haddock West	Ruhle Trawl	NEFS 7																		
556	2010	GB Haddock West	Ruhle Trawl	NEFS 8																		
557	2010	GB Haddock West	Ruhle Trawl	NEFS 9																		
558	2010	GB Haddock West	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
559	2010	GB Haddock West	Ruhle Trawl	Sustainable Harvest Sector 1	4	6	6	100.00	0.01	0.00	0.00	0	0.00	125903	105495	95871.40	518.00	570	25.90	27	38.90	42
560	2010	GB Haddock West	Ruhle Trawl	Tri-State Sector																		
561	2010	GB Winter Flounder	Bottom Longline	Fixed Gear Sector	14	84	34	40.48	0.00	0.00	0.42	49	58.33	962	617753	145592.00	15.00	64	139.20	166	50.80	62
562	2010	GB Winter Flounder	Bottom Longline	NCCS																		
563	2010	GB Winter Flounder	Bottom Longline	NEFS 10																		
564	2010	GB Winter Flounder	Bottom Longline	NEFS 11																		
565	2010	GB Winter Flounder	Bottom Longline	NEFS 12																		
566	2010	GB Winter Flounder	Bottom Longline	NEFS 13																		
567	2010	GB Winter Flounder	Bottom Longline	NEFS 2																		
568	2010	GB Winter Flounder	Bottom Longline	NEFS 3																		
569	2010	GB Winter Flounder	Bottom Longline	NEFS 5																		
570	2010	GB Winter Flounder	Bottom Longline	NEFS 6																		
571	2010	GB Winter Flounder	Bottom Longline	NEFS 7																		
572	2010	GB Winter Flounder	Bottom Longline	NEFS 8																		
573	2010	GB Winter Flounder	Bottom Longline	NEFS 9																		
574	2010	GB Winter Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
575	2010	GB Winter Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
576	2010	GB Winter Flounder	Bottom Longline	Tri-State Sector																		
577	2010	GB Winter Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
578	2010	GB Winter Flounder	Bottom Otter Trawl	NCCS																		
579	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 10																		
580	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 11																		
581	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 12																		
582	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 13	39	180	37	20.56	0.00	0.00	0.44	64	35.56	310568	3078224	520322.70	902.00	5336	742.00	802	231.40	251
583	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 2	27	79	24	30.38	0.00	0.00	0.53	46	58.23	17834	1955052	322736.20	267.00	1617	431.40	462	153.00	164
584	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 3																		
585	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 5	23	48	12	25.00	0.00	0.00	0.54	26	54.17	57911	920401	268804.20	135.00	462	266.80	286	79.20	85

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
586	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 6	3	15	2	13.33	0.00	0.00	0.17	1	6.67	1195	246212	74329.60	21.00	70	89.90	95	13.60	15
587	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 7	21	173	35	20.23	0.00	0.00	0.42	58	33.53	422087	2491359	580032.10	1362.00	5850	698.20	756	237.60	256
588	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 8	28	145	29	20.00	0.00	0.00	0.49	59	40.69	630372	3011206	568889.50	1154.00	6108	783.00	836	188.50	200
589	2010	GB Winter Flounder	Bottom Otter Trawl	NEFS 9	48	325	63	19.38	0.00	0.00	0.25	47	14.46	1213014	5938706	1151109.80	3834.00	19780	1451.80	1570	493.60	528
590	2010	GB Winter Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
591	2010	GB Winter Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	48	231	47	20.35	0.00	0.00	0.55	108	46.75	183189	4030236	460484.10	43.00	376	1173.70	1256	359.90	388
592	2010	GB Winter Flounder	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.38	10	52.63	45800	594126	196414.20	93.00	281	108.20	118	47.10	52
593	2010	GB Winter Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector																		
594	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NCCS																		
595	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 10																		
596	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 11																		
597	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 12																		
598	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 13																		
599	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 2																		
600	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 3																		
601	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 5																		
602	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 6																		
603	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 7																		
604	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 8																		
605	2010	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 9																		
606	2010	GB Winter Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
607	2010	GB Winter Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
608	2010	GB Winter Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
609	2010	GB Winter Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
610	2010	GB Winter Flounder	Haddock Otter Trawl	NCCS																		
611	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 10																		
612	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 11																		
613	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 12																		
614	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 13																		
615	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 2	19	49	16	32.65	0.00	0.00	0.49	28	57.14	3396	859767	324238.10	134.00	355	256.10	274	107.70	116
616	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 3																		
617	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 5																		
618	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 6																		
619	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 7	5	15	14	93.33	0.00	0.00	0.15	12	80.00	22303	226133	166862.90	54.00	73	102.50	109	101.10	109
620	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 8	7	11	10	90.91	0.00	0.00	0.10	6	54.55	22971	168449	94169.80	15.00	27	75.10	80	81.50	86
621	2010	GB Winter Flounder	Haddock Otter Trawl	NEFS 9	4	11	11	100.00	0.00	0.00	0.00	0	0.00	916	33023	118651.90	54.00	15	34.00	36	76.90	82
622	2010	GB Winter Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
623	2010	GB Winter Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	29	176	49	27.84	0.00	0.00	0.49	89	50.57	117416	3967233	1336277.60	450.00	1336	835.30	890	361.90	390
624	2010	GB Winter Flounder	Haddock Otter Trawl	Tri-State Sector																		
625	2010	GB Winter Flounder	Handline	Fixed Gear Sector																		
626	2010	GB Winter Flounder	Handline	NCCS																		
627	2010	GB Winter Flounder	Handline	NEFS 10																		
628	2010	GB Winter Flounder	Handline	NEFS 11																		
629	2010	GB Winter Flounder	Handline	NEFS 12																		
630	2010	GB Winter Flounder	Handline	NEFS 13																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
631	2010	GB Winter Flounder	Handline	NEFS 2																		
632	2010	GB Winter Flounder	Handline	NEFS 3																		
633	2010	GB Winter Flounder	Handline	NEFS 5																		
634	2010	GB Winter Flounder	Handline	NEFS 6																		
635	2010	GB Winter Flounder	Handline	NEFS 7																		
636	2010	GB Winter Flounder	Handline	NEFS 8																		
637	2010	GB Winter Flounder	Handline	NEFS 9																		
638	2010	GB Winter Flounder	Handline	Port Clyde Community Groundfish Sector																		
639	2010	GB Winter Flounder	Handline	Sustainable Harvest Sector 1																		
640	2010	GB Winter Flounder	Handline	Tri-State Sector																		
641	2010	GB Winter Flounder	Large Mesh Gillnet	Fixed Gear Sector																		
642	2010	GB Winter Flounder	Large Mesh Gillnet	NCCS																		
643	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 10																		
644	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 11																		
645	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 12																		
646	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 13																		
647	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 2																		
648	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 3																		
649	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 5																		
650	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 6																		
651	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 7																		
652	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 8																		
653	2010	GB Winter Flounder	Large Mesh Gillnet	NEFS 9																		
654	2010	GB Winter Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
655	2010	GB Winter Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
656	2010	GB Winter Flounder	Large Mesh Gillnet	Tri-State Sector																		
657	2010	GB Winter Flounder	Ruhle Trawl	Fixed Gear Sector																		
658	2010	GB Winter Flounder	Ruhle Trawl	NCCS																		
659	2010	GB Winter Flounder	Ruhle Trawl	NEFS 10																		
660	2010	GB Winter Flounder	Ruhle Trawl	NEFS 11																		
661	2010	GB Winter Flounder	Ruhle Trawl	NEFS 12																		
662	2010	GB Winter Flounder	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	1039	287947	302159.80	32.00	30	46.70	49	104.30	110
663	2010	GB Winter Flounder	Ruhle Trawl	NEFS 2																		
664	2010	GB Winter Flounder	Ruhle Trawl	NEFS 3																		
665	2010	GB Winter Flounder	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					4812	131431	2033.00	0.00	0	63.10	68	2.50	3
666	2010	GB Winter Flounder	Ruhle Trawl	NEFS 6																		
667	2010	GB Winter Flounder	Ruhle Trawl	NEFS 7																		
668	2010	GB Winter Flounder	Ruhle Trawl	NEFS 8																		
669	2010	GB Winter Flounder	Ruhle Trawl	NEFS 9																		
670	2010	GB Winter Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
671	2010	GB Winter Flounder	Ruhle Trawl	Sustainable Harvest Sector 1	4	6	6	100.00	0.00	0.00	0.00	0	0.00	6952	103976	98408.90	16.00	17	27.10	28	38.00	41
672	2010	GB Winter Flounder	Ruhle Trawl	Tri-State Sector																		
673	2010	GB Yellowtail Flounder	Bottom Longline	Fixed Gear Sector	14	84	34	40.48	0.00	0.00	0.55	59	70.24	99	617753	145592.00	3.00	13	139.20	166	50.80	62
674	2010	GB Yellowtail Flounder	Bottom Longline	NCCS																		
675	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 10																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
676	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 11																		
677	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 12																		
678	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 13																		
679	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 2																		
680	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 3																		
681	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 5																		
682	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 6																		
683	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 7																		
684	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 8																		
685	2010	GB Yellowtail Flounder	Bottom Longline	NEFS 9																		
686	2010	GB Yellowtail Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
687	2010	GB Yellowtail Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
688	2010	GB Yellowtail Flounder	Bottom Longline	Tri-State Sector																		
689	2010	GB Yellowtail Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
690	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NCCS																		
691	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 10																		
692	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 11																		
693	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 12																		
694	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 13	39	180	37	20.56	0.00	0.00	0.27	31	17.22	239917	3084695	520322.70	2410.00	14288	742.00	802	231.40	251
695	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 2	27	79	24	30.38	0.00	0.00	0.31	25	31.65	25438	1944408	322736.20	672.00	4049	431.40	462	153.00	164
696	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 3																		
697	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 5	23	48	12	25.00	0.01	0.00	0.48	22	45.83	115376	920401	268804.20	2306.00	7896	266.80	286	79.20	85
698	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 6	3	15	2	13.33	0.00	0.00	0.17	1	6.67	6270	246212	74329.60	29.00	96	89.90	95	13.60	15
699	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 7	21	173	35	20.23	0.00	0.00	0.22	21	12.14	187949	2521920	580032.10	2263.00	9839	698.20	756	237.60	256
700	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 8	28	145	29	20.00	0.01	0.00	0.21	16	11.03	239500	3011206	568889.50	2919.00	15451	783.00	836	188.50	200
701	2010	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 9	48	325	63	19.38	0.01	0.00	0.23	41	12.62	444119	5938706	1151109.80	12038.00	62105	1451.80	1570	493.60	528
702	2010	GB Yellowtail Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
703	2010	GB Yellowtail Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	48	231	47	20.35	0.00	0.00	0.32	53	22.94	42346	4057459	460484.10	772.00	6802	1173.70	1256	359.90	388
704	2010	GB Yellowtail Flounder	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.01	0.00	0.25	6	31.58	105000	594126	196414.20	1564.00	4731	108.20	118	47.10	52
705	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector																		
706	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NCCS																		
707	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 10																		
708	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 11																		
709	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 12																		
710	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 13																		
711	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 2																		
712	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 3																		
713	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 5																		
714	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 6																		
715	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 7																		
716	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 8																		
717	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 9																		
718	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
719	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
720	2010	GB Yellowtail Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
721	2010	GB Yellowtail Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
722	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NCCS																		
723	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 10																		
724	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 11																		
725	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 12																		
726	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 13																		
727	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 2	19	49	16	32.65	0.01	0.00	0.44	25	51.02	4358	848619	324238.10	2194.00	5742	256.10	274	107.70	116
728	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 3																		
729	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 5																		
730	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 6																		
731	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 7	5	15	14	93.33	0.00	0.00	0.11	11	73.33	12740	240599	166862.90	729.00	1051	102.50	109	101.10	109
732	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 8	7	11	10	90.91	0.02	0.00	0.19	9	81.82	1806	168449	94169.80	2051.00	3669	75.10	80	81.50	86
733	2010	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 9	4	11	11	100.00	0.01	0.00	0.00	0	0.00	824	33023	118651.90	1177.00	328	34.00	36	76.90	82
734	2010	GB Yellowtail Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
735	2010	GB Yellowtail Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	29	176	49	27.84	0.00	0.00	0.19	23	13.07	46692	4015622	1336277.60	3354.00	10079	835.30	890	361.90	390
736	2010	GB Yellowtail Flounder	Haddock Otter Trawl	Tri-State Sector																		
737	2010	GB Yellowtail Flounder	Handline	Fixed Gear Sector																		
738	2010	GB Yellowtail Flounder	Handline	NCCS																		
739	2010	GB Yellowtail Flounder	Handline	NEFS 10																		
740	2010	GB Yellowtail Flounder	Handline	NEFS 11																		
741	2010	GB Yellowtail Flounder	Handline	NEFS 12																		
742	2010	GB Yellowtail Flounder	Handline	NEFS 13																		
743	2010	GB Yellowtail Flounder	Handline	NEFS 2																		
744	2010	GB Yellowtail Flounder	Handline	NEFS 3																		
745	2010	GB Yellowtail Flounder	Handline	NEFS 5																		
746	2010	GB Yellowtail Flounder	Handline	NEFS 6																		
747	2010	GB Yellowtail Flounder	Handline	NEFS 7																		
748	2010	GB Yellowtail Flounder	Handline	NEFS 8																		
749	2010	GB Yellowtail Flounder	Handline	NEFS 9																		
750	2010	GB Yellowtail Flounder	Handline	Port Clyde Community Groundfish Sector																		
751	2010	GB Yellowtail Flounder	Handline	Sustainable Harvest Sector 1																		
752	2010	GB Yellowtail Flounder	Handline	Tri-State Sector																		
753	2010	GB Yellowtail Flounder	Large Mesh Gillnet	Fixed Gear Sector																		
754	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NCCS																		
755	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 10																		
756	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 11																		
757	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 12																		
758	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 13																		
759	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 2																		
760	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 3																		
761	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 5																		
762	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 6																		
763	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 7																		
764	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 8																		
765	2010	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 9																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
766	2010	GB Yellowtail Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
767	2010	GB Yellowtail Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
768	2010	GB Yellowtail Flounder	Large Mesh Gillnet	Tri-State Sector																		
769	2010	GB Yellowtail Flounder	Ruhle Trawl	Fixed Gear Sector																		
770	2010	GB Yellowtail Flounder	Ruhle Trawl	NCCS																		
771	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 10																		
772	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 11																		
773	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 12																		
774	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	18850	341984	302159.80	484.00	548	46.70	49	104.30	110
775	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 2																		
776	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 3																		
777	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					4821	131431	2033.00	1.00	65	63.10	68	2.50	3
778	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 6																		
779	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 7																		
780	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 8																		
781	2010	GB Yellowtail Flounder	Ruhle Trawl	NEFS 9																		
782	2010	GB Yellowtail Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
783	2010	GB Yellowtail Flounder	Ruhle Trawl	Sustainable Harvest Sector 1	4	6	6	100.00	0.00	0.00	0.00	0	0.00	254	103976	98408.90	60.00	63	27.10	28	38.00	41
784	2010	GB Yellowtail Flounder	Ruhle Trawl	Tri-State Sector																		
785	2010	GOM Cod	Bottom Longline	Fixed Gear Sector	7	44	10	22.73	0.14	0.00	0.14	3	6.82	106332	156494	33945.50	4673.00	21543	32.50	54	6.10	10
786	2010	GOM Cod	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.00	0	0.00	5445	10907	1473.80	0.00	0	16.90	37	5.30	12
787	2010	GOM Cod	Bottom Longline	NEFS 10	5	42	9	21.43	0.01	0.00	0.40	14	33.33	50795	75781	11484.20	120.00	792	17.40	43	4.30	9
788	2010	GOM Cod	Bottom Longline	NEFS 11																		
789	2010	GOM Cod	Bottom Longline	NEFS 12																		
790	2010	GOM Cod	Bottom Longline	NEFS 13																		
791	2010	GOM Cod	Bottom Longline	NEFS 2																		
792	2010	GOM Cod	Bottom Longline	NEFS 3	6	111	36	32.43	0.04	0.00	0.20	20	18.02	30191	136422	43339.60	1938.00	6100	61.80	122	19.30	37
793	2010	GOM Cod	Bottom Longline	NEFS 5																		
794	2010	GOM Cod	Bottom Longline	NEFS 6																		
795	2010	GOM Cod	Bottom Longline	NEFS 7																		
796	2010	GOM Cod	Bottom Longline	NEFS 8																		
797	2010	GOM Cod	Bottom Longline	NEFS 9																		
798	2010	GOM Cod	Bottom Longline	Port Clyde Community Groundfish Sector																		
799	2010	GOM Cod	Bottom Longline	Sustainable Harvest Sector 1																		
800	2010	GOM Cod	Bottom Longline	Tri-State Sector																		
801	2010	GOM Cod	Bottom Otter Trawl	Fixed Gear Sector																		
802	2010	GOM Cod	Bottom Otter Trawl	NCCS																		
803	2010	GOM Cod	Bottom Otter Trawl	NEFS 10	10	153	58	37.91	0.02	0.00	0.14	18	11.76	182493	357269	113016.00	2142.00	6771	66.60	158	23.30	58
804	2010	GOM Cod	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.01	0.00	0.24	12	23.08	91800	134828	41008.80	318.00	1046	25.70	55	8.40	18
805	2010	GOM Cod	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.01	0.00	0.28	26	43.33	94176	134601	45136.00	599.00	1786	24.50	63	11.40	27
806	2010	GOM Cod	Bottom Otter Trawl	NEFS 13																		
807	2010	GOM Cod	Bottom Otter Trawl	NEFS 2	60	1403	474	33.78	0.01	0.00	0.09	58	4.13	2148224	4793229	1447594.50	16279.00	53903	1232.10	2016	448.10	708
808	2010	GOM Cod	Bottom Otter Trawl	NEFS 3																		
809	2010	GOM Cod	Bottom Otter Trawl	NEFS 5																		
810	2010	GOM Cod	Bottom Otter Trawl	NEFS 6	10	107	26	24.30	0.00	0.00	0.26	21	19.63	191725	1196059	322068.50	234.00	869	438.60	484	113.40	126

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
811	2010	GOM Cod	Bottom Otter Trawl	NEFS 7																		
812	2010	GOM Cod	Bottom Otter Trawl	NEFS 8	5	8	2	25.00	0.00	0.00	0.00	0	0.00	12524	107678	9901.50	0.00	0	42.40	46	10.00	11
813	2010	GOM Cod	Bottom Otter Trawl	NEFS 9	21	50	14	28.00	0.00	0.00	0.38	19	38.00	177365	1110661	301320.00	214.00	789	274.40	295	109.40	117
814	2010	GOM Cod	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.29	45	36.29	64693	404917	133989.40	185.00	559	207.90	266	76.50	98
815	2010	GOM Cod	Bottom Otter Trawl	Sustainable Harvest Sector 1	89	823	245	29.77	0.00	0.00	0.17	102	12.39	1090561	12331734	3684233.20	3835.00	12836	3060.90	3434	1148.60	1271
816	2010	GOM Cod	Bottom Otter Trawl	Tri-State Sector																		
817	2010	GOM Cod	Extra Large Mesh Gillnet	Fixed Gear Sector																		
818	2010	GOM Cod	Extra Large Mesh Gillnet	NCCS																		
819	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 10	7	116	64	55.17	0.00	0.00	0.22	46	39.66	8674	210623	78133.90	112.00	302	76.70	145	43.70	81
820	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 11	14	244	79	32.38	0.02	0.00	0.37	103	42.21	180979	715197	106301.60	2067.00	13907	109.40	260	46.00	92
821	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 12																		
822	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 13																		
823	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 2																		
824	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 3	28	588	199	33.84	0.00	0.00	0.14	63	10.71	251716	1934883	369820.70	1551.00	8115	270.20	640	80.60	202
825	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 5																		
826	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 6																		
827	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 7																		
828	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 8																		
829	2010	GOM Cod	Extra Large Mesh Gillnet	NEFS 9																		
830	2010	GOM Cod	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
831	2010	GOM Cod	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	4	27	9	33.33	0.03	0.00	0.25	8	29.63	34405	199524	15655.80	392.00	4996	120.10	139	30.40	36
832	2010	GOM Cod	Extra Large Mesh Gillnet	Tri-State Sector																		
833	2010	GOM Cod	Haddock Otter Trawl	Fixed Gear Sector																		
834	2010	GOM Cod	Haddock Otter Trawl	NCCS																		
835	2010	GOM Cod	Haddock Otter Trawl	NEFS 10																		
836	2010	GOM Cod	Haddock Otter Trawl	NEFS 11																		
837	2010	GOM Cod	Haddock Otter Trawl	NEFS 12																		
838	2010	GOM Cod	Haddock Otter Trawl	NEFS 13																		
839	2010	GOM Cod	Haddock Otter Trawl	NEFS 2																		
840	2010	GOM Cod	Haddock Otter Trawl	NEFS 3																		
841	2010	GOM Cod	Haddock Otter Trawl	NEFS 5																		
842	2010	GOM Cod	Haddock Otter Trawl	NEFS 6																		
843	2010	GOM Cod	Haddock Otter Trawl	NEFS 7																		
844	2010	GOM Cod	Haddock Otter Trawl	NEFS 8																		
845	2010	GOM Cod	Haddock Otter Trawl	NEFS 9																		
846	2010	GOM Cod	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
847	2010	GOM Cod	Haddock Otter Trawl	Sustainable Harvest Sector 1	4	21	21	100.00	0.00	0.00	0.00	0	0.00	4867	98357	152211.70	102.00	66	35.40	38	153.40	165
848	2010	GOM Cod	Haddock Otter Trawl	Tri-State Sector																		
849	2010	GOM Cod	Handline	Fixed Gear Sector	4	22	10	45.45	0.25	0.00	0.11	3	13.64	24803	25611	11310.00	2853.00	6461	25.60	35	5.70	10
850	2010	GOM Cod	Handline	NCCS																		
851	2010	GOM Cod	Handline	NEFS 10	3	9	8	88.89	0.03	0.00	0.06	3	33.33	18605	15899	14370.60	386.00	427	3.80	9	3.90	8
852	2010	GOM Cod	Handline	NEFS 11																		
853	2010	GOM Cod	Handline	NEFS 12																		
854	2010	GOM Cod	Handline	NEFS 13																		
855	2010	GOM Cod	Handline	NEFS 2																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
856	2010	GOM Cod	Handline	NEFS 3																		
857	2010	GOM Cod	Handline	NEFS 5																		
858	2010	GOM Cod	Handline	NEFS 6																		
859	2010	GOM Cod	Handline	NEFS 7																		
860	2010	GOM Cod	Handline	NEFS 8																		
861	2010	GOM Cod	Handline	NEFS 9																		
862	2010	GOM Cod	Handline	Port Clyde Community Groundfish Sector																		
863	2010	GOM Cod	Handline	Sustainable Harvest Sector 1																		
864	2010	GOM Cod	Handline	Tri-State Sector																		
865	2010	GOM Cod	Large Mesh Gillnet	Fixed Gear Sector																		
866	2010	GOM Cod	Large Mesh Gillnet	NCCS																		
867	2010	GOM Cod	Large Mesh Gillnet	NEFS 10	9	290	122	42.07	0.00	0.00	0.11	27	9.31	115026	696017	263817.90	1260.00	3324	130.80	317	63.20	137
868	2010	GOM Cod	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.08	45	4.68	764159	2958754	1078659.60	3331.00	9137	548.00	1201	215.50	445
869	2010	GOM Cod	Large Mesh Gillnet	NEFS 12																		
870	2010	GOM Cod	Large Mesh Gillnet	NEFS 13																		
871	2010	GOM Cod	Large Mesh Gillnet	NEFS 2																		
872	2010	GOM Cod	Large Mesh Gillnet	NEFS 3	35	1502	532	35.42	0.01	0.00	0.07	39	2.60	1394022	2829392	937022.30	5271.00	15916	527.70	1542	196.40	538
873	2010	GOM Cod	Large Mesh Gillnet	NEFS 5																		
874	2010	GOM Cod	Large Mesh Gillnet	NEFS 6																		
875	2010	GOM Cod	Large Mesh Gillnet	NEFS 7																		
876	2010	GOM Cod	Large Mesh Gillnet	NEFS 8																		
877	2010	GOM Cod	Large Mesh Gillnet	NEFS 9																		
878	2010	GOM Cod	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.12	26	7.28	258003	982739	310534.60	904.00	2861	194.60	408	63.30	127
879	2010	GOM Cod	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	99	42	42.42	0.00	0.00	0.12	11	11.11	146272	947670	433636.10	1033.00	2258	296.60	346	158.30	181
880	2010	GOM Cod	Large Mesh Gillnet	Tri-State Sector																		
881	2010	GOM Cod	Ruhle Trawl	Fixed Gear Sector																		
882	2010	GOM Cod	Ruhle Trawl	NCCS																		
883	2010	GOM Cod	Ruhle Trawl	NEFS 10																		
884	2010	GOM Cod	Ruhle Trawl	NEFS 11																		
885	2010	GOM Cod	Ruhle Trawl	NEFS 12																		
886	2010	GOM Cod	Ruhle Trawl	NEFS 13																		
887	2010	GOM Cod	Ruhle Trawl	NEFS 2																		
888	2010	GOM Cod	Ruhle Trawl	NEFS 3																		
889	2010	GOM Cod	Ruhle Trawl	NEFS 5																		
890	2010	GOM Cod	Ruhle Trawl	NEFS 6																		
891	2010	GOM Cod	Ruhle Trawl	NEFS 7																		
892	2010	GOM Cod	Ruhle Trawl	NEFS 8																		
893	2010	GOM Cod	Ruhle Trawl	NEFS 9																		
894	2010	GOM Cod	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
895	2010	GOM Cod	Ruhle Trawl	Sustainable Harvest Sector 1																		
896	2010	GOM Cod	Ruhle Trawl	Tri-State Sector																		
897	2010	GOM Haddock	Bottom Longline	Fixed Gear Sector	7	44	10	22.73	0.00	0.00	0.93	33	75.00	44517	156494	33945.50	2.00	9	32.50	54	6.10	10
898	2010	GOM Haddock	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.46	20	57.14	483	10907	1473.80	5.00	37	16.90	37	5.30	12
899	2010	GOM Haddock	Bottom Longline	NEFS 10	5	42	9	21.43	0.00	0.00	0.46	17	40.48	5109	72922	11484.20	7.00	44	17.40	43	4.30	9
900	2010	GOM Haddock	Bottom Longline	NEFS 11																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
901	2010	GOM Haddock	Bottom Longline	NEFS 12																		
902	2010	GOM Haddock	Bottom Longline	NEFS 13																		
903	2010	GOM Haddock	Bottom Longline	NEFS 2																		
904	2010	GOM Haddock	Bottom Longline	NEFS 3	6	111	36	32.43	0.00	0.00	0.30	37	33.33	57550	136422	43339.60	90.00	283	61.80	122	19.30	37
905	2010	GOM Haddock	Bottom Longline	NEFS 5																		
906	2010	GOM Haddock	Bottom Longline	NEFS 6																		
907	2010	GOM Haddock	Bottom Longline	NEFS 7																		
908	2010	GOM Haddock	Bottom Longline	NEFS 8																		
909	2010	GOM Haddock	Bottom Longline	NEFS 9																		
910	2010	GOM Haddock	Bottom Longline	Port Clyde Community Groundfish Sector																		
911	2010	GOM Haddock	Bottom Longline	Sustainable Harvest Sector 1																		
912	2010	GOM Haddock	Bottom Longline	Tri-State Sector																		
913	2010	GOM Haddock	Bottom Otter Trawl	Fixed Gear Sector																		
914	2010	GOM Haddock	Bottom Otter Trawl	NCCS																		
915	2010	GOM Haddock	Bottom Otter Trawl	NEFS 10	10	153	58	37.91	0.00	0.00	0.79	124	81.05	1087	357269	113016.00	1.00	3	66.60	158	23.30	58
916	2010	GOM Haddock	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.00	0.00	0.00	0	0.00	7931	134828	41008.80	0.00	0	25.70	55	8.40	18
917	2010	GOM Haddock	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.00	0	0.00	349	134601	45136.00	0.00	0	24.50	63	11.40	27
918	2010	GOM Haddock	Bottom Otter Trawl	NEFS 13																		
919	2010	GOM Haddock	Bottom Otter Trawl	NEFS 2	60	1403	474	33.78	0.00	0.00	0.18	215	15.32	303982	4793229	1447594.50	231.00	765	1232.10	2016	448.10	708
920	2010	GOM Haddock	Bottom Otter Trawl	NEFS 3																		
921	2010	GOM Haddock	Bottom Otter Trawl	NEFS 5																		
922	2010	GOM Haddock	Bottom Otter Trawl	NEFS 6	10	107	26	24.30	0.00	0.00	0.75	72	67.29	11867	1196059	322068.50	1.00	4	438.60	484	113.40	126
923	2010	GOM Haddock	Bottom Otter Trawl	NEFS 7																		
924	2010	GOM Haddock	Bottom Otter Trawl	NEFS 8	5	8	2	25.00	0.00	0.00	0.00	0	0.00	445	107678	9901.50	0.00	0	42.40	46	10.00	11
925	2010	GOM Haddock	Bottom Otter Trawl	NEFS 9	21	50	14	28.00	0.00	0.00	0.45	24	48.00	11295	1110661	301320.00	16.00	59	274.40	295	109.40	117
926	2010	GOM Haddock	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.78	100	80.65	4021	404917	133989.40	3.00	9	207.90	266	76.50	98
927	2010	GOM Haddock	Bottom Otter Trawl	Sustainable Harvest Sector 1	89	823	245	29.77	0.00	0.00	0.28	228	27.70	248870	12331734	3684233.20	495.00	1657	3060.90	3434	1148.60	1271
928	2010	GOM Haddock	Bottom Otter Trawl	Tri-State Sector																		
929	2010	GOM Haddock	Extra Large Mesh Gillnet	Fixed Gear Sector																		
930	2010	GOM Haddock	Extra Large Mesh Gillnet	NCCS																		
931	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 10	7	116	64	55.17	0.00	0.00	0.68	101	87.07	148	210623	78133.90	1.00	3	76.70	145	43.70	81
932	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 11	14	244	79	32.38	0.00	0.00	0.33	92	37.70	1526	715197	106301.60	58.00	390	109.40	260	46.00	92
933	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 12																		
934	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 13																		
935	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 2																		
936	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 3	28	588	199	33.84	0.00	0.00	0.30	199	33.84	2958	1934883	369820.70	58.00	303	270.20	640	80.60	202
937	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 5																		
938	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 6																		
939	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 7																		
940	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 8																		
941	2010	GOM Haddock	Extra Large Mesh Gillnet	NEFS 9																		
942	2010	GOM Haddock	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
943	2010	GOM Haddock	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	4	27	9	33.33	0.00	0.00	0.20	5	18.52	601	199524	15655.80	32.00	408	120.10	139	30.40	36
944	2010	GOM Haddock	Extra Large Mesh Gillnet	Tri-State Sector																		
945	2010	GOM Haddock	Haddock Otter Trawl	Fixed Gear Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
946	2010	GOM Haddock	Haddock Otter Trawl	NCCS																		
947	2010	GOM Haddock	Haddock Otter Trawl	NEFS 10																		
948	2010	GOM Haddock	Haddock Otter Trawl	NEFS 11																		
949	2010	GOM Haddock	Haddock Otter Trawl	NEFS 12																		
950	2010	GOM Haddock	Haddock Otter Trawl	NEFS 13																		
951	2010	GOM Haddock	Haddock Otter Trawl	NEFS 2																		
952	2010	GOM Haddock	Haddock Otter Trawl	NEFS 3																		
953	2010	GOM Haddock	Haddock Otter Trawl	NEFS 5																		
954	2010	GOM Haddock	Haddock Otter Trawl	NEFS 6																		
955	2010	GOM Haddock	Haddock Otter Trawl	NEFS 7																		
956	2010	GOM Haddock	Haddock Otter Trawl	NEFS 8																		
957	2010	GOM Haddock	Haddock Otter Trawl	NEFS 9																		
958	2010	GOM Haddock	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
959	2010	GOM Haddock	Haddock Otter Trawl	Sustainable Harvest Sector 1	4	21	21	100.00	0.00	0.00	0.00	0	0.00	3945	98357	152211.70	226.00	146	35.40	38	153.40	165
960	2010	GOM Haddock	Haddock Otter Trawl	Tri-State Sector																		
961	2010	GOM Haddock	Handline	Fixed Gear Sector	4	22	10	45.45	0.00	0.00	0.00	0	0.00	49	25611	11310.00	0.00	0	25.60	35	5.70	10
962	2010	GOM Haddock	Handline	NCCS																		
963	2010	GOM Haddock	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
964	2010	GOM Haddock	Handline	NEFS 11																		
965	2010	GOM Haddock	Handline	NEFS 12																		
966	2010	GOM Haddock	Handline	NEFS 13																		
967	2010	GOM Haddock	Handline	NEFS 2																		
968	2010	GOM Haddock	Handline	NEFS 3																		
969	2010	GOM Haddock	Handline	NEFS 5																		
970	2010	GOM Haddock	Handline	NEFS 6																		
971	2010	GOM Haddock	Handline	NEFS 7																		
972	2010	GOM Haddock	Handline	NEFS 8																		
973	2010	GOM Haddock	Handline	NEFS 9																		
974	2010	GOM Haddock	Handline	Port Clyde Community Groundfish Sector																		
975	2010	GOM Haddock	Handline	Sustainable Harvest Sector 1																		
976	2010	GOM Haddock	Handline	Tri-State Sector																		
977	2010	GOM Haddock	Large Mesh Gillnet	Fixed Gear Sector																		
978	2010	GOM Haddock	Large Mesh Gillnet	NCCS																		
979	2010	GOM Haddock	Large Mesh Gillnet	NEFS 10	9	290	122	42.07	0.00	0.00	0.48	188	64.83	1002	696017	263817.90	19.00	50	130.80	317	63.20	137
980	2010	GOM Haddock	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.19	191	19.85	8170	2958754	1078659.60	140.00	384	548.00	1201	215.50	445
981	2010	GOM Haddock	Large Mesh Gillnet	NEFS 12																		
982	2010	GOM Haddock	Large Mesh Gillnet	NEFS 13																		
983	2010	GOM Haddock	Large Mesh Gillnet	NEFS 2																		
984	2010	GOM Haddock	Large Mesh Gillnet	NEFS 3	35	1502	532	35.42	0.00	0.00	0.19	273	18.18	83216	2829392	937022.30	246.00	743	527.70	1542	196.40	538
985	2010	GOM Haddock	Large Mesh Gillnet	NEFS 5																		
986	2010	GOM Haddock	Large Mesh Gillnet	NEFS 6																		
987	2010	GOM Haddock	Large Mesh Gillnet	NEFS 7																		
988	2010	GOM Haddock	Large Mesh Gillnet	NEFS 8																		
989	2010	GOM Haddock	Large Mesh Gillnet	NEFS 9																		
990	2010	GOM Haddock	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.25	86	24.09	1751	982739	310534.60	46.00	146	194.60	408	63.30	127

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
991	2010	GOM Haddock	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	99	42	42.42	0.00	0.00	0.22	28	28.28	1721	947670	433636.10	128.00	280	296.60	346	158.30	181
992	2010	GOM Haddock	Large Mesh Gillnet	Tri-State Sector																		
993	2010	GOM Haddock	Ruhle Trawl	Fixed Gear Sector																		
994	2010	GOM Haddock	Ruhle Trawl	NCCS																		
995	2010	GOM Haddock	Ruhle Trawl	NEFS 10																		
996	2010	GOM Haddock	Ruhle Trawl	NEFS 11																		
997	2010	GOM Haddock	Ruhle Trawl	NEFS 12																		
998	2010	GOM Haddock	Ruhle Trawl	NEFS 13																		
999	2010	GOM Haddock	Ruhle Trawl	NEFS 2																		
1000	2010	GOM Haddock	Ruhle Trawl	NEFS 3																		
1001	2010	GOM Haddock	Ruhle Trawl	NEFS 5																		
1002	2010	GOM Haddock	Ruhle Trawl	NEFS 6																		
1003	2010	GOM Haddock	Ruhle Trawl	NEFS 7																		
1004	2010	GOM Haddock	Ruhle Trawl	NEFS 8																		
1005	2010	GOM Haddock	Ruhle Trawl	NEFS 9																		
1006	2010	GOM Haddock	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
1007	2010	GOM Haddock	Ruhle Trawl	Sustainable Harvest Sector 1																		
1008	2010	GOM Haddock	Ruhle Trawl	Tri-State Sector																		
1009	2010	GOM Winter Flounder	Bottom Longline	Fixed Gear Sector	7	44	10	22.73	0.00	0.00	0.00	0	0.00	0	156494	33945.50	0.00	0	32.50	54	6.10	10
1010	2010	GOM Winter Flounder	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.00	0	0.00	0	10907	1473.80	0.00	0	16.90	37	5.30	12
1011	2010	GOM Winter Flounder	Bottom Longline	NEFS 10	5	42	9	21.43	0.00	0.00	0.00	0	0.00	3	72922	11484.20	0.00	0	17.40	43	4.30	9
1012	2010	GOM Winter Flounder	Bottom Longline	NEFS 11																		
1013	2010	GOM Winter Flounder	Bottom Longline	NEFS 12																		
1014	2010	GOM Winter Flounder	Bottom Longline	NEFS 13																		
1015	2010	GOM Winter Flounder	Bottom Longline	NEFS 2																		
1016	2010	GOM Winter Flounder	Bottom Longline	NEFS 3	6	111	36	32.43	0.00	0.00	0.00	0	0.00	1	136422	43339.60	0.00	0	61.80	122	19.30	37
1017	2010	GOM Winter Flounder	Bottom Longline	NEFS 5																		
1018	2010	GOM Winter Flounder	Bottom Longline	NEFS 6																		
1019	2010	GOM Winter Flounder	Bottom Longline	NEFS 7																		
1020	2010	GOM Winter Flounder	Bottom Longline	NEFS 8																		
1021	2010	GOM Winter Flounder	Bottom Longline	NEFS 9																		
1022	2010	GOM Winter Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
1023	2010	GOM Winter Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
1024	2010	GOM Winter Flounder	Bottom Longline	Tri-State Sector																		
1025	2010	GOM Winter Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
1026	2010	GOM Winter Flounder	Bottom Otter Trawl	NCCS																		
1027	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 10	10	153	58	37.91	0.00	0.00	0.22	38	24.84	27723	357269	113016.00	108.00	341	66.60	158	23.30	58
1028	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.00	0.00	0.92	42	80.77	766	134828	41008.80	2.00	7	25.70	55	8.40	18
1029	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.38	35	58.33	2557	134601	45136.00	10.00	30	24.50	63	11.40	27
1030	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 13																		
1031	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 2	60	1403	474	33.78	0.00	0.00	0.17	191	13.61	67473	4793229	1447594.50	595.00	1970	1232.10	2016	448.10	708
1032	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 3																		
1033	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 5																		
1034	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 6	10	107	26	24.30	0.00	0.00	0.65	65	60.75	10607	1196059	322068.50	31.50	117	438.60	484	113.40	126
1035	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 7																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1036	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 8	5	8	2	25.00	0.00	0.00	0.00	0	0.00	6	107678	9901.50	0.00	0	42.40	46	10.00	11
1037	2010	GOM Winter Flounder	Bottom Otter Trawl	NEFS 9	21	50	14	28.00	0.00	0.00	0.88	39	78.00	17	1110661	301320.00	1.50	6	274.40	295	109.40	117
1038	2010	GOM Winter Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.77	99	79.84	269	404917	133989.40	20.00	60	207.90	266	76.50	98
1039	2010	GOM Winter Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	89	823	245	29.77	0.00	0.00	0.28	222	26.97	6216	12331734	3684233.20	78.00	261	3060.90	3434	1148.60	1271
1040	2010	GOM Winter Flounder	Bottom Otter Trawl	Tri-State Sector																		
1041	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector																		
1042	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NCCS																		
1043	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 10	7	116	64	55.17	0.00	0.00	0.00	0	0.00	168	210623	78133.90	0.00	0	76.70	145	43.70	81
1044	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 11	14	244	79	32.38	0.00	0.00	0.00	0	0.00	488	715197	106301.60	0.00	0	109.40	260	46.00	92
1045	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 12																		
1046	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 13																		
1047	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 2																		
1048	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 3	28	588	199	33.84	0.00	0.00	0.52	359	61.05	5275	1934883	369820.70	8.50	44	270.20	640	80.60	202
1049	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 5																		
1050	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 6																		
1051	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 7																		
1052	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 8																		
1053	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 9																		
1054	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1055	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	4	27	9	33.33	0.00	0.00	0.00	0	0.00	175	199524	15655.80	0.00	0	120.10	139	30.40	36
1056	2010	GOM Winter Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
1057	2010	GOM Winter Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
1058	2010	GOM Winter Flounder	Haddock Otter Trawl	NCCS																		
1059	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 10																		
1060	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 11																		
1061	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 12																		
1062	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 13																		
1063	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 2																		
1064	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 3																		
1065	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 5																		
1066	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 6																		
1067	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 7																		
1068	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 8																		
1069	2010	GOM Winter Flounder	Haddock Otter Trawl	NEFS 9																		
1070	2010	GOM Winter Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
1071	2010	GOM Winter Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	4	21	21	100.00	0.00	0.00	0.00	0	0.00	15	98357	152211.70	0.00	0	35.40	38	153.40	165
1072	2010	GOM Winter Flounder	Haddock Otter Trawl	Tri-State Sector																		
1073	2010	GOM Winter Flounder	Handline	Fixed Gear Sector	4	22	10	45.45	0.00	0.00	0.00	0	0.00	0	25611	11310.00	0.00	0	25.60	35	5.70	10
1074	2010	GOM Winter Flounder	Handline	NCCS																		
1075	2010	GOM Winter Flounder	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
1076	2010	GOM Winter Flounder	Handline	NEFS 11																		
1077	2010	GOM Winter Flounder	Handline	NEFS 12																		
1078	2010	GOM Winter Flounder	Handline	NEFS 13																		
1079	2010	GOM Winter Flounder	Handline	NEFS 2																		
1080	2010	GOM Winter Flounder	Handline	NEFS 3																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1081	2010	GOM Winter Flounder	Handline	NEFS 5																		
1082	2010	GOM Winter Flounder	Handline	NEFS 6																		
1083	2010	GOM Winter Flounder	Handline	NEFS 7																		
1084	2010	GOM Winter Flounder	Handline	NEFS 8																		
1085	2010	GOM Winter Flounder	Handline	NEFS 9																		
1086	2010	GOM Winter Flounder	Handline	Port Clyde Community Groundfish Sector																		
1087	2010	GOM Winter Flounder	Handline	Sustainable Harvest Sector 1																		
1088	2010	GOM Winter Flounder	Handline	Tri-State Sector																		
1089	2010	GOM Winter Flounder	Large Mesh Gillnet	Fixed Gear Sector																		
1090	2010	GOM Winter Flounder	Large Mesh Gillnet	NCCS																		
1091	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 10	9	290	122	42.07	0.00	0.00	0.16	51	17.59	15514	696017	263817.90	25.00	66	130.80	317	63.20	137
1092	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.25	300	31.19	1349	2958754	1078659.60	45.00	123	548.00	1201	215.50	445
1093	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 12																		
1094	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 13																		
1095	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 2																		
1096	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 3	35	1502	532	35.42	0.00	0.00	0.14	163	10.85	28700	2829392	937022.30	109.50	331	527.70	1542	196.40	538
1097	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 5																		
1098	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 6																		
1099	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 7																		
1100	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 8																		
1101	2010	GOM Winter Flounder	Large Mesh Gillnet	NEFS 9																		
1102	2010	GOM Winter Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.48	195	54.62	107	982739	310534.60	1.50	5	194.60	408	63.30	127
1103	2010	GOM Winter Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	99	42	42.42	0.00	0.00	0.78	83	83.84	207	947670	433636.10	0.50	1	296.60	346	158.30	181
1104	2010	GOM Winter Flounder	Large Mesh Gillnet	Tri-State Sector																		
1105	2010	GOM Winter Flounder	Ruhle Trawl	Fixed Gear Sector																		
1106	2010	GOM Winter Flounder	Ruhle Trawl	NCCS																		
1107	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 10																		
1108	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 11																		
1109	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 12																		
1110	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 13																		
1111	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 2																		
1112	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 3																		
1113	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 5																		
1114	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 6																		
1115	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 7																		
1116	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 8																		
1117	2010	GOM Winter Flounder	Ruhle Trawl	NEFS 9																		
1118	2010	GOM Winter Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
1119	2010	GOM Winter Flounder	Ruhle Trawl	Sustainable Harvest Sector 1																		
1120	2010	GOM Winter Flounder	Ruhle Trawl	Tri-State Sector																		
1121	2010	Halibut	Bottom Longline	Fixed Gear Sector	30	324	128	39.51	0.00	0.00	0.38	168	51.85	121	1393725	490950.90	92.00	261	279.00	455	101.10	172
1122	2010	Halibut	Bottom Longline	NCCS	3	35	12	34.29	0.22	0.01	0.51	21	60.00	270	10907	1473.80	318.00	2353	16.90	37	5.30	12
1123	2010	Halibut	Bottom Longline	NEFS 10	6	43	9	20.93	0.00	0.00	0.00	0	0.00	0	75215	13484.20	0.00	0	17.40	43	4.30	9
1124	2010	Halibut	Bottom Longline	NEFS 11																		
1125	2010	Halibut	Bottom Longline	NEFS 12																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1126	2010	Halibut	Bottom Longline	NEFS 13																		
1127	2010	Halibut	Bottom Longline	NEFS 2																		
1128	2010	Halibut	Bottom Longline	NEFS 3	7	112	36	32.14	0.00	0.00	0.00	0	0.00	0	138385	43339.60	0.00	0	62.20	123	19.30	37
1129	2010	Halibut	Bottom Longline	NEFS 5																		
1130	2010	Halibut	Bottom Longline	NEFS 6																		
1131	2010	Halibut	Bottom Longline	NEFS 7																		
1132	2010	Halibut	Bottom Longline	NEFS 8																		
1133	2010	Halibut	Bottom Longline	NEFS 9																		
1134	2010	Halibut	Bottom Longline	Port Clyde Community Groundfish Sector																		
1135	2010	Halibut	Bottom Longline	Sustainable Harvest Sector 1																		
1136	2010	Halibut	Bottom Longline	Tri-State Sector																		
1137	2010	Halibut	Bottom Otter Trawl	Fixed Gear Sector																		
1138	2010	Halibut	Bottom Otter Trawl	NCCS																		
1139	2010	Halibut	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.00	0.00	0.24	67	27.35	98	606337	193252.90	183.00	574	117.30	254	41.50	92
1140	2010	Halibut	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.00	0.00	0.68	37	71.15	0	134828	41008.80	24.00	79	25.70	55	8.40	18
1141	2010	Halibut	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.74	50	83.33	0	134601	45136.00	3.00	9	24.50	63	11.40	27
1142	2010	Halibut	Bottom Otter Trawl	NEFS 13	77	356	77	21.63	0.00	0.00	0.29	72	20.22	655	4291264	799783.20	620.00	3327	978.70	1111	297.00	338
1143	2010	Halibut	Bottom Otter Trawl	NEFS 2	101	1660	494	29.76	0.00	0.00	0.11	85	5.12	764	9495473	2445375.50	1865.00	7242	1670.10	2499	531.10	801
1144	2010	Halibut	Bottom Otter Trawl	NEFS 3																		
1145	2010	Halibut	Bottom Otter Trawl	NEFS 5	79	607	230	37.89	0.00	0.00	0.51	390	64.25	167	6112202	2572383.00	20.00	48	737.80	1075	239.00	373
1146	2010	Halibut	Bottom Otter Trawl	NEFS 6	21	199	30	15.08	0.00	0.00	0.31	32	16.08	304	3234868	596262.50	237.00	1286	524.40	579	130.50	144
1147	2010	Halibut	Bottom Otter Trawl	NEFS 7	35	259	49	18.92	0.00	0.00	0.27	43	16.60	182	3036154	695869.20	224.00	977	807.00	893	263.30	289
1148	2010	Halibut	Bottom Otter Trawl	NEFS 8	52	220	38	17.27	0.00	0.00	0.43	66	30.00	467	3865554	680653.00	450.00	2556	910.60	981	229.30	246
1149	2010	Halibut	Bottom Otter Trawl	NEFS 9	97	556	82	14.75	0.00	0.00	0.20	41	7.37	1740	9464577	2054697.20	1261.00	5809	1876.30	2038	644.10	688
1150	2010	Halibut	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.21	27	21.77	553	404917	133989.40	652.00	1970	207.90	266	76.50	98
1151	2010	Halibut	Bottom Otter Trawl	Sustainable Harvest Sector 1	168	1305	279	21.38	0.00	0.00	0.12	53	4.06	4652	19303473	5099786.70	1717.00	6499	3747.70	4188	1321.00	1460
1152	2010	Halibut	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.42	11	57.89	0	594126	196414.20	51.00	154	108.20	118	47.10	52
1153	2010	Halibut	Extra Large Mesh Gillnet	Fixed Gear Sector	31	895	365	40.78	0.00	0.00	0.28	336	37.54	310	5890850	1978849.40	233.00	694	388.90	1043	168.70	425
1154	2010	Halibut	Extra Large Mesh Gillnet	NCCS																		
1155	2010	Halibut	Extra Large Mesh Gillnet	NEFS 10	12	135	68	50.37	0.00	0.00	0.37	82	60.74	56	307754	90669.40	30.00	102	106.40	187	48.30	88
1156	2010	Halibut	Extra Large Mesh Gillnet	NEFS 11	22	358	92	25.70	0.00	0.00	0.28	84	23.46	503	1132090	153346.80	433.00	3197	168.80	383	52.40	105
1157	2010	Halibut	Extra Large Mesh Gillnet	NEFS 12																		
1158	2010	Halibut	Extra Large Mesh Gillnet	NEFS 13																		
1159	2010	Halibut	Extra Large Mesh Gillnet	NEFS 2																		
1160	2010	Halibut	Extra Large Mesh Gillnet	NEFS 3	41	705	223	31.63	0.00	0.00	0.22	143	20.28	540	2750057	521244.90	256.00	1351	377.60	822	106.30	242
1161	2010	Halibut	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
1162	2010	Halibut	Extra Large Mesh Gillnet	NEFS 6																		
1163	2010	Halibut	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.62	72	55.38	0	1011612	325364.50	19.00	59	97.80	166	29.80	45
1164	2010	Halibut	Extra Large Mesh Gillnet	NEFS 8																		
1165	2010	Halibut	Extra Large Mesh Gillnet	NEFS 9																		
1166	2010	Halibut	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1167	2010	Halibut	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	7	48	12	25.00	0.00	0.00	0.55	26	54.17	85	303481	28197.00	44.00	474	144.40	177	32.60	40
1168	2010	Halibut	Extra Large Mesh Gillnet	Tri-State Sector																		
1169	2010	Halibut	Haddock Otter Trawl	Fixed Gear Sector																		
1170	2010	Halibut	Haddock Otter Trawl	NCCS																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1171	2010	Halibut	Haddock Otter Trawl	NEFS 10																		
1172	2010	Halibut	Haddock Otter Trawl	NEFS 11																		
1173	2010	Halibut	Haddock Otter Trawl	NEFS 12																		
1174	2010	Halibut	Haddock Otter Trawl	NEFS 13																		
1175	2010	Halibut	Haddock Otter Trawl	NEFS 2	26	69	16	23.19	0.00	0.00	0.38	23	33.33	240	1201398	484424.30	272.00	675	297.90	320	107.70	116
1176	2010	Halibut	Haddock Otter Trawl	NEFS 3																		
1177	2010	Halibut	Haddock Otter Trawl	NEFS 5																		
1178	2010	Halibut	Haddock Otter Trawl	NEFS 6																		
1179	2010	Halibut	Haddock Otter Trawl	NEFS 7	6	16	14	87.50	0.00	0.00	0.37	15	93.75	0	206865	166862.90	11.00	14	104.40	111	101.10	109
1180	2010	Halibut	Haddock Otter Trawl	NEFS 8	8	12	11	91.67	0.00	0.00	0.14	9	75.00	30	169627	99223.20	54.00	92	76.60	82	86.70	92
1181	2010	Halibut	Haddock Otter Trawl	NEFS 9	4	13	13	100.00	0.00	0.00	0.00	0	0.00	0	33023	159774.50	97.00	20	34.00	36	96.40	102
1182	2010	Halibut	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
1183	2010	Halibut	Haddock Otter Trawl	Sustainable Harvest Sector 1	47	250	61	24.40	0.00	0.00	0.27	51	20.40	489	5347121	1903251.10	479.00	1346	1022.70	1101	424.50	459
1184	2010	Halibut	Haddock Otter Trawl	Tri-State Sector																		
1185	2010	Halibut	Handline	Fixed Gear Sector	9	119	64	53.78	0.00	0.00	0.00	0	0.00	47	200676	44199.10	0.00	0	69.60	140	27.60	71
1186	2010	Halibut	Handline	NCCS																		
1187	2010	Halibut	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
1188	2010	Halibut	Handline	NEFS 11																		
1189	2010	Halibut	Handline	NEFS 12																		
1190	2010	Halibut	Handline	NEFS 13																		
1191	2010	Halibut	Handline	NEFS 2																		
1192	2010	Halibut	Handline	NEFS 3																		
1193	2010	Halibut	Handline	NEFS 5																		
1194	2010	Halibut	Handline	NEFS 6																		
1195	2010	Halibut	Handline	NEFS 7																		
1196	2010	Halibut	Handline	NEFS 8																		
1197	2010	Halibut	Handline	NEFS 9																		
1198	2010	Halibut	Handline	Port Clyde Community Groundfish Sector																		
1199	2010	Halibut	Handline	Sustainable Harvest Sector 1																		
1200	2010	Halibut	Handline	Tri-State Sector																		
1201	2010	Halibut	Large Mesh Gillnet	Fixed Gear Sector	19	689	260	37.74	0.00	0.00	0.32	286	41.51	96	2345972	574862.40	56.00	229	275.70	705	111.30	265
1202	2010	Halibut	Large Mesh Gillnet	NCCS																		
1203	2010	Halibut	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.00	0.00	0.26	104	35.14	52	719986	276616.50	93.00	242	139.10	327	66.50	142
1204	2010	Halibut	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.19	201	20.89	156	2958754	1078659.60	291.00	798	548.00	1201	215.50	445
1205	2010	Halibut	Large Mesh Gillnet	NEFS 12																		
1206	2010	Halibut	Large Mesh Gillnet	NEFS 13																		
1207	2010	Halibut	Large Mesh Gillnet	NEFS 2																		
1208	2010	Halibut	Large Mesh Gillnet	NEFS 3	39	1510	533	35.30	0.00	0.00	0.17	223	14.77	63	2866998	938140.10	154.00	471	532.60	1551	197.50	540
1209	2010	Halibut	Large Mesh Gillnet	NEFS 5																		
1210	2010	Halibut	Large Mesh Gillnet	NEFS 6																		
1211	2010	Halibut	Large Mesh Gillnet	NEFS 7	5	20	5	25.00	0.00	0.00	0.00	0	0.00	0	88890	17558.50	0.00	0	36.40	43	7.20	8
1212	2010	Halibut	Large Mesh Gillnet	NEFS 8																		
1213	2010	Halibut	Large Mesh Gillnet	NEFS 9																		
1214	2010	Halibut	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.37	149	41.74	417	982739	310534.60	278.00	880	194.60	408	63.30	127
1215	2010	Halibut	Large Mesh Gillnet	Sustainable Harvest Sector 1	12	103	43	41.75	0.00	0.00	0.32	46	44.66	140	995791	458826.20	260.00	564	310.70	362	165.60	189

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1216	2010	Halibut	Large Mesh Gillnet	Tri-State Sector																		
1217	2010	Halibut	Ruhle Trawl	Fixed Gear Sector																		
1218	2010	Halibut	Ruhle Trawl	NCCS																		
1219	2010	Halibut	Ruhle Trawl	NEFS 10																		
1220	2010	Halibut	Ruhle Trawl	NEFS 11																		
1221	2010	Halibut	Ruhle Trawl	NEFS 12																		
1222	2010	Halibut	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	0	287947	302196.30	35.00	33	46.70	49	104.30	110
1223	2010	Halibut	Ruhle Trawl	NEFS 2																		
1224	2010	Halibut	Ruhle Trawl	NEFS 3																		
1225	2010	Halibut	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					46	118993	2033.00	0.00	0	63.10	68	2.50	3
1226	2010	Halibut	Ruhle Trawl	NEFS 6																		
1227	2010	Halibut	Ruhle Trawl	NEFS 7																		
1228	2010	Halibut	Ruhle Trawl	NEFS 8																		
1229	2010	Halibut	Ruhle Trawl	NEFS 9																		
1230	2010	Halibut	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
1231	2010	Halibut	Ruhle Trawl	Sustainable Harvest Sector 1	6	7	7	100.00	0.00	0.00	0.00	0	0.00	18	186905	98823.40	4.00	8	36.00	38	45.00	49
1232	2010	Halibut	Ruhle Trawl	Tri-State Sector																		
1233	2010	Northern Windowpane	Bottom Longline	Fixed Gear Sector	29	323	128	39.63	0.00	0.00	0.00	0	0.00	24	1392420	490950.90	0.00	0	278.40	454	101.10	172
1234	2010	Northern Windowpane	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.00	0	0.00	0	10907	1473.80	0.00	0	16.90	37	5.30	12
1235	2010	Northern Windowpane	Bottom Longline	NEFS 10	6	43	9	20.93	0.00	0.00	0.00	0	0.00	0	75215	13484.20	0.00	0	17.40	43	4.30	9
1236	2010	Northern Windowpane	Bottom Longline	NEFS 11																		
1237	2010	Northern Windowpane	Bottom Longline	NEFS 12																		
1238	2010	Northern Windowpane	Bottom Longline	NEFS 13																		
1239	2010	Northern Windowpane	Bottom Longline	NEFS 2																		
1240	2010	Northern Windowpane	Bottom Longline	NEFS 3	6	111	36	32.43	0.00	0.00	0.00	0	0.00	0	136422	43339.60	0.00	0	61.80	122	19.30	37
1241	2010	Northern Windowpane	Bottom Longline	NEFS 5																		
1242	2010	Northern Windowpane	Bottom Longline	NEFS 6																		
1243	2010	Northern Windowpane	Bottom Longline	NEFS 7																		
1244	2010	Northern Windowpane	Bottom Longline	NEFS 8																		
1245	2010	Northern Windowpane	Bottom Longline	NEFS 9																		
1246	2010	Northern Windowpane	Bottom Longline	Port Clyde Community Groundfish Sector																		
1247	2010	Northern Windowpane	Bottom Longline	Sustainable Harvest Sector 1																		
1248	2010	Northern Windowpane	Bottom Longline	Tri-State Sector																		
1249	2010	Northern Windowpane	Bottom Otter Trawl	Fixed Gear Sector																		
1250	2010	Northern Windowpane	Bottom Otter Trawl	NCCS																		
1251	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.01	0.00	0.18	45	18.37	12	606337	193252.90	1640.00	5146	117.30	254	41.50	92
1252	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.00	0.00	0.72	38	73.08	0	134828	41008.80	15.00	49	25.70	55	8.40	18
1253	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.29	27	45.00	0	134601	45136.00	55.00	164	24.50	63	11.40	27
1254	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 13	48	222	40	18.02	0.01	0.00	0.37	57	25.68	0	3430369	584752.90	8750.00	51331	777.70	844	242.10	263
1255	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 2	101	1660	494	29.76	0.00	0.00	0.10	80	4.82	30	9495473	2445375.50	6279.00	24382	1670.10	2499	531.10	801
1256	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 3																		
1257	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 5	26	51	12	23.53	0.02	0.00	0.51	24	47.06	400	921266	268804.20	5199.00	17818	273.70	295	79.20	85
1258	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 6	19	197	29	14.72	0.00	0.00	0.41	49	24.87	0	3222546	589997.20	166.00	907	521.90	576	127.80	141
1259	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 7	27	220	36	16.36	0.01	0.00	0.17	13	5.91	0	2714407	611874.50	6983.00	30978	732.40	795	239.30	258
1260	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 8	40	199	35	17.59	0.01	0.00	0.14	10	5.03	47	3708601	657009.50	5774.00	32592	882.30	945	223.00	238

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1261	2010	Northern Windowpane	Bottom Otter Trawl	NEFS 9	84	535	82	15.33	0.02	0.00	0.26	65	12.15	0	9228662	2053994.20	33217.00	149245	1849.80	2006	644.10	688
1262	2010	Northern Windowpane	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.78	100	80.65	0	404917	133989.40	73.00	221	207.90	266	76.50	98
1263	2010	Northern Windowpane	Bottom Otter Trawl	Sustainable Harvest Sector 1	162	1276	271	21.24	0.00	0.00	0.23	170	13.32	0	19122008	5060952.50	1396.00	5275	3708.40	4138	1309.40	1445
1264	2010	Northern Windowpane	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.01	0.00	0.35	9	47.37	0	594126	196414.20	1095.00	3312	108.20	118	47.10	52
1265	2010	Northern Windowpane	Extra Large Mesh Gillnet	Fixed Gear Sector	19	735	308	41.90	0.00	0.00	0.53	508	69.12	0	4820633	1645728.90	9.00	26	211.50	751	99.10	313
1266	2010	Northern Windowpane	Extra Large Mesh Gillnet	NCCS																		
1267	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 10	9	120	65	54.17	0.00	0.00	0.68	104	86.67	0	221531	79709.50	1.00	3	83.60	154	44.30	82
1268	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 11	14	244	79	32.38	0.00	0.00	0.00	0	0.00	0	715197	106301.60	0.00	0	109.40	260	46.00	92
1269	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 12																		
1270	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 13																		
1271	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 2																		
1272	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 3	30	590	201	34.07	0.00	0.00	0.43	305	51.69	0	1937098	372213.80	13.00	68	271.70	642	82.10	204
1273	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 5																		
1274	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 6																		
1275	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 7																		
1276	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 8																		
1277	2010	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 9																		
1278	2010	Northern Windowpane	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1279	2010	Northern Windowpane	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	5	28	9	32.14	0.00	0.00	0.92	23	82.14	0	220431	15655.80	1.00	14	127.40	147	30.40	36
1280	2010	Northern Windowpane	Extra Large Mesh Gillnet	Tri-State Sector																		
1281	2010	Northern Windowpane	Haddock Otter Trawl	Fixed Gear Sector																		
1282	2010	Northern Windowpane	Haddock Otter Trawl	NCCS																		
1283	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 10																		
1284	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 11																		
1285	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 12																		
1286	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 13																		
1287	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 2	26	69	16	23.19	0.00	0.00	0.73	45	65.22	0	1201398	484424.30	675.00	1674	297.90	320	107.70	116
1288	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 3																		
1289	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 5																		
1290	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 6																		
1291	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 7	5	15	14	93.33	0.01	0.00	0.11	11	73.33	0	206062	166862.90	2174.00	2685	102.50	109	101.10	109
1292	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 8	7	11	11	100.00	0.01	0.00	0.00	0	0.00	23	168449	99065.20	1106.00	1881	75.10	80	86.70	92
1293	2010	Northern Windowpane	Haddock Otter Trawl	NEFS 9	4	13	13	100.00	0.00	0.00	0.00	0	0.00	0	33023	159774.50	444.00	92	34.00	36	96.40	102
1294	2010	Northern Windowpane	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
1295	2010	Northern Windowpane	Haddock Otter Trawl	Sustainable Harvest Sector 1	43	243	61	25.10	0.00	0.00	0.26	50	20.58	0	5209911	1892396.10	4626.00	12736	1010.80	1086	424.50	459
1296	2010	Northern Windowpane	Haddock Otter Trawl	Tri-State Sector																		
1297	2010	Northern Windowpane	Handline	Fixed Gear Sector	8	118	64	54.24	0.00	0.00	0.00	0	0.00	0	199851	43872.60	0.00	0	69.30	139	27.60	71
1298	2010	Northern Windowpane	Handline	NCCS																		
1299	2010	Northern Windowpane	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
1300	2010	Northern Windowpane	Handline	NEFS 11																		
1301	2010	Northern Windowpane	Handline	NEFS 12																		
1302	2010	Northern Windowpane	Handline	NEFS 13																		
1303	2010	Northern Windowpane	Handline	NEFS 2																		
1304	2010	Northern Windowpane	Handline	NEFS 3																		
1305	2010	Northern Windowpane	Handline	NEFS 5																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1306	2010	Northern Windowpane	Handline	NEFS 6																		
1307	2010	Northern Windowpane	Handline	NEFS 7																		
1308	2010	Northern Windowpane	Handline	NEFS 8																		
1309	2010	Northern Windowpane	Handline	NEFS 9																		
1310	2010	Northern Windowpane	Handline	Port Clyde Community Groundfish Sector																		
1311	2010	Northern Windowpane	Handline	Sustainable Harvest Sector 1																		
1312	2010	Northern Windowpane	Handline	Tri-State Sector																		
1313	2010	Northern Windowpane	Large Mesh Gillnet	Fixed Gear Sector	18	688	260	37.79	0.00	0.00	0.33	294	42.73	0	2343386	574862.40	189.00	770	274.60	703	111.30	265
1314	2010	Northern Windowpane	Large Mesh Gillnet	NCCS																		
1315	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.00	0.00	0.19	67	22.64	0	719986	276616.50	153.00	398	139.10	327	66.50	142
1316	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.58	679	70.58	0	2958754	1078659.60	3.00	8	548.00	1201	215.50	445
1317	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 12																		
1318	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 13																		
1319	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 2																		
1320	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 3	36	1505	532	35.35	0.00	0.00	0.12	122	8.11	30	2841537	937580.10	216.00	655	529.10	1544	196.40	538
1321	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 5																		
1322	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 6																		
1323	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 7	3	8	2	25.00	0.00	0.00	1.56	8	100.00	0	50202	10327.50	18.00	87	27.90	31	4.80	5
1324	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 8																		
1325	2010	Northern Windowpane	Large Mesh Gillnet	NEFS 9																		
1326	2010	Northern Windowpane	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.83	279	78.15	61	982739	310534.60	1.00	3	194.60	408	63.30	127
1327	2010	Northern Windowpane	Large Mesh Gillnet	Sustainable Harvest Sector 1	11	102	43	42.16	0.00	0.00	0.00	0	0.00	0	993196	458826.20	0.00	0	309.70	360	165.60	189
1328	2010	Northern Windowpane	Large Mesh Gillnet	Tri-State Sector																		
1329	2010	Northern Windowpane	Ruhle Trawl	Fixed Gear Sector																		
1330	2010	Northern Windowpane	Ruhle Trawl	NCCS																		
1331	2010	Northern Windowpane	Ruhle Trawl	NEFS 10																		
1332	2010	Northern Windowpane	Ruhle Trawl	NEFS 11																		
1333	2010	Northern Windowpane	Ruhle Trawl	NEFS 12																		
1334	2010	Northern Windowpane	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	0	287947	302159.80	837.00	798	46.70	49	104.30	110
1335	2010	Northern Windowpane	Ruhle Trawl	NEFS 2																		
1336	2010	Northern Windowpane	Ruhle Trawl	NEFS 3																		
1337	2010	Northern Windowpane	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					0	118993	2033.00	3.00	176	63.10	68	2.50	3
1338	2010	Northern Windowpane	Ruhle Trawl	NEFS 6																		
1339	2010	Northern Windowpane	Ruhle Trawl	NEFS 7																		
1340	2010	Northern Windowpane	Ruhle Trawl	NEFS 8																		
1341	2010	Northern Windowpane	Ruhle Trawl	NEFS 9																		
1342	2010	Northern Windowpane	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
1343	2010	Northern Windowpane	Ruhle Trawl	Sustainable Harvest Sector 1	6	7	7	100.00	0.00	0.00	0.00	0	0.00	0	186905	98823.40	15.00	28	36.00	38	45.00	49
1344	2010	Northern Windowpane	Ruhle Trawl	Tri-State Sector																		
1345	2010	Ocean Pout	Bottom Longline	Fixed Gear Sector	30	324	128	39.51	0.00	0.00	0.26	107	33.02	50	1393725	490950.90	877.00	2490	279.00	455	101.10	172
1346	2010	Ocean Pout	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.00	0	0.00	0	10907	1473.80	0.00	0	16.90	37	5.30	12
1347	2010	Ocean Pout	Bottom Longline	NEFS 10	6	43	9	20.93	0.01	0.00	0.53	20	46.51	0	75215	13484.20	201.00	1121	17.40	43	4.30	9
1348	2010	Ocean Pout	Bottom Longline	NEFS 11																		
1349	2010	Ocean Pout	Bottom Longline	NEFS 12																		
1350	2010	Ocean Pout	Bottom Longline	NEFS 13																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1351	2010	Ocean Pout	Bottom Longline	NEFS 2																		
1352	2010	Ocean Pout	Bottom Longline	NEFS 3	7	112	36	32.14	0.00	0.00	0.36	46	41.07	0	138385	43339.60	132.00	421	62.20	123	19.30	37
1353	2010	Ocean Pout	Bottom Longline	NEFS 5																		
1354	2010	Ocean Pout	Bottom Longline	NEFS 6																		
1355	2010	Ocean Pout	Bottom Longline	NEFS 7																		
1356	2010	Ocean Pout	Bottom Longline	NEFS 8																		
1357	2010	Ocean Pout	Bottom Longline	NEFS 9																		
1358	2010	Ocean Pout	Bottom Longline	Port Clyde Community Groundfish Sector																		
1359	2010	Ocean Pout	Bottom Longline	Sustainable Harvest Sector 1																		
1360	2010	Ocean Pout	Bottom Longline	Tri-State Sector																		
1361	2010	Ocean Pout	Bottom Otter Trawl	Fixed Gear Sector																		
1362	2010	Ocean Pout	Bottom Otter Trawl	NCCS																		
1363	2010	Ocean Pout	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.00	0.00	0.17	41	16.73	0	606337	193252.90	513.00	1610	117.30	254	41.50	92
1364	2010	Ocean Pout	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.00	0.00	0.88	42	80.77	0	134828	41008.80	2.00	7	25.70	55	8.40	18
1365	2010	Ocean Pout	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.75	51	85.00	0	134601	45136.00	1.00	3	24.50	63	11.40	27
1366	2010	Ocean Pout	Bottom Otter Trawl	NEFS 13	77	356	77	21.63	0.00	0.00	0.36	102	28.65	0	4291264	799783.20	3724.00	19981	978.70	1111	297.00	338
1367	2010	Ocean Pout	Bottom Otter Trawl	NEFS 2	101	1660	494	29.76	0.00	0.00	0.13	118	7.11	0	9495473	2445375.50	914.00	3549	1670.10	2499	531.10	801
1368	2010	Ocean Pout	Bottom Otter Trawl	NEFS 3																		
1369	2010	Ocean Pout	Bottom Otter Trawl	NEFS 5	79	607	230	37.89	0.00	0.00	0.24	171	28.17	0	6112202	2572383.00	5748.00	13658	737.80	1075	239.00	373
1370	2010	Ocean Pout	Bottom Otter Trawl	NEFS 6	21	199	30	15.08	0.00	0.00	0.65	91	45.73	0	3234868	596262.50	1245.00	6754	524.40	579	130.50	144
1371	2010	Ocean Pout	Bottom Otter Trawl	NEFS 7	35	259	49	18.92	0.00	0.00	0.33	58	22.39	60	3036154	695869.20	2384.00	10402	807.00	893	263.30	289
1372	2010	Ocean Pout	Bottom Otter Trawl	NEFS 8	52	220	38	17.27	0.01	0.00	0.20	19	8.64	0	3865554	680653.00	3488.00	19809	910.60	981	229.30	246
1373	2010	Ocean Pout	Bottom Otter Trawl	NEFS 9	97	556	82	14.75	0.00	0.00	0.16	28	5.04	0	9464577	2054697.20	7039.00	32424	1876.30	2038	644.10	688
1374	2010	Ocean Pout	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.78	100	80.65	0	404917	133989.40	6.00	18	207.90	266	76.50	98
1375	2010	Ocean Pout	Bottom Otter Trawl	Sustainable Harvest Sector 1	168	1305	279	21.38	0.00	0.00	0.19	133	10.19	0	19288422	5099786.70	1208.00	4569	3747.70	4188	1321.00	1460
1376	2010	Ocean Pout	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.27	7	36.84	0	594126	196414.20	428.00	1295	108.20	118	47.10	52
1377	2010	Ocean Pout	Extra Large Mesh Gillnet	Fixed Gear Sector	31	895	365	40.78	0.00	0.00	0.77	734	82.01	0	5890850	1978849.40	2.00	6	388.90	1043	168.70	425
1378	2010	Ocean Pout	Extra Large Mesh Gillnet	NCCS																		
1379	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 10	12	135	68	50.37	0.00	0.00	0.00	0	0.00	0	307754	90669.40	0.00	0	106.40	187	48.30	88
1380	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 11	22	358	92	25.70	0.00	0.00	0.00	0	0.00	0	1132090	153346.80	0.00	0	168.80	383	52.40	105
1381	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 12																		
1382	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 13																		
1383	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 2																		
1384	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 3	41	705	223	31.63	0.00	0.00	0.45	363	51.49	0	2750057	521244.90	17.00	90	377.60	822	106.30	242
1385	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
1386	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 6																		
1387	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.00	0	0.00	0	1011612	325364.50	0.00	0	97.80	166	29.80	45
1388	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 8																		
1389	2010	Ocean Pout	Extra Large Mesh Gillnet	NEFS 9																		
1390	2010	Ocean Pout	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1391	2010	Ocean Pout	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	7	48	12	25.00	0.00	0.00	0.00	0	0.00	0	303481	28197.00	0.00	0	144.40	177	32.60	40
1392	2010	Ocean Pout	Extra Large Mesh Gillnet	Tri-State Sector																		
1393	2010	Ocean Pout	Haddock Otter Trawl	Fixed Gear Sector																		
1394	2010	Ocean Pout	Haddock Otter Trawl	NCCS																		
1395	2010	Ocean Pout	Haddock Otter Trawl	NEFS 10																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1396	2010	Ocean Pout	Haddock Otter Trawl	NEFS 11																		
1397	2010	Ocean Pout	Haddock Otter Trawl	NEFS 12																		
1398	2010	Ocean Pout	Haddock Otter Trawl	NEFS 13																		
1399	2010	Ocean Pout	Haddock Otter Trawl	NEFS 2	26	69	16	23.19	0.00	0.00	0.51	33	47.83	0	1201398	484424.30	196.00	486	297.90	320	107.70	116
1400	2010	Ocean Pout	Haddock Otter Trawl	NEFS 3																		
1401	2010	Ocean Pout	Haddock Otter Trawl	NEFS 5																		
1402	2010	Ocean Pout	Haddock Otter Trawl	NEFS 6																		
1403	2010	Ocean Pout	Haddock Otter Trawl	NEFS 7	6	16	14	87.50	0.00	0.00	0.13	9	56.25	0	206865	166862.90	157.00	195	104.40	111	101.10	109
1404	2010	Ocean Pout	Haddock Otter Trawl	NEFS 8	8	12	11	91.67	0.01	0.00	0.22	11	91.67	0	169627	99223.20	1065.00	1821	76.60	82	86.70	92
1405	2010	Ocean Pout	Haddock Otter Trawl	NEFS 9	4	13	13	100.00	0.00	0.00	0.00	0	0.00	0	33023	159774.50	401.00	83	34.00	36	96.40	102
1406	2010	Ocean Pout	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
1407	2010	Ocean Pout	Haddock Otter Trawl	Sustainable Harvest Sector 1	47	250	61	24.40	0.00	0.00	0.67	154	61.60	0	5272460	1903251.10	1696.00	4698	1022.70	1101	424.50	459
1408	2010	Ocean Pout	Haddock Otter Trawl	Tri-State Sector																		
1409	2010	Ocean Pout	Handline	Fixed Gear Sector	9	119	64	53.78	0.00	0.00	0.00	0	0.00	0	200676	44199.10	0.00	0	69.60	140	27.60	71
1410	2010	Ocean Pout	Handline	NCCS																		
1411	2010	Ocean Pout	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
1412	2010	Ocean Pout	Handline	NEFS 11																		
1413	2010	Ocean Pout	Handline	NEFS 12																		
1414	2010	Ocean Pout	Handline	NEFS 13																		
1415	2010	Ocean Pout	Handline	NEFS 2																		
1416	2010	Ocean Pout	Handline	NEFS 3																		
1417	2010	Ocean Pout	Handline	NEFS 5																		
1418	2010	Ocean Pout	Handline	NEFS 6																		
1419	2010	Ocean Pout	Handline	NEFS 7																		
1420	2010	Ocean Pout	Handline	NEFS 8																		
1421	2010	Ocean Pout	Handline	NEFS 9																		
1422	2010	Ocean Pout	Handline	Port Clyde Community Groundfish Sector																		
1423	2010	Ocean Pout	Handline	Sustainable Harvest Sector 1																		
1424	2010	Ocean Pout	Handline	Tri-State Sector																		
1425	2010	Ocean Pout	Large Mesh Gillnet	Fixed Gear Sector	19	689	260	37.74	0.00	0.00	0.65	511	74.17	0	2345972	574862.40	5.00	20	275.70	705	111.30	265
1426	2010	Ocean Pout	Large Mesh Gillnet	NCCS																		
1427	2010	Ocean Pout	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.00	0.00	0.25	100	33.78	0	719986	276616.50	70.00	182	139.10	327	66.50	142
1428	2010	Ocean Pout	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.78	782	81.29	0	2958754	1078659.60	2.00	5	548.00	1201	215.50	445
1429	2010	Ocean Pout	Large Mesh Gillnet	NEFS 12																		
1430	2010	Ocean Pout	Large Mesh Gillnet	NEFS 13																		
1431	2010	Ocean Pout	Large Mesh Gillnet	NEFS 2																		
1432	2010	Ocean Pout	Large Mesh Gillnet	NEFS 3	39	1510	533	35.30	0.00	0.00	0.30	530	35.10	0	2866998	938140.10	44.00	134	532.60	1551	197.50	540
1433	2010	Ocean Pout	Large Mesh Gillnet	NEFS 5																		
1434	2010	Ocean Pout	Large Mesh Gillnet	NEFS 6																		
1435	2010	Ocean Pout	Large Mesh Gillnet	NEFS 7	5	20	5	25.00	0.00	0.00	0.00	0	0.00	0	88890	17558.50	0.00	0	36.40	43	7.20	8
1436	2010	Ocean Pout	Large Mesh Gillnet	NEFS 8																		
1437	2010	Ocean Pout	Large Mesh Gillnet	NEFS 9																		
1438	2010	Ocean Pout	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.83	279	78.15	13	982739	310534.60	3.00	9	194.60	408	63.30	127
1439	2010	Ocean Pout	Large Mesh Gillnet	Sustainable Harvest Sector 1	12	103	43	41.75	0.00	0.00	0.75	85	82.52	0	995791	458826.20	2.00	4	310.70	362	165.60	189
1440	2010	Ocean Pout	Large Mesh Gillnet	Tri-State Sector																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1441	2010	Ocean Pout	Ruhle Trawl	Fixed Gear Sector																		
1442	2010	Ocean Pout	Ruhle Trawl	NCCS																		
1443	2010	Ocean Pout	Ruhle Trawl	NEFS 10																		
1444	2010	Ocean Pout	Ruhle Trawl	NEFS 11																		
1445	2010	Ocean Pout	Ruhle Trawl	NEFS 12																		
1446	2010	Ocean Pout	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	0	287947	302196.30	251.00	239	46.70	49	104.30	110
1447	2010	Ocean Pout	Ruhle Trawl	NEFS 2																		
1448	2010	Ocean Pout	Ruhle Trawl	NEFS 3																		
1449	2010	Ocean Pout	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					0	118993	2033.00	0.00	0	63.10	68	2.50	3
1450	2010	Ocean Pout	Ruhle Trawl	NEFS 6																		
1451	2010	Ocean Pout	Ruhle Trawl	NEFS 7																		
1452	2010	Ocean Pout	Ruhle Trawl	NEFS 8																		
1453	2010	Ocean Pout	Ruhle Trawl	NEFS 9																		
1454	2010	Ocean Pout	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
1455	2010	Ocean Pout	Ruhle Trawl	Sustainable Harvest Sector 1	6	7	7	100.00	0.00	0.00	0.00	0	0.00	0	186905	98823.40	0.00	0	36.00	38	45.00	49
1456	2010	Ocean Pout	Ruhle Trawl	Tri-State Sector																		
1457	2010	Plaice	Bottom Longline	Fixed Gear Sector	30	324	128	39.51	0.00	0.00	0.33	142	43.83	110	1393725	490950.90	10.00	28	279.00	455	101.10	172
1458	2010	Plaice	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.00	0	0.00	1	10907	1473.80	0.00	0	16.90	37	5.30	12
1459	2010	Plaice	Bottom Longline	NEFS 10	6	43	9	20.93	0.00	0.00	0.00	0	0.00	0	75215	13484.20	0.00	0	17.40	43	4.30	9
1460	2010	Plaice	Bottom Longline	NEFS 11																		
1461	2010	Plaice	Bottom Longline	NEFS 12																		
1462	2010	Plaice	Bottom Longline	NEFS 13																		
1463	2010	Plaice	Bottom Longline	NEFS 2																		
1464	2010	Plaice	Bottom Longline	NEFS 3	7	112	36	32.14	0.00	0.00	0.00	0	0.00	0	138385	43339.60	0.00	0	62.20	123	19.30	37
1465	2010	Plaice	Bottom Longline	NEFS 5																		
1466	2010	Plaice	Bottom Longline	NEFS 6																		
1467	2010	Plaice	Bottom Longline	NEFS 7																		
1468	2010	Plaice	Bottom Longline	NEFS 8																		
1469	2010	Plaice	Bottom Longline	NEFS 9																		
1470	2010	Plaice	Bottom Longline	Port Clyde Community Groundfish Sector																		
1471	2010	Plaice	Bottom Longline	Sustainable Harvest Sector 1																		
1472	2010	Plaice	Bottom Longline	Tri-State Sector																		
1473	2010	Plaice	Bottom Otter Trawl	Fixed Gear Sector																		
1474	2010	Plaice	Bottom Otter Trawl	NCCS																		
1475	2010	Plaice	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.01	0.00	0.17	38	15.51	12870	606337	193252.90	1896.00	5949	117.30	254	41.50	92
1476	2010	Plaice	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.02	0.00	0.58	33	63.46	7195	134828	41008.80	852.00	2801	25.70	55	8.40	18
1477	2010	Plaice	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.01	0.00	0.23	20	33.33	9300	134601	45136.00	650.00	1938	24.50	63	11.40	27
1478	2010	Plaice	Bottom Otter Trawl	NEFS 13	77	356	77	21.63	0.00	0.00	0.41	122	34.27	70070	4291264	799783.20	3087.00	16563	978.70	1111	297.00	338
1479	2010	Plaice	Bottom Otter Trawl	NEFS 2	101	1660	494	29.76	0.01	0.00	0.08	53	3.19	288343	9495473	2445375.50	15152.00	58836	1670.10	2499	531.10	801
1480	2010	Plaice	Bottom Otter Trawl	NEFS 3																		
1481	2010	Plaice	Bottom Otter Trawl	NEFS 5	79	607	230	37.89	0.00	0.00	0.62	439	72.32	23619	6123192	2572383.00	666.00	1585	737.80	1075	239.00	373
1482	2010	Plaice	Bottom Otter Trawl	NEFS 6	21	199	30	15.08	0.01	0.00	0.20	15	7.54	265083	3234868	596262.50	4725.00	25634	524.40	579	130.50	144
1483	2010	Plaice	Bottom Otter Trawl	NEFS 7	35	259	49	18.92	0.01	0.00	0.15	15	5.79	151295	3066156	695869.20	4731.00	20846	807.00	893	263.30	289
1484	2010	Plaice	Bottom Otter Trawl	NEFS 8	52	220	38	17.27	0.00	0.00	0.31	40	18.18	74757	3865554	680653.00	3269.00	18565	910.60	981	229.30	246
1485	2010	Plaice	Bottom Otter Trawl	NEFS 9	97	556	82	14.75	0.00	0.00	0.17	29	5.22	201049	9464577	2054697.20	9636.00	44386	1876.30	2038	644.10	688

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1486	2010	Plaice	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.02	0.00	0.16	19	15.32	87379	404917	133989.40	2997.00	9057	207.90	266	76.50	98
1487	2010	Plaice	Bottom Otter Trawl	Sustainable Harvest Sector 1	168	1305	279	21.38	0.01	0.00	0.07	21	1.61	1639449	19376570	5099786.70	42954.00	163203	3747.70	4188	1321.00	1460
1488	2010	Plaice	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.52	13	68.42	10313	594126	196414.20	878.00	2656	108.20	118	47.10	52
1489	2010	Plaice	Extra Large Mesh Gillnet	Fixed Gear Sector	31	895	365	40.78	0.00	0.00	0.77	734	82.01	37	5890850	1978849.40	2.00	6	388.90	1043	168.70	425
1490	2010	Plaice	Extra Large Mesh Gillnet	NCCS																		
1491	2010	Plaice	Extra Large Mesh Gillnet	NEFS 10	12	135	68	50.37	0.00	0.00	0.72	116	85.93	6	307754	90669.40	2.00	7	106.40	187	48.30	88
1492	2010	Plaice	Extra Large Mesh Gillnet	NEFS 11	22	358	92	25.70	0.00	0.00	0.25	68	18.99	3435	1132090	153346.80	19.00	140	168.80	383	52.40	105
1493	2010	Plaice	Extra Large Mesh Gillnet	NEFS 12																		
1494	2010	Plaice	Extra Large Mesh Gillnet	NEFS 13																		
1495	2010	Plaice	Extra Large Mesh Gillnet	NEFS 2																		
1496	2010	Plaice	Extra Large Mesh Gillnet	NEFS 3	41	705	223	31.63	0.00	0.00	0.36	283	40.14	1612	2750057	521244.90	20.00	106	377.60	822	106.30	242
1497	2010	Plaice	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
1498	2010	Plaice	Extra Large Mesh Gillnet	NEFS 6																		
1499	2010	Plaice	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.92	95	73.08	0	1011612	325364.50	11.00	34	97.80	166	29.80	45
1500	2010	Plaice	Extra Large Mesh Gillnet	NEFS 8																		
1501	2010	Plaice	Extra Large Mesh Gillnet	NEFS 9																		
1502	2010	Plaice	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1503	2010	Plaice	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	7	48	12	25.00	0.00	0.00	0.43	20	41.67	1099	303481	28197.00	59.00	635	144.40	177	32.60	40
1504	2010	Plaice	Extra Large Mesh Gillnet	Tri-State Sector																		
1505	2010	Plaice	Haddock Otter Trawl	Fixed Gear Sector																		
1506	2010	Plaice	Haddock Otter Trawl	NCCS																		
1507	2010	Plaice	Haddock Otter Trawl	NEFS 10																		
1508	2010	Plaice	Haddock Otter Trawl	NEFS 11																		
1509	2010	Plaice	Haddock Otter Trawl	NEFS 12																		
1510	2010	Plaice	Haddock Otter Trawl	NEFS 13																		
1511	2010	Plaice	Haddock Otter Trawl	NEFS 2	26	69	16	23.19	0.00	0.00	0.21	9	13.04	12774	1201398	484424.30	805.00	1996	297.90	320	107.70	116
1512	2010	Plaice	Haddock Otter Trawl	NEFS 3																		
1513	2010	Plaice	Haddock Otter Trawl	NEFS 5																		
1514	2010	Plaice	Haddock Otter Trawl	NEFS 6																		
1515	2010	Plaice	Haddock Otter Trawl	NEFS 7	6	16	14	87.50	0.00	0.00	0.23	13	81.25	4501	228462	166862.90	149.00	204	104.40	111	101.10	109
1516	2010	Plaice	Haddock Otter Trawl	NEFS 8	8	12	11	91.67	0.01	0.00	0.14	9	75.00	416	169627	99223.20	898.00	1535	76.60	82	86.70	92
1517	2010	Plaice	Haddock Otter Trawl	NEFS 9	4	13	13	100.00	0.00	0.00	0.00	0	0.00	870	33023	159774.50	758.00	157	34.00	36	96.40	102
1518	2010	Plaice	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
1519	2010	Plaice	Haddock Otter Trawl	Sustainable Harvest Sector 1	47	250	61	24.40	0.00	0.00	0.63	148	59.20	27302	5351927	1903251.10	3508.00	9864	1022.70	1101	424.50	459
1520	2010	Plaice	Haddock Otter Trawl	Tri-State Sector																		
1521	2010	Plaice	Handline	Fixed Gear Sector	9	119	64	53.78	0.00	0.00	0.00	0	0.00	0	200676	44199.10	0.00	0	69.60	140	27.60	71
1522	2010	Plaice	Handline	NCCS																		
1523	2010	Plaice	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
1524	2010	Plaice	Handline	NEFS 11																		
1525	2010	Plaice	Handline	NEFS 12																		
1526	2010	Plaice	Handline	NEFS 13																		
1527	2010	Plaice	Handline	NEFS 2																		
1528	2010	Plaice	Handline	NEFS 3																		
1529	2010	Plaice	Handline	NEFS 5																		
1530	2010	Plaice	Handline	NEFS 6																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1531	2010	Plaice	Handline	NEFS 7																		
1532	2010	Plaice	Handline	NEFS 8																		
1533	2010	Plaice	Handline	NEFS 9																		
1534	2010	Plaice	Handline	Port Clyde Community Groundfish Sector																		
1535	2010	Plaice	Handline	Sustainable Harvest Sector 1																		
1536	2010	Plaice	Handline	Tri-State Sector																		
1537	2010	Plaice	Large Mesh Gillnet	Fixed Gear Sector	19	689	260	37.74	0.00	0.00	0.31	272	39.48	493	2345972	574862.40	101.00	412	275.70	705	111.30	265
1538	2010	Plaice	Large Mesh Gillnet	NCCS																		
1539	2010	Plaice	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.00	0.00	0.15	47	15.88	1529	719986	276616.50	189.00	492	139.10	327	66.50	142
1540	2010	Plaice	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.11	77	8.00	1983	2958754	1078659.60	738.00	2024	548.00	1201	215.50	445
1541	2010	Plaice	Large Mesh Gillnet	NEFS 12																		
1542	2010	Plaice	Large Mesh Gillnet	NEFS 13																		
1543	2010	Plaice	Large Mesh Gillnet	NEFS 2																		
1544	2010	Plaice	Large Mesh Gillnet	NEFS 3	39	1510	533	35.30	0.00	0.00	0.33	600	39.74	4266	2866998	938140.10	459.00	1403	532.60	1551	197.50	540
1545	2010	Plaice	Large Mesh Gillnet	NEFS 5																		
1546	2010	Plaice	Large Mesh Gillnet	NEFS 6																		
1547	2010	Plaice	Large Mesh Gillnet	NEFS 7	5	20	5	25.00	0.00	0.00	0.00	0	0.00	0	88890	17558.50	0.00	0	36.40	43	7.20	8
1548	2010	Plaice	Large Mesh Gillnet	NEFS 8																		
1549	2010	Plaice	Large Mesh Gillnet	NEFS 9																		
1550	2010	Plaice	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.23	79	22.13	1153	982739	310534.60	340.00	1076	194.60	408	63.30	127
1551	2010	Plaice	Large Mesh Gillnet	Sustainable Harvest Sector 1	12	103	43	41.75	0.00	0.00	0.20	25	24.27	389	995791	458826.20	103.00	224	310.70	362	165.60	189
1552	2010	Plaice	Large Mesh Gillnet	Tri-State Sector																		
1553	2010	Plaice	Ruhle Trawl	Fixed Gear Sector																		
1554	2010	Plaice	Ruhle Trawl	NCCS																		
1555	2010	Plaice	Ruhle Trawl	NEFS 10																		
1556	2010	Plaice	Ruhle Trawl	NEFS 11																		
1557	2010	Plaice	Ruhle Trawl	NEFS 12																		
1558	2010	Plaice	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	130	287947	302196.30	136.00	130	46.70	49	104.30	110
1559	2010	Plaice	Ruhle Trawl	NEFS 2																		
1560	2010	Plaice	Ruhle Trawl	NEFS 3																		
1561	2010	Plaice	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					2870	131431	2033.00	0.00	0	63.10	68	2.50	3
1562	2010	Plaice	Ruhle Trawl	NEFS 6																		
1563	2010	Plaice	Ruhle Trawl	NEFS 7																		
1564	2010	Plaice	Ruhle Trawl	NEFS 8																		
1565	2010	Plaice	Ruhle Trawl	NEFS 9																		
1566	2010	Plaice	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
1567	2010	Plaice	Ruhle Trawl	Sustainable Harvest Sector 1	6	7	7	100.00	0.00	0.00	0.00	0	0.00	3150	186905	98823.40	8.00	15	36.00	38	45.00	49
1568	2010	Plaice	Ruhle Trawl	Tri-State Sector																		
1569	2010	Pollock	Bottom Longline	Fixed Gear Sector	30	324	128	39.51	0.00	0.00	0.47	200	61.73	1874	1393725	490950.90	33.00	94	279.00	455	101.10	172
1570	2010	Pollock	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.00	0	0.00	0	10907	1473.80	0.00	0	16.90	37	5.30	12
1571	2010	Pollock	Bottom Longline	NEFS 10	6	43	9	20.93	0.00	0.00	0.00	0	0.00	1202	75215	13484.20	0.00	0	17.40	43	4.30	9
1572	2010	Pollock	Bottom Longline	NEFS 11																		
1573	2010	Pollock	Bottom Longline	NEFS 12																		
1574	2010	Pollock	Bottom Longline	NEFS 13																		
1575	2010	Pollock	Bottom Longline	NEFS 2																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1576	2010	Pollock	Bottom Longline	NEFS 3	7	112	36	32.14	0.00	0.00	0.59	73	65.18	16	138385	43339.60	2.00	6	62.20	123	19.30	37
1577	2010	Pollock	Bottom Longline	NEFS 5																		
1578	2010	Pollock	Bottom Longline	NEFS 6																		
1579	2010	Pollock	Bottom Longline	NEFS 7																		
1580	2010	Pollock	Bottom Longline	NEFS 8																		
1581	2010	Pollock	Bottom Longline	NEFS 9																		
1582	2010	Pollock	Bottom Longline	Port Clyde Community Groundfish Sector																		
1583	2010	Pollock	Bottom Longline	Sustainable Harvest Sector 1																		
1584	2010	Pollock	Bottom Longline	Tri-State Sector																		
1585	2010	Pollock	Bottom Otter Trawl	Fixed Gear Sector																		
1586	2010	Pollock	Bottom Otter Trawl	NCCS																		
1587	2010	Pollock	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.00	0.00	0.79	197	80.41	22159	606337	193252.90	2.00	6	117.30	254	41.50	92
1588	2010	Pollock	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.00	0.00	0.00	0	0.00	2005	134828	41008.80	0.00	0	25.70	55	8.40	18
1589	2010	Pollock	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.76	51	85.00	290	134601	45136.00	3.00	9	24.50	63	11.40	27
1590	2010	Pollock	Bottom Otter Trawl	NEFS 13	77	356	77	21.63	0.00	0.00	0.75	226	63.48	116757	4291264	799783.20	138.00	740	978.70	1111	297.00	338
1591	2010	Pollock	Bottom Otter Trawl	NEFS 2	101	1660	494	29.76	0.00	0.00	0.20	259	15.60	1832317	9495473	2445375.50	2995.00	11630	1670.10	2499	531.10	801
1592	2010	Pollock	Bottom Otter Trawl	NEFS 3																		
1593	2010	Pollock	Bottom Otter Trawl	NEFS 5	79	607	230	37.89	0.00	0.00	0.78	490	80.72	2073	6139367	2572383.00	8.00	19	737.80	1075	239.00	373
1594	2010	Pollock	Bottom Otter Trawl	NEFS 6	21	199	30	15.08	0.00	0.00	0.43	53	26.63	670892	3234868	596262.50	595.00	3228	524.40	579	130.50	144
1595	2010	Pollock	Bottom Otter Trawl	NEFS 7	35	259	49	18.92	0.00	0.00	0.59	124	47.88	33237	3036154	695869.20	87.00	380	807.00	893	263.30	289
1596	2010	Pollock	Bottom Otter Trawl	NEFS 8	52	220	38	17.27	0.00	0.00	0.58	97	44.09	131886	3865554	680653.00	78.00	443	910.60	981	229.30	246
1597	2010	Pollock	Bottom Otter Trawl	NEFS 9	97	556	82	14.75	0.00	0.00	0.28	71	12.77	1120703	9464577	2054697.20	1308.00	6025	1876.30	2038	644.10	688
1598	2010	Pollock	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.78	100	80.65	14429	404917	133989.40	12.00	36	207.90	266	76.50	98
1599	2010	Pollock	Bottom Otter Trawl	Sustainable Harvest Sector 1	168	1305	279	21.38	0.00	0.00	0.17	109	8.35	3661782	19420658	5099786.70	6315.00	24048	3747.70	4188	1321.00	1460
1600	2010	Pollock	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.51	13	68.42	34	594126	196414.20	85.00	257	108.20	118	47.10	52
1601	2010	Pollock	Extra Large Mesh Gillnet	Fixed Gear Sector	31	895	365	40.78	0.00	0.00	0.30	366	40.89	1927	5890850	1978849.40	530.00	1578	388.90	1043	168.70	425
1602	2010	Pollock	Extra Large Mesh Gillnet	NCCS																		
1603	2010	Pollock	Extra Large Mesh Gillnet	NEFS 10	12	135	68	50.37	0.00	0.00	0.58	107	79.26	6840	307754	90669.40	114.00	387	106.40	187	48.30	88
1604	2010	Pollock	Extra Large Mesh Gillnet	NEFS 11	22	358	92	25.70	0.00	0.00	0.37	124	34.64	142697	1132090	153346.80	701.00	5175	168.80	383	52.40	105
1605	2010	Pollock	Extra Large Mesh Gillnet	NEFS 12																		
1606	2010	Pollock	Extra Large Mesh Gillnet	NEFS 13																		
1607	2010	Pollock	Extra Large Mesh Gillnet	NEFS 2																		
1608	2010	Pollock	Extra Large Mesh Gillnet	NEFS 3	41	705	223	31.63	0.00	0.00	0.24	157	22.27	39086	2750057	521244.90	296.00	1562	377.60	822	106.30	242
1609	2010	Pollock	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
1610	2010	Pollock	Extra Large Mesh Gillnet	NEFS 6																		
1611	2010	Pollock	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.00	0	0.00	0	1011612	325364.50	0.00	0	97.80	166	29.80	45
1612	2010	Pollock	Extra Large Mesh Gillnet	NEFS 8																		
1613	2010	Pollock	Extra Large Mesh Gillnet	NEFS 9																		
1614	2010	Pollock	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1615	2010	Pollock	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	7	48	12	25.00	0.01	0.00	0.47	22	45.83	83739	303481	28197.00	150.00	1614	144.40	177	32.60	40
1616	2010	Pollock	Extra Large Mesh Gillnet	Tri-State Sector																		
1617	2010	Pollock	Haddock Otter Trawl	Fixed Gear Sector																		
1618	2010	Pollock	Haddock Otter Trawl	NCCS																		
1619	2010	Pollock	Haddock Otter Trawl	NEFS 10																		
1620	2010	Pollock	Haddock Otter Trawl	NEFS 11																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1621	2010	Pollock	Haddock Otter Trawl	NEFS 12																		
1622	2010	Pollock	Haddock Otter Trawl	NEFS 13																		
1623	2010	Pollock	Haddock Otter Trawl	NEFS 2	26	69	16	23.19	0.00	0.00	0.38	23	33.33	154788	1201398	484424.30	720.00	1786	297.90	320	107.70	116
1624	2010	Pollock	Haddock Otter Trawl	NEFS 3																		
1625	2010	Pollock	Haddock Otter Trawl	NEFS 5																		
1626	2010	Pollock	Haddock Otter Trawl	NEFS 6																		
1627	2010	Pollock	Haddock Otter Trawl	NEFS 7	6	16	14	87.50	0.00	0.00	0.00	0	0.00	311	206865	166862.90	0.00	0	104.40	111	101.10	109
1628	2010	Pollock	Haddock Otter Trawl	NEFS 8	8	12	11	91.67	0.00	0.00	0.00	0	0.00	561	169627	99223.20	0.00	0	76.60	82	86.70	92
1629	2010	Pollock	Haddock Otter Trawl	NEFS 9	4	13	13	100.00	0.00	0.00	0.00	0	0.00	17	33023	159774.50	312.00	64	34.00	36	96.40	102
1630	2010	Pollock	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
1631	2010	Pollock	Haddock Otter Trawl	Sustainable Harvest Sector 1	47	250	61	24.40	0.00	0.00	0.37	83	33.20	462748	5382067	1903251.10	3189.00	9018	1022.70	1101	424.50	459
1632	2010	Pollock	Haddock Otter Trawl	Tri-State Sector																		
1633	2010	Pollock	Handline	Fixed Gear Sector	9	119	64	53.78	0.00	0.00	0.54	94	78.99	8288	200676	44199.10	4.00	18	69.60	140	27.60	71
1634	2010	Pollock	Handline	NCCS																		
1635	2010	Pollock	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.39	9	100.00	71	15816	14370.60	50.00	55	3.80	9	3.90	8
1636	2010	Pollock	Handline	NEFS 11																		
1637	2010	Pollock	Handline	NEFS 12																		
1638	2010	Pollock	Handline	NEFS 13																		
1639	2010	Pollock	Handline	NEFS 2																		
1640	2010	Pollock	Handline	NEFS 3																		
1641	2010	Pollock	Handline	NEFS 5																		
1642	2010	Pollock	Handline	NEFS 6																		
1643	2010	Pollock	Handline	NEFS 7																		
1644	2010	Pollock	Handline	NEFS 8																		
1645	2010	Pollock	Handline	NEFS 9																		
1646	2010	Pollock	Handline	Port Clyde Community Groundfish Sector																		
1647	2010	Pollock	Handline	Sustainable Harvest Sector 1																		
1648	2010	Pollock	Handline	Tri-State Sector																		
1649	2010	Pollock	Large Mesh Gillnet	Fixed Gear Sector	19	689	260	37.74	0.01	0.00	0.19	138	20.03	313692	2345972	574862.40	6441.00	26285	275.70	705	111.30	265
1650	2010	Pollock	Large Mesh Gillnet	NCCS																		
1651	2010	Pollock	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.00	0.00	0.39	163	55.07	34570	719986	276616.50	490.00	1275	139.10	327	66.50	142
1652	2010	Pollock	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.02	0.00	0.20	217	22.56	1444258	2958754	1078659.60	19024.00	52183	548.00	1201	215.50	445
1653	2010	Pollock	Large Mesh Gillnet	NEFS 12																		
1654	2010	Pollock	Large Mesh Gillnet	NEFS 13																		
1655	2010	Pollock	Large Mesh Gillnet	NEFS 2																		
1656	2010	Pollock	Large Mesh Gillnet	NEFS 3	39	1510	533	35.30	0.00	0.00	0.25	415	27.48	498951	2866998	938140.10	1978.00	6045	532.60	1551	197.50	540
1657	2010	Pollock	Large Mesh Gillnet	NEFS 5																		
1658	2010	Pollock	Large Mesh Gillnet	NEFS 6																		
1659	2010	Pollock	Large Mesh Gillnet	NEFS 7	5	20	5	25.00	0.01	0.00	0.52	10	50.00	29595	88890	17558.50	246.00	1245	36.40	43	7.20	8
1660	2010	Pollock	Large Mesh Gillnet	NEFS 8																		
1661	2010	Pollock	Large Mesh Gillnet	NEFS 9																		
1662	2010	Pollock	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.27	98	27.45	340288	982739	310534.60	1338.00	4234	194.60	408	63.30	127
1663	2010	Pollock	Large Mesh Gillnet	Sustainable Harvest Sector 1	12	103	43	41.75	0.01	0.00	0.17	20	19.42	575213	995791	458826.20	5642.00	12245	310.70	362	165.60	189
1664	2010	Pollock	Large Mesh Gillnet	Tri-State Sector																		
1665	2010	Pollock	Ruhle Trawl	Fixed Gear Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1666	2010	Pollock	Ruhle Trawl	NCCS																		
1667	2010	Pollock	Ruhle Trawl	NEFS 10																		
1668	2010	Pollock	Ruhle Trawl	NEFS 11																		
1669	2010	Pollock	Ruhle Trawl	NEFS 12																		
1670	2010	Pollock	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	6	287947	302196.30	3.00	3	46.70	49	104.30	110
1671	2010	Pollock	Ruhle Trawl	NEFS 2																		
1672	2010	Pollock	Ruhle Trawl	NEFS 3																		
1673	2010	Pollock	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					599	143184	2033.00	0.00	0	63.10	68	2.50	3
1674	2010	Pollock	Ruhle Trawl	NEFS 6																		
1675	2010	Pollock	Ruhle Trawl	NEFS 7																		
1676	2010	Pollock	Ruhle Trawl	NEFS 8																		
1677	2010	Pollock	Ruhle Trawl	NEFS 9																		
1678	2010	Pollock	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
1679	2010	Pollock	Ruhle Trawl	Sustainable Harvest Sector 1	6	7	7	100.00	0.00	0.00	0.00	0	0.00	29281	186905	98823.40	1.00	2	36.00	38	45.00	49
1680	2010	Pollock	Ruhle Trawl	Tri-State Sector																		
1681	2010	Redfish	Bottom Longline	Fixed Gear Sector	30	324	128	39.51	0.00	0.00	0.32	141	43.52	3138	1393725	490950.90	13.00	37	279.00	455	101.10	172
1682	2010	Redfish	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.00	0	0.00	12	10907	1473.80	0.00	0	16.90	37	5.30	12
1683	2010	Redfish	Bottom Longline	NEFS 10	6	43	9	20.93	0.00	0.00	0.00	0	0.00	0	75215	13484.20	0.00	0	17.40	43	4.30	9
1684	2010	Redfish	Bottom Longline	NEFS 11																		
1685	2010	Redfish	Bottom Longline	NEFS 12																		
1686	2010	Redfish	Bottom Longline	NEFS 13																		
1687	2010	Redfish	Bottom Longline	NEFS 2																		
1688	2010	Redfish	Bottom Longline	NEFS 3	7	112	36	32.14	0.00	0.00	0.43	55	49.11	39	138385	43339.60	17.00	54	62.20	123	19.30	37
1689	2010	Redfish	Bottom Longline	NEFS 5																		
1690	2010	Redfish	Bottom Longline	NEFS 6																		
1691	2010	Redfish	Bottom Longline	NEFS 7																		
1692	2010	Redfish	Bottom Longline	NEFS 8																		
1693	2010	Redfish	Bottom Longline	NEFS 9																		
1694	2010	Redfish	Bottom Longline	Port Clyde Community Groundfish Sector																		
1695	2010	Redfish	Bottom Longline	Sustainable Harvest Sector 1																		
1696	2010	Redfish	Bottom Longline	Tri-State Sector																		
1697	2010	Redfish	Bottom Otter Trawl	Fixed Gear Sector																		
1698	2010	Redfish	Bottom Otter Trawl	NCCS																		
1699	2010	Redfish	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.00	0.00	0.69	186	75.92	1271	606337	193252.90	153.00	480	117.30	254	41.50	92
1700	2010	Redfish	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.00	0.00	0.49	29	55.77	93	134828	41008.80	5.00	16	25.70	55	8.40	18
1701	2010	Redfish	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.38	35	58.33	8	134601	45136.00	13.00	39	24.50	63	11.40	27
1702	2010	Redfish	Bottom Otter Trawl	NEFS 13	77	356	77	21.63	0.00	0.00	0.45	138	38.76	38088	4291264	799783.20	1188.00	6374	978.70	1111	297.00	338
1703	2010	Redfish	Bottom Otter Trawl	NEFS 2	101	1660	494	29.76	0.01	0.00	0.27	417	25.12	845448	9501121	2445375.50	29382.00	114159	1670.10	2499	531.10	801
1704	2010	Redfish	Bottom Otter Trawl	NEFS 3																		
1705	2010	Redfish	Bottom Otter Trawl	NEFS 5	79	607	230	37.89	0.00	0.00	0.64	447	73.64	950	6112202	2572383.00	34.00	81	737.80	1075	239.00	373
1706	2010	Redfish	Bottom Otter Trawl	NEFS 6	21	199	30	15.08	0.00	0.00	0.27	26	13.07	640715	3234868	596262.50	1045.00	5669	524.40	579	130.50	144
1707	2010	Redfish	Bottom Otter Trawl	NEFS 7	35	259	49	18.92	0.00	0.00	0.37	68	26.25	9884	3036154	695869.20	448.00	1955	807.00	893	263.30	289
1708	2010	Redfish	Bottom Otter Trawl	NEFS 8	52	220	38	17.27	0.00	0.00	0.55	92	41.82	19745	3865554	680653.00	339.00	1925	910.60	981	229.30	246
1709	2010	Redfish	Bottom Otter Trawl	NEFS 9	97	556	82	14.75	0.00	0.00	0.26	64	11.51	264390	9464577	2054697.20	10159.00	46796	1876.30	2038	644.10	688
1710	2010	Redfish	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.23	32	25.81	7125	404917	133989.40	416.00	1257	207.90	266	76.50	98

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1711	2010	Redfish	Bottom Otter Trawl	Sustainable Harvest Sector 1	168	1305	279	21.38	0.01	0.00	0.12	58	4.44	2075181	19359589	5099786.70	30528.00	115889	3747.70	4188	1321.00	1460
1712	2010	Redfish	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.00	0	0.00	0	594126	196414.20	0.00	0	108.20	118	47.10	52
1713	2010	Redfish	Extra Large Mesh Gillnet	Fixed Gear Sector	31	895	365	40.78	0.00	0.00	0.00	0	0.00	46	5890850	1978849.40	0.00	0	388.90	1043	168.70	425
1714	2010	Redfish	Extra Large Mesh Gillnet	NCCS																		
1715	2010	Redfish	Extra Large Mesh Gillnet	NEFS 10	12	135	68	50.37	0.00	0.00	0.55	105	77.78	182	307754	90669.40	7.00	24	106.40	187	48.30	88
1716	2010	Redfish	Extra Large Mesh Gillnet	NEFS 11	22	358	92	25.70	0.00	0.00	0.87	266	74.30	409	1132090	153346.80	1.00	7	168.80	383	52.40	105
1717	2010	Redfish	Extra Large Mesh Gillnet	NEFS 12																		
1718	2010	Redfish	Extra Large Mesh Gillnet	NEFS 13																		
1719	2010	Redfish	Extra Large Mesh Gillnet	NEFS 2																		
1720	2010	Redfish	Extra Large Mesh Gillnet	NEFS 3	41	705	223	31.63	0.00	0.00	0.57	440	62.41	155	2750057	521244.90	27.00	142	377.60	822	106.30	242
1721	2010	Redfish	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
1722	2010	Redfish	Extra Large Mesh Gillnet	NEFS 6																		
1723	2010	Redfish	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.00	0	0.00	0	1011612	325364.50	0.00	0	97.80	166	29.80	45
1724	2010	Redfish	Extra Large Mesh Gillnet	NEFS 8																		
1725	2010	Redfish	Extra Large Mesh Gillnet	NEFS 9																		
1726	2010	Redfish	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1727	2010	Redfish	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	7	48	12	25.00	0.00	0.00	0.00	0	0.00	4806	303481	28197.00	0.00	0	144.40	177	32.60	40
1728	2010	Redfish	Extra Large Mesh Gillnet	Tri-State Sector																		
1729	2010	Redfish	Haddock Otter Trawl	Fixed Gear Sector																		
1730	2010	Redfish	Haddock Otter Trawl	NCCS																		
1731	2010	Redfish	Haddock Otter Trawl	NEFS 10																		
1732	2010	Redfish	Haddock Otter Trawl	NEFS 11																		
1733	2010	Redfish	Haddock Otter Trawl	NEFS 12																		
1734	2010	Redfish	Haddock Otter Trawl	NEFS 13																		
1735	2010	Redfish	Haddock Otter Trawl	NEFS 2	26	69	16	23.19	0.01	0.00	0.36	21	30.43	104113	1212210	484424.30	5765.00	14426	297.90	320	107.70	116
1736	2010	Redfish	Haddock Otter Trawl	NEFS 3																		
1737	2010	Redfish	Haddock Otter Trawl	NEFS 5																		
1738	2010	Redfish	Haddock Otter Trawl	NEFS 6																		
1739	2010	Redfish	Haddock Otter Trawl	NEFS 7	6	16	14	87.50	0.00	0.00	0.36	15	93.75	17	206865	166862.90	59.00	73	104.40	111	101.10	109
1740	2010	Redfish	Haddock Otter Trawl	NEFS 8	8	12	11	91.67	0.00	0.00	0.19	10	83.33	223	169627	99223.20	32.00	55	76.60	82	86.70	92
1741	2010	Redfish	Haddock Otter Trawl	NEFS 9	4	13	13	100.00	0.00	0.00	0.00	0	0.00	275	33023	159774.50	174.00	36	34.00	36	96.40	102
1742	2010	Redfish	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
1743	2010	Redfish	Haddock Otter Trawl	Sustainable Harvest Sector 1	47	250	61	24.40	0.00	0.00	0.58	138	55.20	77856	5363866	1903251.10	9158.00	25810	1022.70	1101	424.50	459
1744	2010	Redfish	Haddock Otter Trawl	Tri-State Sector																		
1745	2010	Redfish	Handline	Fixed Gear Sector	9	119	64	53.78	0.00	0.00	0.00	0	0.00	0	200676	44199.10	0.00	0	69.60	140	27.60	71
1746	2010	Redfish	Handline	NCCS																		
1747	2010	Redfish	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
1748	2010	Redfish	Handline	NEFS 11																		
1749	2010	Redfish	Handline	NEFS 12																		
1750	2010	Redfish	Handline	NEFS 13																		
1751	2010	Redfish	Handline	NEFS 2																		
1752	2010	Redfish	Handline	NEFS 3																		
1753	2010	Redfish	Handline	NEFS 5																		
1754	2010	Redfish	Handline	NEFS 6																		
1755	2010	Redfish	Handline	NEFS 7																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1756	2010	Redfish	Handline	NEFS 8																		
1757	2010	Redfish	Handline	NEFS 9																		
1758	2010	Redfish	Handline	Port Clyde Community Groundfish Sector																		
1759	2010	Redfish	Handline	Sustainable Harvest Sector 1																		
1760	2010	Redfish	Handline	Tri-State Sector																		
1761	2010	Redfish	Large Mesh Gillnet	Fixed Gear Sector	19	689	260	37.74	0.00	0.00	0.22	170	24.67	21396	2345972	574862.40	69.00	282	275.70	705	111.30	265
1762	2010	Redfish	Large Mesh Gillnet	NCCS																		
1763	2010	Redfish	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.00	0.00	0.55	210	70.95	1481	719986	276616.50	35.00	91	139.10	327	66.50	142
1764	2010	Redfish	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.38	488	50.73	31831	2958754	1078659.60	1273.00	3492	548.00	1201	215.50	445
1765	2010	Redfish	Large Mesh Gillnet	NEFS 12																		
1766	2010	Redfish	Large Mesh Gillnet	NEFS 13																		
1767	2010	Redfish	Large Mesh Gillnet	NEFS 2																		
1768	2010	Redfish	Large Mesh Gillnet	NEFS 3	39	1510	533	35.30	0.00	0.00	0.14	160	10.60	2367	2866998	938140.10	67.00	205	532.60	1551	197.50	540
1769	2010	Redfish	Large Mesh Gillnet	NEFS 5																		
1770	2010	Redfish	Large Mesh Gillnet	NEFS 6																		
1771	2010	Redfish	Large Mesh Gillnet	NEFS 7	5	20	5	25.00	0.00	0.00	0.00	0	0.00	1003	88890	17558.50	0.00	0	36.40	43	7.20	8
1772	2010	Redfish	Large Mesh Gillnet	NEFS 8																		
1773	2010	Redfish	Large Mesh Gillnet	NEFS 9																		
1774	2010	Redfish	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.32	125	35.01	5938	982739	310534.60	147.00	465	194.60	408	63.30	127
1775	2010	Redfish	Large Mesh Gillnet	Sustainable Harvest Sector 1	12	103	43	41.75	0.00	0.00	0.25	34	33.01	44336	995791	458826.20	1075.00	2333	310.70	362	165.60	189
1776	2010	Redfish	Large Mesh Gillnet	Tri-State Sector																		
1777	2010	Redfish	Ruhle Trawl	Fixed Gear Sector																		
1778	2010	Redfish	Ruhle Trawl	NCCS																		
1779	2010	Redfish	Ruhle Trawl	NEFS 10																		
1780	2010	Redfish	Ruhle Trawl	NEFS 11																		
1781	2010	Redfish	Ruhle Trawl	NEFS 12																		
1782	2010	Redfish	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	0	287947	302196.30	0.00	0	46.70	49	104.30	110
1783	2010	Redfish	Ruhle Trawl	NEFS 2																		
1784	2010	Redfish	Ruhle Trawl	NEFS 3																		
1785	2010	Redfish	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					20	118993	2033.00	0.00	0	63.10	68	2.50	3
1786	2010	Redfish	Ruhle Trawl	NEFS 6																		
1787	2010	Redfish	Ruhle Trawl	NEFS 7																		
1788	2010	Redfish	Ruhle Trawl	NEFS 8																		
1789	2010	Redfish	Ruhle Trawl	NEFS 9																		
1790	2010	Redfish	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
1791	2010	Redfish	Ruhle Trawl	Sustainable Harvest Sector 1	6	7	7	100.00	0.00	0.00	0.00	0	0.00	64531	186905	98823.40	0.00	0	36.00	38	45.00	49
1792	2010	Redfish	Ruhle Trawl	Tri-State Sector																		
1793	2010	SNE/MA Winter Flounder	Bottom Longline	Fixed Gear Sector	9	196	99	50.51	0.00	0.00	0.50	146	74.49	1	619479	311413.40	9.00	18	116.20	247	61.90	123
1794	2010	SNE/MA Winter Flounder	Bottom Longline	NCCS																		
1795	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 10																		
1796	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 11																		
1797	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 12																		
1798	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 13																		
1799	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 2																		
1800	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 3																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1801	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 5																		
1802	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 6																		
1803	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 7																		
1804	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 8																		
1805	2010	SNE/MA Winter Flounder	Bottom Longline	NEFS 9																		
1806	2010	SNE/MA Winter Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
1807	2010	SNE/MA Winter Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
1808	2010	SNE/MA Winter Flounder	Bottom Longline	Tri-State Sector																		
1809	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
1810	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NCCS																		
1811	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 10																		
1812	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 11																		
1813	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 12																		
1814	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 13	36	170	54	31.76	0.01	0.00	0.24	40	23.53	2703	1175591	271133.80	2589.50	11228	437.40	524	161.10	191
1815	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 2	14	178	71	39.89	0.00	0.00	0.71	141	79.21	142	2761633	675044.80	209.00	855	720.30	804	286.90	323
1816	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 3																		
1817	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 5	55	558	222	39.78	0.01	0.00	0.08	27	4.84	3281	5202193	2303578.80	13222.50	29860	527.20	848	193.30	323
1818	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 6	8	77	23	29.87	0.00	0.00	0.88	61	79.22	945	1792597	199864.40	10.50	94	422.30	462	115.40	126
1819	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 7	14	86	26	30.23	0.01	0.00	0.58	54	62.79	160	548087	115837.10	721.50	3414	363.40	411	110.50	124
1820	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 8	19	67	15	22.39	0.01	0.00	0.65	39	58.21	121	746670	101862.00	1203.00	8818	327.70	357	83.90	91
1821	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 9	28	181	52	28.73	0.00	0.00	0.35	63	34.81	8843	2415210	602267.40	2255.50	9045	1050.30	1143	421.20	447
1822	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
1823	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	31	251	125	49.80	0.00	0.00	0.30	123	49.00	864	3000341	955069.40	540.00	1696	1381.70	1514	722.90	784
1824	2010	SNE/MA Winter Flounder	Bottom Otter Trawl	Tri-State Sector																		
1825	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector	29	891	363	40.74	0.00	0.00	0.65	681	76.43	0	5878322	1977497.40	266.50	792	386.60	1038	168.00	423
1826	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NCCS																		
1827	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 10	5	19	5	26.32	0.00	0.00	0.00	0	0.00	0	97131	12535.50	0.00	0	29.70	42	7.10	10
1828	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 11	8	114	13	11.40	0.00	0.00	0.00	0	0.00	0	416893	47045.20	0.00	0	59.40	123	6.50	13
1829	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 12																		
1830	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 13																		
1831	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 2																		
1832	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 3	13	117	24	20.51	0.00	0.00	0.91	83	70.94	0	815174	151424.20	1.50	8	107.40	182	25.60	40
1833	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
1834	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 6																		
1835	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.92	95	73.08	5	1011612	325364.50	2.00	6	97.80	166	29.80	45
1836	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 8																		
1837	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 9																		
1838	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1839	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
1840	2010	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
1841	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
1842	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NCCS																		
1843	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 10																		
1844	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 11																		
1845	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 12																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1846	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 13																		
1847	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 2	5	12	11	91.67	0.00	0.00	0.23	11	91.67	2	314206	88578.20	1.00	4	80.50	87	78.00	84
1848	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 3																		
1849	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 5																		
1850	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 6																		
1851	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 7																		
1852	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 8																		
1853	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 9																		
1854	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
1855	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	14	68	30	44.12	0.00	0.00	0.45	44	64.71	107	1245027	414761.80	411.50	1235	392.40	431	187.10	204
1856	2010	SNE/MA Winter Flounder	Haddock Otter Trawl	Tri-State Sector																		
1857	2010	SNE/MA Winter Flounder	Handline	Fixed Gear Sector	4	96	52	54.17	0.00	0.00	0.00	0	0.00	2	175064	32168.70	0.00	0	42.30	103	18.70	56
1858	2010	SNE/MA Winter Flounder	Handline	NCCS																		
1859	2010	SNE/MA Winter Flounder	Handline	NEFS 10																		
1860	2010	SNE/MA Winter Flounder	Handline	NEFS 11																		
1861	2010	SNE/MA Winter Flounder	Handline	NEFS 12																		
1862	2010	SNE/MA Winter Flounder	Handline	NEFS 13																		
1863	2010	SNE/MA Winter Flounder	Handline	NEFS 2																		
1864	2010	SNE/MA Winter Flounder	Handline	NEFS 3																		
1865	2010	SNE/MA Winter Flounder	Handline	NEFS 5																		
1866	2010	SNE/MA Winter Flounder	Handline	NEFS 6																		
1867	2010	SNE/MA Winter Flounder	Handline	NEFS 7																		
1868	2010	SNE/MA Winter Flounder	Handline	NEFS 8																		
1869	2010	SNE/MA Winter Flounder	Handline	NEFS 9																		
1870	2010	SNE/MA Winter Flounder	Handline	Port Clyde Community Groundfish Sector																		
1871	2010	SNE/MA Winter Flounder	Handline	Sustainable Harvest Sector 1																		
1872	2010	SNE/MA Winter Flounder	Handline	Tri-State Sector																		
1873	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	Fixed Gear Sector	17	609	231	37.93	0.00	0.00	0.10	40	6.57	13	2169317	516185.30	1427.00	5997	248.70	625	99.40	236
1874	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NCCS																		
1875	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 10																		
1876	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 11																		
1877	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 12																		
1878	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 13																		
1879	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 2																		
1880	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 3	4	8	2	25.00	0.00	0.00	0.00	0	0.00	1	37606	1117.80	0.00	0	8.00	13	1.70	3
1881	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 5																		
1882	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 6																		
1883	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 7	4	17	5	29.41	0.00	0.00	0.81	13	76.47	0	60681	17558.50	5.50	19	18.80	24	7.20	8
1884	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 8																		
1885	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 9																		
1886	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1887	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
1888	2010	SNE/MA Winter Flounder	Large Mesh Gillnet	Tri-State Sector																		
1889	2010	SNE/MA Winter Flounder	Ruhle Trawl	Fixed Gear Sector																		
1890	2010	SNE/MA Winter Flounder	Ruhle Trawl	NCCS																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1891	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 10																		
1892	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 11																		
1893	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 12																		
1894	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 13																		
1895	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 2																		
1896	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 3																		
1897	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 5																		
1898	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 6																		
1899	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 7																		
1900	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 8																		
1901	2010	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 9																		
1902	2010	SNE/MA Winter Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
1903	2010	SNE/MA Winter Flounder	Ruhle Trawl	Sustainable Harvest Sector 1																		
1904	2010	SNE/MA Winter Flounder	Ruhle Trawl	Tri-State Sector																		
1905	2010	SNE/MA Yellowtail Flounder	Bottom Longline	Fixed Gear Sector																		
1906	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NCCS																		
1907	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 10																		
1908	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 11																		
1909	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 12																		
1910	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 13																		
1911	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 2																		
1912	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 3																		
1913	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 5																		
1914	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 6																		
1915	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 7																		
1916	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 8																		
1917	2010	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 9																		
1918	2010	SNE/MA Yellowtail Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
1919	2010	SNE/MA Yellowtail Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
1920	2010	SNE/MA Yellowtail Flounder	Bottom Longline	Tri-State Sector																		
1921	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
1922	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NCCS																		
1923	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 10																		
1924	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 11																		
1925	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 12																		
1926	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 13	29	134	40	29.85	0.00	0.00	0.25	32	23.88	72064	860894	215030.30	1007.00	4032	251.10	322	74.50	97
1927	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 2																		
1928	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 3																		
1929	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 5	53	556	222	39.93	0.00	0.00	0.14	70	12.59	158845	5190936	2303578.80	1547.00	3486	526.80	847	193.30	323
1930	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 6																		
1931	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 7	8	39	16	41.03	0.00	0.00	0.55	28	71.79	18408	321746	83994.70	273.00	1046	109.30	134	41.20	49
1932	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 8	12	21	4	19.05	0.00	0.00	0.63	11	52.38	25459	156953	23643.50	12.00	80	75.80	87	9.30	11
1933	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 9	13	21	1	4.76	0.00					20075	235916	703.00	0.00	0	110.00	123	8.30	9
1934	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
1935	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	6	29	8	27.59	0.00	0.00	0.38	12	41.38	22155	166414	38834.20	139.00	596	57.60	70	11.60	15

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1936	2010	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	Tri-State Sector																		
1937	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector	12	160	57	35.63	0.00	0.00	0.60	111	69.38	0	1070217	333120.50	3.00	10	177.30	292	69.60	112
1938	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NCCS																		
1939	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 10	3	15	3	20.00	0.00	0.00	0.00	0	0.00	0	86223	10959.90	0.00	0	22.70	33	4.00	6
1940	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 11	8	114	13	11.40	0.00	0.00	0.00	0	0.00	0	416893	47045.20	0.00	0	59.40	123	6.50	13
1941	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 12																		
1942	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 13																		
1943	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 2																		
1944	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 3	11	115	22	19.13	0.00	0.00	0.49	45	39.13	0	812959	149031.10	7.00	38	106.00	180	24.20	38
1945	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
1946	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 6																		
1947	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 7	7	112	22	19.64	0.00	0.00	0.00	0	0.00	3	836687	239066.00	0.00	0	87.50	148	24.20	38
1948	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 8																		
1949	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 9																		
1950	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1951	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
1952	2010	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
1953	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
1954	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NCCS																		
1955	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 10																		
1956	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 11																		
1957	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 12																		
1958	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 13																		
1959	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 2																		
1960	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 3																		
1961	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 5																		
1962	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 6																		
1963	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 7																		
1964	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 8																		
1965	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 9																		
1966	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
1967	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	4	7	1	14.29	0.00					551	62548	10855.00	14.00	81	19.30	23	6.90	7
1968	2010	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	Tri-State Sector																		
1969	2010	SNE/MA Yellowtail Flounder	Handline	Fixed Gear Sector																		
1970	2010	SNE/MA Yellowtail Flounder	Handline	NCCS																		
1971	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 10																		
1972	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 11																		
1973	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 12																		
1974	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 13																		
1975	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 2																		
1976	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 3																		
1977	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 5																		
1978	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 6																		
1979	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 7																		
1980	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 8																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
1981	2010	SNE/MA Yellowtail Flounder	Handline	NEFS 9																		
1982	2010	SNE/MA Yellowtail Flounder	Handline	Port Clyde Community Groundfish Sector																		
1983	2010	SNE/MA Yellowtail Flounder	Handline	Sustainable Harvest Sector 1																		
1984	2010	SNE/MA Yellowtail Flounder	Handline	Tri-State Sector																		
1985	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	Fixed Gear Sector																		
1986	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NCCS																		
1987	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 10																		
1988	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 11																		
1989	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 12																		
1990	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 13																		
1991	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 2																		
1992	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 3	3	5	1	20.00	0.00					0	25461	560.00	0.00	0	3.60	7	1.10	2
1993	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 5																		
1994	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 6																		
1995	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 7																		
1996	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 8																		
1997	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 9																		
1998	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
1999	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2000	2010	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	Tri-State Sector																		
2001	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	Fixed Gear Sector																		
2002	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NCCS																		
2003	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 10																		
2004	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 11																		
2005	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 12																		
2006	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 13																		
2007	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 2																		
2008	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 3																		
2009	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 5																		
2010	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 6																		
2011	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 7																		
2012	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 8																		
2013	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 9																		
2014	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
2015	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	Sustainable Harvest Sector 1																		
2016	2010	SNE/MA Yellowtail Flounder	Ruhle Trawl	Tri-State Sector																		
2017	2010	Southern Windowpane	Bottom Longline	Fixed Gear Sector																		
2018	2010	Southern Windowpane	Bottom Longline	NCCS																		
2019	2010	Southern Windowpane	Bottom Longline	NEFS 10																		
2020	2010	Southern Windowpane	Bottom Longline	NEFS 11																		
2021	2010	Southern Windowpane	Bottom Longline	NEFS 12																		
2022	2010	Southern Windowpane	Bottom Longline	NEFS 13																		
2023	2010	Southern Windowpane	Bottom Longline	NEFS 2																		
2024	2010	Southern Windowpane	Bottom Longline	NEFS 3																		
2025	2010	Southern Windowpane	Bottom Longline	NEFS 5																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2026	2010	Southern Windowpane	Bottom Longline	NEFS 6																		
2027	2010	Southern Windowpane	Bottom Longline	NEFS 7																		
2028	2010	Southern Windowpane	Bottom Longline	NEFS 8																		
2029	2010	Southern Windowpane	Bottom Longline	NEFS 9																		
2030	2010	Southern Windowpane	Bottom Longline	Port Clyde Community Groundfish Sector																		
2031	2010	Southern Windowpane	Bottom Longline	Sustainable Harvest Sector 1																		
2032	2010	Southern Windowpane	Bottom Longline	Tri-State Sector																		
2033	2010	Southern Windowpane	Bottom Otter Trawl	Fixed Gear Sector																		
2034	2010	Southern Windowpane	Bottom Otter Trawl	NCCS																		
2035	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 10																		
2036	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 11																		
2037	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 12																		
2038	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 13	29	134	40	29.85	0.04	0.00	0.22	25	18.66	30	860894	215030.30	8564.00	34287	251.10	322	74.50	97
2039	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 2																		
2040	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 3																		
2041	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 5	53	556	222	39.93	0.01	0.00	0.09	33	5.94	186	5190936	2303578.80	28483.00	64184	526.80	847	193.30	323
2042	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 6																		
2043	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 7	8	39	16	41.03	0.01	0.00	0.40	22	56.41	0	321746	83994.70	1019.00	3903	109.30	134	41.20	49
2044	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 8	12	21	4	19.05	0.02	0.00	0.66	12	57.14	0	156953	23643.50	377.00	2503	75.80	87	9.30	11
2045	2010	Southern Windowpane	Bottom Otter Trawl	NEFS 9	13	21	1	4.76	0.00					0	235916	703.00	1.00	336	110.00	123	8.30	9
2046	2010	Southern Windowpane	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
2047	2010	Southern Windowpane	Bottom Otter Trawl	Sustainable Harvest Sector 1	6	29	8	27.59	0.03	0.00	0.45	14	48.28	27	166414	38834.20	1067.00	4572	57.60	70	11.60	15
2048	2010	Southern Windowpane	Bottom Otter Trawl	Tri-State Sector																		
2049	2010	Southern Windowpane	Extra Large Mesh Gillnet	Fixed Gear Sector	12	160	57	35.63	0.00	0.00	0.00	0	0.00	0	1070217	333120.50	0.00	0	177.30	292	69.60	112
2050	2010	Southern Windowpane	Extra Large Mesh Gillnet	NCCS																		
2051	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 10	3	15	3	20.00	0.00	0.00	0.00	0	0.00	0	86223	10959.90	0.00	0	22.70	33	4.00	6
2052	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 11	8	114	13	11.40	0.00	0.00	0.00	0	0.00	0	416893	47045.20	0.00	0	59.40	123	6.50	13
2053	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 12																		
2054	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 13																		
2055	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 2																		
2056	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 3	11	115	22	19.13	0.00	0.00	0.93	80	69.57	0	812959	149031.10	3.00	16	106.00	180	24.20	38
2057	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
2058	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 6																		
2059	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 7	7	112	22	19.64	0.00	0.00	0.00	0	0.00	0	836687	239066.00	0.00	0	87.50	148	24.20	38
2060	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 8																		
2061	2010	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 9																		
2062	2010	Southern Windowpane	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2063	2010	Southern Windowpane	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2064	2010	Southern Windowpane	Extra Large Mesh Gillnet	Tri-State Sector																		
2065	2010	Southern Windowpane	Haddock Otter Trawl	Fixed Gear Sector																		
2066	2010	Southern Windowpane	Haddock Otter Trawl	NCCS																		
2067	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 10																		
2068	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 11																		
2069	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 12																		
2070	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 13																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2071	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 2																		
2072	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 3																		
2073	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 5																		
2074	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 6																		
2075	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 7																		
2076	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 8																		
2077	2010	Southern Windowpane	Haddock Otter Trawl	NEFS 9																		
2078	2010	Southern Windowpane	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
2079	2010	Southern Windowpane	Haddock Otter Trawl	Sustainable Harvest Sector 1	4	7	1	14.29	0.00					0	62548	10855.00	27.00	156	19.30	23	6.90	7
2080	2010	Southern Windowpane	Haddock Otter Trawl	Tri-State Sector																		
2081	2010	Southern Windowpane	Handline	Fixed Gear Sector																		
2082	2010	Southern Windowpane	Handline	NCCS																		
2083	2010	Southern Windowpane	Handline	NEFS 10																		
2084	2010	Southern Windowpane	Handline	NEFS 11																		
2085	2010	Southern Windowpane	Handline	NEFS 12																		
2086	2010	Southern Windowpane	Handline	NEFS 13																		
2087	2010	Southern Windowpane	Handline	NEFS 2																		
2088	2010	Southern Windowpane	Handline	NEFS 3																		
2089	2010	Southern Windowpane	Handline	NEFS 5																		
2090	2010	Southern Windowpane	Handline	NEFS 6																		
2091	2010	Southern Windowpane	Handline	NEFS 7																		
2092	2010	Southern Windowpane	Handline	NEFS 8																		
2093	2010	Southern Windowpane	Handline	NEFS 9																		
2094	2010	Southern Windowpane	Handline	Port Clyde Community Groundfish Sector																		
2095	2010	Southern Windowpane	Handline	Sustainable Harvest Sector 1																		
2096	2010	Southern Windowpane	Handline	Tri-State Sector																		
2097	2010	Southern Windowpane	Large Mesh Gillnet	Fixed Gear Sector																		
2098	2010	Southern Windowpane	Large Mesh Gillnet	NCCS																		
2099	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 10																		
2100	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 11																		
2101	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 12																		
2102	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 13																		
2103	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 2																		
2104	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 3	3	5	1	20.00	0.00					0	25461	560.00	0.00	0	3.60	7	1.10	2
2105	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 5																		
2106	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 6																		
2107	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 7																		
2108	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 8																		
2109	2010	Southern Windowpane	Large Mesh Gillnet	NEFS 9																		
2110	2010	Southern Windowpane	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2111	2010	Southern Windowpane	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2112	2010	Southern Windowpane	Large Mesh Gillnet	Tri-State Sector																		
2113	2010	Southern Windowpane	Ruhle Trawl	Fixed Gear Sector																		
2114	2010	Southern Windowpane	Ruhle Trawl	NCCS																		
2115	2010	Southern Windowpane	Ruhle Trawl	NEFS 10																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2116	2010	Southern Windowpane	Ruhle Trawl	NEFS 11																		
2117	2010	Southern Windowpane	Ruhle Trawl	NEFS 12																		
2118	2010	Southern Windowpane	Ruhle Trawl	NEFS 13																		
2119	2010	Southern Windowpane	Ruhle Trawl	NEFS 2																		
2120	2010	Southern Windowpane	Ruhle Trawl	NEFS 3																		
2121	2010	Southern Windowpane	Ruhle Trawl	NEFS 5																		
2122	2010	Southern Windowpane	Ruhle Trawl	NEFS 6																		
2123	2010	Southern Windowpane	Ruhle Trawl	NEFS 7																		
2124	2010	Southern Windowpane	Ruhle Trawl	NEFS 8																		
2125	2010	Southern Windowpane	Ruhle Trawl	NEFS 9																		
2126	2010	Southern Windowpane	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
2127	2010	Southern Windowpane	Ruhle Trawl	Sustainable Harvest Sector 1																		
2128	2010	Southern Windowpane	Ruhle Trawl	Tri-State Sector																		
2129	2010	White Hake	Bottom Longline	Fixed Gear Sector	30	324	128	39.51	0.00	0.00	0.24	96	29.63	12857	1393725	490950.90	700.00	1987	279.00	455	101.10	172
2130	2010	White Hake	Bottom Longline	NCCS	3	35	12	34.29	0.01	0.00	0.55	23	65.71	635	10907	1473.80	12.00	89	16.90	37	5.30	12
2131	2010	White Hake	Bottom Longline	NEFS 10	6	43	9	20.93	0.00	0.00	0.00	0	0.00	0	75215	13484.20	0.00	0	17.40	43	4.30	9
2132	2010	White Hake	Bottom Longline	NEFS 11																		
2133	2010	White Hake	Bottom Longline	NEFS 12																		
2134	2010	White Hake	Bottom Longline	NEFS 13																		
2135	2010	White Hake	Bottom Longline	NEFS 2																		
2136	2010	White Hake	Bottom Longline	NEFS 3	7	112	36	32.14	0.00	0.00	0.80	87	77.68	0	138385	43339.60	1.00	3	62.20	123	19.30	37
2137	2010	White Hake	Bottom Longline	NEFS 5																		
2138	2010	White Hake	Bottom Longline	NEFS 6																		
2139	2010	White Hake	Bottom Longline	NEFS 7																		
2140	2010	White Hake	Bottom Longline	NEFS 8																		
2141	2010	White Hake	Bottom Longline	NEFS 9																		
2142	2010	White Hake	Bottom Longline	Port Clyde Community Groundfish Sector																		
2143	2010	White Hake	Bottom Longline	Sustainable Harvest Sector 1																		
2144	2010	White Hake	Bottom Longline	Tri-State Sector																		
2145	2010	White Hake	Bottom Otter Trawl	Fixed Gear Sector																		
2146	2010	White Hake	Bottom Otter Trawl	NCCS																		
2147	2010	White Hake	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.00	0.00	0.39	122	49.80	4728	606337	193252.90	88.00	276	117.30	254	41.50	92
2148	2010	White Hake	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.00	0.00	0.89	42	80.77	299	134828	41008.80	4.00	13	25.70	55	8.40	18
2149	2010	White Hake	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.00	0	0.00	58	134601	45136.00	0.00	0	24.50	63	11.40	27
2150	2010	White Hake	Bottom Otter Trawl	NEFS 13	77	356	77	21.63	0.00	0.00	0.50	155	43.54	56438	4291264	799783.20	882.00	4732	978.70	1111	297.00	338
2151	2010	White Hake	Bottom Otter Trawl	NEFS 2	101	1660	494	29.76	0.00	0.00	0.30	493	29.70	377473	9501121	2445375.50	615.00	2389	1670.10	2499	531.10	801
2152	2010	White Hake	Bottom Otter Trawl	NEFS 3																		
2153	2010	White Hake	Bottom Otter Trawl	NEFS 5	79	607	230	37.89	0.00	0.00	0.40	315	51.89	2284	6164490	2572383.00	205.00	491	737.80	1075	239.00	373
2154	2010	White Hake	Bottom Otter Trawl	NEFS 6	21	199	30	15.08	0.00	0.00	0.67	94	47.24	269459	3234868	596262.50	53.00	288	524.40	579	130.50	144
2155	2010	White Hake	Bottom Otter Trawl	NEFS 7	35	259	49	18.92	0.00	0.00	0.28	44	16.99	20421	3054672	695869.20	1657.00	7274	807.00	893	263.30	289
2156	2010	White Hake	Bottom Otter Trawl	NEFS 8	52	220	38	17.27	0.00	0.00	0.42	63	28.64	54892	3865554	680653.00	86.00	488	910.60	981	229.30	246
2157	2010	White Hake	Bottom Otter Trawl	NEFS 9	97	556	82	14.75	0.00	0.00	0.20	39	7.01	306046	9464577	2054697.20	2903.00	13372	1876.30	2038	644.10	688
2158	2010	White Hake	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.38	61	49.19	30496	404917	133989.40	102.00	308	207.90	266	76.50	98
2159	2010	White Hake	Bottom Otter Trawl	Sustainable Harvest Sector 1	168	1305	279	21.38	0.00	0.00	0.21	156	11.95	2850843	19314148	5099786.70	5342.00	20231	3747.70	4188	1321.00	1460
2160	2010	White Hake	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.55	13	68.42	0	594126	196414.20	201.00	608	108.20	118	47.10	52

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2161	2010	White Hake	Extra Large Mesh Gillnet	Fixed Gear Sector	31	895	365	40.78	0.00	0.00	0.38	470	52.51	1099	5890850	1978849.40	159.00	473	388.90	1043	168.70	425
2162	2010	White Hake	Extra Large Mesh Gillnet	NCCS																		
2163	2010	White Hake	Extra Large Mesh Gillnet	NEFS 10	12	135	68	50.37	0.00	0.00	0.45	95	70.37	2674	307754	90669.40	45.00	153	106.40	187	48.30	88
2164	2010	White Hake	Extra Large Mesh Gillnet	NEFS 11	22	358	92	25.70	0.00	0.00	0.38	126	35.20	12869	1132090	153346.80	40.00	295	168.80	383	52.40	105
2165	2010	White Hake	Extra Large Mesh Gillnet	NEFS 12																		
2166	2010	White Hake	Extra Large Mesh Gillnet	NEFS 13																		
2167	2010	White Hake	Extra Large Mesh Gillnet	NEFS 2																		
2168	2010	White Hake	Extra Large Mesh Gillnet	NEFS 3	41	705	223	31.63	0.00	0.00	0.47	375	53.19	23508	2750057	521244.90	54.00	285	377.60	822	106.30	242
2169	2010	White Hake	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
2170	2010	White Hake	Extra Large Mesh Gillnet	NEFS 6																		
2171	2010	White Hake	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.00	0	0.00	0	1011612	325364.50	0.00	0	97.80	166	29.80	45
2172	2010	White Hake	Extra Large Mesh Gillnet	NEFS 8																		
2173	2010	White Hake	Extra Large Mesh Gillnet	NEFS 9																		
2174	2010	White Hake	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2175	2010	White Hake	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	7	48	12	25.00	0.00	0.00	0.72	32	66.67	48713	303481	28197.00	124.00	1335	144.40	177	32.60	40
2176	2010	White Hake	Extra Large Mesh Gillnet	Tri-State Sector																		
2177	2010	White Hake	Haddock Otter Trawl	Fixed Gear Sector																		
2178	2010	White Hake	Haddock Otter Trawl	NCCS																		
2179	2010	White Hake	Haddock Otter Trawl	NEFS 10																		
2180	2010	White Hake	Haddock Otter Trawl	NEFS 11																		
2181	2010	White Hake	Haddock Otter Trawl	NEFS 12																		
2182	2010	White Hake	Haddock Otter Trawl	NEFS 13																		
2183	2010	White Hake	Haddock Otter Trawl	NEFS 2	26	69	16	23.19	0.00	0.00	0.29	16	23.19	39410	1212210	484424.30	288.00	721	297.90	320	107.70	116
2184	2010	White Hake	Haddock Otter Trawl	NEFS 3																		
2185	2010	White Hake	Haddock Otter Trawl	NEFS 5																		
2186	2010	White Hake	Haddock Otter Trawl	NEFS 6																		
2187	2010	White Hake	Haddock Otter Trawl	NEFS 7	6	16	14	87.50	0.00	0.00	0.19	12	75.00	908	235493	166862.90	64.00	90	104.40	111	101.10	109
2188	2010	White Hake	Haddock Otter Trawl	NEFS 8	8	12	11	91.67	0.00	0.00	0.23	11	91.67	0	169627	99223.20	10.00	17	76.60	82	86.70	92
2189	2010	White Hake	Haddock Otter Trawl	NEFS 9	4	13	13	100.00	0.00	0.00	0.00	0	0.00	111	33023	159774.50	69.00	14	34.00	36	96.40	102
2190	2010	White Hake	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
2191	2010	White Hake	Haddock Otter Trawl	Sustainable Harvest Sector 1	47	250	61	24.40	0.00	0.00	0.32	66	26.40	73125	5362928	1903251.10	340.00	958	1022.70	1101	424.50	459
2192	2010	White Hake	Haddock Otter Trawl	Tri-State Sector																		
2193	2010	White Hake	Handline	Fixed Gear Sector	9	119	64	53.78	0.00	0.00	0.00	0	0.00	0	200676	44199.10	0.00	0	69.60	140	27.60	71
2194	2010	White Hake	Handline	NCCS																		
2195	2010	White Hake	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
2196	2010	White Hake	Handline	NEFS 11																		
2197	2010	White Hake	Handline	NEFS 12																		
2198	2010	White Hake	Handline	NEFS 13																		
2199	2010	White Hake	Handline	NEFS 2																		
2200	2010	White Hake	Handline	NEFS 3																		
2201	2010	White Hake	Handline	NEFS 5																		
2202	2010	White Hake	Handline	NEFS 6																		
2203	2010	White Hake	Handline	NEFS 7																		
2204	2010	White Hake	Handline	NEFS 8																		
2205	2010	White Hake	Handline	NEFS 9																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2206	2010	White Hake	Handline	Port Clyde Community Groundfish Sector																		
2207	2010	White Hake	Handline	Sustainable Harvest Sector 1																		
2208	2010	White Hake	Handline	Tri-State Sector																		
2209	2010	White Hake	Large Mesh Gillnet	Fixed Gear Sector	19	689	260	37.74	0.00	0.00	0.41	364	52.83	33961	2345972	574862.40	863.00	3522	275.70	705	111.30	265
2210	2010	White Hake	Large Mesh Gillnet	NCCS																		
2211	2010	White Hake	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.00	0.00	0.41	169	57.09	10838	719986	276616.50	180.00	469	139.10	327	66.50	142
2212	2010	White Hake	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.40	509	52.91	153796	2958754	1078659.60	1475.00	4046	548.00	1201	215.50	445
2213	2010	White Hake	Large Mesh Gillnet	NEFS 12																		
2214	2010	White Hake	Large Mesh Gillnet	NEFS 13																		
2215	2010	White Hake	Large Mesh Gillnet	NEFS 2																		
2216	2010	White Hake	Large Mesh Gillnet	NEFS 3	39	1510	533	35.30	0.00	0.00	0.26	429	28.41	59618	2866998	938140.10	143.00	437	532.60	1551	197.50	540
2217	2010	White Hake	Large Mesh Gillnet	NEFS 5																		
2218	2010	White Hake	Large Mesh Gillnet	NEFS 6																		
2219	2010	White Hake	Large Mesh Gillnet	NEFS 7	5	20	5	25.00	0.00	0.00	0.52	10	50.00	5128	88890	17558.50	11.00	56	36.40	43	7.20	8
2220	2010	White Hake	Large Mesh Gillnet	NEFS 8																		
2221	2010	White Hake	Large Mesh Gillnet	NEFS 9																		
2222	2010	White Hake	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.22	70	19.61	122572	982739	310534.60	858.00	2715	194.60	408	63.30	127
2223	2010	White Hake	Large Mesh Gillnet	Sustainable Harvest Sector 1	12	103	43	41.75	0.00	0.00	0.33	49	47.57	199211	995791	458826.20	1482.00	3216	310.70	362	165.60	189
2224	2010	White Hake	Large Mesh Gillnet	Tri-State Sector																		
2225	2010	White Hake	Ruhle Trawl	Fixed Gear Sector																		
2226	2010	White Hake	Ruhle Trawl	NCCS																		
2227	2010	White Hake	Ruhle Trawl	NEFS 10																		
2228	2010	White Hake	Ruhle Trawl	NEFS 11																		
2229	2010	White Hake	Ruhle Trawl	NEFS 12																		
2230	2010	White Hake	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	0	287947	302196.30	17.00	16	46.70	49	104.30	110
2231	2010	White Hake	Ruhle Trawl	NEFS 2																		
2232	2010	White Hake	Ruhle Trawl	NEFS 3																		
2233	2010	White Hake	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					316	169043	2033.00	0.00	0	63.10	68	2.50	3
2234	2010	White Hake	Ruhle Trawl	NEFS 6																		
2235	2010	White Hake	Ruhle Trawl	NEFS 7																		
2236	2010	White Hake	Ruhle Trawl	NEFS 8																		
2237	2010	White Hake	Ruhle Trawl	NEFS 9																		
2238	2010	White Hake	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
2239	2010	White Hake	Ruhle Trawl	Sustainable Harvest Sector 1	6	7	7	100.00	0.00	0.00	0.00	0	0.00	5841	186905	98823.40	0.00	0	36.00	38	45.00	49
2240	2010	White Hake	Ruhle Trawl	Tri-State Sector																		
2241	2010	Witch Flounder	Bottom Longline	Fixed Gear Sector	30	324	128	39.51	0.00	0.00	0.00	0	0.00	0	1393725	490950.90	0.00	0	279.00	455	101.10	172
2242	2010	Witch Flounder	Bottom Longline	NCCS	3	35	12	34.29	0.00	0.00	0.00	0	0.00	0	10907	1473.80	0.00	0	16.90	37	5.30	12
2243	2010	Witch Flounder	Bottom Longline	NEFS 10	6	43	9	20.93	0.00	0.00	0.00	0	0.00	0	75215	13484.20	0.00	0	17.40	43	4.30	9
2244	2010	Witch Flounder	Bottom Longline	NEFS 11																		
2245	2010	Witch Flounder	Bottom Longline	NEFS 12																		
2246	2010	Witch Flounder	Bottom Longline	NEFS 13																		
2247	2010	Witch Flounder	Bottom Longline	NEFS 2																		
2248	2010	Witch Flounder	Bottom Longline	NEFS 3	7	112	36	32.14	0.00	0.00	0.00	0	0.00	0	138385	43339.60	0.00	0	62.20	123	19.30	37
2249	2010	Witch Flounder	Bottom Longline	NEFS 5																		
2250	2010	Witch Flounder	Bottom Longline	NEFS 6																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2251	2010	Witch Flounder	Bottom Longline	NEFS 7																		
2252	2010	Witch Flounder	Bottom Longline	NEFS 8																		
2253	2010	Witch Flounder	Bottom Longline	NEFS 9																		
2254	2010	Witch Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
2255	2010	Witch Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
2256	2010	Witch Flounder	Bottom Longline	Tri-State Sector																		
2257	2010	Witch Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
2258	2010	Witch Flounder	Bottom Otter Trawl	NCCS																		
2259	2010	Witch Flounder	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.00	0.00	0.18	42	17.14	40133	606337	193252.90	324.00	1017	117.30	254	41.50	92
2260	2010	Witch Flounder	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.01	0.00	0.55	32	61.54	5842	134828	41008.80	248.00	815	25.70	55	8.40	18
2261	2010	Witch Flounder	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.42	37	61.67	4039	134601	45136.00	106.00	316	24.50	63	11.40	27
2262	2010	Witch Flounder	Bottom Otter Trawl	NEFS 13	77	356	77	21.63	0.00	0.00	0.32	85	23.88	49647	4291264	799783.20	1181.00	6337	978.70	1111	297.00	338
2263	2010	Witch Flounder	Bottom Otter Trawl	NEFS 2	101	1660	494	29.76	0.00	0.00	0.11	85	5.12	231208	9495473	2445375.50	4434.00	17217	1670.10	2499	531.10	801
2264	2010	Witch Flounder	Bottom Otter Trawl	NEFS 3																		
2265	2010	Witch Flounder	Bottom Otter Trawl	NEFS 5	79	607	230	37.89	0.00	0.00	0.25	182	29.98	17570	6123192	2572383.00	743.00	1769	737.80	1075	239.00	373
2266	2010	Witch Flounder	Bottom Otter Trawl	NEFS 6	21	199	30	15.08	0.00	0.00	0.25	22	11.06	141318	3234868	596262.50	888.00	4818	524.40	579	130.50	144
2267	2010	Witch Flounder	Bottom Otter Trawl	NEFS 7	35	259	49	18.92	0.00	0.00	0.20	25	9.65	55968	3036154	695869.20	2327.00	10153	807.00	893	263.30	289
2268	2010	Witch Flounder	Bottom Otter Trawl	NEFS 8	52	220	38	17.27	0.00	0.00	0.36	51	23.18	44190	3865554	680653.00	986.00	5600	910.60	981	229.30	246
2269	2010	Witch Flounder	Bottom Otter Trawl	NEFS 9	97	556	82	14.75	0.00	0.00	0.19	35	6.29	147645	9464577	2054697.20	4573.00	21065	1876.30	2038	644.10	688
2270	2010	Witch Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.02	0.00	0.14	15	12.10	42726	404917	133989.40	2121.00	6410	207.90	266	76.50	98
2271	2010	Witch Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	168	1305	279	21.38	0.00	0.00	0.09	34	2.61	542676	19370209	5099786.70	13446.00	51071	3747.70	4188	1321.00	1460
2272	2010	Witch Flounder	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.26	6	31.58	4592	594126	196414.20	262.00	793	108.20	118	47.10	52
2273	2010	Witch Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector	31	895	365	40.78	0.00	0.00	0.00	0	0.00	22	5890850	1978849.40	0.00	0	388.90	1043	168.70	425
2274	2010	Witch Flounder	Extra Large Mesh Gillnet	NCCS																		
2275	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 10	12	135	68	50.37	0.00	0.00	0.47	97	71.85	138	307754	90669.40	13.00	44	106.40	187	48.30	88
2276	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 11	22	358	92	25.70	0.00	0.00	0.46	161	44.97	1090	1132090	153346.80	5.00	37	168.80	383	52.40	105
2277	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 12																		
2278	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 13																		
2279	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 2																		
2280	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 3	41	705	223	31.63	0.00	0.00	0.49	393	55.74	16102	2750057	521244.90	7.00	37	377.60	822	106.30	242
2281	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
2282	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 6																		
2283	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.00	0	0.00	0	1011612	325364.50	0.00	0	97.80	166	29.80	45
2284	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 8																		
2285	2010	Witch Flounder	Extra Large Mesh Gillnet	NEFS 9																		
2286	2010	Witch Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2287	2010	Witch Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	7	48	12	25.00	0.00	0.00	0.48	23	47.92	10395	303481	28197.00	13.00	140	144.40	177	32.60	40
2288	2010	Witch Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
2289	2010	Witch Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
2290	2010	Witch Flounder	Haddock Otter Trawl	NCCS																		
2291	2010	Witch Flounder	Haddock Otter Trawl	NEFS 10																		
2292	2010	Witch Flounder	Haddock Otter Trawl	NEFS 11																		
2293	2010	Witch Flounder	Haddock Otter Trawl	NEFS 12																		
2294	2010	Witch Flounder	Haddock Otter Trawl	NEFS 13																		
2295	2010	Witch Flounder	Haddock Otter Trawl	NEFS 2	26	69	16	23.19	0.00	0.00	0.32	18	26.09	22387	1201398	484424.30	312.00	774	297.90	320	107.70	116

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2296	2010	Witch Flounder	Haddock Otter Trawl	NEFS 3																		
2297	2010	Witch Flounder	Haddock Otter Trawl	NEFS 5																		
2298	2010	Witch Flounder	Haddock Otter Trawl	NEFS 6																		
2299	2010	Witch Flounder	Haddock Otter Trawl	NEFS 7	6	16	14	87.50	0.00	0.00	0.33	15	93.75	3302	206865	166862.90	24.00	30	104.40	111	101.10	109
2300	2010	Witch Flounder	Haddock Otter Trawl	NEFS 8	8	12	11	91.67	0.00	0.00	0.19	10	83.33	33	169627	99223.20	48.00	82	76.60	82	86.70	92
2301	2010	Witch Flounder	Haddock Otter Trawl	NEFS 9	4	13	13	100.00	0.00	0.00	0.00	0	0.00	425	33023	159774.50	722.00	149	34.00	36	96.40	102
2302	2010	Witch Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
2303	2010	Witch Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	47	250	61	24.40	0.00	0.00	0.24	44	17.60	25867	5380615	1903251.10	416.00	1176	1022.70	1101	424.50	459
2304	2010	Witch Flounder	Haddock Otter Trawl	Tri-State Sector																		
2305	2010	Witch Flounder	Handline	Fixed Gear Sector	9	119	64	53.78	0.00	0.00	0.00	0	0.00	0	200676	44199.10	0.00	0	69.60	140	27.60	71
2306	2010	Witch Flounder	Handline	NCCS																		
2307	2010	Witch Flounder	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
2308	2010	Witch Flounder	Handline	NEFS 11																		
2309	2010	Witch Flounder	Handline	NEFS 12																		
2310	2010	Witch Flounder	Handline	NEFS 13																		
2311	2010	Witch Flounder	Handline	NEFS 2																		
2312	2010	Witch Flounder	Handline	NEFS 3																		
2313	2010	Witch Flounder	Handline	NEFS 5																		
2314	2010	Witch Flounder	Handline	NEFS 6																		
2315	2010	Witch Flounder	Handline	NEFS 7																		
2316	2010	Witch Flounder	Handline	NEFS 8																		
2317	2010	Witch Flounder	Handline	NEFS 9																		
2318	2010	Witch Flounder	Handline	Port Clyde Community Groundfish Sector																		
2319	2010	Witch Flounder	Handline	Sustainable Harvest Sector 1																		
2320	2010	Witch Flounder	Handline	Tri-State Sector																		
2321	2010	Witch Flounder	Large Mesh Gillnet	Fixed Gear Sector	19	689	260	37.74	0.00	0.00	0.51	437	63.43	348	2345972	574862.40	26.00	106	275.70	705	111.30	265
2322	2010	Witch Flounder	Large Mesh Gillnet	NCCS																		
2323	2010	Witch Flounder	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.00	0.00	0.39	164	55.41	1297	719986	276616.50	6.00	16	139.10	327	66.50	142
2324	2010	Witch Flounder	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.11	70	7.28	994	2958754	1078659.60	119.00	326	548.00	1201	215.50	445
2325	2010	Witch Flounder	Large Mesh Gillnet	NEFS 12																		
2326	2010	Witch Flounder	Large Mesh Gillnet	NEFS 13																		
2327	2010	Witch Flounder	Large Mesh Gillnet	NEFS 2																		
2328	2010	Witch Flounder	Large Mesh Gillnet	NEFS 3	39	1510	533	35.30	0.00	0.00	0.23	370	24.50	1343	2866998	938140.10	15.00	46	532.60	1551	197.50	540
2329	2010	Witch Flounder	Large Mesh Gillnet	NEFS 5																		
2330	2010	Witch Flounder	Large Mesh Gillnet	NEFS 6																		
2331	2010	Witch Flounder	Large Mesh Gillnet	NEFS 7	5	20	5	25.00	0.00	0.00	0.00	0	0.00	10	88890	17558.50	0.00	0	36.40	43	7.20	8
2332	2010	Witch Flounder	Large Mesh Gillnet	NEFS 8																		
2333	2010	Witch Flounder	Large Mesh Gillnet	NEFS 9																		
2334	2010	Witch Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.20	61	17.09	320	982739	310534.60	34.00	108	194.60	408	63.30	127
2335	2010	Witch Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1	12	103	43	41.75	0.00	0.00	0.19	23	22.33	778	995791	458826.20	23.00	50	310.70	362	165.60	189
2336	2010	Witch Flounder	Large Mesh Gillnet	Tri-State Sector																		
2337	2010	Witch Flounder	Ruhle Trawl	Fixed Gear Sector																		
2338	2010	Witch Flounder	Ruhle Trawl	NCCS																		
2339	2010	Witch Flounder	Ruhle Trawl	NEFS 10																		
2340	2010	Witch Flounder	Ruhle Trawl	NEFS 11																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2341	2010	Witch Flounder	Ruhle Trawl	NEFS 12																		
2342	2010	Witch Flounder	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	725	287947	302196.30	23.00	22	46.70	49	104.30	110
2343	2010	Witch Flounder	Ruhle Trawl	NEFS 2																		
2344	2010	Witch Flounder	Ruhle Trawl	NEFS 3																		
2345	2010	Witch Flounder	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					3851	131431	2033.00	0.00	0	63.10	68	2.50	3
2346	2010	Witch Flounder	Ruhle Trawl	NEFS 6																		
2347	2010	Witch Flounder	Ruhle Trawl	NEFS 7																		
2348	2010	Witch Flounder	Ruhle Trawl	NEFS 8																		
2349	2010	Witch Flounder	Ruhle Trawl	NEFS 9																		
2350	2010	Witch Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
2351	2010	Witch Flounder	Ruhle Trawl	Sustainable Harvest Sector 1	6	7	7	100.00	0.00	0.00	0.00	0	0.00	1664	200822	98823.40	0.00	0	36.00	38	45.00	49
2352	2010	Witch Flounder	Ruhle Trawl	Tri-State Sector																		
2353	2010	Wolffish	Bottom Longline	Fixed Gear Sector	30	324	128	39.51	0.00	0.00	0.27	114	35.19	5	1393725	490950.90	282.00	801	279.00	455	101.10	172
2354	2010	Wolffish	Bottom Longline	NCCS	3	35	12	34.29	0.01	0.00	0.90	29	82.86	0	10907	1473.80	21.00	155	16.90	37	5.30	12
2355	2010	Wolffish	Bottom Longline	NEFS 10	6	43	9	20.93	0.01	0.00	0.51	19	44.19	0	75215	13484.20	72.00	402	17.40	43	4.30	9
2356	2010	Wolffish	Bottom Longline	NEFS 11																		
2357	2010	Wolffish	Bottom Longline	NEFS 12																		
2358	2010	Wolffish	Bottom Longline	NEFS 13																		
2359	2010	Wolffish	Bottom Longline	NEFS 2																		
2360	2010	Wolffish	Bottom Longline	NEFS 3	7	112	36	32.14	0.02	0.00	0.42	54	48.21	0	138385	43339.60	682.00	2178	62.20	123	19.30	37
2361	2010	Wolffish	Bottom Longline	NEFS 5																		
2362	2010	Wolffish	Bottom Longline	NEFS 6																		
2363	2010	Wolffish	Bottom Longline	NEFS 7																		
2364	2010	Wolffish	Bottom Longline	NEFS 8																		
2365	2010	Wolffish	Bottom Longline	NEFS 9																		
2366	2010	Wolffish	Bottom Longline	Port Clyde Community Groundfish Sector																		
2367	2010	Wolffish	Bottom Longline	Sustainable Harvest Sector 1																		
2368	2010	Wolffish	Bottom Longline	Tri-State Sector																		
2369	2010	Wolffish	Bottom Otter Trawl	Fixed Gear Sector																		
2370	2010	Wolffish	Bottom Otter Trawl	NCCS																		
2371	2010	Wolffish	Bottom Otter Trawl	NEFS 10	12	245	91	37.14	0.00	0.00	0.15	33	13.47	0	606337	193252.90	581.00	1823	117.30	254	41.50	92
2372	2010	Wolffish	Bottom Otter Trawl	NEFS 11	9	52	16	30.77	0.00	0.00	0.51	30	57.69	0	134828	41008.80	75.00	247	25.70	55	8.40	18
2373	2010	Wolffish	Bottom Otter Trawl	NEFS 12	5	60	27	45.00	0.00	0.00	0.33	30	50.00	0	134601	45136.00	156.00	465	24.50	63	11.40	27
2374	2010	Wolffish	Bottom Otter Trawl	NEFS 13	77	356	77	21.63	0.00	0.00	0.35	100	28.09	6	4291264	799783.20	208.00	1116	978.70	1111	297.00	338
2375	2010	Wolffish	Bottom Otter Trawl	NEFS 2	101	1660	494	29.76	0.00	0.00	0.12	102	6.14	0	9495473	2445375.50	2551.00	9906	1670.10	2499	531.10	801
2376	2010	Wolffish	Bottom Otter Trawl	NEFS 3																		
2377	2010	Wolffish	Bottom Otter Trawl	NEFS 5	79	607	230	37.89	0.00	0.00	0.00	0	0.00	2	6112202	2572383.00	0.00	0	737.80	1075	239.00	373
2378	2010	Wolffish	Bottom Otter Trawl	NEFS 6	21	199	30	15.08	0.00	0.00	0.57	79	39.70	0	3234868	596262.50	113.00	613	524.40	579	130.50	144
2379	2010	Wolffish	Bottom Otter Trawl	NEFS 7	35	259	49	18.92	0.00	0.00	0.31	51	19.69	0	3036154	695869.20	302.00	1318	807.00	893	263.30	289
2380	2010	Wolffish	Bottom Otter Trawl	NEFS 8	52	220	38	17.27	0.00	0.00	0.54	88	40.00	6	3865554	680653.00	43.00	244	910.60	981	229.30	246
2381	2010	Wolffish	Bottom Otter Trawl	NEFS 9	97	556	82	14.75	0.00	0.00	0.24	55	9.89	0	9464577	2054697.20	1205.00	5551	1876.30	2038	644.10	688
2382	2010	Wolffish	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	18	124	46	37.10	0.00	0.00	0.28	42	33.87	0	404917	133989.40	128.00	387	207.90	266	76.50	98
2383	2010	Wolffish	Bottom Otter Trawl	Sustainable Harvest Sector 1	168	1305	279	21.38	0.00	0.00	0.21	149	11.42	491	19288422	5099786.70	1999.00	7561	3747.70	4188	1321.00	1460
2384	2010	Wolffish	Bottom Otter Trawl	Tri-State Sector	7	19	7	36.84	0.00	0.00	0.00	0	0.00	0	594126	196414.20	0.00	0	108.20	118	47.10	52
2385	2010	Wolffish	Extra Large Mesh Gillnet	Fixed Gear Sector	31	895	365	40.78	0.00	0.00	0.52	607	67.82	0	5890850	1978849.40	47.00	140	388.90	1043	168.70	425

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2386	2010	Wolffish	Extra Large Mesh Gillnet	NCCS																		
2387	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 10	12	135	68	50.37	0.00	0.00	0.00	0	0.00	0	307754	90669.40	0.00	0	106.40	187	48.30	88
2388	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 11	22	358	92	25.70	0.00	0.00	0.39	131	36.59	0	1132090	153346.80	89.00	657	168.80	383	52.40	105
2389	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 12																		
2390	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 13																		
2391	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 2																		
2392	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 3	41	705	223	31.63	0.00	0.00	0.29	213	30.21	0	2750057	521244.90	156.00	823	377.60	822	106.30	242
2393	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 5	5	15	5	33.33	0.00	0.00	0.00	0	0.00	0	65496	26121.00	0.00	0	22.40	35	6.20	11
2394	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 6																		
2395	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 7	9	130	29	22.31	0.00	0.00	0.00	0	0.00	0	1011612	325364.50	0.00	0	97.80	166	29.80	45
2396	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 8																		
2397	2010	Wolffish	Extra Large Mesh Gillnet	NEFS 9																		
2398	2010	Wolffish	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2399	2010	Wolffish	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1	7	48	12	25.00	0.00	0.00	0.84	35	72.92	0	303481	28197.00	24.00	258	144.40	177	32.60	40
2400	2010	Wolffish	Extra Large Mesh Gillnet	Tri-State Sector																		
2401	2010	Wolffish	Haddock Otter Trawl	Fixed Gear Sector																		
2402	2010	Wolffish	Haddock Otter Trawl	NCCS																		
2403	2010	Wolffish	Haddock Otter Trawl	NEFS 10																		
2404	2010	Wolffish	Haddock Otter Trawl	NEFS 11																		
2405	2010	Wolffish	Haddock Otter Trawl	NEFS 12																		
2406	2010	Wolffish	Haddock Otter Trawl	NEFS 13																		
2407	2010	Wolffish	Haddock Otter Trawl	NEFS 2	26	69	16	23.19	0.00	0.00	0.41	25	36.23	0	1201398	484424.30	61.00	151	297.90	320	107.70	116
2408	2010	Wolffish	Haddock Otter Trawl	NEFS 3																		
2409	2010	Wolffish	Haddock Otter Trawl	NEFS 5																		
2410	2010	Wolffish	Haddock Otter Trawl	NEFS 6																		
2411	2010	Wolffish	Haddock Otter Trawl	NEFS 7	6	16	14	87.50	0.00	0.00	0.00	0	0.00	0	206865	166862.90	0.00	0	104.40	111	101.10	109
2412	2010	Wolffish	Haddock Otter Trawl	NEFS 8	8	12	11	91.67	0.00	0.00	0.27	11	91.67	0	169627	99223.20	9.00	15	76.60	82	86.70	92
2413	2010	Wolffish	Haddock Otter Trawl	NEFS 9	4	13	13	100.00	0.00	0.00	0.00	0	0.00	0	33023	159774.50	34.00	7	34.00	36	96.40	102
2414	2010	Wolffish	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
2415	2010	Wolffish	Haddock Otter Trawl	Sustainable Harvest Sector 1	47	250	61	24.40	0.00	0.00	0.59	139	55.60	0	5272460	1903251.10	406.00	1125	1022.70	1101	424.50	459
2416	2010	Wolffish	Haddock Otter Trawl	Tri-State Sector																		
2417	2010	Wolffish	Handline	Fixed Gear Sector	9	119	64	53.78	0.00	0.00	0.69	103	86.55	0	200676	44199.10	10.00	45	69.60	140	27.60	71
2418	2010	Wolffish	Handline	NCCS																		
2419	2010	Wolffish	Handline	NEFS 10	3	9	8	88.89	0.00	0.00	0.00	0	0.00	0	15816	14370.60	0.00	0	3.80	9	3.90	8
2420	2010	Wolffish	Handline	NEFS 11																		
2421	2010	Wolffish	Handline	NEFS 12																		
2422	2010	Wolffish	Handline	NEFS 13																		
2423	2010	Wolffish	Handline	NEFS 2																		
2424	2010	Wolffish	Handline	NEFS 3																		
2425	2010	Wolffish	Handline	NEFS 5																		
2426	2010	Wolffish	Handline	NEFS 6																		
2427	2010	Wolffish	Handline	NEFS 7																		
2428	2010	Wolffish	Handline	NEFS 8																		
2429	2010	Wolffish	Handline	NEFS 9																		
2430	2010	Wolffish	Handline	Port Clyde Community Groundfish Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2431	2010	Wolffish	Handline	Sustainable Harvest Sector 1																		
2432	2010	Wolffish	Handline	Tri-State Sector																		
2433	2010	Wolffish	Large Mesh Gillnet	Fixed Gear Sector	19	689	260	37.74	0.00	0.00	0.14	83	12.05	10	2345972	574862.40	1057.00	4314	275.70	705	111.30	265
2434	2010	Wolffish	Large Mesh Gillnet	NCCS																		
2435	2010	Wolffish	Large Mesh Gillnet	NEFS 10	11	296	124	41.89	0.00	0.00	0.21	78	26.35	0	719986	276616.50	396.00	1031	139.10	327	66.50	142
2436	2010	Wolffish	Large Mesh Gillnet	NEFS 11	36	962	374	38.88	0.00	0.00	0.29	353	36.69	0	2958754	1078659.60	99.00	272	548.00	1201	215.50	445
2437	2010	Wolffish	Large Mesh Gillnet	NEFS 12																		
2438	2010	Wolffish	Large Mesh Gillnet	NEFS 13																		
2439	2010	Wolffish	Large Mesh Gillnet	NEFS 2																		
2440	2010	Wolffish	Large Mesh Gillnet	NEFS 3	39	1510	533	35.30	0.00	0.00	0.20	285	18.87	0	2866998	938140.10	254.00	776	532.60	1551	197.50	540
2441	2010	Wolffish	Large Mesh Gillnet	NEFS 5																		
2442	2010	Wolffish	Large Mesh Gillnet	NEFS 6																		
2443	2010	Wolffish	Large Mesh Gillnet	NEFS 7	5	20	5	25.00	0.00	0.00	0.00	0	0.00	0	88890	17558.50	0.00	0	36.40	43	7.20	8
2444	2010	Wolffish	Large Mesh Gillnet	NEFS 8																		
2445	2010	Wolffish	Large Mesh Gillnet	NEFS 9																		
2446	2010	Wolffish	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	16	357	113	31.65	0.00	0.00	0.35	139	38.94	0	982739	310534.60	78.00	247	194.60	408	63.30	127
2447	2010	Wolffish	Large Mesh Gillnet	Sustainable Harvest Sector 1	12	103	43	41.75	0.00	0.00	0.37	54	52.43	0	995791	458826.20	36.00	78	310.70	362	165.60	189
2448	2010	Wolffish	Large Mesh Gillnet	Tri-State Sector																		
2449	2010	Wolffish	Ruhle Trawl	Fixed Gear Sector																		
2450	2010	Wolffish	Ruhle Trawl	NCCS																		
2451	2010	Wolffish	Ruhle Trawl	NEFS 10																		
2452	2010	Wolffish	Ruhle Trawl	NEFS 11																		
2453	2010	Wolffish	Ruhle Trawl	NEFS 12																		
2454	2010	Wolffish	Ruhle Trawl	NEFS 13	4	16	16	100.00	0.00	0.00	0.00	0	0.00	0	287947	302196.30	0.00	0	46.70	49	104.30	110
2455	2010	Wolffish	Ruhle Trawl	NEFS 2																		
2456	2010	Wolffish	Ruhle Trawl	NEFS 3																		
2457	2010	Wolffish	Ruhle Trawl	NEFS 5	6	11	1	9.09	0.00					4	118993	2033.00	0.00	0	63.10	68	2.50	3
2458	2010	Wolffish	Ruhle Trawl	NEFS 6																		
2459	2010	Wolffish	Ruhle Trawl	NEFS 7																		
2460	2010	Wolffish	Ruhle Trawl	NEFS 8																		
2461	2010	Wolffish	Ruhle Trawl	NEFS 9																		
2462	2010	Wolffish	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
2463	2010	Wolffish	Ruhle Trawl	Sustainable Harvest Sector 1	6	7	7	100.00	0.00	0.00	0.00	0	0.00	0	186905	98823.40	0.00	0	36.00	38	45.00	49
2464	2010	Wolffish	Ruhle Trawl	Tri-State Sector																		
2465	2011	CC/GOM Yellowtail Flounder	Bottom Longline	Fixed Gear Sector	16	328	40	12.20	0.00	0.00	0.00	0	0.00	29	1046745	127086.30	0.00	0	168.50	359	14.30	44
2466	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NCCS																		
2467	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.00	0	0.00	0	49858	17254.90	0.00	0	14.70	34	4.40	10
2468	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 11																		
2469	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 12																		
2470	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 13																		
2471	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 2																		
2472	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.00	0	0.00	0	298479	79608.30	0.00	0	140.80	308	38.80	81
2473	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 5																		
2474	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 6																		
2475	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 7																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2476	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 8																		
2477	2011	CC/GOM Yellowtail Flounder	Bottom Longline	NEFS 9																		
2478	2011	CC/GOM Yellowtail Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
2479	2011	CC/GOM Yellowtail Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
2480	2011	CC/GOM Yellowtail Flounder	Bottom Longline	Tri-State Sector																		
2481	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
2482	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NCCS																		
2483	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.03	0.00	0.16	58	10.78	288490	1690509	440369.40	13506.00	51847	290.90	584	79.60	170
2484	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.01	0.00	0.31	45	30.82	29748	311558	74652.00	920.00	3840	72.90	157	21.90	47
2485	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.03	0.00	0.36	51	36.43	14195	177907	54104.20	1531.00	5034	61.20	143	20.40	42
2486	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 13	16	73	23	31.51	0.00	0.00	0.64	50	68.49	15219	769423	185697.90	56.00	232	379.30	411	158.40	171
2487	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 2	77	2352	550	23.38	0.01	0.00	0.13	121	5.14	289835	10822077	2944065.80	18120.00	66607	2268.80	3396	695.80	989
2488	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.22	2	8.33	13336	53664	4363.00	12.00	148	15.90	28	1.40	2
2489	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 5																		
2490	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 6	13	198	42	21.21	0.00	0.00	0.24	30	15.15	105618	3600784	1015463.40	1470.00	5213	611.90	673	226.50	247
2491	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 7	5	43	7	16.28	0.00	0.00	0.00	0	0.00	53907	118080	15548.30	0.00	0	234.80	261	28.70	32
2492	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 8	12	52	17	32.69	0.00	0.00	0.63	36	69.23	105797	582938	192823.70	410.00	1239	327.60	349	125.80	135
2493	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	NEFS 9	44	287	89	31.01	0.00	0.00	0.25	70	24.39	351264	4903428	1154268.60	3270.00	13891	1625.20	1748	651.20	702
2494	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.63	105	66.04	18	499763	164841.10	3.00	9	259.60	339	92.10	117
2495	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	125	1162	296	25.47	0.00	0.00	0.29	277	23.84	72946	19061786	5723867.50	2685.00	8942	4147.40	4566	1616.00	1765
2496	2011	CC/GOM Yellowtail Flounder	Bottom Otter Trawl	Tri-State Sector																		
2497	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector	16	1044	290	27.78	0.00	0.00	0.00	0	0.00	12	6414707	1661832.10	0.00	0	297.60	1066	84.10	291
2498	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NCCS																		
2499	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 10	4	89	50	56.18	0.00	0.00	0.00	0	0.00	56	189089	75046.30	0.00	0	73.90	121	48.50	72
2500	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 11	4	61	61	100.00	0.00	0.00	0.00	0	0.00	6	142250	62863.80	0.00	0	21.10	61	27.60	61
2501	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 12																		
2502	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 13																		
2503	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 2																		
2504	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 3	16	360	143	39.72	0.00	0.00	0.42	204	56.67	1399	849965	174701.50	5.00	24	202.70	416	73.50	155
2505	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 5																		
2506	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 6																		
2507	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 7																		
2508	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 8																		
2509	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 9																		
2510	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2511	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2512	2011	CC/GOM Yellowtail Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
2513	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
2514	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NCCS																		
2515	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 10																		
2516	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 11																		
2517	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 12																		
2518	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 13																		
2519	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 2																		
2520	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 3																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2521	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 5																		
2522	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 6																		
2523	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 7																		
2524	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 8																		
2525	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	NEFS 9	3	20	2	10.00	0.00	0.00	0.00	0	0.00	535	186140	16063.20	0.00	0	62.00	67	12.10	13
2526	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
2527	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	8	22	22	100.00	0.00	0.00	0.00	0	0.00	6483	157237	445572.70	41.00	14	133.80	143	161.20	170
2528	2011	CC/GOM Yellowtail Flounder	Haddock Otter Trawl	Tri-State Sector																		
2529	2011	CC/GOM Yellowtail Flounder	Handline	Fixed Gear Sector	4	99	32	32.32	0.00	0.00	0.00	0	0.00	0	153649	39311.00	0.00	0	57.20	117	10.50	34
2530	2011	CC/GOM Yellowtail Flounder	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	0	18542	6504.80	0.00	0	12.00	26	4.40	9
2531	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
2532	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 11																		
2533	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 12																		
2534	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 13																		
2535	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 2																		
2536	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 3																		
2537	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 5																		
2538	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 6																		
2539	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 7																		
2540	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 8																		
2541	2011	CC/GOM Yellowtail Flounder	Handline	NEFS 9																		
2542	2011	CC/GOM Yellowtail Flounder	Handline	Port Clyde Community Groundfish Sector																		
2543	2011	CC/GOM Yellowtail Flounder	Handline	Sustainable Harvest Sector 1																		
2544	2011	CC/GOM Yellowtail Flounder	Handline	Tri-State Sector																		
2545	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	Fixed Gear Sector	18	802	233	29.05	0.00	0.00	0.30	234	29.18	1817	2301224	586115.50	62.00	243	279.40	817	82.30	235
2546	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NCCS																		
2547	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 10	12	359	149	41.50	0.00	0.00	0.18	74	20.61	73660	1122365	441761.00	1501.00	3814	295.00	501	105.20	193
2548	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.22	201	15.47	727	4076694	932163.20	51.00	223	481.80	1332	128.90	326
2549	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 12	6	96	22	22.92	0.00	0.00	0.00	0	0.00	0	1059087	212863.50	0.00	0	367.90	419	80.40	93
2550	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 13																		
2551	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 2																		
2552	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 3	31	2103	717	34.09	0.01	0.00	0.10	116	5.52	123724	3455744	1100298.90	8002.00	25132	795.30	2139	285.20	725
2553	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 5																		
2554	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 6																		
2555	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 7	4	14	6	42.86	0.00	0.00	0.72	12	85.71	24	64474	39861.90	2.00	3	49.20	56	31.90	35
2556	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 8																		
2557	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	NEFS 9																		
2558	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	14	557	146	26.21	0.00	0.00	0.47	262	47.04	19	1849272	446871.00	16.00	66	412.20	740	101.90	182
2559	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.47	54	47.79	83	894379	332117.40	16.00	43	369.50	429	133.30	152
2560	2011	CC/GOM Yellowtail Flounder	Large Mesh Gillnet	Tri-State Sector																		
2561	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	Fixed Gear Sector																		
2562	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NCCS																		
2563	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 10																		
2564	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 11																		
2565	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 12																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2566	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 13																		
2567	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 2																		
2568	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 3																		
2569	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 5																		
2570	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 6																		
2571	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 7																		
2572	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 8																		
2573	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	NEFS 9																		
2574	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
2575	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	Sustainable Harvest Sector 1																		
2576	2011	CC/GOM Yellowtail Flounder	Ruhle Trawl	Tri-State Sector																		
2577	2011	GB Cod East	Bottom Longline	Fixed Gear Sector	3	31	5	16.13	0.05	0.00	0.24	4	12.90	95429	202322	19785.40	910.00	9306	65.90	78	11.30	14
2578	2011	GB Cod East	Bottom Longline	NCCS																		
2579	2011	GB Cod East	Bottom Longline	NEFS 10																		
2580	2011	GB Cod East	Bottom Longline	NEFS 11																		
2581	2011	GB Cod East	Bottom Longline	NEFS 12																		
2582	2011	GB Cod East	Bottom Longline	NEFS 13																		
2583	2011	GB Cod East	Bottom Longline	NEFS 2																		
2584	2011	GB Cod East	Bottom Longline	NEFS 3																		
2585	2011	GB Cod East	Bottom Longline	NEFS 5																		
2586	2011	GB Cod East	Bottom Longline	NEFS 6																		
2587	2011	GB Cod East	Bottom Longline	NEFS 7																		
2588	2011	GB Cod East	Bottom Longline	NEFS 8																		
2589	2011	GB Cod East	Bottom Longline	NEFS 9																		
2590	2011	GB Cod East	Bottom Longline	Port Clyde Community Groundfish Sector																		
2591	2011	GB Cod East	Bottom Longline	Sustainable Harvest Sector 1																		
2592	2011	GB Cod East	Bottom Longline	Tri-State Sector																		
2593	2011	GB Cod East	Bottom Otter Trawl	Fixed Gear Sector																		
2594	2011	GB Cod East	Bottom Otter Trawl	NCCS																		
2595	2011	GB Cod East	Bottom Otter Trawl	NEFS 10																		
2596	2011	GB Cod East	Bottom Otter Trawl	NEFS 11																		
2597	2011	GB Cod East	Bottom Otter Trawl	NEFS 12																		
2598	2011	GB Cod East	Bottom Otter Trawl	NEFS 13	15	46	15	32.61	0.01	0.00	0.30	16	34.78	14307	426603	39449.90	320.00	3460	312.00	333	119.00	128
2599	2011	GB Cod East	Bottom Otter Trawl	NEFS 2	11	42	13	30.95	0.03	0.00	0.58	27	64.29	11176	532425	98429.90	2787.00	15075	288.30	307	100.50	108
2600	2011	GB Cod East	Bottom Otter Trawl	NEFS 3																		
2601	2011	GB Cod East	Bottom Otter Trawl	NEFS 5																		
2602	2011	GB Cod East	Bottom Otter Trawl	NEFS 6																		
2603	2011	GB Cod East	Bottom Otter Trawl	NEFS 7	7	16	6	37.50	0.02	0.00	0.19	4	25.00	3425	93666	27485.10	418.00	1424	111.50	119	51.40	54
2604	2011	GB Cod East	Bottom Otter Trawl	NEFS 8	9	31	17	54.84	0.01	0.00	0.25	15	48.39	12263	475190	162207.80	1517.00	4444	236.00	250	140.80	148
2605	2011	GB Cod East	Bottom Otter Trawl	NEFS 9	19	69	25	36.23	0.01	0.00	0.19	13	18.84	73710	1608135	485945.10	6026.00	19942	470.90	510	184.30	199
2606	2011	GB Cod East	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
2607	2011	GB Cod East	Bottom Otter Trawl	Sustainable Harvest Sector 1	20	103	26	25.24	0.01	0.00	0.28	23	22.33	32808	1060962	173010.50	981.00	6016	718.80	766	200.40	212
2608	2011	GB Cod East	Bottom Otter Trawl	Tri-State Sector																		
2609	2011	GB Cod East	Extra Large Mesh Gillnet	Fixed Gear Sector																		
2610	2011	GB Cod East	Extra Large Mesh Gillnet	NCCS																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2611	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 10																		
2612	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 11																		
2613	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 12																		
2614	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 13																		
2615	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 2																		
2616	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 3																		
2617	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 5																		
2618	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 6																		
2619	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 7																		
2620	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 8																		
2621	2011	GB Cod East	Extra Large Mesh Gillnet	NEFS 9																		
2622	2011	GB Cod East	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2623	2011	GB Cod East	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2624	2011	GB Cod East	Extra Large Mesh Gillnet	Tri-State Sector																		
2625	2011	GB Cod East	Haddock Otter Trawl	Fixed Gear Sector																		
2626	2011	GB Cod East	Haddock Otter Trawl	NCCS																		
2627	2011	GB Cod East	Haddock Otter Trawl	NEFS 10																		
2628	2011	GB Cod East	Haddock Otter Trawl	NEFS 11																		
2629	2011	GB Cod East	Haddock Otter Trawl	NEFS 12																		
2630	2011	GB Cod East	Haddock Otter Trawl	NEFS 13																		
2631	2011	GB Cod East	Haddock Otter Trawl	NEFS 2	9	11	6	54.55	0.01	0.00	0.23	5	45.45	2152	134202	22834.90	238.00	1399	62.80	69	41.40	45
2632	2011	GB Cod East	Haddock Otter Trawl	NEFS 3																		
2633	2011	GB Cod East	Haddock Otter Trawl	NEFS 5																		
2634	2011	GB Cod East	Haddock Otter Trawl	NEFS 6																		
2635	2011	GB Cod East	Haddock Otter Trawl	NEFS 7																		
2636	2011	GB Cod East	Haddock Otter Trawl	NEFS 8																		
2637	2011	GB Cod East	Haddock Otter Trawl	NEFS 9	7	10	1	10.00	0.02					18573	114230	35959.90	788.00	2503	57.70	60	3.60	4
2638	2011	GB Cod East	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
2639	2011	GB Cod East	Haddock Otter Trawl	Sustainable Harvest Sector 1	14	86	26	30.23	0.01	0.00	0.44	42	48.84	13272	1460915	271030.60	1975.00	10646	546.70	582	200.70	214
2640	2011	GB Cod East	Haddock Otter Trawl	Tri-State Sector																		
2641	2011	GB Cod East	Handline	Fixed Gear Sector																		
2642	2011	GB Cod East	Handline	NCCS																		
2643	2011	GB Cod East	Handline	NEFS 10																		
2644	2011	GB Cod East	Handline	NEFS 11																		
2645	2011	GB Cod East	Handline	NEFS 12																		
2646	2011	GB Cod East	Handline	NEFS 13																		
2647	2011	GB Cod East	Handline	NEFS 2																		
2648	2011	GB Cod East	Handline	NEFS 3																		
2649	2011	GB Cod East	Handline	NEFS 5																		
2650	2011	GB Cod East	Handline	NEFS 6																		
2651	2011	GB Cod East	Handline	NEFS 7																		
2652	2011	GB Cod East	Handline	NEFS 8																		
2653	2011	GB Cod East	Handline	NEFS 9																		
2654	2011	GB Cod East	Handline	Port Clyde Community Groundfish Sector																		
2655	2011	GB Cod East	Handline	Sustainable Harvest Sector 1																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2656	2011	GB Cod East	Handline	Tri-State Sector																		
2657	2011	GB Cod East	Large Mesh Gillnet	Fixed Gear Sector																		
2658	2011	GB Cod East	Large Mesh Gillnet	NCCS																		
2659	2011	GB Cod East	Large Mesh Gillnet	NEFS 10																		
2660	2011	GB Cod East	Large Mesh Gillnet	NEFS 11																		
2661	2011	GB Cod East	Large Mesh Gillnet	NEFS 12																		
2662	2011	GB Cod East	Large Mesh Gillnet	NEFS 13																		
2663	2011	GB Cod East	Large Mesh Gillnet	NEFS 2																		
2664	2011	GB Cod East	Large Mesh Gillnet	NEFS 3																		
2665	2011	GB Cod East	Large Mesh Gillnet	NEFS 5																		
2666	2011	GB Cod East	Large Mesh Gillnet	NEFS 6																		
2667	2011	GB Cod East	Large Mesh Gillnet	NEFS 7																		
2668	2011	GB Cod East	Large Mesh Gillnet	NEFS 8																		
2669	2011	GB Cod East	Large Mesh Gillnet	NEFS 9																		
2670	2011	GB Cod East	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2671	2011	GB Cod East	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2672	2011	GB Cod East	Large Mesh Gillnet	Tri-State Sector																		
2673	2011	GB Cod East	Ruhle Trawl	Fixed Gear Sector																		
2674	2011	GB Cod East	Ruhle Trawl	NCCS																		
2675	2011	GB Cod East	Ruhle Trawl	NEFS 10																		
2676	2011	GB Cod East	Ruhle Trawl	NEFS 11																		
2677	2011	GB Cod East	Ruhle Trawl	NEFS 12																		
2678	2011	GB Cod East	Ruhle Trawl	NEFS 13																		
2679	2011	GB Cod East	Ruhle Trawl	NEFS 2																		
2680	2011	GB Cod East	Ruhle Trawl	NEFS 3																		
2681	2011	GB Cod East	Ruhle Trawl	NEFS 5																		
2682	2011	GB Cod East	Ruhle Trawl	NEFS 6																		
2683	2011	GB Cod East	Ruhle Trawl	NEFS 7																		
2684	2011	GB Cod East	Ruhle Trawl	NEFS 8																		
2685	2011	GB Cod East	Ruhle Trawl	NEFS 9																		
2686	2011	GB Cod East	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
2687	2011	GB Cod East	Ruhle Trawl	Sustainable Harvest Sector 1	4	5	1	20.00	0.00					149	39337	2996.00	3.00	39	27.10	29	4.50	5
2688	2011	GB Cod East	Ruhle Trawl	Tri-State Sector																		
2689	2011	GB Cod West	Bottom Longline	Fixed Gear Sector	14	216	32	14.81	0.02	0.00	0.34	40	18.52	117200	556322	91572.00	2199.00	13359	81.30	230	11.90	36
2690	2011	GB Cod West	Bottom Longline	NCCS																		
2691	2011	GB Cod West	Bottom Longline	NEFS 10																		
2692	2011	GB Cod West	Bottom Longline	NEFS 11																		
2693	2011	GB Cod West	Bottom Longline	NEFS 12																		
2694	2011	GB Cod West	Bottom Longline	NEFS 13																		
2695	2011	GB Cod West	Bottom Longline	NEFS 2																		
2696	2011	GB Cod West	Bottom Longline	NEFS 3																		
2697	2011	GB Cod West	Bottom Longline	NEFS 5																		
2698	2011	GB Cod West	Bottom Longline	NEFS 6																		
2699	2011	GB Cod West	Bottom Longline	NEFS 7																		
2700	2011	GB Cod West	Bottom Longline	NEFS 8																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2701	2011	GB Cod West	Bottom Longline	NEFS 9																		
2702	2011	GB Cod West	Bottom Longline	Port Clyde Community Groundfish Sector																		
2703	2011	GB Cod West	Bottom Longline	Sustainable Harvest Sector 1																		
2704	2011	GB Cod West	Bottom Longline	Tri-State Sector																		
2705	2011	GB Cod West	Bottom Otter Trawl	Fixed Gear Sector																		
2706	2011	GB Cod West	Bottom Otter Trawl	NCCS																		
2707	2011	GB Cod West	Bottom Otter Trawl	NEFS 10	3	116	33	28.45	0.00	0.00	0.29	32	27.59	157213	549385	137324.80	384.00	1536	63.70	122	18.30	33
2708	2011	GB Cod West	Bottom Otter Trawl	NEFS 11																		
2709	2011	GB Cod West	Bottom Otter Trawl	NEFS 12																		
2710	2011	GB Cod West	Bottom Otter Trawl	NEFS 13	74	468	132	28.21	0.00	0.00	0.20	68	14.53	507930	4845791	1818471.80	2735.00	7288	1207.90	1382	475.80	539
2711	2011	GB Cod West	Bottom Otter Trawl	NEFS 2	27	286	86	30.07	0.00	0.00	0.23	57	19.93	1002942	4371987	1201922.20	5811.00	21137	1254.70	1378	441.60	484
2712	2011	GB Cod West	Bottom Otter Trawl	NEFS 3																		
2713	2011	GB Cod West	Bottom Otter Trawl	NEFS 5	54	641	211	32.92	0.00	0.00	0.23	144	22.46	146749	6146871	2049029.70	635.00	1905	713.00	1031	256.80	371
2714	2011	GB Cod West	Bottom Otter Trawl	NEFS 6	7	86	27	31.40	0.00	0.00	0.34	33	38.37	566122	2071769	363554.00	860.00	4901	479.00	519	185.30	199
2715	2011	GB Cod West	Bottom Otter Trawl	NEFS 7	25	201	45	22.39	0.00	0.00	0.30	45	22.39	225242	2504154	815397.50	2551.00	7834	656.00	729	254.80	279
2716	2011	GB Cod West	Bottom Otter Trawl	NEFS 8	28	158	36	22.78	0.00	0.00	0.21	20	12.66	415316	2683120	587980.40	2071.00	9451	772.10	823	267.80	286
2717	2011	GB Cod West	Bottom Otter Trawl	NEFS 9	74	559	130	23.26	0.01	0.00	0.17	50	8.94	1590294	9981504	2600934.80	30148.00	115698	2494.00	2684	956.80	1032
2718	2011	GB Cod West	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
2719	2011	GB Cod West	Bottom Otter Trawl	Sustainable Harvest Sector 1	57	465	155	33.33	0.01	0.00	0.28	142	30.54	1321393	6781968	1695638.80	11580.00	46316	2320.60	2501	1003.90	1080
2720	2011	GB Cod West	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.08	1	6.67	4419	420738	41397.50	102.00	1037	96.40	104	17.40	19
2721	2011	GB Cod West	Extra Large Mesh Gillnet	Fixed Gear Sector	32	1272	343	26.97	0.00	0.00	0.35	433	34.04	2107	7880582	2045826.40	132.00	508	564.30	1475	150.30	394
2722	2011	GB Cod West	Extra Large Mesh Gillnet	NCCS																		
2723	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 10	5	31	12	38.71	0.00	0.00	0.53	21	67.74	22	223214	94210.00	8.00	19	33.60	54	11.20	18
2724	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 11	6	141	23	16.31	0.00	0.00	0.00	0	0.00	0	526309	90002.80	0.00	0	60.00	143	11.10	23
2725	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 12																		
2726	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 13																		
2727	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 2																		
2728	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 3	14	153	28	18.30	0.00	0.00	0.00	0	0.00	22	819712	156861.40	0.00	0	151.90	235	29.80	45
2729	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 5																		
2730	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 6																		
2731	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 7	7	183	48	26.23	0.00	0.00	0.42	76	41.53	695	1050575	319944.00	178.00	584	129.30	217	42.70	67
2732	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 8																		
2733	2011	GB Cod West	Extra Large Mesh Gillnet	NEFS 9																		
2734	2011	GB Cod West	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2735	2011	GB Cod West	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2736	2011	GB Cod West	Extra Large Mesh Gillnet	Tri-State Sector																		
2737	2011	GB Cod West	Haddock Otter Trawl	Fixed Gear Sector																		
2738	2011	GB Cod West	Haddock Otter Trawl	NCCS																		
2739	2011	GB Cod West	Haddock Otter Trawl	NEFS 10																		
2740	2011	GB Cod West	Haddock Otter Trawl	NEFS 11																		
2741	2011	GB Cod West	Haddock Otter Trawl	NEFS 12																		
2742	2011	GB Cod West	Haddock Otter Trawl	NEFS 13																		
2743	2011	GB Cod West	Haddock Otter Trawl	NEFS 2	7	9	9	100.00	0.00	0.00	0.00	0	0.00	11306	143271	127507.70	382.00	429	62.00	67	58.60	63
2744	2011	GB Cod West	Haddock Otter Trawl	NEFS 3																		
2745	2011	GB Cod West	Haddock Otter Trawl	NEFS 5																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2746	2011	GB Cod West	Haddock Otter Trawl	NEFS 6																		
2747	2011	GB Cod West	Haddock Otter Trawl	NEFS 7	4	8	4	50.00	0.00	0.00	1.00	8	100.00	7816	50919	8197.40	2.00	12	65.20	70	31.50	34
2748	2011	GB Cod West	Haddock Otter Trawl	NEFS 8																		
2749	2011	GB Cod West	Haddock Otter Trawl	NEFS 9	7	23	7	30.43	0.01	0.00	0.32	8	34.78	41462	252060	61311.20	341.00	1402	115.00	123	43.80	47
2750	2011	GB Cod West	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
2751	2011	GB Cod West	Haddock Otter Trawl	Sustainable Harvest Sector 1	22	77	35	45.45	0.00	0.00	0.23	25	32.47	86650	1329587	516389.20	1277.00	3288	384.50	409	253.50	269
2752	2011	GB Cod West	Haddock Otter Trawl	Tri-State Sector																		
2753	2011	GB Cod West	Handline	Fixed Gear Sector	4	99	34	34.34	0.01	0.00	0.42	51	51.52	38651	153649	39350.50	370.00	1445	57.20	117	13.50	38
2754	2011	GB Cod West	Handline	NCCS																		
2755	2011	GB Cod West	Handline	NEFS 10																		
2756	2011	GB Cod West	Handline	NEFS 11																		
2757	2011	GB Cod West	Handline	NEFS 12																		
2758	2011	GB Cod West	Handline	NEFS 13																		
2759	2011	GB Cod West	Handline	NEFS 2																		
2760	2011	GB Cod West	Handline	NEFS 3																		
2761	2011	GB Cod West	Handline	NEFS 5																		
2762	2011	GB Cod West	Handline	NEFS 6																		
2763	2011	GB Cod West	Handline	NEFS 7																		
2764	2011	GB Cod West	Handline	NEFS 8																		
2765	2011	GB Cod West	Handline	NEFS 9																		
2766	2011	GB Cod West	Handline	Port Clyde Community Groundfish Sector																		
2767	2011	GB Cod West	Handline	Sustainable Harvest Sector 1																		
2768	2011	GB Cod West	Handline	Tri-State Sector																		
2769	2011	GB Cod West	Large Mesh Gillnet	Fixed Gear Sector	18	690	215	31.16	0.01	0.00	0.13	56	8.12	222245	2044882	542391.10	3739.00	14096	240.70	706	75.10	217
2770	2011	GB Cod West	Large Mesh Gillnet	NCCS																		
2771	2011	GB Cod West	Large Mesh Gillnet	NEFS 10	5	14	3	21.43	0.00	0.00	0.11	1	7.14	6837	86539	37370.50	31.00	72	58.30	63	13.70	15
2772	2011	GB Cod West	Large Mesh Gillnet	NEFS 11																		
2773	2011	GB Cod West	Large Mesh Gillnet	NEFS 12																		
2774	2011	GB Cod West	Large Mesh Gillnet	NEFS 13																		
2775	2011	GB Cod West	Large Mesh Gillnet	NEFS 2																		
2776	2011	GB Cod West	Large Mesh Gillnet	NEFS 3	5	33	10	30.30	0.00	0.00	0.46	17	51.52	825	80059	28036.50	8.00	23	18.60	36	8.20	13
2777	2011	GB Cod West	Large Mesh Gillnet	NEFS 5																		
2778	2011	GB Cod West	Large Mesh Gillnet	NEFS 6																		
2779	2011	GB Cod West	Large Mesh Gillnet	NEFS 7																		
2780	2011	GB Cod West	Large Mesh Gillnet	NEFS 8																		
2781	2011	GB Cod West	Large Mesh Gillnet	NEFS 9																		
2782	2011	GB Cod West	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2783	2011	GB Cod West	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2784	2011	GB Cod West	Large Mesh Gillnet	Tri-State Sector																		
2785	2011	GB Cod West	Ruhle Trawl	Fixed Gear Sector																		
2786	2011	GB Cod West	Ruhle Trawl	NCCS																		
2787	2011	GB Cod West	Ruhle Trawl	NEFS 10																		
2788	2011	GB Cod West	Ruhle Trawl	NEFS 11																		
2789	2011	GB Cod West	Ruhle Trawl	NEFS 12																		
2790	2011	GB Cod West	Ruhle Trawl	NEFS 13	14	48	9	18.75	0.00	0.00	0.77	29	60.42	23921	826254	132192.40	3.00	19	261.00	282	63.90	68

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2791	2011	GB Cod West	Ruhle Trawl	NEFS 2																		
2792	2011	GB Cod West	Ruhle Trawl	NEFS 3																		
2793	2011	GB Cod West	Ruhle Trawl	NEFS 5	3	4	0	0.00						5246	51034	0.00	0.00		23.30	24	0.00	0
2794	2011	GB Cod West	Ruhle Trawl	NEFS 6																		
2795	2011	GB Cod West	Ruhle Trawl	NEFS 7																		
2796	2011	GB Cod West	Ruhle Trawl	NEFS 8																		
2797	2011	GB Cod West	Ruhle Trawl	NEFS 9																		
2798	2011	GB Cod West	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
2799	2011	GB Cod West	Ruhle Trawl	Sustainable Harvest Sector 1	3	5	2	40.00	0.00	0.00	0.20	2	40.00	27797	127196	3607.20	8.00	282	28.30	30	10.40	11
2800	2011	GB Cod West	Ruhle Trawl	Tri-State Sector																		
2801	2011	GB Haddock East	Bottom Longline	Fixed Gear Sector	3	31	5	16.13	0.07	0.00	0.42	9	29.03	101045	202322	19785.40	1326.00	13559	65.90	78	11.30	14
2802	2011	GB Haddock East	Bottom Longline	NCCS																		
2803	2011	GB Haddock East	Bottom Longline	NEFS 10																		
2804	2011	GB Haddock East	Bottom Longline	NEFS 11																		
2805	2011	GB Haddock East	Bottom Longline	NEFS 12																		
2806	2011	GB Haddock East	Bottom Longline	NEFS 13																		
2807	2011	GB Haddock East	Bottom Longline	NEFS 2																		
2808	2011	GB Haddock East	Bottom Longline	NEFS 3																		
2809	2011	GB Haddock East	Bottom Longline	NEFS 5																		
2810	2011	GB Haddock East	Bottom Longline	NEFS 6																		
2811	2011	GB Haddock East	Bottom Longline	NEFS 7																		
2812	2011	GB Haddock East	Bottom Longline	NEFS 8																		
2813	2011	GB Haddock East	Bottom Longline	NEFS 9																		
2814	2011	GB Haddock East	Bottom Longline	Port Clyde Community Groundfish Sector																		
2815	2011	GB Haddock East	Bottom Longline	Sustainable Harvest Sector 1																		
2816	2011	GB Haddock East	Bottom Longline	Tri-State Sector																		
2817	2011	GB Haddock East	Bottom Otter Trawl	Fixed Gear Sector																		
2818	2011	GB Haddock East	Bottom Otter Trawl	NCCS																		
2819	2011	GB Haddock East	Bottom Otter Trawl	NEFS 10																		
2820	2011	GB Haddock East	Bottom Otter Trawl	NEFS 11																		
2821	2011	GB Haddock East	Bottom Otter Trawl	NEFS 12																		
2822	2011	GB Haddock East	Bottom Otter Trawl	NEFS 13	15	46	15	32.61	0.01	0.00	0.48	26	56.52	85231	440865	39449.90	271.00	3029	312.00	333	119.00	128
2823	2011	GB Haddock East	Bottom Otter Trawl	NEFS 2	11	42	13	30.95	0.03	0.00	0.35	16	38.10	150241	532425	98429.90	2697.00	14589	288.30	307	100.50	108
2824	2011	GB Haddock East	Bottom Otter Trawl	NEFS 3																		
2825	2011	GB Haddock East	Bottom Otter Trawl	NEFS 5																		
2826	2011	GB Haddock East	Bottom Otter Trawl	NEFS 6																		
2827	2011	GB Haddock East	Bottom Otter Trawl	NEFS 7	7	16	6	37.50	0.00	0.00	0.14	2	12.50	9423	93666	27485.10	95.00	324	111.50	119	51.40	54
2828	2011	GB Haddock East	Bottom Otter Trawl	NEFS 8	9	31	17	54.84	0.01	0.00	0.22	13	41.94	86116	475190	162207.80	949.00	2780	236.00	250	140.80	148
2829	2011	GB Haddock East	Bottom Otter Trawl	NEFS 9	19	69	25	36.23	0.00	0.00	0.21	15	21.74	311456	1608135	485945.10	2253.00	7456	470.90	510	184.30	199
2830	2011	GB Haddock East	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
2831	2011	GB Haddock East	Bottom Otter Trawl	Sustainable Harvest Sector 1	20	103	26	25.24	0.02	0.00	0.44	44	42.72	459381	1099280	173010.50	3538.00	22480	718.80	766	200.40	212
2832	2011	GB Haddock East	Bottom Otter Trawl	Tri-State Sector																		
2833	2011	GB Haddock East	Extra Large Mesh Gillnet	Fixed Gear Sector																		
2834	2011	GB Haddock East	Extra Large Mesh Gillnet	NCCS																		
2835	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 10																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2836	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 11																		
2837	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 12																		
2838	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 13																		
2839	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 2																		
2840	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 3																		
2841	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 5																		
2842	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 6																		
2843	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 7																		
2844	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 8																		
2845	2011	GB Haddock East	Extra Large Mesh Gillnet	NEFS 9																		
2846	2011	GB Haddock East	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2847	2011	GB Haddock East	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2848	2011	GB Haddock East	Extra Large Mesh Gillnet	Tri-State Sector																		
2849	2011	GB Haddock East	Haddock Otter Trawl	Fixed Gear Sector																		
2850	2011	GB Haddock East	Haddock Otter Trawl	NCCS																		
2851	2011	GB Haddock East	Haddock Otter Trawl	NEFS 10																		
2852	2011	GB Haddock East	Haddock Otter Trawl	NEFS 11																		
2853	2011	GB Haddock East	Haddock Otter Trawl	NEFS 12																		
2854	2011	GB Haddock East	Haddock Otter Trawl	NEFS 13																		
2855	2011	GB Haddock East	Haddock Otter Trawl	NEFS 2	9	11	6	54.55	0.01	0.00	0.26	6	54.55	79537	134202	22834.90	132.00	776	62.80	69	41.40	45
2856	2011	GB Haddock East	Haddock Otter Trawl	NEFS 3																		
2857	2011	GB Haddock East	Haddock Otter Trawl	NEFS 5																		
2858	2011	GB Haddock East	Haddock Otter Trawl	NEFS 6																		
2859	2011	GB Haddock East	Haddock Otter Trawl	NEFS 7																		
2860	2011	GB Haddock East	Haddock Otter Trawl	NEFS 8																		
2861	2011	GB Haddock East	Haddock Otter Trawl	NEFS 9	7	10	1	10.00	0.01					49618	114230	35959.90	326.00	1036	57.70	60	3.60	4
2862	2011	GB Haddock East	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
2863	2011	GB Haddock East	Haddock Otter Trawl	Sustainable Harvest Sector 1	14	86	26	30.23	0.02	0.00	0.36	33	38.37	910853	1461221	271030.60	5594.00	30159	546.70	582	200.70	214
2864	2011	GB Haddock East	Haddock Otter Trawl	Tri-State Sector																		
2865	2011	GB Haddock East	Handline	Fixed Gear Sector																		
2866	2011	GB Haddock East	Handline	NCCS																		
2867	2011	GB Haddock East	Handline	NEFS 10																		
2868	2011	GB Haddock East	Handline	NEFS 11																		
2869	2011	GB Haddock East	Handline	NEFS 12																		
2870	2011	GB Haddock East	Handline	NEFS 13																		
2871	2011	GB Haddock East	Handline	NEFS 2																		
2872	2011	GB Haddock East	Handline	NEFS 3																		
2873	2011	GB Haddock East	Handline	NEFS 5																		
2874	2011	GB Haddock East	Handline	NEFS 6																		
2875	2011	GB Haddock East	Handline	NEFS 7																		
2876	2011	GB Haddock East	Handline	NEFS 8																		
2877	2011	GB Haddock East	Handline	NEFS 9																		
2878	2011	GB Haddock East	Handline	Port Clyde Community Groundfish Sector																		
2879	2011	GB Haddock East	Handline	Sustainable Harvest Sector 1																		
2880	2011	GB Haddock East	Handline	Tri-State Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2881	2011	GB Haddock East	Large Mesh Gillnet	Fixed Gear Sector																		
2882	2011	GB Haddock East	Large Mesh Gillnet	NCCS																		
2883	2011	GB Haddock East	Large Mesh Gillnet	NEFS 10																		
2884	2011	GB Haddock East	Large Mesh Gillnet	NEFS 11																		
2885	2011	GB Haddock East	Large Mesh Gillnet	NEFS 12																		
2886	2011	GB Haddock East	Large Mesh Gillnet	NEFS 13																		
2887	2011	GB Haddock East	Large Mesh Gillnet	NEFS 2																		
2888	2011	GB Haddock East	Large Mesh Gillnet	NEFS 3																		
2889	2011	GB Haddock East	Large Mesh Gillnet	NEFS 5																		
2890	2011	GB Haddock East	Large Mesh Gillnet	NEFS 6																		
2891	2011	GB Haddock East	Large Mesh Gillnet	NEFS 7																		
2892	2011	GB Haddock East	Large Mesh Gillnet	NEFS 8																		
2893	2011	GB Haddock East	Large Mesh Gillnet	NEFS 9																		
2894	2011	GB Haddock East	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2895	2011	GB Haddock East	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2896	2011	GB Haddock East	Large Mesh Gillnet	Tri-State Sector																		
2897	2011	GB Haddock East	Ruhle Trawl	Fixed Gear Sector																		
2898	2011	GB Haddock East	Ruhle Trawl	NCCS																		
2899	2011	GB Haddock East	Ruhle Trawl	NEFS 10																		
2900	2011	GB Haddock East	Ruhle Trawl	NEFS 11																		
2901	2011	GB Haddock East	Ruhle Trawl	NEFS 12																		
2902	2011	GB Haddock East	Ruhle Trawl	NEFS 13																		
2903	2011	GB Haddock East	Ruhle Trawl	NEFS 2																		
2904	2011	GB Haddock East	Ruhle Trawl	NEFS 3																		
2905	2011	GB Haddock East	Ruhle Trawl	NEFS 5																		
2906	2011	GB Haddock East	Ruhle Trawl	NEFS 6																		
2907	2011	GB Haddock East	Ruhle Trawl	NEFS 7																		
2908	2011	GB Haddock East	Ruhle Trawl	NEFS 8																		
2909	2011	GB Haddock East	Ruhle Trawl	NEFS 9																		
2910	2011	GB Haddock East	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
2911	2011	GB Haddock East	Ruhle Trawl	Sustainable Harvest Sector 1	4	5	1	20.00	0.00					60949	41879	2996.00	0.00	0	27.10	29	4.50	5
2912	2011	GB Haddock East	Ruhle Trawl	Tri-State Sector																		
2913	2011	GB Haddock West	Bottom Longline	Fixed Gear Sector	14	216	32	14.81	0.00	0.00	0.49	68	31.48	76893	556322	91572.00	256.00	1555	81.30	230	11.90	36
2914	2011	GB Haddock West	Bottom Longline	NCCS																		
2915	2011	GB Haddock West	Bottom Longline	NEFS 10																		
2916	2011	GB Haddock West	Bottom Longline	NEFS 11																		
2917	2011	GB Haddock West	Bottom Longline	NEFS 12																		
2918	2011	GB Haddock West	Bottom Longline	NEFS 13																		
2919	2011	GB Haddock West	Bottom Longline	NEFS 2																		
2920	2011	GB Haddock West	Bottom Longline	NEFS 3																		
2921	2011	GB Haddock West	Bottom Longline	NEFS 5																		
2922	2011	GB Haddock West	Bottom Longline	NEFS 6																		
2923	2011	GB Haddock West	Bottom Longline	NEFS 7																		
2924	2011	GB Haddock West	Bottom Longline	NEFS 8																		
2925	2011	GB Haddock West	Bottom Longline	NEFS 9																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2926	2011	GB Haddock West	Bottom Longline	Port Clyde Community Groundfish Sector																		
2927	2011	GB Haddock West	Bottom Longline	Sustainable Harvest Sector 1																		
2928	2011	GB Haddock West	Bottom Longline	Tri-State Sector																		
2929	2011	GB Haddock West	Bottom Otter Trawl	Fixed Gear Sector																		
2930	2011	GB Haddock West	Bottom Otter Trawl	NCCS																		
2931	2011	GB Haddock West	Bottom Otter Trawl	NEFS 10	3	116	33	28.45	0.00	0.00	0.47	58	50.00	28701	549385	137324.80	47.00	188	63.70	122	18.30	33
2932	2011	GB Haddock West	Bottom Otter Trawl	NEFS 11																		
2933	2011	GB Haddock West	Bottom Otter Trawl	NEFS 12																		
2934	2011	GB Haddock West	Bottom Otter Trawl	NEFS 13	74	468	132	28.21	0.00	0.00	0.24	96	20.51	479865	4889345	1818471.80	2158.00	5802	1207.90	1382	475.80	539
2935	2011	GB Haddock West	Bottom Otter Trawl	NEFS 2	27	286	86	30.07	0.00	0.00	0.35	106	37.06	577343	4371987	1201922.20	2900.00	10549	1254.70	1378	441.60	484
2936	2011	GB Haddock West	Bottom Otter Trawl	NEFS 3																		
2937	2011	GB Haddock West	Bottom Otter Trawl	NEFS 5	54	641	211	32.92	0.00	0.00	0.54	392	61.15	96286	6146871	2049029.70	270.00	810	713.00	1031	256.80	371
2938	2011	GB Haddock West	Bottom Otter Trawl	NEFS 6	7	86	27	31.40	0.00	0.00	0.40	39	45.35	70858	2071769	363554.00	378.00	2154	479.00	519	185.30	199
2939	2011	GB Haddock West	Bottom Otter Trawl	NEFS 7	25	201	45	22.39	0.00	0.00	0.60	108	53.73	178981	2504154	815397.50	1753.00	5384	656.00	729	254.80	279
2940	2011	GB Haddock West	Bottom Otter Trawl	NEFS 8	28	158	36	22.78	0.00	0.00	0.23	24	15.19	464120	2683120	587980.40	950.00	4335	772.10	823	267.80	286
2941	2011	GB Haddock West	Bottom Otter Trawl	NEFS 9	74	559	130	23.26	0.00	0.00	0.20	70	12.52	931524	9981504	2600934.80	7632.00	29289	2494.00	2684	956.80	1032
2942	2011	GB Haddock West	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
2943	2011	GB Haddock West	Bottom Otter Trawl	Sustainable Harvest Sector 1	57	465	155	33.33	0.00	0.00	0.22	96	20.65	1158065	6721679	1695638.80	4349.00	17240	2320.60	2501	1003.90	1080
2944	2011	GB Haddock West	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.37	6	40.00	288183	420738	41397.50	153.00	1555	96.40	104	17.40	19
2945	2011	GB Haddock West	Extra Large Mesh Gillnet	Fixed Gear Sector	32	1272	343	26.97	0.00	0.00	0.00	0	0.00	51	7880582	2045826.40	0.00	0	564.30	1475	150.30	394
2946	2011	GB Haddock West	Extra Large Mesh Gillnet	NCCS																		
2947	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 10	5	31	12	38.71	0.00	0.00	0.00	0	0.00	0	223214	94210.00	0.00	0	33.60	54	11.20	18
2948	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 11	6	141	23	16.31	0.00	0.00	0.00	0	0.00	0	526309	90002.80	0.00	0	60.00	143	11.10	23
2949	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 12																		
2950	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 13																		
2951	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 2																		
2952	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 3	14	153	28	18.30	0.00	0.00	0.00	0	0.00	0	819712	156861.40	0.00	0	151.90	235	29.80	45
2953	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 5																		
2954	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 6																		
2955	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 7	7	183	48	26.23	0.00	0.00	0.00	0	0.00	0	1050575	319944.00	0.00	0	129.30	217	42.70	67
2956	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 8																		
2957	2011	GB Haddock West	Extra Large Mesh Gillnet	NEFS 9																		
2958	2011	GB Haddock West	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
2959	2011	GB Haddock West	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
2960	2011	GB Haddock West	Extra Large Mesh Gillnet	Tri-State Sector																		
2961	2011	GB Haddock West	Haddock Otter Trawl	Fixed Gear Sector																		
2962	2011	GB Haddock West	Haddock Otter Trawl	NCCS																		
2963	2011	GB Haddock West	Haddock Otter Trawl	NEFS 10																		
2964	2011	GB Haddock West	Haddock Otter Trawl	NEFS 11																		
2965	2011	GB Haddock West	Haddock Otter Trawl	NEFS 12																		
2966	2011	GB Haddock West	Haddock Otter Trawl	NEFS 13																		
2967	2011	GB Haddock West	Haddock Otter Trawl	NEFS 2	7	9	9	100.00	0.01	0.00	0.00	0	0.00	48025	143271	127507.70	724.00	814	62.00	67	58.60	63
2968	2011	GB Haddock West	Haddock Otter Trawl	NEFS 3																		
2969	2011	GB Haddock West	Haddock Otter Trawl	NEFS 5																		
2970	2011	GB Haddock West	Haddock Otter Trawl	NEFS 6																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
2971	2011	GB Haddock West	Haddock Otter Trawl	NEFS 7	4	8	4	50.00	0.00	0.00	0.75	7	87.50	40460	50919	8197.40	32.00	199	65.20	70	31.50	34
2972	2011	GB Haddock West	Haddock Otter Trawl	NEFS 8																		
2973	2011	GB Haddock West	Haddock Otter Trawl	NEFS 9	7	23	7	30.43	0.00	0.00	0.37	10	43.48	55603	252060	61311.20	233.00	958	115.00	123	43.80	47
2974	2011	GB Haddock West	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
2975	2011	GB Haddock West	Haddock Otter Trawl	Sustainable Harvest Sector 1	22	77	35	45.45	0.00	0.00	0.20	21	27.27	858837	1298364	516389.20	2324.00	5843	384.50	409	253.50	269
2976	2011	GB Haddock West	Haddock Otter Trawl	Tri-State Sector																		
2977	2011	GB Haddock West	Handline	Fixed Gear Sector	4	99	34	34.34	0.00	0.00	0.00	0	0.00	655	153649	39350.50	0.00	0	57.20	117	13.50	38
2978	2011	GB Haddock West	Handline	NCCS																		
2979	2011	GB Haddock West	Handline	NEFS 10																		
2980	2011	GB Haddock West	Handline	NEFS 11																		
2981	2011	GB Haddock West	Handline	NEFS 12																		
2982	2011	GB Haddock West	Handline	NEFS 13																		
2983	2011	GB Haddock West	Handline	NEFS 2																		
2984	2011	GB Haddock West	Handline	NEFS 3																		
2985	2011	GB Haddock West	Handline	NEFS 5																		
2986	2011	GB Haddock West	Handline	NEFS 6																		
2987	2011	GB Haddock West	Handline	NEFS 7																		
2988	2011	GB Haddock West	Handline	NEFS 8																		
2989	2011	GB Haddock West	Handline	NEFS 9																		
2990	2011	GB Haddock West	Handline	Port Clyde Community Groundfish Sector																		
2991	2011	GB Haddock West	Handline	Sustainable Harvest Sector 1																		
2992	2011	GB Haddock West	Handline	Tri-State Sector																		
2993	2011	GB Haddock West	Large Mesh Gillnet	Fixed Gear Sector	18	690	215	31.16	0.00	0.00	0.28	197	28.55	9868	2044882	542391.10	191.00	720	240.70	706	75.10	217
2994	2011	GB Haddock West	Large Mesh Gillnet	NCCS																		
2995	2011	GB Haddock West	Large Mesh Gillnet	NEFS 10	5	14	3	21.43	0.00	0.00	0.00	0	0.00	553	86539	37370.50	0.00	0	58.30	63	13.70	15
2996	2011	GB Haddock West	Large Mesh Gillnet	NEFS 11																		
2997	2011	GB Haddock West	Large Mesh Gillnet	NEFS 12																		
2998	2011	GB Haddock West	Large Mesh Gillnet	NEFS 13																		
2999	2011	GB Haddock West	Large Mesh Gillnet	NEFS 2																		
3000	2011	GB Haddock West	Large Mesh Gillnet	NEFS 3	5	33	10	30.30	0.00	0.00	0.82	26	78.79	47	80059	28036.50	1.00	3	18.60	36	8.20	13
3001	2011	GB Haddock West	Large Mesh Gillnet	NEFS 5																		
3002	2011	GB Haddock West	Large Mesh Gillnet	NEFS 6																		
3003	2011	GB Haddock West	Large Mesh Gillnet	NEFS 7																		
3004	2011	GB Haddock West	Large Mesh Gillnet	NEFS 8																		
3005	2011	GB Haddock West	Large Mesh Gillnet	NEFS 9																		
3006	2011	GB Haddock West	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3007	2011	GB Haddock West	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3008	2011	GB Haddock West	Large Mesh Gillnet	Tri-State Sector																		
3009	2011	GB Haddock West	Ruhle Trawl	Fixed Gear Sector																		
3010	2011	GB Haddock West	Ruhle Trawl	NCCS																		
3011	2011	GB Haddock West	Ruhle Trawl	NEFS 10																		
3012	2011	GB Haddock West	Ruhle Trawl	NEFS 11																		
3013	2011	GB Haddock West	Ruhle Trawl	NEFS 12																		
3014	2011	GB Haddock West	Ruhle Trawl	NEFS 13	14	48	9	18.75	0.00	0.00	0.29	9	18.75	711762	852589	132192.40	327.00	2109	261.00	282	63.90	68
3015	2011	GB Haddock West	Ruhle Trawl	NEFS 2																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3016	2011	GB Haddock West	Ruhle Trawl	NEFS 3																		
3017	2011	GB Haddock West	Ruhle Trawl	NEFS 5	3	4	0	0.00						40786	51034	0.00	0.00		23.30	24	0.00	0
3018	2011	GB Haddock West	Ruhle Trawl	NEFS 6																		
3019	2011	GB Haddock West	Ruhle Trawl	NEFS 7																		
3020	2011	GB Haddock West	Ruhle Trawl	NEFS 8																		
3021	2011	GB Haddock West	Ruhle Trawl	NEFS 9																		
3022	2011	GB Haddock West	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
3023	2011	GB Haddock West	Ruhle Trawl	Sustainable Harvest Sector 1	3	5	2	40.00	0.00	0.00	0.20	2	40.00	80372	120760	3607.20	9.00	301	28.30	30	10.40	11
3024	2011	GB Haddock West	Ruhle Trawl	Tri-State Sector																		
3025	2011	GB Winter Flounder	Bottom Longline	Fixed Gear Sector	8	41	8	19.51	0.00	0.00	0.69	24	58.54	528	222753	25433.40	5.00	44	75.80	93	15.40	20
3026	2011	GB Winter Flounder	Bottom Longline	NCCS																		
3027	2011	GB Winter Flounder	Bottom Longline	NEFS 10																		
3028	2011	GB Winter Flounder	Bottom Longline	NEFS 11																		
3029	2011	GB Winter Flounder	Bottom Longline	NEFS 12																		
3030	2011	GB Winter Flounder	Bottom Longline	NEFS 13																		
3031	2011	GB Winter Flounder	Bottom Longline	NEFS 2																		
3032	2011	GB Winter Flounder	Bottom Longline	NEFS 3																		
3033	2011	GB Winter Flounder	Bottom Longline	NEFS 5																		
3034	2011	GB Winter Flounder	Bottom Longline	NEFS 6																		
3035	2011	GB Winter Flounder	Bottom Longline	NEFS 7																		
3036	2011	GB Winter Flounder	Bottom Longline	NEFS 8																		
3037	2011	GB Winter Flounder	Bottom Longline	NEFS 9																		
3038	2011	GB Winter Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
3039	2011	GB Winter Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
3040	2011	GB Winter Flounder	Bottom Longline	Tri-State Sector																		
3041	2011	GB Winter Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
3042	2011	GB Winter Flounder	Bottom Otter Trawl	NCCS																		
3043	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 10																		
3044	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 11																		
3045	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 12																		
3046	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 13	42	193	45	23.32	0.00	0.00	0.37	61	31.61	432943	2640431	867718.80	121.00	368	817.60	873	324.00	346
3047	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 2	25	115	30	26.09	0.00	0.00	0.53	61	53.04	49813	1474338	308956.60	299.00	1427	513.20	549	216.60	231
3048	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 3																		
3049	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 5	12	19	3	15.79	0.00	0.00	0.00	0	0.00	22023	345177	76717.00	0.00	0	88.00	90	21.80	23
3050	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 6	3	17	3	17.65	0.00	0.00	0.00	0	0.00	21825	366635	69855.00	0.00	0	103.50	109	22.10	23
3051	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 7	18	131	28	21.37	0.00	0.00	0.31	30	22.90	379344	2116625	718230.40	156.00	460	553.50	602	209.90	225
3052	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 8	22	134	31	23.13	0.00	0.00	0.41	49	36.57	623600	2537600	544040.50	292.00	1362	706.40	749	236.90	252
3053	2011	GB Winter Flounder	Bottom Otter Trawl	NEFS 9	52	383	102	26.63	0.00	0.00	0.34	123	32.11	2168409	7842557	2166343.00	6544.00	23690	2045.70	2192	813.30	873
3054	2011	GB Winter Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
3055	2011	GB Winter Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	49	299	67	22.41	0.00	0.00	0.28	60	20.07	350828	4211748	787131.00	163.00	872	1433.40	1526	498.50	530
3056	2011	GB Winter Flounder	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.00	0	0.00	17360	420738	41397.50	0.00	0	96.40	104	17.40	19
3057	2011	GB Winter Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector																		
3058	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NCCS																		
3059	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 10																		
3060	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 11																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3061	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 12																		
3062	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 13																		
3063	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 2																		
3064	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 3																		
3065	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 5																		
3066	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 6																		
3067	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 7																		
3068	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 8																		
3069	2011	GB Winter Flounder	Extra Large Mesh Gillnet	NEFS 9																		
3070	2011	GB Winter Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3071	2011	GB Winter Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3072	2011	GB Winter Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
3073	2011	GB Winter Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
3074	2011	GB Winter Flounder	Haddock Otter Trawl	NCCS																		
3075	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 10																		
3076	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 11																		
3077	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 12																		
3078	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 13																		
3079	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 2	15	19	9	47.37	0.00	0.00	0.38	12	63.16	2720	240035	96025.90	211.00	527	118.30	129	61.20	66
3080	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 3																		
3081	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 5																		
3082	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 6																		
3083	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.00	0	0.00	8684	57395	9349.60	0.00	0	73.30	79	31.50	34
3084	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 8																		
3085	2011	GB Winter Flounder	Haddock Otter Trawl	NEFS 9	13	24	8	33.33	0.00	0.00	0.58	16	66.67	38502	271255	97265.00	44.00	123	143.10	152	47.40	51
3086	2011	GB Winter Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
3087	2011	GB Winter Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	29	144	36	25.00	0.00	0.00	0.39	53	36.81	138216	2536610	713189.20	148.00	526	674.30	718	263.90	281
3088	2011	GB Winter Flounder	Haddock Otter Trawl	Tri-State Sector																		
3089	2011	GB Winter Flounder	Handline	Fixed Gear Sector																		
3090	2011	GB Winter Flounder	Handline	NCCS																		
3091	2011	GB Winter Flounder	Handline	NEFS 10																		
3092	2011	GB Winter Flounder	Handline	NEFS 11																		
3093	2011	GB Winter Flounder	Handline	NEFS 12																		
3094	2011	GB Winter Flounder	Handline	NEFS 13																		
3095	2011	GB Winter Flounder	Handline	NEFS 2																		
3096	2011	GB Winter Flounder	Handline	NEFS 3																		
3097	2011	GB Winter Flounder	Handline	NEFS 5																		
3098	2011	GB Winter Flounder	Handline	NEFS 6																		
3099	2011	GB Winter Flounder	Handline	NEFS 7																		
3100	2011	GB Winter Flounder	Handline	NEFS 8																		
3101	2011	GB Winter Flounder	Handline	NEFS 9																		
3102	2011	GB Winter Flounder	Handline	Port Clyde Community Groundfish Sector																		
3103	2011	GB Winter Flounder	Handline	Sustainable Harvest Sector 1																		
3104	2011	GB Winter Flounder	Handline	Tri-State Sector																		
3105	2011	GB Winter Flounder	Large Mesh Gillnet	Fixed Gear Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3106	2011	GB Winter Flounder	Large Mesh Gillnet	NCCS																		
3107	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 10																		
3108	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 11																		
3109	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 12																		
3110	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 13																		
3111	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 2																		
3112	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 3																		
3113	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 5																		
3114	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 6																		
3115	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 7																		
3116	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 8																		
3117	2011	GB Winter Flounder	Large Mesh Gillnet	NEFS 9																		
3118	2011	GB Winter Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3119	2011	GB Winter Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3120	2011	GB Winter Flounder	Large Mesh Gillnet	Tri-State Sector																		
3121	2011	GB Winter Flounder	Ruhle Trawl	Fixed Gear Sector																		
3122	2011	GB Winter Flounder	Ruhle Trawl	NCCS																		
3123	2011	GB Winter Flounder	Ruhle Trawl	NEFS 10																		
3124	2011	GB Winter Flounder	Ruhle Trawl	NEFS 11																		
3125	2011	GB Winter Flounder	Ruhle Trawl	NEFS 12																		
3126	2011	GB Winter Flounder	Ruhle Trawl	NEFS 13	14	54	9	16.67	0.00	0.00	0.00	0	0.00	33863	851035	142571.70	0.00	0	285.30	308	63.90	68
3127	2011	GB Winter Flounder	Ruhle Trawl	NEFS 2																		
3128	2011	GB Winter Flounder	Ruhle Trawl	NEFS 3																		
3129	2011	GB Winter Flounder	Ruhle Trawl	NEFS 5	4	5	0	0.00						247	52344	0.00	0.00		23.30	24	0.00	0
3130	2011	GB Winter Flounder	Ruhle Trawl	NEFS 6																		
3131	2011	GB Winter Flounder	Ruhle Trawl	NEFS 7																		
3132	2011	GB Winter Flounder	Ruhle Trawl	NEFS 8																		
3133	2011	GB Winter Flounder	Ruhle Trawl	NEFS 9																		
3134	2011	GB Winter Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
3135	2011	GB Winter Flounder	Ruhle Trawl	Sustainable Harvest Sector 1	6	9	2	22.22	0.00	0.00	0.00	0	0.00	14915	109860	6603.20	0.00	0	40.30	43	10.40	11
3136	2011	GB Winter Flounder	Ruhle Trawl	Tri-State Sector																		
3137	2011	GB Yellowtail Flounder	Bottom Longline	Fixed Gear Sector	8	41	8	19.51	0.00	0.00	0.53	18	43.90	19	222753	25433.40	4.00	35	75.80	93	15.40	20
3138	2011	GB Yellowtail Flounder	Bottom Longline	NCCS																		
3139	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 10																		
3140	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 11																		
3141	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 12																		
3142	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 13																		
3143	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 2																		
3144	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 3																		
3145	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 5																		
3146	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 6																		
3147	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 7																		
3148	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 8																		
3149	2011	GB Yellowtail Flounder	Bottom Longline	NEFS 9																		
3150	2011	GB Yellowtail Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3151	2011	GB Yellowtail Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
3152	2011	GB Yellowtail Flounder	Bottom Longline	Tri-State Sector																		
3153	2011	GB Yellowtail Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
3154	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NCCS																		
3155	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 10																		
3156	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 11																		
3157	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 12																		
3158	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 13	42	193	45	23.32	0.00	0.00	0.26	37	19.17	352011	2691876	867718.80	3805.00	11804	817.60	873	324.00	346
3159	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 2	25	115	30	26.09	0.00	0.00	0.52	60	52.17	12963	1474338	308956.60	831.00	3966	513.20	549	216.60	231
3160	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 3																		
3161	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 5	12	19	3	15.79	0.01	0.00	0.40	5	26.32	66432	352906	76717.00	392.00	1803	88.00	90	21.80	23
3162	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 6	3	17	3	17.65	0.00	0.00	0.84	11	64.71	6749	366635	69855.00	48.00	252	103.50	109	22.10	23
3163	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 7	18	131	28	21.37	0.00	0.00	0.22	18	13.74	183199	2116625	718230.40	2157.00	6357	553.50	602	209.90	225
3164	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 8	22	134	31	23.13	0.01	0.00	0.25	23	17.16	247602	2537600	544040.50	3982.00	18573	706.40	749	236.90	252
3165	2011	GB Yellowtail Flounder	Bottom Otter Trawl	NEFS 9	52	383	102	26.63	0.01	0.00	0.18	43	11.23	916014	7850951	2166343.00	13913.00	50422	2045.70	2192	813.30	873
3166	2011	GB Yellowtail Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
3167	2011	GB Yellowtail Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	49	299	67	22.41	0.00	0.00	0.29	65	21.74	116860	4157830	787131.00	695.00	3671	1433.40	1526	498.50	530
3168	2011	GB Yellowtail Flounder	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.31	5	33.33	85805	420738	41397.50	104.00	1057	96.40	104	17.40	19
3169	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector																		
3170	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NCCS																		
3171	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 10																		
3172	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 11																		
3173	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 12																		
3174	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 13																		
3175	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 2																		
3176	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 3																		
3177	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 5																		
3178	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 6																		
3179	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 7																		
3180	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 8																		
3181	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 9																		
3182	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3183	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3184	2011	GB Yellowtail Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
3185	2011	GB Yellowtail Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
3186	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NCCS																		
3187	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 10																		
3188	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 11																		
3189	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 12																		
3190	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 13																		
3191	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 2	15	19	9	47.37	0.00	0.00	0.13	3	15.79	3983	240035	96025.90	147.00	367	118.30	129	61.20	66
3192	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 3																		
3193	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 5																		
3194	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 6																		
3195	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.58	8	72.73	21698	57395	9349.60	32.00	196	73.30	79	31.50	34

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3196	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 8																		
3197	2011	GB Yellowtail Flounder	Haddock Otter Trawl	NEFS 9	13	24	8	33.33	0.00	0.00	0.42	12	50.00	13277	284893	97265.00	251.00	735	143.10	152	47.40	51
3198	2011	GB Yellowtail Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
3199	2011	GB Yellowtail Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	29	144	36	25.00	0.00	0.00	0.27	32	22.22	48806	2448752	713189.20	1815.00	6232	674.30	718	263.90	281
3200	2011	GB Yellowtail Flounder	Haddock Otter Trawl	Tri-State Sector																		
3201	2011	GB Yellowtail Flounder	Handline	Fixed Gear Sector																		
3202	2011	GB Yellowtail Flounder	Handline	NCCS																		
3203	2011	GB Yellowtail Flounder	Handline	NEFS 10																		
3204	2011	GB Yellowtail Flounder	Handline	NEFS 11																		
3205	2011	GB Yellowtail Flounder	Handline	NEFS 12																		
3206	2011	GB Yellowtail Flounder	Handline	NEFS 13																		
3207	2011	GB Yellowtail Flounder	Handline	NEFS 2																		
3208	2011	GB Yellowtail Flounder	Handline	NEFS 3																		
3209	2011	GB Yellowtail Flounder	Handline	NEFS 5																		
3210	2011	GB Yellowtail Flounder	Handline	NEFS 6																		
3211	2011	GB Yellowtail Flounder	Handline	NEFS 7																		
3212	2011	GB Yellowtail Flounder	Handline	NEFS 8																		
3213	2011	GB Yellowtail Flounder	Handline	NEFS 9																		
3214	2011	GB Yellowtail Flounder	Handline	Port Clyde Community Groundfish Sector																		
3215	2011	GB Yellowtail Flounder	Handline	Sustainable Harvest Sector 1																		
3216	2011	GB Yellowtail Flounder	Handline	Tri-State Sector																		
3217	2011	GB Yellowtail Flounder	Large Mesh Gillnet	Fixed Gear Sector																		
3218	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NCCS																		
3219	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 10																		
3220	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 11																		
3221	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 12																		
3222	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 13																		
3223	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 2																		
3224	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 3																		
3225	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 5																		
3226	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 6																		
3227	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 7																		
3228	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 8																		
3229	2011	GB Yellowtail Flounder	Large Mesh Gillnet	NEFS 9																		
3230	2011	GB Yellowtail Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3231	2011	GB Yellowtail Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3232	2011	GB Yellowtail Flounder	Large Mesh Gillnet	Tri-State Sector																		
3233	2011	GB Yellowtail Flounder	Ruhle Trawl	Fixed Gear Sector																		
3234	2011	GB Yellowtail Flounder	Ruhle Trawl	NCCS																		
3235	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 10																		
3236	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 11																		
3237	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 12																		
3238	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 13	14	54	9	16.67	0.00	0.00	0.60	25	46.30	60959	882233	142571.70	57.00	353	285.30	308	63.90	68
3239	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 2																		
3240	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 3																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3241	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 5	4	5	0	0.00						5776	55855	0.00	0.00		23.30	24	0.00	0
3242	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 6																		
3243	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 7																		
3244	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 8																		
3245	2011	GB Yellowtail Flounder	Ruhle Trawl	NEFS 9																		
3246	2011	GB Yellowtail Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
3247	2011	GB Yellowtail Flounder	Ruhle Trawl	Sustainable Harvest Sector 1	6	9	2	22.22	0.00	0.00	0.00	0	0.00	479	109860	6603.20	0.00	0	40.30	43	10.40	11
3248	2011	GB Yellowtail Flounder	Ruhle Trawl	Tri-State Sector																		
3249	2011	GOM Cod	Bottom Longline	Fixed Gear Sector	7	122	10	8.20	0.05	0.00	0.36	15	12.30	336598	510854	41162.30	1853.00	22997	96.90	144	5.40	12
3250	2011	GOM Cod	Bottom Longline	NCCS																		
3251	2011	GOM Cod	Bottom Longline	NEFS 10	3	34	10	29.41	0.04	0.00	0.34	12	35.29	25450	49858	17254.90	736.00	2127	14.70	34	4.40	10
3252	2011	GOM Cod	Bottom Longline	NEFS 11																		
3253	2011	GOM Cod	Bottom Longline	NEFS 12																		
3254	2011	GOM Cod	Bottom Longline	NEFS 13																		
3255	2011	GOM Cod	Bottom Longline	NEFS 2																		
3256	2011	GOM Cod	Bottom Longline	NEFS 3	12	293	77	26.28	0.07	0.00	0.08	8	2.73	149320	298479	79608.30	5307.00	19898	140.80	308	38.80	81
3257	2011	GOM Cod	Bottom Longline	NEFS 5																		
3258	2011	GOM Cod	Bottom Longline	NEFS 6																		
3259	2011	GOM Cod	Bottom Longline	NEFS 7																		
3260	2011	GOM Cod	Bottom Longline	NEFS 8																		
3261	2011	GOM Cod	Bottom Longline	NEFS 9																		
3262	2011	GOM Cod	Bottom Longline	Port Clyde Community Groundfish Sector																		
3263	2011	GOM Cod	Bottom Longline	Sustainable Harvest Sector 1																		
3264	2011	GOM Cod	Bottom Longline	Tri-State Sector																		
3265	2011	GOM Cod	Bottom Otter Trawl	Fixed Gear Sector																		
3266	2011	GOM Cod	Bottom Otter Trawl	NCCS																		
3267	2011	GOM Cod	Bottom Otter Trawl	NEFS 10	14	422	132	31.28	0.03	0.00	0.11	26	6.16	509477	1141124	303044.60	7880.00	29672	229.10	465	61.30	137
3268	2011	GOM Cod	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.01	0.00	0.28	39	26.71	162677	311558	74652.00	427.00	1782	72.90	157	21.90	47
3269	2011	GOM Cod	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.02	0.00	0.33	46	32.86	124899	177907	54104.20	1267.00	4166	61.20	143	20.40	42
3270	2011	GOM Cod	Bottom Otter Trawl	NEFS 13	7	29	4	13.79	0.00	0.00	0.57	11	37.93	21248	450143	93292.00	62.00	299	98.10	111	21.10	23
3271	2011	GOM Cod	Bottom Otter Trawl	NEFS 2	64	2139	539	25.20	0.01	0.00	0.09	66	3.09	2840284	7406443	1954000.80	26072.00	98823	2104.40	3215	648.50	937
3272	2011	GOM Cod	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.00	0	0.00	32758	53664	4363.00	0.00	0	15.90	28	1.40	2
3273	2011	GOM Cod	Bottom Otter Trawl	NEFS 5																		
3274	2011	GOM Cod	Bottom Otter Trawl	NEFS 6	9	126	41	32.54	0.00	0.00	0.30	42	33.33	416802	1850501	698355.10	2145.00	5684	498.60	550	220.60	241
3275	2011	GOM Cod	Bottom Otter Trawl	NEFS 7																		
3276	2011	GOM Cod	Bottom Otter Trawl	NEFS 8	6	13	6	46.15	0.01	0.00	0.51	10	76.92	10567	106872	21514.30	215.00	1068	79.90	85	41.70	45
3277	2011	GOM Cod	Bottom Otter Trawl	NEFS 9	26	94	32	34.04	0.01	0.00	0.33	37	39.36	133713	1657811	344377.50	2186.00	10523	542.60	581	246.90	265
3278	2011	GOM Cod	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.32	52	32.70	79091	499763	164841.10	172.00	521	259.60	339	92.10	117
3279	2011	GOM Cod	Bottom Otter Trawl	Sustainable Harvest Sector 1	106	932	277	29.72	0.00	0.00	0.15	88	9.44	1393163	15705125	4690601.20	12041.00	40316	3790.50	4178	1486.60	1627
3280	2011	GOM Cod	Bottom Otter Trawl	Tri-State Sector																		
3281	2011	GOM Cod	Extra Large Mesh Gillnet	Fixed Gear Sector																		
3282	2011	GOM Cod	Extra Large Mesh Gillnet	NCCS																		
3283	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 10	4	89	50	56.18	0.00	0.00	0.24	41	46.07	2738	189089	75046.30	246.00	620	73.90	121	48.50	72
3284	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 11	4	61	61	100.00	0.01	0.00	0.00	0	0.00	28444	142250	62863.80	887.00	2007	21.10	61	27.60	61
3285	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 12																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3286	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 13																		
3287	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 2																		
3288	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 3	16	360	143	39.72	0.01	0.00	0.11	29	8.06	36791	849965	174701.50	1019.00	4958	202.70	416	73.50	155
3289	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 5																		
3290	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 6																		
3291	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 7																		
3292	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 8																		
3293	2011	GOM Cod	Extra Large Mesh Gillnet	NEFS 9																		
3294	2011	GOM Cod	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3295	2011	GOM Cod	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3296	2011	GOM Cod	Extra Large Mesh Gillnet	Tri-State Sector																		
3297	2011	GOM Cod	Haddock Otter Trawl	Fixed Gear Sector																		
3298	2011	GOM Cod	Haddock Otter Trawl	NCCS																		
3299	2011	GOM Cod	Haddock Otter Trawl	NEFS 10																		
3300	2011	GOM Cod	Haddock Otter Trawl	NEFS 11																		
3301	2011	GOM Cod	Haddock Otter Trawl	NEFS 12																		
3302	2011	GOM Cod	Haddock Otter Trawl	NEFS 13																		
3303	2011	GOM Cod	Haddock Otter Trawl	NEFS 2																		
3304	2011	GOM Cod	Haddock Otter Trawl	NEFS 3																		
3305	2011	GOM Cod	Haddock Otter Trawl	NEFS 5																		
3306	2011	GOM Cod	Haddock Otter Trawl	NEFS 6																		
3307	2011	GOM Cod	Haddock Otter Trawl	NEFS 7																		
3308	2011	GOM Cod	Haddock Otter Trawl	NEFS 8																		
3309	2011	GOM Cod	Haddock Otter Trawl	NEFS 9																		
3310	2011	GOM Cod	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
3311	2011	GOM Cod	Haddock Otter Trawl	Sustainable Harvest Sector 1																		
3312	2011	GOM Cod	Haddock Otter Trawl	Tri-State Sector																		
3313	2011	GOM Cod	Handline	Fixed Gear Sector																		
3314	2011	GOM Cod	Handline	NCCS	4	26	9	34.62	0.07	0.00	0.15	4	15.38	16588	18542	6412.40	446.00	1290	12.00	26	4.40	9
3315	2011	GOM Cod	Handline	NEFS 10	3	20	1	5.00	0.03					17191	17388	511.50	17.00	578	8.60	20	0.50	1
3316	2011	GOM Cod	Handline	NEFS 11																		
3317	2011	GOM Cod	Handline	NEFS 12																		
3318	2011	GOM Cod	Handline	NEFS 13																		
3319	2011	GOM Cod	Handline	NEFS 2																		
3320	2011	GOM Cod	Handline	NEFS 3																		
3321	2011	GOM Cod	Handline	NEFS 5																		
3322	2011	GOM Cod	Handline	NEFS 6																		
3323	2011	GOM Cod	Handline	NEFS 7																		
3324	2011	GOM Cod	Handline	NEFS 8																		
3325	2011	GOM Cod	Handline	NEFS 9																		
3326	2011	GOM Cod	Handline	Port Clyde Community Groundfish Sector																		
3327	2011	GOM Cod	Handline	Sustainable Harvest Sector 1																		
3328	2011	GOM Cod	Handline	Tri-State Sector																		
3329	2011	GOM Cod	Large Mesh Gillnet	Fixed Gear Sector																		
3330	2011	GOM Cod	Large Mesh Gillnet	NCCS																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3331	2011	GOM Cod	Large Mesh Gillnet	NEFS 10	9	350	147	42.00	0.00	0.00	0.11	34	9.71	108226	1052982	407599.80	1718.00	4438	285.60	490	97.10	184
3332	2011	GOM Cod	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.10	43	3.31	930008	4076694	932163.20	3577.00	15644	481.80	1332	128.90	326
3333	2011	GOM Cod	Large Mesh Gillnet	NEFS 12	6	96	22	22.92	0.00	0.00	0.17	9	9.38	58626	1059087	212863.50	648.00	3224	367.90	419	80.40	93
3334	2011	GOM Cod	Large Mesh Gillnet	NEFS 13																		
3335	2011	GOM Cod	Large Mesh Gillnet	NEFS 2																		
3336	2011	GOM Cod	Large Mesh Gillnet	NEFS 3	30	2100	716	34.10	0.01	0.00	0.06	38	1.81	1247162	3451936	1094399.10	11146.00	35157	793.60	2136	284.10	723
3337	2011	GOM Cod	Large Mesh Gillnet	NEFS 5																		
3338	2011	GOM Cod	Large Mesh Gillnet	NEFS 6																		
3339	2011	GOM Cod	Large Mesh Gillnet	NEFS 7	3	13	6	46.15	0.01	0.00	0.21	4	30.77	19867	60969	35421.20	350.00	602	49.20	56	31.90	35
3340	2011	GOM Cod	Large Mesh Gillnet	NEFS 8																		
3341	2011	GOM Cod	Large Mesh Gillnet	NEFS 9																		
3342	2011	GOM Cod	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	14	557	146	26.21	0.00	0.00	0.11	24	4.31	295212	1849272	446871.00	1697.00	7023	412.20	740	101.90	182
3343	2011	GOM Cod	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.17	13	11.50	112629	894379	331354.80	1397.00	3771	369.50	429	133.30	152
3344	2011	GOM Cod	Large Mesh Gillnet	Tri-State Sector																		
3345	2011	GOM Cod	Ruhle Trawl	Fixed Gear Sector																		
3346	2011	GOM Cod	Ruhle Trawl	NCCS																		
3347	2011	GOM Cod	Ruhle Trawl	NEFS 10																		
3348	2011	GOM Cod	Ruhle Trawl	NEFS 11																		
3349	2011	GOM Cod	Ruhle Trawl	NEFS 12																		
3350	2011	GOM Cod	Ruhle Trawl	NEFS 13																		
3351	2011	GOM Cod	Ruhle Trawl	NEFS 2																		
3352	2011	GOM Cod	Ruhle Trawl	NEFS 3																		
3353	2011	GOM Cod	Ruhle Trawl	NEFS 5																		
3354	2011	GOM Cod	Ruhle Trawl	NEFS 6																		
3355	2011	GOM Cod	Ruhle Trawl	NEFS 7																		
3356	2011	GOM Cod	Ruhle Trawl	NEFS 8																		
3357	2011	GOM Cod	Ruhle Trawl	NEFS 9																		
3358	2011	GOM Cod	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
3359	2011	GOM Cod	Ruhle Trawl	Sustainable Harvest Sector 1																		
3360	2011	GOM Cod	Ruhle Trawl	Tri-State Sector																		
3361	2011	GOM Haddock	Bottom Longline	Fixed Gear Sector	7	122	10	8.20	0.00	0.00	0.42	19	15.57	113088	510854	41162.30	125.00	1551	96.90	144	5.40	12
3362	2011	GOM Haddock	Bottom Longline	NCCS																		
3363	2011	GOM Haddock	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.49	18	52.94	3738	49858	17254.90	35.00	101	14.70	34	4.40	10
3364	2011	GOM Haddock	Bottom Longline	NEFS 11																		
3365	2011	GOM Haddock	Bottom Longline	NEFS 12																		
3366	2011	GOM Haddock	Bottom Longline	NEFS 13																		
3367	2011	GOM Haddock	Bottom Longline	NEFS 2																		
3368	2011	GOM Haddock	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.29	73	24.91	113465	298479	79608.30	278.00	1042	140.80	308	38.80	81
3369	2011	GOM Haddock	Bottom Longline	NEFS 5																		
3370	2011	GOM Haddock	Bottom Longline	NEFS 6																		
3371	2011	GOM Haddock	Bottom Longline	NEFS 7																		
3372	2011	GOM Haddock	Bottom Longline	NEFS 8																		
3373	2011	GOM Haddock	Bottom Longline	NEFS 9																		
3374	2011	GOM Haddock	Bottom Longline	Port Clyde Community Groundfish Sector																		
3375	2011	GOM Haddock	Bottom Longline	Sustainable Harvest Sector 1																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3376	2011	GOM Haddock	Bottom Longline	Tri-State Sector																		
3377	2011	GOM Haddock	Bottom Otter Trawl	Fixed Gear Sector																		
3378	2011	GOM Haddock	Bottom Otter Trawl	NCCS																		
3379	2011	GOM Haddock	Bottom Otter Trawl	NEFS 10	14	422	132	31.28	0.00	0.00	0.30	130	30.81	16941	1141124	303044.60	27.00	102	229.10	465	61.30	137
3380	2011	GOM Haddock	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.44	69	47.26	30354	311558	74652.00	26.00	109	72.90	157	21.90	47
3381	2011	GOM Haddock	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.46	69	49.29	876	177907	54104.20	6.00	20	61.20	143	20.40	42
3382	2011	GOM Haddock	Bottom Otter Trawl	NEFS 13	7	29	4	13.79	0.00	0.00	0.61	12	41.38	11326	450143	93292.00	6.00	29	98.10	111	21.10	23
3383	2011	GOM Haddock	Bottom Otter Trawl	NEFS 2	64	2139	539	25.20	0.00	0.00	0.22	337	15.76	425763	7406443	1954000.80	1177.00	4461	2104.40	3215	648.50	937
3384	2011	GOM Haddock	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.00	0	0.00	3392	53664	4363.00	0.00	0	15.90	28	1.40	2
3385	2011	GOM Haddock	Bottom Otter Trawl	NEFS 5																		
3386	2011	GOM Haddock	Bottom Otter Trawl	NEFS 6	9	126	41	32.54	0.00	0.00	0.43	63	50.00	34460	1850501	698355.10	171.00	453	498.60	550	220.60	241
3387	2011	GOM Haddock	Bottom Otter Trawl	NEFS 7																		
3388	2011	GOM Haddock	Bottom Otter Trawl	NEFS 8	6	13	6	46.15	0.00	0.00	0.00	0	0.00	240	106872	21514.30	0.00	0	79.90	85	41.70	45
3389	2011	GOM Haddock	Bottom Otter Trawl	NEFS 9	26	94	32	34.04	0.00	0.00	0.58	62	65.96	13894	1657811	344377.50	218.00	1049	542.60	581	246.90	265
3390	2011	GOM Haddock	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.60	101	63.52	1095	499763	164841.10	3.00	9	259.60	339	92.10	117
3391	2011	GOM Haddock	Bottom Otter Trawl	Sustainable Harvest Sector 1	106	932	277	29.72	0.00	0.00	0.14	84	9.01	214166	15705125	4690601.20	774.00	2592	3790.50	4178	1486.60	1627
3392	2011	GOM Haddock	Bottom Otter Trawl	Tri-State Sector																		
3393	2011	GOM Haddock	Extra Large Mesh Gillnet	Fixed Gear Sector																		
3394	2011	GOM Haddock	Extra Large Mesh Gillnet	NCCS																		
3395	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 10	4	89	50	56.18	0.00	0.00	0.36	58	65.17	222	189089	75046.30	26.00	66	73.90	121	48.50	72
3396	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 11	4	61	61	100.00	0.00	0.00	0.00	0	0.00	66	142250	62863.80	27.00	61	21.10	61	27.60	61
3397	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 12																		
3398	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 13																		
3399	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 2																		
3400	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 3	16	360	143	39.72	0.00	0.00	0.27	126	35.00	1100	849965	174701.50	45.00	219	202.70	416	73.50	155
3401	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 5																		
3402	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 6																		
3403	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 7																		
3404	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 8																		
3405	2011	GOM Haddock	Extra Large Mesh Gillnet	NEFS 9																		
3406	2011	GOM Haddock	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3407	2011	GOM Haddock	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3408	2011	GOM Haddock	Extra Large Mesh Gillnet	Tri-State Sector																		
3409	2011	GOM Haddock	Haddock Otter Trawl	Fixed Gear Sector																		
3410	2011	GOM Haddock	Haddock Otter Trawl	NCCS																		
3411	2011	GOM Haddock	Haddock Otter Trawl	NEFS 10																		
3412	2011	GOM Haddock	Haddock Otter Trawl	NEFS 11																		
3413	2011	GOM Haddock	Haddock Otter Trawl	NEFS 12																		
3414	2011	GOM Haddock	Haddock Otter Trawl	NEFS 13																		
3415	2011	GOM Haddock	Haddock Otter Trawl	NEFS 2																		
3416	2011	GOM Haddock	Haddock Otter Trawl	NEFS 3																		
3417	2011	GOM Haddock	Haddock Otter Trawl	NEFS 5																		
3418	2011	GOM Haddock	Haddock Otter Trawl	NEFS 6																		
3419	2011	GOM Haddock	Haddock Otter Trawl	NEFS 7																		
3420	2011	GOM Haddock	Haddock Otter Trawl	NEFS 8																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3421	2011	GOM Haddock	Haddock Otter Trawl	NEFS 9																		
3422	2011	GOM Haddock	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
3423	2011	GOM Haddock	Haddock Otter Trawl	Sustainable Harvest Sector 1																		
3424	2011	GOM Haddock	Haddock Otter Trawl	Tri-State Sector																		
3425	2011	GOM Haddock	Handline	Fixed Gear Sector																		
3426	2011	GOM Haddock	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	182	18542	6412.40	0.00	0	12.00	26	4.40	9
3427	2011	GOM Haddock	Handline	NEFS 10	3	20	1	5.00	0.00					8	17388	511.50	0.00	0	8.60	20	0.50	1
3428	2011	GOM Haddock	Handline	NEFS 11																		
3429	2011	GOM Haddock	Handline	NEFS 12																		
3430	2011	GOM Haddock	Handline	NEFS 13																		
3431	2011	GOM Haddock	Handline	NEFS 2																		
3432	2011	GOM Haddock	Handline	NEFS 3																		
3433	2011	GOM Haddock	Handline	NEFS 5																		
3434	2011	GOM Haddock	Handline	NEFS 6																		
3435	2011	GOM Haddock	Handline	NEFS 7																		
3436	2011	GOM Haddock	Handline	NEFS 8																		
3437	2011	GOM Haddock	Handline	NEFS 9																		
3438	2011	GOM Haddock	Handline	Port Clyde Community Groundfish Sector																		
3439	2011	GOM Haddock	Handline	Sustainable Harvest Sector 1																		
3440	2011	GOM Haddock	Handline	Tri-State Sector																		
3441	2011	GOM Haddock	Large Mesh Gillnet	Fixed Gear Sector																		
3442	2011	GOM Haddock	Large Mesh Gillnet	NCCS																		
3443	2011	GOM Haddock	Large Mesh Gillnet	NEFS 10	9	350	147	42.00	0.00	0.00	0.25	115	32.86	9988	1052982	407599.80	121.00	313	285.60	490	97.10	184
3444	2011	GOM Haddock	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.24	219	16.86	8671	4076694	932163.20	215.00	940	481.80	1332	128.90	326
3445	2011	GOM Haddock	Large Mesh Gillnet	NEFS 12	6	96	22	22.92	0.00	0.00	0.21	13	13.54	2227	1059087	212863.50	54.00	269	367.90	419	80.40	93
3446	2011	GOM Haddock	Large Mesh Gillnet	NEFS 13																		
3447	2011	GOM Haddock	Large Mesh Gillnet	NEFS 2																		
3448	2011	GOM Haddock	Large Mesh Gillnet	NEFS 3	30	2100	716	34.10	0.00	0.00	0.10	118	5.62	33406	3451936	1094399.10	688.00	2170	793.60	2136	284.10	723
3449	2011	GOM Haddock	Large Mesh Gillnet	NEFS 5																		
3450	2011	GOM Haddock	Large Mesh Gillnet	NEFS 6																		
3451	2011	GOM Haddock	Large Mesh Gillnet	NEFS 7	3	13	6	46.15	0.00	0.00	0.22	4	30.77	383	60969	35421.20	24.00	41	49.20	56	31.90	35
3452	2011	GOM Haddock	Large Mesh Gillnet	NEFS 8																		
3453	2011	GOM Haddock	Large Mesh Gillnet	NEFS 9																		
3454	2011	GOM Haddock	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	14	557	146	26.21	0.00	0.00	0.42	229	41.11	2389	1849272	446871.00	138.00	571	412.20	740	101.90	182
3455	2011	GOM Haddock	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.17	13	11.50	948	894379	331354.80	105.00	283	369.50	429	133.30	152
3456	2011	GOM Haddock	Large Mesh Gillnet	Tri-State Sector																		
3457	2011	GOM Haddock	Ruhle Trawl	Fixed Gear Sector																		
3458	2011	GOM Haddock	Ruhle Trawl	NCCS																		
3459	2011	GOM Haddock	Ruhle Trawl	NEFS 10																		
3460	2011	GOM Haddock	Ruhle Trawl	NEFS 11																		
3461	2011	GOM Haddock	Ruhle Trawl	NEFS 12																		
3462	2011	GOM Haddock	Ruhle Trawl	NEFS 13																		
3463	2011	GOM Haddock	Ruhle Trawl	NEFS 2																		
3464	2011	GOM Haddock	Ruhle Trawl	NEFS 3																		
3465	2011	GOM Haddock	Ruhle Trawl	NEFS 5																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3466	2011	GOM Haddock	Ruhle Trawl	NEFS 6																		
3467	2011	GOM Haddock	Ruhle Trawl	NEFS 7																		
3468	2011	GOM Haddock	Ruhle Trawl	NEFS 8																		
3469	2011	GOM Haddock	Ruhle Trawl	NEFS 9																		
3470	2011	GOM Haddock	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
3471	2011	GOM Haddock	Ruhle Trawl	Sustainable Harvest Sector 1																		
3472	2011	GOM Haddock	Ruhle Trawl	Tri-State Sector																		
3473	2011	GOM Winter Flounder	Bottom Longline	Fixed Gear Sector	7	122	10	8.20	0.00	0.00	0.48	24	19.67	74	510854	41162.30	1.00	12	96.90	144	5.40	12
3474	2011	GOM Winter Flounder	Bottom Longline	NCCS																		
3475	2011	GOM Winter Flounder	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.00	0	0.00	0	49858	17254.90	0.00	0	14.70	34	4.40	10
3476	2011	GOM Winter Flounder	Bottom Longline	NEFS 11																		
3477	2011	GOM Winter Flounder	Bottom Longline	NEFS 12																		
3478	2011	GOM Winter Flounder	Bottom Longline	NEFS 13																		
3479	2011	GOM Winter Flounder	Bottom Longline	NEFS 2																		
3480	2011	GOM Winter Flounder	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.00	0	0.00	0	298479	79608.30	0.00	0	140.80	308	38.80	81
3481	2011	GOM Winter Flounder	Bottom Longline	NEFS 5																		
3482	2011	GOM Winter Flounder	Bottom Longline	NEFS 6																		
3483	2011	GOM Winter Flounder	Bottom Longline	NEFS 7																		
3484	2011	GOM Winter Flounder	Bottom Longline	NEFS 8																		
3485	2011	GOM Winter Flounder	Bottom Longline	NEFS 9																		
3486	2011	GOM Winter Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
3487	2011	GOM Winter Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
3488	2011	GOM Winter Flounder	Bottom Longline	Tri-State Sector																		
3489	2011	GOM Winter Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
3490	2011	GOM Winter Flounder	Bottom Otter Trawl	NCCS																		
3491	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 10	14	422	132	31.28	0.00	0.00	0.17	52	12.32	108588	1141124	303044.60	945.00	3558	229.10	465	61.30	137
3492	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.30	44	30.14	2655	311558	74652.00	15.50	65	72.90	157	21.90	47
3493	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.46	69	49.29	1365	177907	54104.20	17.00	56	61.20	143	20.40	42
3494	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 13	7	29	4	13.79	0.00	0.00	0.00	0	0.00	1466	450143	93292.00	0.00	0	98.10	111	21.10	23
3495	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 2	64	2139	539	25.20	0.00	0.00	0.17	201	9.40	96639	7406443	1954000.80	1005.50	3811	2104.40	3215	648.50	937
3496	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.00	0	0.00	1929	53664	4363.00	0.00	0	15.90	28	1.40	2
3497	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 5																		
3498	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 6	9	126	41	32.54	0.00	0.00	0.28	37	29.37	31443	1850501	698355.10	135.50	359	498.60	550	220.60	241
3499	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 7																		
3500	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 8	6	13	6	46.15	0.01	0.00	0.41	8	61.54	2665	106872	21514.30	120.50	599	79.90	85	41.70	45
3501	2011	GOM Winter Flounder	Bottom Otter Trawl	NEFS 9	26	94	32	34.04	0.00	0.00	0.35	39	41.49	1630	1657811	344377.50	188.00	905	542.60	581	246.90	265
3502	2011	GOM Winter Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.83	123	77.36	22	499763	164841.10	0.50	2	259.60	339	92.10	117
3503	2011	GOM Winter Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	106	932	277	29.72	0.00	0.00	0.28	252	27.04	11983	15705125	4690601.20	193.00	646	3790.50	4178	1486.60	1627
3504	2011	GOM Winter Flounder	Bottom Otter Trawl	Tri-State Sector																		
3505	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector																		
3506	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NCCS																		
3507	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 10	4	89	50	56.18	0.00	0.00	0.62	76	85.39	219	189089	75046.30	5.00	13	73.90	121	48.50	72
3508	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 11	4	61	61	100.00	0.00	0.00	0.00	0	0.00	34	142250	62863.80	0.00	0	21.10	61	27.60	61
3509	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 12																		
3510	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 13																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3511	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 2																		
3512	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 3	16	360	143	39.72	0.00	0.00	0.49	231	64.17	821	849965	174701.50	3.00	15	202.70	416	73.50	155
3513	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 5																		
3514	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 6																		
3515	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 7																		
3516	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 8																		
3517	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	NEFS 9																		
3518	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3519	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3520	2011	GOM Winter Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
3521	2011	GOM Winter Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
3522	2011	GOM Winter Flounder	Haddock Otter Trawl	NCCS																		
3523	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 10																		
3524	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 11																		
3525	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 12																		
3526	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 13																		
3527	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 2																		
3528	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 3																		
3529	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 5																		
3530	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 6																		
3531	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 7																		
3532	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 8																		
3533	2011	GOM Winter Flounder	Haddock Otter Trawl	NEFS 9																		
3534	2011	GOM Winter Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
3535	2011	GOM Winter Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1																		
3536	2011	GOM Winter Flounder	Haddock Otter Trawl	Tri-State Sector																		
3537	2011	GOM Winter Flounder	Handline	Fixed Gear Sector																		
3538	2011	GOM Winter Flounder	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	0	18542	6412.40	0.00	0	12.00	26	4.40	9
3539	2011	GOM Winter Flounder	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
3540	2011	GOM Winter Flounder	Handline	NEFS 11																		
3541	2011	GOM Winter Flounder	Handline	NEFS 12																		
3542	2011	GOM Winter Flounder	Handline	NEFS 13																		
3543	2011	GOM Winter Flounder	Handline	NEFS 2																		
3544	2011	GOM Winter Flounder	Handline	NEFS 3																		
3545	2011	GOM Winter Flounder	Handline	NEFS 5																		
3546	2011	GOM Winter Flounder	Handline	NEFS 6																		
3547	2011	GOM Winter Flounder	Handline	NEFS 7																		
3548	2011	GOM Winter Flounder	Handline	NEFS 8																		
3549	2011	GOM Winter Flounder	Handline	NEFS 9																		
3550	2011	GOM Winter Flounder	Handline	Port Clyde Community Groundfish Sector																		
3551	2011	GOM Winter Flounder	Handline	Sustainable Harvest Sector 1																		
3552	2011	GOM Winter Flounder	Handline	Tri-State Sector																		
3553	2011	GOM Winter Flounder	Large Mesh Gillnet	Fixed Gear Sector																		
3554	2011	GOM Winter Flounder	Large Mesh Gillnet	NCCS																		
3555	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 10	9	350	147	42.00	0.00	0.00	0.21	92	26.29	17577	1052982	407599.80	34.50	89	285.60	490	97.10	184

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3556	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.20	170	13.09	2769	4076694	932163.20	28.00	122	481.80	1332	128.90	326
3557	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 12	6	96	22	22.92	0.00	0.00	0.00	0	0.00	1	1059087	212863.50	0.00	0	367.90	419	80.40	93
3558	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 13																		
3559	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 2																		
3560	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 3	30	2100	716	34.10	0.00	0.00	0.08	80	3.81	51860	3451936	1094399.10	237.50	749	793.60	2136	284.10	723
3561	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 5																		
3562	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 6																		
3563	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 7	3	13	6	46.15	0.00	0.00	0.68	11	84.62	65	60969	35421.20	0.50	1	49.20	56	31.90	35
3564	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 8																		
3565	2011	GOM Winter Flounder	Large Mesh Gillnet	NEFS 9																		
3566	2011	GOM Winter Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	14	557	146	26.21	0.00	0.00	0.43	237	42.55	146	1849272	446871.00	2.00	8	412.20	740	101.90	182
3567	2011	GOM Winter Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.67	74	65.49	297	894379	331354.80	19.00	51	369.50	429	133.30	152
3568	2011	GOM Winter Flounder	Large Mesh Gillnet	Tri-State Sector																		
3569	2011	GOM Winter Flounder	Ruhle Trawl	Fixed Gear Sector																		
3570	2011	GOM Winter Flounder	Ruhle Trawl	NCCS																		
3571	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 10																		
3572	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 11																		
3573	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 12																		
3574	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 13																		
3575	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 2																		
3576	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 3																		
3577	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 5																		
3578	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 6																		
3579	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 7																		
3580	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 8																		
3581	2011	GOM Winter Flounder	Ruhle Trawl	NEFS 9																		
3582	2011	GOM Winter Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
3583	2011	GOM Winter Flounder	Ruhle Trawl	Sustainable Harvest Sector 1																		
3584	2011	GOM Winter Flounder	Ruhle Trawl	Tri-State Sector																		
3585	2011	Halibut	Bottom Longline	Fixed Gear Sector	24	369	47	12.74	0.00	0.00	0.93	216	58.54	288	1269498	152519.70	18.00	150	241.80	448	28.70	62
3586	2011	Halibut	Bottom Longline	NCCS																		
3587	2011	Halibut	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.00	0	0.00	0	49858	17254.90	0.00	0	14.70	34	4.40	10
3588	2011	Halibut	Bottom Longline	NEFS 11																		
3589	2011	Halibut	Bottom Longline	NEFS 12																		
3590	2011	Halibut	Bottom Longline	NEFS 13																		
3591	2011	Halibut	Bottom Longline	NEFS 2																		
3592	2011	Halibut	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.00	0	0.00	0	298479	79608.30	0.00	0	140.80	308	38.80	81
3593	2011	Halibut	Bottom Longline	NEFS 5																		
3594	2011	Halibut	Bottom Longline	NEFS 6																		
3595	2011	Halibut	Bottom Longline	NEFS 7																		
3596	2011	Halibut	Bottom Longline	NEFS 8																		
3597	2011	Halibut	Bottom Longline	NEFS 9																		
3598	2011	Halibut	Bottom Longline	Port Clyde Community Groundfish Sector																		
3599	2011	Halibut	Bottom Longline	Sustainable Harvest Sector 1																		
3600	2011	Halibut	Bottom Longline	Tri-State Sector																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3601	2011	Halibut	Bottom Otter Trawl	Fixed Gear Sector																		
3602	2011	Halibut	Bottom Otter Trawl	NCCS																		
3603	2011	Halibut	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.00	0.00	0.16	58	10.78	201	1690509	440369.40	299.00	1148	290.90	584	79.60	170
3604	2011	Halibut	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.61	93	63.70	31	311558	74652.00	18.00	75	72.90	157	21.90	47
3605	2011	Halibut	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.36	52	37.14	47	177907	54104.20	74.00	243	61.20	143	20.40	42
3606	2011	Halibut	Bottom Otter Trawl	NEFS 13	96	543	136	25.05	0.00	0.00	0.21	77	14.18	780	5651557	1951213.70	882.00	2555	1290.10	1474	496.90	562
3607	2011	Halibut	Bottom Otter Trawl	NEFS 2	102	2467	552	22.38	0.00	0.00	0.13	121	4.90	1961	12296414	3254352.90	1870.00	7066	2303.70	3433	707.70	1001
3608	2011	Halibut	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.00	0	0.00	0	53664	4363.00	0.00	0	15.90	28	1.40	2
3609	2011	Halibut	Bottom Otter Trawl	NEFS 5	56	645	211	32.71	0.00	0.00	0.59	423	65.58	23	6189506	2065282.80	46.00	138	713.00	1031	256.80	371
3610	2011	Halibut	Bottom Otter Trawl	NEFS 6	17	216	42	19.44	0.00	0.00	0.22	26	12.04	322	3980042	1085318.40	838.00	3073	611.90	673	226.50	247
3611	2011	Halibut	Bottom Otter Trawl	NEFS 7	32	217	45	20.74	0.00	0.00	0.26	35	16.13	578	2565524	842882.60	529.00	1610	656.00	729	254.80	279
3612	2011	Halibut	Bottom Otter Trawl	NEFS 8	43	202	37	18.32	0.00	0.00	0.26	29	14.36	598	3265183	771702.50	674.00	2852	794.30	846	273.70	292
3613	2011	Halibut	Bottom Otter Trawl	NEFS 9	119	722	132	18.28	0.00	0.00	0.20	67	9.28	2451	13236959	3431257.40	2756.00	10632	2594.80	2795	970.90	1047
3614	2011	Halibut	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.24	35	22.01	622	499763	164841.10	631.00	1913	259.60	339	92.10	117
3615	2011	Halibut	Bottom Otter Trawl	Sustainable Harvest Sector 1	183	1500	318	21.20	0.00	0.00	0.09	38	2.53	10931	23310625	6559250.50	5715.00	20310	4486.40	4939	1702.90	1862
3616	2011	Halibut	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.68	10	66.67	0	420738	41397.50	5.00	51	96.40	104	17.40	19
3617	2011	Halibut	Extra Large Mesh Gillnet	Fixed Gear Sector	33	1275	343	26.90	0.00	0.00	0.73	878	68.86	104	7890632	2045826.40	1152.00	4443	565.30	1478	150.30	394
3618	2011	Halibut	Extra Large Mesh Gillnet	NCCS																		
3619	2011	Halibut	Extra Large Mesh Gillnet	NEFS 10	9	120	62	51.67	0.00	0.00	0.42	82	68.33	0	412304	169256.30	224.00	546	107.50	175	59.70	90
3620	2011	Halibut	Extra Large Mesh Gillnet	NEFS 11	10	202	84	41.58	0.00	0.00	0.33	94	46.53	190	668560	152866.60	134.00	586	81.10	204	38.70	84
3621	2011	Halibut	Extra Large Mesh Gillnet	NEFS 12																		
3622	2011	Halibut	Extra Large Mesh Gillnet	NEFS 13																		
3623	2011	Halibut	Extra Large Mesh Gillnet	NEFS 2																		
3624	2011	Halibut	Extra Large Mesh Gillnet	NEFS 3	30	513	171	33.33	0.00	0.00	0.19	87	16.96	558	1669677	331562.90	585.00	2946	354.60	651	103.30	200
3625	2011	Halibut	Extra Large Mesh Gillnet	NEFS 5																		
3626	2011	Halibut	Extra Large Mesh Gillnet	NEFS 6																		
3627	2011	Halibut	Extra Large Mesh Gillnet	NEFS 7	9	194	53	27.32	0.00	0.00	0.44	88	45.36	79	1092447	343227.40	306.00	974	173.90	267	69.70	97
3628	2011	Halibut	Extra Large Mesh Gillnet	NEFS 8																		
3629	2011	Halibut	Extra Large Mesh Gillnet	NEFS 9																		
3630	2011	Halibut	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3631	2011	Halibut	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3632	2011	Halibut	Extra Large Mesh Gillnet	Tri-State Sector																		
3633	2011	Halibut	Haddock Otter Trawl	Fixed Gear Sector																		
3634	2011	Halibut	Haddock Otter Trawl	NCCS																		
3635	2011	Halibut	Haddock Otter Trawl	NEFS 10																		
3636	2011	Halibut	Haddock Otter Trawl	NEFS 11																		
3637	2011	Halibut	Haddock Otter Trawl	NEFS 12																		
3638	2011	Halibut	Haddock Otter Trawl	NEFS 13	3	11	2	18.18	0.01	0.00	1.47	10	90.91	0	61728	2195.60	12.00	337	70.10	75	11.50	12
3639	2011	Halibut	Haddock Otter Trawl	NEFS 2	16	20	11	55.00	0.00	0.00	0.53	16	80.00	92	258754	185171.60	22.00	31	124.80	136	72.50	78
3640	2011	Halibut	Haddock Otter Trawl	NEFS 3																		
3641	2011	Halibut	Haddock Otter Trawl	NEFS 5																		
3642	2011	Halibut	Haddock Otter Trawl	NEFS 6																		
3643	2011	Halibut	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.00	0	0.00	0	53451	9349.60	0.00	0	73.30	79	31.50	34
3644	2011	Halibut	Haddock Otter Trawl	NEFS 8																		
3645	2011	Halibut	Haddock Otter Trawl	NEFS 9	16	44	8	18.18	0.00	0.00	0.76	26	59.09	206	457000	113328.20	143.00	577	148.50	158	47.40	51

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3646	2011	Halibut	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
3647	2011	Halibut	Haddock Otter Trawl	Sustainable Harvest Sector 1	38	165	42	25.45	0.00	0.00	0.26	34	20.61	473	2584464	1158779.00	349.00	778	707.90	754	296.20	316
3648	2011	Halibut	Haddock Otter Trawl	Tri-State Sector																		
3649	2011	Halibut	Handline	Fixed Gear Sector	4	99	36	36.36	0.00	0.00	0.00	0	0.00	0	153649	39442.50	0.00	0	57.20	117	17.30	43
3650	2011	Halibut	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	37	18542	6504.80	0.00	0	12.00	26	4.40	9
3651	2011	Halibut	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
3652	2011	Halibut	Handline	NEFS 11																		
3653	2011	Halibut	Handline	NEFS 12																		
3654	2011	Halibut	Handline	NEFS 13																		
3655	2011	Halibut	Handline	NEFS 2																		
3656	2011	Halibut	Handline	NEFS 3																		
3657	2011	Halibut	Handline	NEFS 5																		
3658	2011	Halibut	Handline	NEFS 6																		
3659	2011	Halibut	Handline	NEFS 7																		
3660	2011	Halibut	Handline	NEFS 8																		
3661	2011	Halibut	Handline	NEFS 9																		
3662	2011	Halibut	Handline	Port Clyde Community Groundfish Sector																		
3663	2011	Halibut	Handline	Sustainable Harvest Sector 1																		
3664	2011	Halibut	Handline	Tri-State Sector																		
3665	2011	Halibut	Large Mesh Gillnet	Fixed Gear Sector	19	803	234	29.14	0.00	0.00	0.30	230	28.64	196	2307839	595528.00	90.00	349	280.80	819	83.30	236
3666	2011	Halibut	Large Mesh Gillnet	NCCS																		
3667	2011	Halibut	Large Mesh Gillnet	NEFS 10	14	364	149	40.93	0.00	0.00	0.22	102	28.02	443	1139521	444970.30	136.00	348	302.00	508	105.20	193
3668	2011	Halibut	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.40	481	37.03	455	4076694	932163.20	287.00	1255	481.80	1332	128.90	326
3669	2011	Halibut	Large Mesh Gillnet	NEFS 12	7	99	22	22.22	0.00	0.00	0.59	52	52.53	39	1102911	231008.30	28.00	134	385.70	438	80.40	93
3670	2011	Halibut	Large Mesh Gillnet	NEFS 13																		
3671	2011	Halibut	Large Mesh Gillnet	NEFS 2																		
3672	2011	Halibut	Large Mesh Gillnet	NEFS 3	35	2133	724	33.94	0.00	0.00	0.12	168	7.88	104	3531995	1122435.60	344.00	1082	810.80	2170	289.50	732
3673	2011	Halibut	Large Mesh Gillnet	NEFS 5																		
3674	2011	Halibut	Large Mesh Gillnet	NEFS 6																		
3675	2011	Halibut	Large Mesh Gillnet	NEFS 7	5	15	8	53.33	0.00	0.00	0.40	11	73.33	59	64534	41154.30	49.00	77	49.50	57	32.90	37
3676	2011	Halibut	Large Mesh Gillnet	NEFS 8																		
3677	2011	Halibut	Large Mesh Gillnet	NEFS 9																		
3678	2011	Halibut	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	15	558	146	26.16	0.00	0.00	0.19	69	12.37	611	1857095	452719.70	470.00	1928	412.20	740	101.90	182
3679	2011	Halibut	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.22	20	17.70	241	894379	334188.20	191.00	511	369.50	429	133.30	152
3680	2011	Halibut	Large Mesh Gillnet	Tri-State Sector																		
3681	2011	Halibut	Ruhle Trawl	Fixed Gear Sector																		
3682	2011	Halibut	Ruhle Trawl	NCCS																		
3683	2011	Halibut	Ruhle Trawl	NEFS 10																		
3684	2011	Halibut	Ruhle Trawl	NEFS 11																		
3685	2011	Halibut	Ruhle Trawl	NEFS 12																		
3686	2011	Halibut	Ruhle Trawl	NEFS 13	16	56	9	16.07	0.00	0.00	0.67	28	50.00	47	804866	142583.50	15.00	85	285.30	308	63.90	68
3687	2011	Halibut	Ruhle Trawl	NEFS 2																		
3688	2011	Halibut	Ruhle Trawl	NEFS 3																		
3689	2011	Halibut	Ruhle Trawl	NEFS 5	4	5	0	0.00						0	52344	0.00	0.00		23.30	24	0.00	0
3690	2011	Halibut	Ruhle Trawl	NEFS 6																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3691	2011	Halibut	Ruhle Trawl	NEFS 7																		
3692	2011	Halibut	Ruhle Trawl	NEFS 8																		
3693	2011	Halibut	Ruhle Trawl	NEFS 9																		
3694	2011	Halibut	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
3695	2011	Halibut	Ruhle Trawl	Sustainable Harvest Sector 1	8	11	2	18.18	0.00	0.00	0.00	0	0.00	156	152932	6603.20	0.00	0	42.60	46	10.40	11
3696	2011	Halibut	Ruhle Trawl	Tri-State Sector																		
3697	2011	Northern Windowpane	Bottom Longline	Fixed Gear Sector	24	369	47	12.74	0.00	0.00	0.94	218	59.08	0	1269498	152519.70	2.00	17	241.80	448	28.70	62
3698	2011	Northern Windowpane	Bottom Longline	NCCS																		
3699	2011	Northern Windowpane	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.00	0	0.00	0	49858	17254.90	0.00	0	14.70	34	4.40	10
3700	2011	Northern Windowpane	Bottom Longline	NEFS 11																		
3701	2011	Northern Windowpane	Bottom Longline	NEFS 12																		
3702	2011	Northern Windowpane	Bottom Longline	NEFS 13																		
3703	2011	Northern Windowpane	Bottom Longline	NEFS 2																		
3704	2011	Northern Windowpane	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.00	0	0.00	0	298479	79608.30	0.00	0	140.80	308	38.80	81
3705	2011	Northern Windowpane	Bottom Longline	NEFS 5																		
3706	2011	Northern Windowpane	Bottom Longline	NEFS 6																		
3707	2011	Northern Windowpane	Bottom Longline	NEFS 7																		
3708	2011	Northern Windowpane	Bottom Longline	NEFS 8																		
3709	2011	Northern Windowpane	Bottom Longline	NEFS 9																		
3710	2011	Northern Windowpane	Bottom Longline	Port Clyde Community Groundfish Sector																		
3711	2011	Northern Windowpane	Bottom Longline	Sustainable Harvest Sector 1																		
3712	2011	Northern Windowpane	Bottom Longline	Tri-State Sector																		
3713	2011	Northern Windowpane	Bottom Otter Trawl	Fixed Gear Sector																		
3714	2011	Northern Windowpane	Bottom Otter Trawl	NCCS																		
3715	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.02	0.00	0.17	70	13.01	0	1690509	440369.40	7257.00	27858	290.90	584	79.60	170
3716	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.25	32	21.92	0	311558	74652.00	164.00	684	72.90	157	21.90	47
3717	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.36	51	36.43	0	177907	54104.20	189.00	621	61.20	143	20.40	42
3718	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 13	58	266	50	18.80	0.01	0.00	0.23	32	12.03	0	3391777	1053416.70	13073.00	42092	949.00	1020	352.70	377
3719	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 2	102	2467	552	22.38	0.00	0.00	0.11	98	3.97	0	12296414	3253022.40	8130.00	30731	2303.70	3433	707.70	1001
3720	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.02	0.00	0.50	5	20.83	0	53664	4363.00	75.00	922	15.90	28	1.40	2
3721	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 5	12	19	3	15.79	0.01	0.00	0.62	9	47.37	0	345177	76717.00	1032.00	4643	88.00	90	21.80	23
3722	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 6	16	215	42	19.53	0.00	0.00	0.28	37	17.21	0	3967419	1085318.40	1563.00	5714	611.90	673	226.50	247
3723	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 7	23	174	32	18.39	0.01	0.00	0.18	14	8.05	0	2173862	733778.70	9562.00	28328	569.30	623	219.00	236
3724	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 8	34	186	36	19.35	0.01	0.00	0.31	38	20.43	0	3120539	736864.20	7794.00	33007	788.50	839	272.00	290
3725	2011	Northern Windowpane	Bottom Otter Trawl	NEFS 9	96	670	131	19.55	0.01	0.00	0.17	51	7.61	0	12744937	3320611.60	39993.00	153498	2577.20	2774	968.50	1044
3726	2011	Northern Windowpane	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.00	0	0.00	0	499763	164841.10	0.00	0	259.60	339	92.10	117
3727	2011	Northern Windowpane	Bottom Otter Trawl	Sustainable Harvest Sector 1	174	1461	309	21.15	0.00	0.00	0.27	264	18.07	0	23147892	6510998.50	2833.00	10072	4457.80	4900	1692.40	1848
3728	2011	Northern Windowpane	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.77	11	73.33	0	420738	41397.50	13.00	132	96.40	104	17.40	19
3729	2011	Northern Windowpane	Extra Large Mesh Gillnet	Fixed Gear Sector	17	1045	290	27.75	0.00	0.00	0.72	721	69.00	0	6416372	1661832.10	6.00	23	298.00	1067	84.10	291
3730	2011	Northern Windowpane	Extra Large Mesh Gillnet	NCCS																		
3731	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 10	4	89	50	56.18	0.00	0.00	0.00	0	0.00	0	189089	75046.30	0.00	0	73.90	121	48.50	72
3732	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 11	4	61	61	100.00	0.00	0.00	0.00	0	0.00	0	142250	62863.80	0.00	0	21.10	61	27.60	61
3733	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 12																		
3734	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 13																		
3735	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 2																		

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3736	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 3	16	360	143	39.72	0.00	0.00	0.00	0	0.00	0	849965	174701.50	0.00	0	202.70	416	73.50	155
3737	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 5																		
3738	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 6																		
3739	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 7																		
3740	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 8																		
3741	2011	Northern Windowpane	Extra Large Mesh Gillnet	NEFS 9																		
3742	2011	Northern Windowpane	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3743	2011	Northern Windowpane	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3744	2011	Northern Windowpane	Extra Large Mesh Gillnet	Tri-State Sector																		
3745	2011	Northern Windowpane	Haddock Otter Trawl	Fixed Gear Sector																		
3746	2011	Northern Windowpane	Haddock Otter Trawl	NCCS																		
3747	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 10																		
3748	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 11																		
3749	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 12																		
3750	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 13	3	11	2	18.18	0.00	0.00	0.00	0	0.00	0	61728	2195.60	0.00	0	70.10	75	11.50	12
3751	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 2	16	20	11	55.00	0.00	0.00	0.26	10	50.00	0	258754	185171.60	137.00	191	124.80	136	72.50	78
3752	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 3																		
3753	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 5																		
3754	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 6																		
3755	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.81	9	81.82	0	53451	9349.60	12.00	69	73.30	79	31.50	34
3756	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 8																		
3757	2011	Northern Windowpane	Haddock Otter Trawl	NEFS 9	16	44	8	18.18	0.00	0.00	0.19	4	9.09	0	457000	113328.20	386.00	1557	148.50	158	47.40	51
3758	2011	Northern Windowpane	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
3759	2011	Northern Windowpane	Haddock Otter Trawl	Sustainable Harvest Sector 1	37	164	42	25.61	0.00	0.00	0.48	77	46.95	0	2555280	1158761.90	1486.00	3277	707.90	754	296.20	316
3760	2011	Northern Windowpane	Haddock Otter Trawl	Tri-State Sector																		
3761	2011	Northern Windowpane	Handline	Fixed Gear Sector	4	99	36	36.36	0.00	0.00	0.00	0	0.00	0	153649	39442.50	0.00	0	57.20	117	17.30	43
3762	2011	Northern Windowpane	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	0	18542	6504.80	0.00	0	12.00	26	4.40	9
3763	2011	Northern Windowpane	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
3764	2011	Northern Windowpane	Handline	NEFS 11																		
3765	2011	Northern Windowpane	Handline	NEFS 12																		
3766	2011	Northern Windowpane	Handline	NEFS 13																		
3767	2011	Northern Windowpane	Handline	NEFS 2																		
3768	2011	Northern Windowpane	Handline	NEFS 3																		
3769	2011	Northern Windowpane	Handline	NEFS 5																		
3770	2011	Northern Windowpane	Handline	NEFS 6																		
3771	2011	Northern Windowpane	Handline	NEFS 7																		
3772	2011	Northern Windowpane	Handline	NEFS 8																		
3773	2011	Northern Windowpane	Handline	NEFS 9																		
3774	2011	Northern Windowpane	Handline	Port Clyde Community Groundfish Sector																		
3775	2011	Northern Windowpane	Handline	Sustainable Harvest Sector 1																		
3776	2011	Northern Windowpane	Handline	Tri-State Sector																		
3777	2011	Northern Windowpane	Large Mesh Gillnet	Fixed Gear Sector	18	802	233	29.05	0.00	0.00	0.18	108	13.47	0	2301224	586115.50	96.00	377	279.40	817	82.30	235
3778	2011	Northern Windowpane	Large Mesh Gillnet	NCCS																		
3779	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 10	14	364	149	40.93	0.00	0.00	0.18	71	19.51	0	1139521	444970.30	95.00	243	302.00	508	105.20	193
3780	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.49	605	46.57	0	4076694	932163.20	3.00	13	481.80	1332	128.90	326

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	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3781	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 12	7	99	22	22.22	0.00	0.00	0.00	0	0.00	0	1102911	231008.30	0.00	0	385.70	438	80.40	93
3782	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 13																		
3783	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 2																		
3784	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 3	31	2103	717	34.09	0.00	0.00	0.10	124	5.90	1	3455744	1100298.90	785.00	2465	795.30	2139	285.20	725
3785	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 5																		
3786	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 6																		
3787	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 7	4	14	6	42.86	0.00	0.00	0.00	0	0.00	0	64474	39861.90	0.00	0	49.20	56	31.90	35
3788	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 8																		
3789	2011	Northern Windowpane	Large Mesh Gillnet	NEFS 9																		
3790	2011	Northern Windowpane	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	15	558	146	26.16	0.00	0.00	0.00	0	0.00	0	1857095	452719.70	0.00	0	412.20	740	101.90	182
3791	2011	Northern Windowpane	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.00	0	0.00	0	894379	334188.20	0.00	0	369.50	429	133.30	152
3792	2011	Northern Windowpane	Large Mesh Gillnet	Tri-State Sector																		
3793	2011	Northern Windowpane	Ruhle Trawl	Fixed Gear Sector																		
3794	2011	Northern Windowpane	Ruhle Trawl	NCCS																		
3795	2011	Northern Windowpane	Ruhle Trawl	NEFS 10																		
3796	2011	Northern Windowpane	Ruhle Trawl	NEFS 11																		
3797	2011	Northern Windowpane	Ruhle Trawl	NEFS 12																		
3798	2011	Northern Windowpane	Ruhle Trawl	NEFS 13	15	55	9	16.36	0.00	0.00	0.69	28	50.91	0	804860	142571.70	304.00	1716	285.30	308	63.90	68
3799	2011	Northern Windowpane	Ruhle Trawl	NEFS 2																		
3800	2011	Northern Windowpane	Ruhle Trawl	NEFS 3																		
3801	2011	Northern Windowpane	Ruhle Trawl	NEFS 5	4	5	0	0.00						0	52344	0.00	0.00		23.30	24	0.00	0
3802	2011	Northern Windowpane	Ruhle Trawl	NEFS 6																		
3803	2011	Northern Windowpane	Ruhle Trawl	NEFS 7																		
3804	2011	Northern Windowpane	Ruhle Trawl	NEFS 8																		
3805	2011	Northern Windowpane	Ruhle Trawl	NEFS 9																		
3806	2011	Northern Windowpane	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
3807	2011	Northern Windowpane	Ruhle Trawl	Sustainable Harvest Sector 1	8	11	2	18.18	0.00	0.00	0.95	8	72.73	0	152932	6603.20	5.00	116	42.60	46	10.40	11
3808	2011	Northern Windowpane	Ruhle Trawl	Tri-State Sector																		
3809	2011	Ocean Pout	Bottom Longline	Fixed Gear Sector	24	369	47	12.74	0.01	0.00	0.55	121	32.79	10	1269498	152519.70	1040.00	8656	241.80	448	28.70	62
3810	2011	Ocean Pout	Bottom Longline	NCCS																		
3811	2011	Ocean Pout	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.30	10	29.41	0	49858	17254.90	76.00	220	14.70	34	4.40	10
3812	2011	Ocean Pout	Bottom Longline	NEFS 11																		
3813	2011	Ocean Pout	Bottom Longline	NEFS 12																		
3814	2011	Ocean Pout	Bottom Longline	NEFS 13																		
3815	2011	Ocean Pout	Bottom Longline	NEFS 2																		
3816	2011	Ocean Pout	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.19	38	12.97	0	298479	79608.30	133.00	499	140.80	308	38.80	81
3817	2011	Ocean Pout	Bottom Longline	NEFS 5																		
3818	2011	Ocean Pout	Bottom Longline	NEFS 6																		
3819	2011	Ocean Pout	Bottom Longline	NEFS 7																		
3820	2011	Ocean Pout	Bottom Longline	NEFS 8																		
3821	2011	Ocean Pout	Bottom Longline	NEFS 9																		
3822	2011	Ocean Pout	Bottom Longline	Port Clyde Community Groundfish Sector																		
3823	2011	Ocean Pout	Bottom Longline	Sustainable Harvest Sector 1																		
3824	2011	Ocean Pout	Bottom Longline	Tri-State Sector																		
3825	2011	Ocean Pout	Bottom Otter Trawl	Fixed Gear Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3826	2011	Ocean Pout	Bottom Otter Trawl	NCCS																		
3827	2011	Ocean Pout	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.00	0.00	0.20	86	15.99	0	1690509	440369.40	1175.00	4511	290.90	584	79.60	170
3828	2011	Ocean Pout	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.46	72	49.32	0	311558	74652.00	60.00	250	72.90	157	21.90	47
3829	2011	Ocean Pout	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.51	76	54.29	0	177907	54104.20	10.00	33	61.20	143	20.40	42
3830	2011	Ocean Pout	Bottom Otter Trawl	NEFS 13	96	543	136	25.05	0.00	0.00	0.29	128	23.57	0	5651557	1951213.70	5981.00	17324	1290.10	1474	496.90	562
3831	2011	Ocean Pout	Bottom Otter Trawl	NEFS 2	102	2467	552	22.38	0.00	0.00	0.10	83	3.36	0	12296414	3254352.90	1642.00	6204	2303.70	3433	707.70	1001
3832	2011	Ocean Pout	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.00	0	0.00	0	53664	4363.00	0.00	0	15.90	28	1.40	2
3833	2011	Ocean Pout	Bottom Otter Trawl	NEFS 5	56	645	211	32.71	0.01	0.00	0.23	145	22.48	0	6189506	2065282.80	11993.00	35942	713.00	1031	256.80	371
3834	2011	Ocean Pout	Bottom Otter Trawl	NEFS 6	17	216	42	19.44	0.00	0.00	0.33	50	23.15	0	3980042	1085318.40	1559.00	5717	611.90	673	226.50	247
3835	2011	Ocean Pout	Bottom Otter Trawl	NEFS 7	32	217	45	20.74	0.00	0.00	0.35	58	26.73	0	2565524	842882.60	1094.00	3330	656.00	729	254.80	279
3836	2011	Ocean Pout	Bottom Otter Trawl	NEFS 8	43	202	37	18.32	0.00	0.00	0.31	40	19.80	0	3265183	771702.50	2084.00	8818	794.30	846	273.70	292
3837	2011	Ocean Pout	Bottom Otter Trawl	NEFS 9	119	722	132	18.28	0.00	0.00	0.15	37	5.12	0	13236959	3431257.40	6773.00	26129	2594.80	2795	970.90	1047
3838	2011	Ocean Pout	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.84	124	77.99	0	499763	164841.10	3.00	9	259.60	339	92.10	117
3839	2011	Ocean Pout	Bottom Otter Trawl	Sustainable Harvest Sector 1	183	1500	318	21.20	0.00	0.00	0.16	101	6.73	0	23310625	6559250.50	2261.00	8035	4486.40	4939	1702.90	1862
3840	2011	Ocean Pout	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.83	12	80.00	0	420738	41397.50	29.00	295	96.40	104	17.40	19
3841	2011	Ocean Pout	Extra Large Mesh Gillnet	Fixed Gear Sector	33	1275	343	26.90	0.00	0.00	0.00	0	0.00	0	7890632	2045826.40	0.00	0	565.30	1478	150.30	394
3842	2011	Ocean Pout	Extra Large Mesh Gillnet	NCCS																		
3843	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 10	9	120	62	51.67	0.00	0.00	0.00	0	0.00	0	412304	169256.30	0.00	0	107.50	175	59.70	90
3844	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 11	10	202	84	41.58	0.00	0.00	0.00	0	0.00	0	668560	152866.60	0.00	0	81.10	204	38.70	84
3845	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 12																		
3846	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 13																		
3847	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 2																		
3848	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 3	30	513	171	33.33	0.00	0.00	0.82	406	79.14	0	1669677	331562.90	2.00	10	354.60	651	103.30	200
3849	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 5																		
3850	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 6																		
3851	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 7	9	194	53	27.32	0.00	0.00	0.00	0	0.00	0	1092447	343227.40	0.00	0	173.90	267	69.70	97
3852	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 8																		
3853	2011	Ocean Pout	Extra Large Mesh Gillnet	NEFS 9																		
3854	2011	Ocean Pout	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3855	2011	Ocean Pout	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3856	2011	Ocean Pout	Extra Large Mesh Gillnet	Tri-State Sector																		
3857	2011	Ocean Pout	Haddock Otter Trawl	Fixed Gear Sector																		
3858	2011	Ocean Pout	Haddock Otter Trawl	NCCS																		
3859	2011	Ocean Pout	Haddock Otter Trawl	NEFS 10																		
3860	2011	Ocean Pout	Haddock Otter Trawl	NEFS 11																		
3861	2011	Ocean Pout	Haddock Otter Trawl	NEFS 12																		
3862	2011	Ocean Pout	Haddock Otter Trawl	NEFS 13	3	11	2	18.18	0.00	0.00	0.00	0	0.00	0	61728	2195.60	0.00	0	70.10	75	11.50	12
3863	2011	Ocean Pout	Haddock Otter Trawl	NEFS 2	16	20	11	55.00	0.00	0.00	0.27	10	50.00	0	258754	185171.60	125.00	175	124.80	136	72.50	78
3864	2011	Ocean Pout	Haddock Otter Trawl	NEFS 3																		
3865	2011	Ocean Pout	Haddock Otter Trawl	NEFS 5																		
3866	2011	Ocean Pout	Haddock Otter Trawl	NEFS 6																		
3867	2011	Ocean Pout	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.11	1	9.09	0	53451	9349.60	43.00	246	73.30	79	31.50	34
3868	2011	Ocean Pout	Haddock Otter Trawl	NEFS 8																		
3869	2011	Ocean Pout	Haddock Otter Trawl	NEFS 9	16	44	8	18.18	0.00	0.00	0.46	15	34.09	0	457000	113328.20	233.00	940	148.50	158	47.40	51
3870	2011	Ocean Pout	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3871	2011	Ocean Pout	Haddock Otter Trawl	Sustainable Harvest Sector 1	38	165	42	25.45	0.00	0.00	0.40	63	38.18	0	2584464	1158779.00	356.00	794	707.90	754	296.20	316
3872	2011	Ocean Pout	Haddock Otter Trawl	Tri-State Sector																		
3873	2011	Ocean Pout	Handline	Fixed Gear Sector	4	99	36	36.36	0.00	0.00	0.00	0	0.00	0	153649	39442.50	0.00	0	57.20	117	17.30	43
3874	2011	Ocean Pout	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	0	18542	6504.80	0.00	0	12.00	26	4.40	9
3875	2011	Ocean Pout	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
3876	2011	Ocean Pout	Handline	NEFS 11																		
3877	2011	Ocean Pout	Handline	NEFS 12																		
3878	2011	Ocean Pout	Handline	NEFS 13																		
3879	2011	Ocean Pout	Handline	NEFS 2																		
3880	2011	Ocean Pout	Handline	NEFS 3																		
3881	2011	Ocean Pout	Handline	NEFS 5																		
3882	2011	Ocean Pout	Handline	NEFS 6																		
3883	2011	Ocean Pout	Handline	NEFS 7																		
3884	2011	Ocean Pout	Handline	NEFS 8																		
3885	2011	Ocean Pout	Handline	NEFS 9																		
3886	2011	Ocean Pout	Handline	Port Clyde Community Groundfish Sector																		
3887	2011	Ocean Pout	Handline	Sustainable Harvest Sector 1																		
3888	2011	Ocean Pout	Handline	Tri-State Sector																		
3889	2011	Ocean Pout	Large Mesh Gillnet	Fixed Gear Sector	19	803	234	29.14	0.00	0.00	0.65	531	66.13	0	2307839	595528.00	11.00	43	280.80	819	83.30	236
3890	2011	Ocean Pout	Large Mesh Gillnet	NCCS																		
3891	2011	Ocean Pout	Large Mesh Gillnet	NEFS 10	14	364	149	40.93	0.00	0.00	0.31	153	42.03	0	1139521	444970.30	66.00	169	302.00	508	105.20	193
3892	2011	Ocean Pout	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.87	952	73.29	0	4076694	932163.20	1.00	4	481.80	1332	128.90	326
3893	2011	Ocean Pout	Large Mesh Gillnet	NEFS 12	7	99	22	22.22	0.00	0.00	0.00	0	0.00	0	1102911	231008.30	0.00	0	385.70	438	80.40	93
3894	2011	Ocean Pout	Large Mesh Gillnet	NEFS 13																		
3895	2011	Ocean Pout	Large Mesh Gillnet	NEFS 2																		
3896	2011	Ocean Pout	Large Mesh Gillnet	NEFS 3	35	2133	724	33.94	0.00	0.00	0.24	535	25.08	0	3531995	1122435.60	53.00	167	810.80	2170	289.50	732
3897	2011	Ocean Pout	Large Mesh Gillnet	NEFS 5																		
3898	2011	Ocean Pout	Large Mesh Gillnet	NEFS 6																		
3899	2011	Ocean Pout	Large Mesh Gillnet	NEFS 7	5	15	8	53.33	0.00	0.00	0.00	0	0.00	0	64534	41154.30	0.00	0	49.50	57	32.90	37
3900	2011	Ocean Pout	Large Mesh Gillnet	NEFS 8																		
3901	2011	Ocean Pout	Large Mesh Gillnet	NEFS 9																		
3902	2011	Ocean Pout	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	15	558	146	26.16	0.00	0.00	0.00	0	0.00	0	1857095	452719.70	0.00	0	412.20	740	101.90	182
3903	2011	Ocean Pout	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.00	0	0.00	0	894379	334188.20	0.00	0	369.50	429	133.30	152
3904	2011	Ocean Pout	Large Mesh Gillnet	Tri-State Sector																		
3905	2011	Ocean Pout	Ruhle Trawl	Fixed Gear Sector																		
3906	2011	Ocean Pout	Ruhle Trawl	NCCS																		
3907	2011	Ocean Pout	Ruhle Trawl	NEFS 10																		
3908	2011	Ocean Pout	Ruhle Trawl	NEFS 11																		
3909	2011	Ocean Pout	Ruhle Trawl	NEFS 12																		
3910	2011	Ocean Pout	Ruhle Trawl	NEFS 13	16	56	9	16.07	0.00	0.00	1.04	40	71.43	0	804866	142583.50	121.00	683	285.30	308	63.90	68
3911	2011	Ocean Pout	Ruhle Trawl	NEFS 2																		
3912	2011	Ocean Pout	Ruhle Trawl	NEFS 3																		
3913	2011	Ocean Pout	Ruhle Trawl	NEFS 5	4	5	0	0.00						0	52344	0.00	0.00		23.30	24	0.00	0
3914	2011	Ocean Pout	Ruhle Trawl	NEFS 6																		
3915	2011	Ocean Pout	Ruhle Trawl	NEFS 7																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3916	2011	Ocean Pout	Ruhle Trawl	NEFS 8																		
3917	2011	Ocean Pout	Ruhle Trawl	NEFS 9																		
3918	2011	Ocean Pout	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
3919	2011	Ocean Pout	Ruhle Trawl	Sustainable Harvest Sector 1	8	11	2	18.18	0.00	0.00	0.00	0	0.00	0	152932	6603.20	0.00	0	42.60	46	10.40	11
3920	2011	Ocean Pout	Ruhle Trawl	Tri-State Sector																		
3921	2011	Plaice	Bottom Longline	Fixed Gear Sector	24	369	47	12.74	0.00	0.00	0.64	149	40.38	30	1269498	152519.70	2.00	17	241.80	448	28.70	62
3922	2011	Plaice	Bottom Longline	NCCS																		
3923	2011	Plaice	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.00	0	0.00	0	49858	17254.90	0.00	0	14.70	34	4.40	10
3924	2011	Plaice	Bottom Longline	NEFS 11																		
3925	2011	Plaice	Bottom Longline	NEFS 12																		
3926	2011	Plaice	Bottom Longline	NEFS 13																		
3927	2011	Plaice	Bottom Longline	NEFS 2																		
3928	2011	Plaice	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.86	219	74.74	1	298479	79608.30	1.00	4	140.80	308	38.80	81
3929	2011	Plaice	Bottom Longline	NEFS 5																		
3930	2011	Plaice	Bottom Longline	NEFS 6																		
3931	2011	Plaice	Bottom Longline	NEFS 7																		
3932	2011	Plaice	Bottom Longline	NEFS 8																		
3933	2011	Plaice	Bottom Longline	NEFS 9																		
3934	2011	Plaice	Bottom Longline	Port Clyde Community Groundfish Sector																		
3935	2011	Plaice	Bottom Longline	Sustainable Harvest Sector 1																		
3936	2011	Plaice	Bottom Longline	Tri-State Sector																		
3937	2011	Plaice	Bottom Otter Trawl	Fixed Gear Sector																		
3938	2011	Plaice	Bottom Otter Trawl	NCCS																		
3939	2011	Plaice	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.01	0.00	0.12	36	6.69	17102	1690509	440369.40	3084.00	11839	290.90	584	79.60	170
3940	2011	Plaice	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.01	0.00	0.21	26	17.81	12095	311558	74652.00	924.00	3856	72.90	157	21.90	47
3941	2011	Plaice	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.02	0.00	0.24	28	20.00	10043	177907	54104.20	875.00	2877	61.20	143	20.40	42
3942	2011	Plaice	Bottom Otter Trawl	NEFS 13	96	543	136	25.05	0.00	0.00	0.23	88	16.21	127995	5672861	1951213.70	3132.00	9106	1290.10	1474	496.90	562
3943	2011	Plaice	Bottom Otter Trawl	NEFS 2	102	2467	552	22.38	0.01	0.00	0.09	65	2.63	372226	12310854	3254352.90	27090.00	102478	2303.70	3433	707.70	1001
3944	2011	Plaice	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.01	0.00	1.64	18	75.00	419	53664	4363.00	35.00	430	15.90	28	1.40	2
3945	2011	Plaice	Bottom Otter Trawl	NEFS 5	56	645	211	32.71	0.00	0.00	0.61	433	67.13	20101	6189506	2065282.80	981.00	2940	713.00	1031	256.80	371
3946	2011	Plaice	Bottom Otter Trawl	NEFS 6	17	216	42	19.44	0.00	0.00	0.22	26	12.04	181562	3980042	1085318.40	3018.00	11068	611.90	673	226.50	247
3947	2011	Plaice	Bottom Otter Trawl	NEFS 7	32	217	45	20.74	0.01	0.00	0.18	19	8.76	158110	2597820	842882.60	5899.00	18181	656.00	729	254.80	279
3948	2011	Plaice	Bottom Otter Trawl	NEFS 8	43	202	37	18.32	0.00	0.00	0.24	26	12.87	86260	3265183	771702.50	3192.00	13506	794.30	846	273.70	292
3949	2011	Plaice	Bottom Otter Trawl	NEFS 9	119	722	132	18.28	0.01	0.00	0.12	25	3.46	429281	13236959	3431257.40	21303.00	82182	2594.80	2795	970.90	1047
3950	2011	Plaice	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.02	0.00	0.17	21	13.21	51216	499763	164841.10	3276.00	9932	259.60	339	92.10	117
3951	2011	Plaice	Bottom Otter Trawl	Sustainable Harvest Sector 1	183	1500	318	21.20	0.01	0.00	0.07	25	1.67	1630740	23408974	6559250.50	45757.00	163300	4486.40	4939	1702.90	1862
3952	2011	Plaice	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.61	10	66.67	12037	420738	41397.50	47.00	478	96.40	104	17.40	19
3953	2011	Plaice	Extra Large Mesh Gillnet	Fixed Gear Sector	33	1275	343	26.90	0.00	0.00	0.00	0	0.00	16	7890632	2045826.40	0.00	0	565.30	1478	150.30	394
3954	2011	Plaice	Extra Large Mesh Gillnet	NCCS																		
3955	2011	Plaice	Extra Large Mesh Gillnet	NEFS 10	9	120	62	51.67	0.00	0.00	0.00	0	0.00	2	412304	169256.30	0.00	0	107.50	175	59.70	90
3956	2011	Plaice	Extra Large Mesh Gillnet	NEFS 11	10	202	84	41.58	0.00	0.00	0.36	102	50.50	297	668560	152866.60	11.00	48	81.10	204	38.70	84
3957	2011	Plaice	Extra Large Mesh Gillnet	NEFS 12																		
3958	2011	Plaice	Extra Large Mesh Gillnet	NEFS 13																		
3959	2011	Plaice	Extra Large Mesh Gillnet	NEFS 2																		
3960	2011	Plaice	Extra Large Mesh Gillnet	NEFS 3	30	513	171	33.33	0.00	0.00	0.47	283	55.17	1152	1669677	331562.90	11.00	55	354.60	651	103.30	200

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
3961	2011	Plaice	Extra Large Mesh Gillnet	NEFS 5																		
3962	2011	Plaice	Extra Large Mesh Gillnet	NEFS 6																		
3963	2011	Plaice	Extra Large Mesh Gillnet	NEFS 7	9	194	53	27.32	0.00	0.00	0.00	0	0.00	0	1092447	343227.40	0.00	0	173.90	267	69.70	97
3964	2011	Plaice	Extra Large Mesh Gillnet	NEFS 8																		
3965	2011	Plaice	Extra Large Mesh Gillnet	NEFS 9																		
3966	2011	Plaice	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
3967	2011	Plaice	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
3968	2011	Plaice	Extra Large Mesh Gillnet	Tri-State Sector																		
3969	2011	Plaice	Haddock Otter Trawl	Fixed Gear Sector																		
3970	2011	Plaice	Haddock Otter Trawl	NCCS																		
3971	2011	Plaice	Haddock Otter Trawl	NEFS 10																		
3972	2011	Plaice	Haddock Otter Trawl	NEFS 11																		
3973	2011	Plaice	Haddock Otter Trawl	NEFS 12																		
3974	2011	Plaice	Haddock Otter Trawl	NEFS 13	3	11	2	18.18	0.00	0.00	0.34	3	27.27	0	61728	2195.60	8.00	225	70.10	75	11.50	12
3975	2011	Plaice	Haddock Otter Trawl	NEFS 2	16	20	11	55.00	0.00	0.00	0.29	11	55.00	5867	277473	185171.60	210.00	315	124.80	136	72.50	78
3976	2011	Plaice	Haddock Otter Trawl	NEFS 3																		
3977	2011	Plaice	Haddock Otter Trawl	NEFS 5																		
3978	2011	Plaice	Haddock Otter Trawl	NEFS 6																		
3979	2011	Plaice	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.99	10	90.91	959	57281	9349.60	31.00	190	73.30	79	31.50	34
3980	2011	Plaice	Haddock Otter Trawl	NEFS 8																		
3981	2011	Plaice	Haddock Otter Trawl	NEFS 9	16	44	8	18.18	0.00	0.00	0.76	26	59.09	20238	457000	113328.20	406.00	1637	148.50	158	47.40	51
3982	2011	Plaice	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
3983	2011	Plaice	Haddock Otter Trawl	Sustainable Harvest Sector 1	38	165	42	25.45	0.00	0.00	0.24	31	18.79	27141	2666321	1158779.00	1468.00	3378	707.90	754	296.20	316
3984	2011	Plaice	Haddock Otter Trawl	Tri-State Sector																		
3985	2011	Plaice	Handline	Fixed Gear Sector	4	99	36	36.36	0.00	0.00	0.00	0	0.00	0	153649	39442.50	0.00	0	57.20	117	17.30	43
3986	2011	Plaice	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	0	18542	6504.80	0.00	0	12.00	26	4.40	9
3987	2011	Plaice	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
3988	2011	Plaice	Handline	NEFS 11																		
3989	2011	Plaice	Handline	NEFS 12																		
3990	2011	Plaice	Handline	NEFS 13																		
3991	2011	Plaice	Handline	NEFS 2																		
3992	2011	Plaice	Handline	NEFS 3																		
3993	2011	Plaice	Handline	NEFS 5																		
3994	2011	Plaice	Handline	NEFS 6																		
3995	2011	Plaice	Handline	NEFS 7																		
3996	2011	Plaice	Handline	NEFS 8																		
3997	2011	Plaice	Handline	NEFS 9																		
3998	2011	Plaice	Handline	Port Clyde Community Groundfish Sector																		
3999	2011	Plaice	Handline	Sustainable Harvest Sector 1																		
4000	2011	Plaice	Handline	Tri-State Sector																		
4001	2011	Plaice	Large Mesh Gillnet	Fixed Gear Sector	19	803	234	29.14	0.00	0.00	0.18	101	12.58	699	2307839	595528.00	42.00	163	280.80	819	83.30	236
4002	2011	Plaice	Large Mesh Gillnet	NCCS																		
4003	2011	Plaice	Large Mesh Gillnet	NEFS 10	14	364	149	40.93	0.00	0.00	0.19	78	21.43	962	1139521	444970.30	85.00	218	302.00	508	105.20	193
4004	2011	Plaice	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.10	43	3.31	5076	4076694	932163.20	473.00	2069	481.80	1332	128.90	326
4005	2011	Plaice	Large Mesh Gillnet	NEFS 12	7	99	22	22.22	0.00	0.00	0.27	19	19.19	116	1102911	231008.30	32.00	153	385.70	438	80.40	93

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4006	2011	Plaice	Large Mesh Gillnet	NEFS 13																		
4007	2011	Plaice	Large Mesh Gillnet	NEFS 2																		
4008	2011	Plaice	Large Mesh Gillnet	NEFS 3	35	2133	724	33.94	0.00	0.00	0.11	146	6.84	5662	3531995	1122435.60	623.00	1960	810.80	2170	289.50	732
4009	2011	Plaice	Large Mesh Gillnet	NEFS 5																		
4010	2011	Plaice	Large Mesh Gillnet	NEFS 6																		
4011	2011	Plaice	Large Mesh Gillnet	NEFS 7	5	15	8	53.33	0.00	0.00	0.67	13	86.67	13	64534	41154.30	2.00	3	49.50	57	32.90	37
4012	2011	Plaice	Large Mesh Gillnet	NEFS 8																		
4013	2011	Plaice	Large Mesh Gillnet	NEFS 9																		
4014	2011	Plaice	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	15	558	146	26.16	0.00	0.00	0.11	25	4.48	2427	1857095	452719.70	316.00	1296	412.20	740	101.90	182
4015	2011	Plaice	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.25	25	22.12	300	894379	334188.20	88.00	236	369.50	429	133.30	152
4016	2011	Plaice	Large Mesh Gillnet	Tri-State Sector																		
4017	2011	Plaice	Ruhle Trawl	Fixed Gear Sector																		
4018	2011	Plaice	Ruhle Trawl	NCCS																		
4019	2011	Plaice	Ruhle Trawl	NEFS 10																		
4020	2011	Plaice	Ruhle Trawl	NEFS 11																		
4021	2011	Plaice	Ruhle Trawl	NEFS 12																		
4022	2011	Plaice	Ruhle Trawl	NEFS 13	16	56	9	16.07	0.00	0.00	0.00	0	0.00	6164	806492	142583.50	0.00	0	285.30	308	63.90	68
4023	2011	Plaice	Ruhle Trawl	NEFS 2																		
4024	2011	Plaice	Ruhle Trawl	NEFS 3																		
4025	2011	Plaice	Ruhle Trawl	NEFS 5	4	5	0	0.00						25	52344	0.00	0.00		23.30	24	0.00	0
4026	2011	Plaice	Ruhle Trawl	NEFS 6																		
4027	2011	Plaice	Ruhle Trawl	NEFS 7																		
4028	2011	Plaice	Ruhle Trawl	NEFS 8																		
4029	2011	Plaice	Ruhle Trawl	NEFS 9																		
4030	2011	Plaice	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
4031	2011	Plaice	Ruhle Trawl	Sustainable Harvest Sector 1	8	11	2	18.18	0.00	0.00	0.00	0	0.00	9845	152932	6603.20	0.00	0	42.60	46	10.40	11
4032	2011	Plaice	Ruhle Trawl	Tri-State Sector																		
4033	2011	Pollock	Bottom Longline	Fixed Gear Sector	24	369	47	12.74	0.00	0.00	0.48	102	27.64	9864	1269498	152519.70	10.00	83	241.80	448	28.70	62
4034	2011	Pollock	Bottom Longline	NCCS																		
4035	2011	Pollock	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.66	23	67.65	209	49858	17254.90	3.00	9	14.70	34	4.40	10
4036	2011	Pollock	Bottom Longline	NEFS 11																		
4037	2011	Pollock	Bottom Longline	NEFS 12																		
4038	2011	Pollock	Bottom Longline	NEFS 13																		
4039	2011	Pollock	Bottom Longline	NEFS 2																		
4040	2011	Pollock	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.41	117	39.93	2091	298479	79608.30	160.00	600	140.80	308	38.80	81
4041	2011	Pollock	Bottom Longline	NEFS 5																		
4042	2011	Pollock	Bottom Longline	NEFS 6																		
4043	2011	Pollock	Bottom Longline	NEFS 7																		
4044	2011	Pollock	Bottom Longline	NEFS 8																		
4045	2011	Pollock	Bottom Longline	NEFS 9																		
4046	2011	Pollock	Bottom Longline	Port Clyde Community Groundfish Sector																		
4047	2011	Pollock	Bottom Longline	Sustainable Harvest Sector 1																		
4048	2011	Pollock	Bottom Longline	Tri-State Sector																		
4049	2011	Pollock	Bottom Otter Trawl	Fixed Gear Sector																		
4050	2011	Pollock	Bottom Otter Trawl	NCCS																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4051	2011	Pollock	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.00	0.00	0.00	0	0.00	67658	1690509	440369.40	0.00	0	290.90	584	79.60	170
4052	2011	Pollock	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.00	0	0.00	31031	311558	74652.00	0.00	0	72.90	157	21.90	47
4053	2011	Pollock	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.48	71	50.71	4594	177907	54104.20	24.00	79	61.20	143	20.40	42
4054	2011	Pollock	Bottom Otter Trawl	NEFS 13	96	543	136	25.05	0.00	0.00	0.44	225	41.44	196729	5670189	1951213.70	56.00	163	1290.10	1474	496.90	562
4055	2011	Pollock	Bottom Otter Trawl	NEFS 2	102	2467	552	22.38	0.00	0.00	0.16	185	7.50	3325752	12310854	3254352.90	3829.00	14485	2303.70	3433	707.70	1001
4056	2011	Pollock	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.00	0	0.00	344	53664	4363.00	0.00	0	15.90	28	1.40	2
4057	2011	Pollock	Bottom Otter Trawl	NEFS 5	56	645	211	32.71	0.00	0.00	0.81	505	78.29	1186	6189506	2065282.80	2.00	6	713.00	1031	256.80	371
4058	2011	Pollock	Bottom Otter Trawl	NEFS 6	17	216	42	19.44	0.00	0.00	0.28	39	18.06	674466	3980042	1085318.40	624.00	2288	611.90	673	226.50	247
4059	2011	Pollock	Bottom Otter Trawl	NEFS 7	32	217	45	20.74	0.00	0.00	0.63	117	53.92	17623	2565524	842882.60	5.00	15	656.00	729	254.80	279
4060	2011	Pollock	Bottom Otter Trawl	NEFS 8	43	202	37	18.32	0.00	0.00	0.38	54	26.73	75326	3265183	771702.50	50.00	212	794.30	846	273.70	292
4061	2011	Pollock	Bottom Otter Trawl	NEFS 9	119	722	132	18.28	0.00	0.00	0.26	104	14.40	1325102	13236959	3431257.40	1260.00	4861	2594.80	2795	970.90	1047
4062	2011	Pollock	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.00	0	0.00	42883	499763	164841.10	0.00	0	259.60	339	92.10	117
4063	2011	Pollock	Bottom Otter Trawl	Sustainable Harvest Sector 1	183	1500	318	21.20	0.00	0.00	0.25	244	16.27	5003235	23454411	6559250.50	10830.00	38726	4486.40	4939	1702.90	1862
4064	2011	Pollock	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	1.14	13	86.67	206	420738	41397.50	19.00	193	96.40	104	17.40	19
4065	2011	Pollock	Extra Large Mesh Gillnet	Fixed Gear Sector	33	1275	343	26.90	0.00	0.00	0.31	362	28.39	1326	7890632	2045826.40	56.00	216	565.30	1478	150.30	394
4066	2011	Pollock	Extra Large Mesh Gillnet	NCCS																		
4067	2011	Pollock	Extra Large Mesh Gillnet	NEFS 10	9	120	62	51.67	0.00	0.00	0.27	56	46.67	54	412304	169256.30	89.00	217	107.50	175	59.70	90
4068	2011	Pollock	Extra Large Mesh Gillnet	NEFS 11	10	202	84	41.58	0.00	0.00	0.20	50	24.75	9171	668560	152866.60	508.00	2222	81.10	204	38.70	84
4069	2011	Pollock	Extra Large Mesh Gillnet	NEFS 12																		
4070	2011	Pollock	Extra Large Mesh Gillnet	NEFS 13																		
4071	2011	Pollock	Extra Large Mesh Gillnet	NEFS 2																		
4072	2011	Pollock	Extra Large Mesh Gillnet	NEFS 3	30	513	171	33.33	0.00	0.00	0.20	95	18.52	17204	1669677	331562.90	618.00	3112	354.60	651	103.30	200
4073	2011	Pollock	Extra Large Mesh Gillnet	NEFS 5																		
4074	2011	Pollock	Extra Large Mesh Gillnet	NEFS 6																		
4075	2011	Pollock	Extra Large Mesh Gillnet	NEFS 7	9	194	53	27.32	0.00	0.00	0.52	103	53.09	266	1092447	343227.40	168.00	535	173.90	267	69.70	97
4076	2011	Pollock	Extra Large Mesh Gillnet	NEFS 8																		
4077	2011	Pollock	Extra Large Mesh Gillnet	NEFS 9																		
4078	2011	Pollock	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4079	2011	Pollock	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4080	2011	Pollock	Extra Large Mesh Gillnet	Tri-State Sector																		
4081	2011	Pollock	Haddock Otter Trawl	Fixed Gear Sector																		
4082	2011	Pollock	Haddock Otter Trawl	NCCS																		
4083	2011	Pollock	Haddock Otter Trawl	NEFS 10																		
4084	2011	Pollock	Haddock Otter Trawl	NEFS 11																		
4085	2011	Pollock	Haddock Otter Trawl	NEFS 12																		
4086	2011	Pollock	Haddock Otter Trawl	NEFS 13	3	11	2	18.18	0.00	0.00	0.00	0	0.00	7295	61728	2195.60	0.00	0	70.10	75	11.50	12
4087	2011	Pollock	Haddock Otter Trawl	NEFS 2	16	20	11	55.00	0.00	0.00	0.59	17	85.00	58273	277473	185171.60	47.00	70	124.80	136	72.50	78
4088	2011	Pollock	Haddock Otter Trawl	NEFS 3																		
4089	2011	Pollock	Haddock Otter Trawl	NEFS 5																		
4090	2011	Pollock	Haddock Otter Trawl	NEFS 6																		
4091	2011	Pollock	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.00	0	0.00	28	53451	9349.60	0.00	0	73.30	79	31.50	34
4092	2011	Pollock	Haddock Otter Trawl	NEFS 8																		
4093	2011	Pollock	Haddock Otter Trawl	NEFS 9	16	44	8	18.18	0.00	0.00	0.88	29	65.91	90054	457000	113328.20	7.00	28	148.50	158	47.40	51
4094	2011	Pollock	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
4095	2011	Pollock	Haddock Otter Trawl	Sustainable Harvest Sector 1	38	165	42	25.45	0.00	0.00	0.32	47	28.48	349187	2683805	1158779.00	3370.00	7805	707.90	754	296.20	316

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4096	2011	Pollock	Haddock Otter Trawl	Tri-State Sector																		
4097	2011	Pollock	Handline	Fixed Gear Sector	4	99	36	36.36	0.00	0.00	0.00	0	0.00	14829	153649	39442.50	0.00	0	57.20	117	17.30	43
4098	2011	Pollock	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.90	22	84.62	1376	18542	6504.80	3.00	9	12.00	26	4.40	9
4099	2011	Pollock	Handline	NEFS 10	3	20	1	5.00	0.00					189	17388	511.50	0.00	0	8.60	20	0.50	1
4100	2011	Pollock	Handline	NEFS 11																		
4101	2011	Pollock	Handline	NEFS 12																		
4102	2011	Pollock	Handline	NEFS 13																		
4103	2011	Pollock	Handline	NEFS 2																		
4104	2011	Pollock	Handline	NEFS 3																		
4105	2011	Pollock	Handline	NEFS 5																		
4106	2011	Pollock	Handline	NEFS 6																		
4107	2011	Pollock	Handline	NEFS 7																		
4108	2011	Pollock	Handline	NEFS 8																		
4109	2011	Pollock	Handline	NEFS 9																		
4110	2011	Pollock	Handline	Port Clyde Community Groundfish Sector																		
4111	2011	Pollock	Handline	Sustainable Harvest Sector 1																		
4112	2011	Pollock	Handline	Tri-State Sector																		
4113	2011	Pollock	Large Mesh Gillnet	Fixed Gear Sector	19	803	234	29.14	0.01	0.00	0.16	81	10.09	313113	2307839	595528.00	4805.00	18621	280.80	819	83.30	236
4114	2011	Pollock	Large Mesh Gillnet	NCCS																		
4115	2011	Pollock	Large Mesh Gillnet	NEFS 10	14	364	149	40.93	0.01	0.00	0.27	134	36.81	244480	1139521	444970.30	4545.00	11639	302.00	508	105.20	193
4116	2011	Pollock	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.01	0.00	0.24	225	17.32	1626479	4076694	932163.20	5871.00	25676	481.80	1332	128.90	326
4117	2011	Pollock	Large Mesh Gillnet	NEFS 12	7	99	22	22.22	0.04	0.00	0.16	8	8.08	762285	1102911	231008.30	10189.00	48646	385.70	438	80.40	93
4118	2011	Pollock	Large Mesh Gillnet	NEFS 13																		
4119	2011	Pollock	Large Mesh Gillnet	NEFS 2																		
4120	2011	Pollock	Large Mesh Gillnet	NEFS 3	35	2133	724	33.94	0.01	0.00	0.27	640	30.00	811120	3531995	1122435.60	7383.00	23232	810.80	2170	289.50	732
4121	2011	Pollock	Large Mesh Gillnet	NEFS 5																		
4122	2011	Pollock	Large Mesh Gillnet	NEFS 6																		
4123	2011	Pollock	Large Mesh Gillnet	NEFS 7	5	15	8	53.33	0.04	0.00	0.24	7	46.67	25878	64534	41154.30	1521.00	2385	49.50	57	32.90	37
4124	2011	Pollock	Large Mesh Gillnet	NEFS 8																		
4125	2011	Pollock	Large Mesh Gillnet	NEFS 9																		
4126	2011	Pollock	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	15	558	146	26.16	0.01	0.00	0.12	32	5.73	855741	1857095	452719.70	5667.00	23247	412.20	740	101.90	182
4127	2011	Pollock	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.02	0.00	0.18	15	13.27	466459	894379	334188.20	5344.00	14302	369.50	429	133.30	152
4128	2011	Pollock	Large Mesh Gillnet	Tri-State Sector																		
4129	2011	Pollock	Ruhle Trawl	Fixed Gear Sector																		
4130	2011	Pollock	Ruhle Trawl	NCCS																		
4131	2011	Pollock	Ruhle Trawl	NEFS 10																		
4132	2011	Pollock	Ruhle Trawl	NEFS 11																		
4133	2011	Pollock	Ruhle Trawl	NEFS 12																		
4134	2011	Pollock	Ruhle Trawl	NEFS 13	16	56	9	16.07	0.00	0.00	0.67	28	50.00	14929	806639	142583.50	8.00	45	285.30	308	63.90	68
4135	2011	Pollock	Ruhle Trawl	NEFS 2																		
4136	2011	Pollock	Ruhle Trawl	NEFS 3																		
4137	2011	Pollock	Ruhle Trawl	NEFS 5	4	5	0	0.00						597	52344	0.00	0.00		23.30	24	0.00	0
4138	2011	Pollock	Ruhle Trawl	NEFS 6																		
4139	2011	Pollock	Ruhle Trawl	NEFS 7																		
4140	2011	Pollock	Ruhle Trawl	NEFS 8																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4141	2011	Pollock	Ruhle Trawl	NEFS 9																		
4142	2011	Pollock	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
4143	2011	Pollock	Ruhle Trawl	Sustainable Harvest Sector 1	8	11	2	18.18	0.00	0.00	0.00	0	0.00	11545	152932	6603.20	0.00	0	42.60	46	10.40	11
4144	2011	Pollock	Ruhle Trawl	Tri-State Sector																		
4145	2011	Redfish	Bottom Longline	Fixed Gear Sector	24	369	47	12.74	0.00	0.00	0.00	0	0.00	1574	1269498	152519.70	0.00	0	241.80	448	28.70	62
4146	2011	Redfish	Bottom Longline	NCCS																		
4147	2011	Redfish	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.00	0	0.00	3	49858	17254.90	0.00	0	14.70	34	4.40	10
4148	2011	Redfish	Bottom Longline	NEFS 11																		
4149	2011	Redfish	Bottom Longline	NEFS 12																		
4150	2011	Redfish	Bottom Longline	NEFS 13																		
4151	2011	Redfish	Bottom Longline	NEFS 2																		
4152	2011	Redfish	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.34	94	32.08	99	298479	79608.30	20.00	75	140.80	308	38.80	81
4153	2011	Redfish	Bottom Longline	NEFS 5																		
4154	2011	Redfish	Bottom Longline	NEFS 6																		
4155	2011	Redfish	Bottom Longline	NEFS 7																		
4156	2011	Redfish	Bottom Longline	NEFS 8																		
4157	2011	Redfish	Bottom Longline	NEFS 9																		
4158	2011	Redfish	Bottom Longline	Port Clyde Community Groundfish Sector																		
4159	2011	Redfish	Bottom Longline	Sustainable Harvest Sector 1																		
4160	2011	Redfish	Bottom Longline	Tri-State Sector																		
4161	2011	Redfish	Bottom Otter Trawl	Fixed Gear Sector																		
4162	2011	Redfish	Bottom Otter Trawl	NCCS																		
4163	2011	Redfish	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.00	0.00	0.35	200	37.17	649	1690509	440369.40	134.00	514	290.90	584	79.60	170
4164	2011	Redfish	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.62	94	64.38	237	311558	74652.00	74.00	309	72.90	157	21.90	47
4165	2011	Redfish	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.50	74	52.86	154	177907	54104.20	91.00	299	61.20	143	20.40	42
4166	2011	Redfish	Bottom Otter Trawl	NEFS 13	96	543	136	25.05	0.00	0.00	0.24	94	17.31	75906	5651557	1951213.70	2004.00	5804	1290.10	1474	496.90	562
4167	2011	Redfish	Bottom Otter Trawl	NEFS 2	102	2467	552	22.38	0.01	0.00	0.14	151	6.12	954129	12310854	3254352.90	21441.00	81109	2303.70	3433	707.70	1001
4168	2011	Redfish	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.00	0	0.00	18	53664	4363.00	0.00	0	15.90	28	1.40	2
4169	2011	Redfish	Bottom Otter Trawl	NEFS 5	56	645	211	32.71	0.00	0.00	0.00	0	0.00	15	6189506	2065282.80	0.00	0	713.00	1031	256.80	371
4170	2011	Redfish	Bottom Otter Trawl	NEFS 6	17	216	42	19.44	0.00	0.00	0.23	27	12.50	610693	3980042	1085318.40	3236.00	11867	611.90	673	226.50	247
4171	2011	Redfish	Bottom Otter Trawl	NEFS 7	32	217	45	20.74	0.00	0.00	0.53	99	45.62	2890	2565524	842882.60	416.00	1266	656.00	729	254.80	279
4172	2011	Redfish	Bottom Otter Trawl	NEFS 8	43	202	37	18.32	0.00	0.00	0.33	43	21.29	21362	3265183	771702.50	634.00	2683	794.30	846	273.70	292
4173	2011	Redfish	Bottom Otter Trawl	NEFS 9	119	722	132	18.28	0.00	0.00	0.20	66	9.14	677023	13236959	3431257.40	13988.00	53962	2594.80	2795	970.90	1047
4174	2011	Redfish	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.21	28	17.61	8071	499763	164841.10	334.00	1013	259.60	339	92.10	117
4175	2011	Redfish	Bottom Otter Trawl	Sustainable Harvest Sector 1	183	1500	318	21.20	0.01	0.00	0.15	90	6.00	2989323	23366673	6559250.50	62806.00	223740	4486.40	4939	1702.90	1862
4176	2011	Redfish	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.00	0	0.00	0	420738	41397.50	0.00	0	96.40	104	17.40	19
4177	2011	Redfish	Extra Large Mesh Gillnet	Fixed Gear Sector	33	1275	343	26.90	0.00	0.00	0.86	957	75.06	118	7890632	2045826.40	1.00	4	565.30	1478	150.30	394
4178	2011	Redfish	Extra Large Mesh Gillnet	NCCS																		
4179	2011	Redfish	Extra Large Mesh Gillnet	NEFS 10	9	120	62	51.67	0.00	0.00	0.00	0	0.00	1	412304	169256.30	0.00	0	107.50	175	59.70	90
4180	2011	Redfish	Extra Large Mesh Gillnet	NEFS 11	10	202	84	41.58	0.00	0.00	0.57	146	72.28	50	668560	152866.60	3.00	13	81.10	204	38.70	84
4181	2011	Redfish	Extra Large Mesh Gillnet	NEFS 12																		
4182	2011	Redfish	Extra Large Mesh Gillnet	NEFS 13																		
4183	2011	Redfish	Extra Large Mesh Gillnet	NEFS 2																		
4184	2011	Redfish	Extra Large Mesh Gillnet	NEFS 3	30	513	171	33.33	0.00	0.00	0.00	0	0.00	35	1669677	331562.90	0.00	0	354.60	651	103.30	200
4185	2011	Redfish	Extra Large Mesh Gillnet	NEFS 5																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4186	2011	Redfish	Extra Large Mesh Gillnet	NEFS 6																		
4187	2011	Redfish	Extra Large Mesh Gillnet	NEFS 7	9	194	53	27.32	0.00	0.00	0.00	0	0.00	0	1092447	343227.40	0.00	0	173.90	267	69.70	97
4188	2011	Redfish	Extra Large Mesh Gillnet	NEFS 8																		
4189	2011	Redfish	Extra Large Mesh Gillnet	NEFS 9																		
4190	2011	Redfish	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4191	2011	Redfish	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4192	2011	Redfish	Extra Large Mesh Gillnet	Tri-State Sector																		
4193	2011	Redfish	Haddock Otter Trawl	Fixed Gear Sector																		
4194	2011	Redfish	Haddock Otter Trawl	NCCS																		
4195	2011	Redfish	Haddock Otter Trawl	NEFS 10																		
4196	2011	Redfish	Haddock Otter Trawl	NEFS 11																		
4197	2011	Redfish	Haddock Otter Trawl	NEFS 12																		
4198	2011	Redfish	Haddock Otter Trawl	NEFS 13	3	11	2	18.18	0.01	0.00	0.34	3	27.27	284	61728	2195.60	23.00	647	70.10	75	11.50	12
4199	2011	Redfish	Haddock Otter Trawl	NEFS 2	16	20	11	55.00	0.01	0.00	0.37	13	65.00	27667	277473	185171.60	1756.00	2631	124.80	136	72.50	78
4200	2011	Redfish	Haddock Otter Trawl	NEFS 3																		
4201	2011	Redfish	Haddock Otter Trawl	NEFS 5																		
4202	2011	Redfish	Haddock Otter Trawl	NEFS 6																		
4203	2011	Redfish	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.00	0	0.00	0	53451	9349.60	0.00	0	73.30	79	31.50	34
4204	2011	Redfish	Haddock Otter Trawl	NEFS 8																		
4205	2011	Redfish	Haddock Otter Trawl	NEFS 9	16	44	8	18.18	0.00	0.00	0.73	26	59.09	23905	457000	113328.20	216.00	871	148.50	158	47.40	51
4206	2011	Redfish	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
4207	2011	Redfish	Haddock Otter Trawl	Sustainable Harvest Sector 1	38	165	42	25.45	0.01	0.00	0.34	50	30.30	75212	2646372	1158779.00	10762.00	24578	707.90	754	296.20	316
4208	2011	Redfish	Haddock Otter Trawl	Tri-State Sector																		
4209	2011	Redfish	Handline	Fixed Gear Sector	4	99	36	36.36	0.00	0.00	0.00	0	0.00	14	153649	39442.50	0.00	0	57.20	117	17.30	43
4210	2011	Redfish	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	5	18542	6504.80	0.00	0	12.00	26	4.40	9
4211	2011	Redfish	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
4212	2011	Redfish	Handline	NEFS 11																		
4213	2011	Redfish	Handline	NEFS 12																		
4214	2011	Redfish	Handline	NEFS 13																		
4215	2011	Redfish	Handline	NEFS 2																		
4216	2011	Redfish	Handline	NEFS 3																		
4217	2011	Redfish	Handline	NEFS 5																		
4218	2011	Redfish	Handline	NEFS 6																		
4219	2011	Redfish	Handline	NEFS 7																		
4220	2011	Redfish	Handline	NEFS 8																		
4221	2011	Redfish	Handline	NEFS 9																		
4222	2011	Redfish	Handline	Port Clyde Community Groundfish Sector																		
4223	2011	Redfish	Handline	Sustainable Harvest Sector 1																		
4224	2011	Redfish	Handline	Tri-State Sector																		
4225	2011	Redfish	Large Mesh Gillnet	Fixed Gear Sector	19	803	234	29.14	0.00	0.00	0.35	284	35.37	13811	2307839	595528.00	85.00	329	280.80	819	83.30	236
4226	2011	Redfish	Large Mesh Gillnet	NCCS																		
4227	2011	Redfish	Large Mesh Gillnet	NEFS 10	14	364	149	40.93	0.00	0.00	0.36	182	50.00	19095	1139521	444970.30	85.00	218	302.00	508	105.20	193
4228	2011	Redfish	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.20	164	12.63	9980	4076694	932163.20	263.00	1150	481.80	1332	128.90	326
4229	2011	Redfish	Large Mesh Gillnet	NEFS 12	7	99	22	22.22	0.00	0.00	0.22	13	13.13	37768	1102911	231008.30	327.00	1561	385.70	438	80.40	93
4230	2011	Redfish	Large Mesh Gillnet	NEFS 13																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4231	2011	Redfish	Large Mesh Gillnet	NEFS 2																		
4232	2011	Redfish	Large Mesh Gillnet	NEFS 3	35	2133	724	33.94	0.00	0.00	0.16	273	12.80	1827	3531995	1122435.60	118.00	371	810.80	2170	289.50	732
4233	2011	Redfish	Large Mesh Gillnet	NEFS 5																		
4234	2011	Redfish	Large Mesh Gillnet	NEFS 6																		
4235	2011	Redfish	Large Mesh Gillnet	NEFS 7	5	15	8	53.33	0.00	0.00	0.25	7	46.67	430	64534	41154.30	11.00	17	49.50	57	32.90	37
4236	2011	Redfish	Large Mesh Gillnet	NEFS 8																		
4237	2011	Redfish	Large Mesh Gillnet	NEFS 9																		
4238	2011	Redfish	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	15	558	146	26.16	0.00	0.00	0.21	84	15.05	20398	1857095	452719.70	196.00	804	412.20	740	101.90	182
4239	2011	Redfish	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.31	33	29.20	20771	894379	334188.20	163.00	436	369.50	429	133.30	152
4240	2011	Redfish	Large Mesh Gillnet	Tri-State Sector																		
4241	2011	Redfish	Ruhle Trawl	Fixed Gear Sector																		
4242	2011	Redfish	Ruhle Trawl	NCCS																		
4243	2011	Redfish	Ruhle Trawl	NEFS 10																		
4244	2011	Redfish	Ruhle Trawl	NEFS 11																		
4245	2011	Redfish	Ruhle Trawl	NEFS 12																		
4246	2011	Redfish	Ruhle Trawl	NEFS 13	16	56	9	16.07	0.00	0.00	0.00	0	0.00	85	804866	142583.50	0.00	0	285.30	308	63.90	68
4247	2011	Redfish	Ruhle Trawl	NEFS 2																		
4248	2011	Redfish	Ruhle Trawl	NEFS 3																		
4249	2011	Redfish	Ruhle Trawl	NEFS 5	4	5	0	0.00						0	52344	0.00	0.00		23.30	24	0.00	0
4250	2011	Redfish	Ruhle Trawl	NEFS 6																		
4251	2011	Redfish	Ruhle Trawl	NEFS 7																		
4252	2011	Redfish	Ruhle Trawl	NEFS 8																		
4253	2011	Redfish	Ruhle Trawl	NEFS 9																		
4254	2011	Redfish	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
4255	2011	Redfish	Ruhle Trawl	Sustainable Harvest Sector 1	8	11	2	18.18	0.00	0.00	0.00	0	0.00	320	152932	6603.20	0.00	0	42.60	46	10.40	11
4256	2011	Redfish	Ruhle Trawl	Tri-State Sector																		
4257	2011	SNE/MA Winter Flounder	Bottom Longline	Fixed Gear Sector	9	206	30	14.56	0.00	0.00	0.59	83	40.29	0	535891	85924.00	77.00	480	73.80	219	8.90	32
4258	2011	SNE/MA Winter Flounder	Bottom Longline	NCCS																		
4259	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 10																		
4260	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 11																		
4261	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 12																		
4262	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 13																		
4263	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 2																		
4264	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 3																		
4265	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 5																		
4266	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 6																		
4267	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 7																		
4268	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 8																		
4269	2011	SNE/MA Winter Flounder	Bottom Longline	NEFS 9																		
4270	2011	SNE/MA Winter Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
4271	2011	SNE/MA Winter Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
4272	2011	SNE/MA Winter Flounder	Bottom Longline	Tri-State Sector																		
4273	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
4274	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NCCS																		
4275	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 10	3	116	33	28.45	0.00	0.00	0.26	27	23.28	45	549385	137324.80	458.50	1834	63.70	122	18.30	33

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4276	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 11																		
4277	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 12																		
4278	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 13	47	321	108	33.64	0.01	0.00	0.17	44	13.71	1	2579060	990202.90	7075.50	18429	740.20	880	305.70	359
4279	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 2	13	213	81	38.03	0.00	0.00	0.45	125	58.69	1351	3415634	991395.50	231.00	796	1071.70	1182	408.70	449
4280	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 3																		
4281	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 5	44	626	208	33.23	0.01	0.00	0.09	25	3.99	263	5844330	1988565.80	22554.50	66287	625.10	941	235.00	348
4282	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 6	5	73	26	35.62	0.00	0.00	0.66	53	72.60	74	1762906	317108.30	278.00	1545	438.20	476	178.50	192
4283	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 7	14	86	22	25.58	0.02	0.00	0.40	34	39.53	0	509743	124652.20	1897.50	7759	371.50	422	81.90	94
4284	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 8	15	55	20	36.36	0.01	0.00	0.56	37	67.27	302	620710	206147.70	1606.00	4836	362.60	387	151.50	162
4285	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	NEFS 9	41	245	88	35.92	0.02	0.00	0.36	111	45.31	798	3737640	920536.90	14612.00	59329	1578.90	1699	649.90	701
4286	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
4287	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	28	269	134	49.81	0.01	0.00	0.32	141	52.42	119	3487204	1081518.30	7947.00	25624	1605.20	1738	869.70	936
4288	2011	SNE/MA Winter Flounder	Bottom Otter Trawl	Tri-State Sector																		
4289	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector	31	1271	343	26.99	0.00	0.00	0.56	715	56.25	1	7878917	2045826.40	24.00	92	563.90	1474	150.30	394
4290	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NCCS																		
4291	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 10	5	31	12	38.71	0.00	0.00	0.00	0	0.00	0	223214	94210.00	0.00	0	33.60	54	11.20	18
4292	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 11	6	141	23	16.31	0.00	0.00	0.00	0	0.00	0	526309	90002.80	0.00	0	60.00	143	11.10	23
4293	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 12																		
4294	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 13																		
4295	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 2																		
4296	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 3	14	153	28	18.30	0.00	0.00	0.00	0	0.00	0	819712	156861.40	0.00	0	151.90	235	29.80	45
4297	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 5																		
4298	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 6																		
4299	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 7	7	183	48	26.23	0.00	0.00	0.86	137	74.86	0	1050575	319944.00	1.00	3	129.30	217	42.70	67
4300	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 8																		
4301	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	NEFS 9																		
4302	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4303	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4304	2011	SNE/MA Winter Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
4305	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
4306	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NCCS																		
4307	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 10																		
4308	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 11																		
4309	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 12																		
4310	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 13																		
4311	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 2																		
4312	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 3																		
4313	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 5																		
4314	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 6																		
4315	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 7																		
4316	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 8																		
4317	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	NEFS 9																		
4318	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
4319	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	7	19	14	73.68	0.00	0.00	0.44	17	89.47	0	170153	74230.60	3.00	7	131.40	141	101.00	107
4320	2011	SNE/MA Winter Flounder	Haddock Otter Trawl	Tri-State Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4321	2011	SNE/MA Winter Flounder	Handline	Fixed Gear Sector	4	99	32	32.32	0.00	0.00	0.00	0	0.00	0	153649	39311.00	0.00	0	57.20	117	10.50	34
4322	2011	SNE/MA Winter Flounder	Handline	NCCS																		
4323	2011	SNE/MA Winter Flounder	Handline	NEFS 10																		
4324	2011	SNE/MA Winter Flounder	Handline	NEFS 11																		
4325	2011	SNE/MA Winter Flounder	Handline	NEFS 12																		
4326	2011	SNE/MA Winter Flounder	Handline	NEFS 13																		
4327	2011	SNE/MA Winter Flounder	Handline	NEFS 2																		
4328	2011	SNE/MA Winter Flounder	Handline	NEFS 3																		
4329	2011	SNE/MA Winter Flounder	Handline	NEFS 5																		
4330	2011	SNE/MA Winter Flounder	Handline	NEFS 6																		
4331	2011	SNE/MA Winter Flounder	Handline	NEFS 7																		
4332	2011	SNE/MA Winter Flounder	Handline	NEFS 8																		
4333	2011	SNE/MA Winter Flounder	Handline	NEFS 9																		
4334	2011	SNE/MA Winter Flounder	Handline	Port Clyde Community Groundfish Sector																		
4335	2011	SNE/MA Winter Flounder	Handline	Sustainable Harvest Sector 1																		
4336	2011	SNE/MA Winter Flounder	Handline	Tri-State Sector																		
4337	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	Fixed Gear Sector	18	690	215	31.16	0.00	0.00	0.14	63	9.13	11	2044882	542391.10	624.50	2354	240.70	706	75.10	217
4338	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NCCS																		
4339	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 10	3	9	3	33.33	0.00	0.00	0.00	0	0.00	0	69383	34161.20	0.00	0	44.40	49	13.70	15
4340	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 11																		
4341	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 12																		
4342	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 13																		
4343	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 2																		
4344	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 3	5	33	10	30.30	0.00	0.00	0.43	16	48.48	14	80059	28036.50	10.00	29	18.60	36	8.20	13
4345	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 5																		
4346	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 6																		
4347	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 7																		
4348	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 8																		
4349	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	NEFS 9																		
4350	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4351	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4352	2011	SNE/MA Winter Flounder	Large Mesh Gillnet	Tri-State Sector																		
4353	2011	SNE/MA Winter Flounder	Ruhle Trawl	Fixed Gear Sector																		
4354	2011	SNE/MA Winter Flounder	Ruhle Trawl	NCCS																		
4355	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 10																		
4356	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 11																		
4357	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 12																		
4358	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 13																		
4359	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 2																		
4360	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 3																		
4361	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 5																		
4362	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 6																		
4363	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 7																		
4364	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 8																		
4365	2011	SNE/MA Winter Flounder	Ruhle Trawl	NEFS 9																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4366	2011	SNE/MA Winter Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
4367	2011	SNE/MA Winter Flounder	Ruhle Trawl	Sustainable Harvest Sector 1																		
4368	2011	SNE/MA Winter Flounder	Ruhle Trawl	Tri-State Sector																		
4369	2011	SNE/MA Yellowtail Flounder	Bottom Longline	Fixed Gear Sector																		
4370	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NCCS																		
4371	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 10																		
4372	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 11																		
4373	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 12																		
4374	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 13																		
4375	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 2																		
4376	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 3																		
4377	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 5																		
4378	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 6																		
4379	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 7																		
4380	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 8																		
4381	2011	SNE/MA Yellowtail Flounder	Bottom Longline	NEFS 9																		
4382	2011	SNE/MA Yellowtail Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
4383	2011	SNE/MA Yellowtail Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
4384	2011	SNE/MA Yellowtail Flounder	Bottom Longline	Tri-State Sector																		
4385	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
4386	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NCCS																		
4387	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 10																		
4388	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 11																		
4389	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 12																		
4390	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 13	38	277	90	32.49	0.00	0.00	0.19	47	16.97	183729	2259780	897797.00	4318.00	10869	485.50	608	176.00	219
4391	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 2																		
4392	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 3																		
4393	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 5	44	626	208	33.23	0.00	0.00	0.12	48	7.67	315142	5844330	1988565.80	6577.00	19330	625.10	941	235.00	348
4394	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 6																		
4395	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 7	9	43	15	34.88	0.01	0.00	0.31	16	37.21	49609	391662	109103.90	1356.00	4868	136.70	161	53.20	62
4396	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 8	9	16	6	37.50	0.00	0.00	0.00	0	0.00	15980	144644	34838.30	0.00	0	122.90	130	48.60	52
4397	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	NEFS 9	23	52	18	34.62	0.00	0.00	0.63	37	71.15	130756	492023	110645.80	374.00	1663	404.30	431	139.90	151
4398	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
4399	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	9	39	11	28.21	0.02	0.00	0.24	8	20.51	55879	162733	48252.00	890.00	3002	73.90	86	25.00	30
4400	2011	SNE/MA Yellowtail Flounder	Bottom Otter Trawl	Tri-State Sector																		
4401	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector	16	230	54	23.48	0.00	0.00	0.00	0	0.00	1	1474260	383994.30	0.00	0	268.50	413	66.60	104
4402	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NCCS																		
4403	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 10	5	31	12	38.71	0.00	0.00	0.00	0	0.00	0	223214	94210.00	0.00	0	33.60	54	11.20	18
4404	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 11	6	141	23	16.31	0.00	0.00	0.00	0	0.00	0	526309	90002.80	0.00	0	60.00	143	11.10	23
4405	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 12																		
4406	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 13																		
4407	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 2																		
4408	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 3	14	153	28	18.30	0.00	0.00	0.91	103	67.32	1	819712	156861.40	2.00	10	151.90	235	29.80	45
4409	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 5																		
4410	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 6																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4411	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 7	7	183	48	26.23	0.00	0.00	0.28	43	23.50	41	1050575	319944.00	36.00	118	129.30	217	42.70	67
4412	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 8																		
4413	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	NEFS 9																		
4414	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4415	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4416	2011	SNE/MA Yellowtail Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
4417	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
4418	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NCCS																		
4419	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 10																		
4420	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 11																		
4421	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 12																		
4422	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 13																		
4423	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 2																		
4424	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 3																		
4425	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 5																		
4426	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 6																		
4427	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 7																		
4428	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 8																		
4429	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	NEFS 9																		
4430	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
4431	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1																		
4432	2011	SNE/MA Yellowtail Flounder	Haddock Otter Trawl	Tri-State Sector																		
4433	2011	SNE/MA Yellowtail Flounder	Handline	Fixed Gear Sector																		
4434	2011	SNE/MA Yellowtail Flounder	Handline	NCCS																		
4435	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 10																		
4436	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 11																		
4437	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 12																		
4438	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 13																		
4439	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 2																		
4440	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 3																		
4441	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 5																		
4442	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 6																		
4443	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 7																		
4444	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 8																		
4445	2011	SNE/MA Yellowtail Flounder	Handline	NEFS 9																		
4446	2011	SNE/MA Yellowtail Flounder	Handline	Port Clyde Community Groundfish Sector																		
4447	2011	SNE/MA Yellowtail Flounder	Handline	Sustainable Harvest Sector 1																		
4448	2011	SNE/MA Yellowtail Flounder	Handline	Tri-State Sector																		
4449	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	Fixed Gear Sector																		
4450	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NCCS																		
4451	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 10																		
4452	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 11																		
4453	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 12																		
4454	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 13																		
4455	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 2																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4456	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 3	4	30	7	23.33	0.00	0.00	0.00	0	0.00	7	76250	22136.70	0.00	0	15.50	31	4.30	7
4457	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 5																		
4458	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 6																		
4459	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 7																		
4460	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 8																		
4461	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	NEFS 9																		
4462	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4463	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4464	2011	SNE/MA Yellowtail Flounder	Large Mesh Gillnet	Tri-State Sector																		
4465	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	Fixed Gear Sector																		
4466	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NCCS																		
4467	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 10																		
4468	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 11																		
4469	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 12																		
4470	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 13																		
4471	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 2																		
4472	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 3																		
4473	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 5																		
4474	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 6																		
4475	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 7																		
4476	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 8																		
4477	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	NEFS 9																		
4478	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
4479	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	Sustainable Harvest Sector 1																		
4480	2011	SNE/MA Yellowtail Flounder	Ruhle Trawl	Tri-State Sector																		
4481	2011	Southern Windowpane	Bottom Longline	Fixed Gear Sector																		
4482	2011	Southern Windowpane	Bottom Longline	NCCS																		
4483	2011	Southern Windowpane	Bottom Longline	NEFS 10																		
4484	2011	Southern Windowpane	Bottom Longline	NEFS 11																		
4485	2011	Southern Windowpane	Bottom Longline	NEFS 12																		
4486	2011	Southern Windowpane	Bottom Longline	NEFS 13																		
4487	2011	Southern Windowpane	Bottom Longline	NEFS 2																		
4488	2011	Southern Windowpane	Bottom Longline	NEFS 3																		
4489	2011	Southern Windowpane	Bottom Longline	NEFS 5																		
4490	2011	Southern Windowpane	Bottom Longline	NEFS 6																		
4491	2011	Southern Windowpane	Bottom Longline	NEFS 7																		
4492	2011	Southern Windowpane	Bottom Longline	NEFS 8																		
4493	2011	Southern Windowpane	Bottom Longline	NEFS 9																		
4494	2011	Southern Windowpane	Bottom Longline	Port Clyde Community Groundfish Sector																		
4495	2011	Southern Windowpane	Bottom Longline	Sustainable Harvest Sector 1																		
4496	2011	Southern Windowpane	Bottom Longline	Tri-State Sector																		
4497	2011	Southern Windowpane	Bottom Otter Trawl	Fixed Gear Sector																		
4498	2011	Southern Windowpane	Bottom Otter Trawl	NCCS																		
4499	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 10																		
4500	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 11																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4501	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 12																		
4502	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 13	38	277	90	32.49	0.02	0.00	0.16	33	11.91	0	2259780	897797.00	17009.00	42812	485.50	608	176.00	219
4503	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 2																		
4504	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 3																		
4505	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 5	44	626	208	33.23	0.02	0.00	0.10	36	5.75	350	5844330	1988565.80	38925.00	114399	625.10	941	235.00	348
4506	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 6																		
4507	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 7	9	43	15	34.88	0.01	0.00	0.35	18	41.86	0	391662	109103.90	1077.00	3866	136.70	161	53.20	62
4508	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 8	9	16	6	37.50	0.00	0.00	0.00	0	0.00	0	144644	34838.30	0.00	0	122.90	130	48.60	52
4509	2011	Southern Windowpane	Bottom Otter Trawl	NEFS 9	23	52	18	34.62	0.01	0.00	0.48	30	57.69	0	492023	110645.80	600.00	2668	404.30	431	139.90	151
4510	2011	Southern Windowpane	Bottom Otter Trawl	Port Clyde Community Groundfish Sector																		
4511	2011	Southern Windowpane	Bottom Otter Trawl	Sustainable Harvest Sector 1	9	39	11	28.21	0.08	0.00	0.36	15	38.46	0	162733	48252.00	3891.00	13123	73.90	86	25.00	30
4512	2011	Southern Windowpane	Bottom Otter Trawl	Tri-State Sector																		
4513	2011	Southern Windowpane	Extra Large Mesh Gillnet	Fixed Gear Sector	16	230	54	23.48	0.00	0.00	0.00	0	0.00	0	1474260	383994.30	0.00	0	268.50	413	66.60	104
4514	2011	Southern Windowpane	Extra Large Mesh Gillnet	NCCS																		
4515	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 10	5	31	12	38.71	0.00	0.00	0.80	26	83.87	0	223214	94210.00	1.00	2	33.60	54	11.20	18
4516	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 11	6	141	23	16.31	0.00	0.00	0.66	68	48.23	0	526309	90002.80	2.00	12	60.00	143	11.10	23
4517	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 12																		
4518	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 13																		
4519	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 2																		
4520	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 3	14	153	28	18.30	0.00	0.00	0.00	0	0.00	0	819712	156861.40	0.00	0	151.90	235	29.80	45
4521	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 5																		
4522	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 6																		
4523	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 7	7	183	48	26.23	0.00	0.00	0.85	136	74.32	0	1050575	319944.00	1.00	3	129.30	217	42.70	67
4524	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 8																		
4525	2011	Southern Windowpane	Extra Large Mesh Gillnet	NEFS 9																		
4526	2011	Southern Windowpane	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4527	2011	Southern Windowpane	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4528	2011	Southern Windowpane	Extra Large Mesh Gillnet	Tri-State Sector																		
4529	2011	Southern Windowpane	Haddock Otter Trawl	Fixed Gear Sector																		
4530	2011	Southern Windowpane	Haddock Otter Trawl	NCCS																		
4531	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 10																		
4532	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 11																		
4533	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 12																		
4534	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 13																		
4535	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 2																		
4536	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 3																		
4537	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 5																		
4538	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 6																		
4539	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 7																		
4540	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 8																		
4541	2011	Southern Windowpane	Haddock Otter Trawl	NEFS 9																		
4542	2011	Southern Windowpane	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
4543	2011	Southern Windowpane	Haddock Otter Trawl	Sustainable Harvest Sector 1																		
4544	2011	Southern Windowpane	Haddock Otter Trawl	Tri-State Sector																		
4545	2011	Southern Windowpane	Handline	Fixed Gear Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4546	2011	Southern Windowpane	Handline	NCCS																		
4547	2011	Southern Windowpane	Handline	NEFS 10																		
4548	2011	Southern Windowpane	Handline	NEFS 11																		
4549	2011	Southern Windowpane	Handline	NEFS 12																		
4550	2011	Southern Windowpane	Handline	NEFS 13																		
4551	2011	Southern Windowpane	Handline	NEFS 2																		
4552	2011	Southern Windowpane	Handline	NEFS 3																		
4553	2011	Southern Windowpane	Handline	NEFS 5																		
4554	2011	Southern Windowpane	Handline	NEFS 6																		
4555	2011	Southern Windowpane	Handline	NEFS 7																		
4556	2011	Southern Windowpane	Handline	NEFS 8																		
4557	2011	Southern Windowpane	Handline	NEFS 9																		
4558	2011	Southern Windowpane	Handline	Port Clyde Community Groundfish Sector																		
4559	2011	Southern Windowpane	Handline	Sustainable Harvest Sector 1																		
4560	2011	Southern Windowpane	Handline	Tri-State Sector																		
4561	2011	Southern Windowpane	Large Mesh Gillnet	Fixed Gear Sector																		
4562	2011	Southern Windowpane	Large Mesh Gillnet	NCCS																		
4563	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 10																		
4564	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 11																		
4565	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 12																		
4566	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 13																		
4567	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 2																		
4568	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 3	4	30	7	23.33	0.00	0.00	0.00	0	0.00	0	76250	22136.70	0.00	0	15.50	31	4.30	7
4569	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 5																		
4570	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 6																		
4571	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 7																		
4572	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 8																		
4573	2011	Southern Windowpane	Large Mesh Gillnet	NEFS 9																		
4574	2011	Southern Windowpane	Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4575	2011	Southern Windowpane	Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4576	2011	Southern Windowpane	Large Mesh Gillnet	Tri-State Sector																		
4577	2011	Southern Windowpane	Ruhle Trawl	Fixed Gear Sector																		
4578	2011	Southern Windowpane	Ruhle Trawl	NCCS																		
4579	2011	Southern Windowpane	Ruhle Trawl	NEFS 10																		
4580	2011	Southern Windowpane	Ruhle Trawl	NEFS 11																		
4581	2011	Southern Windowpane	Ruhle Trawl	NEFS 12																		
4582	2011	Southern Windowpane	Ruhle Trawl	NEFS 13																		
4583	2011	Southern Windowpane	Ruhle Trawl	NEFS 2																		
4584	2011	Southern Windowpane	Ruhle Trawl	NEFS 3																		
4585	2011	Southern Windowpane	Ruhle Trawl	NEFS 5																		
4586	2011	Southern Windowpane	Ruhle Trawl	NEFS 6																		
4587	2011	Southern Windowpane	Ruhle Trawl	NEFS 7																		
4588	2011	Southern Windowpane	Ruhle Trawl	NEFS 8																		
4589	2011	Southern Windowpane	Ruhle Trawl	NEFS 9																		
4590	2011	Southern Windowpane	Ruhle Trawl	Port Clyde Community Groundfish Sector																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4591	2011	Southern Windowpane	Ruhle Trawl	Sustainable Harvest Sector 1																		
4592	2011	Southern Windowpane	Ruhle Trawl	Tri-State Sector																		
4593	2011	White Hake	Bottom Longline	Fixed Gear Sector	24	369	47	12.74	0.00	0.00	0.64	147	39.84	15799	1269498	152519.70	30.00	250	241.80	448	28.70	62
4594	2011	White Hake	Bottom Longline	NCCS																		
4595	2011	White Hake	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.00	0	0.00	5	49858	17254.90	0.00	0	14.70	34	4.40	10
4596	2011	White Hake	Bottom Longline	NEFS 11																		
4597	2011	White Hake	Bottom Longline	NEFS 12																		
4598	2011	White Hake	Bottom Longline	NEFS 13																		
4599	2011	White Hake	Bottom Longline	NEFS 2																		
4600	2011	White Hake	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.86	218	74.40	72	298479	79608.30	1.00	4	140.80	308	38.80	81
4601	2011	White Hake	Bottom Longline	NEFS 5																		
4602	2011	White Hake	Bottom Longline	NEFS 6																		
4603	2011	White Hake	Bottom Longline	NEFS 7																		
4604	2011	White Hake	Bottom Longline	NEFS 8																		
4605	2011	White Hake	Bottom Longline	NEFS 9																		
4606	2011	White Hake	Bottom Longline	Port Clyde Community Groundfish Sector																		
4607	2011	White Hake	Bottom Longline	Sustainable Harvest Sector 1																		
4608	2011	White Hake	Bottom Longline	Tri-State Sector																		
4609	2011	White Hake	Bottom Otter Trawl	Fixed Gear Sector																		
4610	2011	White Hake	Bottom Otter Trawl	NCCS																		
4611	2011	White Hake	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.00	0.00	0.35	205	38.10	12008	1690509	440369.40	34.00	131	290.90	584	79.60	170
4612	2011	White Hake	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.45	71	48.63	807	311558	74652.00	6.00	25	72.90	157	21.90	47
4613	2011	White Hake	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.64	91	65.00	883	177907	54104.20	8.00	26	61.20	143	20.40	42
4614	2011	White Hake	Bottom Otter Trawl	NEFS 13	96	543	136	25.05	0.00	0.00	0.36	176	32.41	228705	5653319	1951213.70	1007.00	2918	1290.10	1474	496.90	562
4615	2011	White Hake	Bottom Otter Trawl	NEFS 2	102	2467	552	22.38	0.00	0.00	0.38	780	31.62	654060	12310854	3254352.90	1224.00	4630	2303.70	3433	707.70	1001
4616	2011	White Hake	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.00	0	0.00	319	53664	4363.00	0.00	0	15.90	28	1.40	2
4617	2011	White Hake	Bottom Otter Trawl	NEFS 5	56	645	211	32.71	0.00	0.00	0.34	245	37.98	1248	6189506	2065282.80	83.00	249	713.00	1031	256.80	371
4618	2011	White Hake	Bottom Otter Trawl	NEFS 6	17	216	42	19.44	0.00	0.00	0.40	66	30.56	292328	3980042	1085318.40	476.00	1746	611.90	673	226.50	247
4619	2011	White Hake	Bottom Otter Trawl	NEFS 7	32	217	45	20.74	0.00	0.00	0.49	89	41.01	19304	2565524	842882.60	284.00	864	656.00	729	254.80	279
4620	2011	White Hake	Bottom Otter Trawl	NEFS 8	43	202	37	18.32	0.00	0.00	0.48	75	37.13	74291	3265183	771702.50	904.00	3825	794.30	846	273.70	292
4621	2011	White Hake	Bottom Otter Trawl	NEFS 9	119	722	132	18.28	0.00	0.00	0.25	95	13.16	468774	13236959	3431257.40	3542.00	13664	2594.80	2795	970.90	1047
4622	2011	White Hake	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.41	72	45.28	47168	499763	164841.10	27.00	82	259.60	339	92.10	117
4623	2011	White Hake	Bottom Otter Trawl	Sustainable Harvest Sector 1	183	1500	318	21.20	0.00	0.00	0.22	184	12.27	3379950	23369973	6559250.50	737.00	2626	4486.40	4939	1702.90	1862
4624	2011	White Hake	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.79	11	73.33	0	420738	41397.50	19.00	193	96.40	104	17.40	19
4625	2011	White Hake	Extra Large Mesh Gillnet	Fixed Gear Sector	33	1275	343	26.90	0.00	0.00	0.39	492	38.59	1999	7890632	2045826.40	112.00	432	565.30	1478	150.30	394
4626	2011	White Hake	Extra Large Mesh Gillnet	NCCS																		
4627	2011	White Hake	Extra Large Mesh Gillnet	NEFS 10	9	120	62	51.67	0.00	0.00	0.00	0	0.00	9	412304	169256.30	0.00	0	107.50	175	59.70	90
4628	2011	White Hake	Extra Large Mesh Gillnet	NEFS 11	10	202	84	41.58	0.00	0.00	0.32	90	44.55	3924	668560	152866.60	44.00	192	81.10	204	38.70	84
4629	2011	White Hake	Extra Large Mesh Gillnet	NEFS 12																		
4630	2011	White Hake	Extra Large Mesh Gillnet	NEFS 13																		
4631	2011	White Hake	Extra Large Mesh Gillnet	NEFS 2																		
4632	2011	White Hake	Extra Large Mesh Gillnet	NEFS 3	30	513	171	33.33	0.00	0.00	0.31	179	34.89	28696	1669677	331562.90	337.00	1697	354.60	651	103.30	200
4633	2011	White Hake	Extra Large Mesh Gillnet	NEFS 5																		
4634	2011	White Hake	Extra Large Mesh Gillnet	NEFS 6																		
4635	2011	White Hake	Extra Large Mesh Gillnet	NEFS 7	9	194	53	27.32	0.00	0.00	0.57	112	57.73	0	1092447	343227.40	69.00	220	173.90	267	69.70	97

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4636	2011	White Hake	Extra Large Mesh Gillnet	NEFS 8																		
4637	2011	White Hake	Extra Large Mesh Gillnet	NEFS 9																		
4638	2011	White Hake	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4639	2011	White Hake	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4640	2011	White Hake	Extra Large Mesh Gillnet	Tri-State Sector																		
4641	2011	White Hake	Haddock Otter Trawl	Fixed Gear Sector																		
4642	2011	White Hake	Haddock Otter Trawl	NCCS																		
4643	2011	White Hake	Haddock Otter Trawl	NEFS 10																		
4644	2011	White Hake	Haddock Otter Trawl	NEFS 11																		
4645	2011	White Hake	Haddock Otter Trawl	NEFS 12																		
4646	2011	White Hake	Haddock Otter Trawl	NEFS 13	3	11	2	18.18	0.00	0.00	0.00	0	0.00	2413	61728	2195.60	0.00	0	70.10	75	11.50	12
4647	2011	White Hake	Haddock Otter Trawl	NEFS 2	16	20	11	55.00	0.00	0.00	0.69	18	90.00	15452	277473	185171.60	70.00	105	124.80	136	72.50	78
4648	2011	White Hake	Haddock Otter Trawl	NEFS 3																		
4649	2011	White Hake	Haddock Otter Trawl	NEFS 5																		
4650	2011	White Hake	Haddock Otter Trawl	NEFS 6																		
4651	2011	White Hake	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.00	0	0.00	0	53451	9349.60	0.00	0	73.30	79	31.50	34
4652	2011	White Hake	Haddock Otter Trawl	NEFS 8																		
4653	2011	White Hake	Haddock Otter Trawl	NEFS 9	16	44	8	18.18	0.00	0.00	0.88	29	65.91	30800	457000	113328.20	11.00	44	148.50	158	47.40	51
4654	2011	White Hake	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
4655	2011	White Hake	Haddock Otter Trawl	Sustainable Harvest Sector 1	38	165	42	25.45	0.00	0.00	0.56	90	54.55	69427	2660673	1158779.00	138.00	317	707.90	754	296.20	316
4656	2011	White Hake	Haddock Otter Trawl	Tri-State Sector																		
4657	2011	White Hake	Handline	Fixed Gear Sector	4	99	36	36.36	0.00	0.00	0.00	0	0.00	0	153649	39442.50	0.00	0	57.20	117	17.30	43
4658	2011	White Hake	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	8	18542	6504.80	0.00	0	12.00	26	4.40	9
4659	2011	White Hake	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
4660	2011	White Hake	Handline	NEFS 11																		
4661	2011	White Hake	Handline	NEFS 12																		
4662	2011	White Hake	Handline	NEFS 13																		
4663	2011	White Hake	Handline	NEFS 2																		
4664	2011	White Hake	Handline	NEFS 3																		
4665	2011	White Hake	Handline	NEFS 5																		
4666	2011	White Hake	Handline	NEFS 6																		
4667	2011	White Hake	Handline	NEFS 7																		
4668	2011	White Hake	Handline	NEFS 8																		
4669	2011	White Hake	Handline	NEFS 9																		
4670	2011	White Hake	Handline	Port Clyde Community Groundfish Sector																		
4671	2011	White Hake	Handline	Sustainable Harvest Sector 1																		
4672	2011	White Hake	Handline	Tri-State Sector																		
4673	2011	White Hake	Large Mesh Gillnet	Fixed Gear Sector	19	803	234	29.14	0.00	0.00	0.16	86	10.71	96873	2307839	595528.00	964.00	3736	280.80	819	83.30	236
4674	2011	White Hake	Large Mesh Gillnet	NCCS																		
4675	2011	White Hake	Large Mesh Gillnet	NEFS 10	14	364	149	40.93	0.00	0.00	0.34	172	47.25	80095	1139521	444970.30	1087.00	2784	302.00	508	105.20	193
4676	2011	White Hake	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.15	97	7.47	221015	4076694	932163.20	674.00	2948	481.80	1332	128.90	326
4677	2011	White Hake	Large Mesh Gillnet	NEFS 12	7	99	22	22.22	0.01	0.00	0.24	16	16.16	182808	1102911	231008.30	2151.00	10270	385.70	438	80.40	93
4678	2011	White Hake	Large Mesh Gillnet	NEFS 13																		
4679	2011	White Hake	Large Mesh Gillnet	NEFS 2																		
4680	2011	White Hake	Large Mesh Gillnet	NEFS 3	35	2133	724	33.94	0.00	0.00	0.21	441	20.68	134232	3531995	1122435.60	1215.00	3823	810.80	2170	289.50	732

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4681	2011	White Hake	Large Mesh Gillnet	NEFS 5																		
4682	2011	White Hake	Large Mesh Gillnet	NEFS 6																		
4683	2011	White Hake	Large Mesh Gillnet	NEFS 7	5	15	8	53.33	0.03	0.00	0.26	7	46.67	15095	64534	41154.30	1050.00	1646	49.50	57	32.90	37
4684	2011	White Hake	Large Mesh Gillnet	NEFS 8																		
4685	2011	White Hake	Large Mesh Gillnet	NEFS 9																		
4686	2011	White Hake	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	15	558	146	26.16	0.01	0.00	0.13	35	6.27	297574	1857095	452719.70	2518.00	10329	412.20	740	101.90	182
4687	2011	White Hake	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.43	49	43.36	213886	894379	334188.20	819.00	2192	369.50	429	133.30	152
4688	2011	White Hake	Large Mesh Gillnet	Tri-State Sector																		
4689	2011	White Hake	Ruhle Trawl	Fixed Gear Sector																		
4690	2011	White Hake	Ruhle Trawl	NCCS																		
4691	2011	White Hake	Ruhle Trawl	NEFS 10																		
4692	2011	White Hake	Ruhle Trawl	NEFS 11																		
4693	2011	White Hake	Ruhle Trawl	NEFS 12																		
4694	2011	White Hake	Ruhle Trawl	NEFS 13	16	56	9	16.07	0.00	0.00	0.00	0	0.00	563	843620	142583.50	0.00	0	285.30	308	63.90	68
4695	2011	White Hake	Ruhle Trawl	NEFS 2																		
4696	2011	White Hake	Ruhle Trawl	NEFS 3																		
4697	2011	White Hake	Ruhle Trawl	NEFS 5	4	5	0	0.00						60	52344	0.00	0.00		23.30	24	0.00	0
4698	2011	White Hake	Ruhle Trawl	NEFS 6																		
4699	2011	White Hake	Ruhle Trawl	NEFS 7																		
4700	2011	White Hake	Ruhle Trawl	NEFS 8																		
4701	2011	White Hake	Ruhle Trawl	NEFS 9																		
4702	2011	White Hake	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
4703	2011	White Hake	Ruhle Trawl	Sustainable Harvest Sector 1	8	11	2	18.18	0.00	0.00	0.00	0	0.00	2744	152932	6603.20	0.00	0	42.60	46	10.40	11
4704	2011	White Hake	Ruhle Trawl	Tri-State Sector																		
4705	2011	Witch Flounder	Bottom Longline	Fixed Gear Sector	24	369	47	12.74	0.00	0.00	0.00	0	0.00	0	1269498	152519.70	0.00	0	241.80	448	28.70	62
4706	2011	Witch Flounder	Bottom Longline	NCCS																		
4707	2011	Witch Flounder	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.00	0	0.00	0	49858	17254.90	0.00	0	14.70	34	4.40	10
4708	2011	Witch Flounder	Bottom Longline	NEFS 11																		
4709	2011	Witch Flounder	Bottom Longline	NEFS 12																		
4710	2011	Witch Flounder	Bottom Longline	NEFS 13																		
4711	2011	Witch Flounder	Bottom Longline	NEFS 2																		
4712	2011	Witch Flounder	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.00	0	0.00	0	298479	79608.30	0.00	0	140.80	308	38.80	81
4713	2011	Witch Flounder	Bottom Longline	NEFS 5																		
4714	2011	Witch Flounder	Bottom Longline	NEFS 6																		
4715	2011	Witch Flounder	Bottom Longline	NEFS 7																		
4716	2011	Witch Flounder	Bottom Longline	NEFS 8																		
4717	2011	Witch Flounder	Bottom Longline	NEFS 9																		
4718	2011	Witch Flounder	Bottom Longline	Port Clyde Community Groundfish Sector																		
4719	2011	Witch Flounder	Bottom Longline	Sustainable Harvest Sector 1																		
4720	2011	Witch Flounder	Bottom Longline	Tri-State Sector																		
4721	2011	Witch Flounder	Bottom Otter Trawl	Fixed Gear Sector																		
4722	2011	Witch Flounder	Bottom Otter Trawl	NCCS																		
4723	2011	Witch Flounder	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.00	0.00	0.15	55	10.22	79526	1690509	440369.40	474.00	1820	290.90	584	79.60	170
4724	2011	Witch Flounder	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.23	30	20.55	9649	311558	74652.00	74.00	309	72.90	157	21.90	47
4725	2011	Witch Flounder	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.25	31	22.14	5102	177907	54104.20	76.00	250	61.20	143	20.40	42

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4726	2011	Witch Flounder	Bottom Otter Trawl	NEFS 13	96	543	136	25.05	0.00	0.00	0.17	52	9.58	94599	5651557	1951213.70	2222.00	6436	1290.10	1474	496.90	562
4727	2011	Witch Flounder	Bottom Otter Trawl	NEFS 2	102	2467	552	22.38	0.00	0.00	0.10	83	3.36	388521	12310854	3254352.90	5628.00	21290	2303.70	3433	707.70	1001
4728	2011	Witch Flounder	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.01	0.00	1.70	18	75.00	222	53664	4363.00	26.00	320	15.90	28	1.40	2
4729	2011	Witch Flounder	Bottom Otter Trawl	NEFS 5	56	645	211	32.71	0.00	0.00	0.18	99	15.35	15846	6189506	2065282.80	826.00	2475	713.00	1031	256.80	371
4730	2011	Witch Flounder	Bottom Otter Trawl	NEFS 6	17	216	42	19.44	0.00	0.00	0.22	25	11.57	194456	3980042	1085318.40	821.00	3011	611.90	673	226.50	247
4731	2011	Witch Flounder	Bottom Otter Trawl	NEFS 7	32	217	45	20.74	0.00	0.00	0.16	16	7.37	83215	2565524	842882.60	1759.00	5354	656.00	729	254.80	279
4732	2011	Witch Flounder	Bottom Otter Trawl	NEFS 8	43	202	37	18.32	0.00	0.00	0.23	24	11.88	65521	3265183	771702.50	1569.00	6639	794.30	846	273.70	292
4733	2011	Witch Flounder	Bottom Otter Trawl	NEFS 9	119	722	132	18.28	0.00	0.00	0.18	53	7.34	304214	13236959	3431257.40	5993.00	23120	2594.80	2795	970.90	1047
4734	2011	Witch Flounder	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.02	0.00	0.12	11	6.92	76696	499763	164841.10	3041.00	9220	259.60	339	92.10	117
4735	2011	Witch Flounder	Bottom Otter Trawl	Sustainable Harvest Sector 1	183	1500	318	21.20	0.00	0.00	0.08	31	2.07	679693	23364852	6559250.50	16107.00	57375	4486.40	4939	1702.90	1862
4736	2011	Witch Flounder	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.43	7	46.67	3609	420738	41397.50	7.00	71	96.40	104	17.40	19
4737	2011	Witch Flounder	Extra Large Mesh Gillnet	Fixed Gear Sector	33	1275	343	26.90	0.00	0.00	0.00	0	0.00	23	7890632	2045826.40	0.00	0	565.30	1478	150.30	394
4738	2011	Witch Flounder	Extra Large Mesh Gillnet	NCCS																		
4739	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 10	9	120	62	51.67	0.00	0.00	0.00	0	0.00	0	412304	169256.30	0.00	0	107.50	175	59.70	90
4740	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 11	10	202	84	41.58	0.00	0.00	0.78	167	82.67	146	668560	152866.60	1.00	4	81.10	204	38.70	84
4741	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 12																		
4742	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 13																		
4743	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 2																		
4744	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 3	30	513	171	33.33	0.00	0.00	0.54	320	62.38	11245	1669677	331562.90	5.00	25	354.60	651	103.30	200
4745	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 5																		
4746	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 6																		
4747	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 7	9	194	53	27.32	0.00	0.00	0.86	147	75.77	4	1092447	343227.40	4.00	13	173.90	267	69.70	97
4748	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 8																		
4749	2011	Witch Flounder	Extra Large Mesh Gillnet	NEFS 9																		
4750	2011	Witch Flounder	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4751	2011	Witch Flounder	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4752	2011	Witch Flounder	Extra Large Mesh Gillnet	Tri-State Sector																		
4753	2011	Witch Flounder	Haddock Otter Trawl	Fixed Gear Sector																		
4754	2011	Witch Flounder	Haddock Otter Trawl	NCCS																		
4755	2011	Witch Flounder	Haddock Otter Trawl	NEFS 10																		
4756	2011	Witch Flounder	Haddock Otter Trawl	NEFS 11																		
4757	2011	Witch Flounder	Haddock Otter Trawl	NEFS 12																		
4758	2011	Witch Flounder	Haddock Otter Trawl	NEFS 13	3	11	2	18.18	0.00	0.00	1.47	10	90.91	0	61728	2195.60	7.00	197	70.10	75	11.50	12
4759	2011	Witch Flounder	Haddock Otter Trawl	NEFS 2	16	20	11	55.00	0.00	0.00	0.39	14	70.00	3196	277473	185171.60	69.00	103	124.80	136	72.50	78
4760	2011	Witch Flounder	Haddock Otter Trawl	NEFS 3																		
4761	2011	Witch Flounder	Haddock Otter Trawl	NEFS 5																		
4762	2011	Witch Flounder	Haddock Otter Trawl	NEFS 6																		
4763	2011	Witch Flounder	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.00	0	0.00	118	53451	9349.60	0.00	0	73.30	79	31.50	34
4764	2011	Witch Flounder	Haddock Otter Trawl	NEFS 8																		
4765	2011	Witch Flounder	Haddock Otter Trawl	NEFS 9	16	44	8	18.18	0.00	0.00	0.61	22	50.00	15380	457000	113328.20	68.00	274	148.50	158	47.40	51
4766	2011	Witch Flounder	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
4767	2011	Witch Flounder	Haddock Otter Trawl	Sustainable Harvest Sector 1	38	165	42	25.45	0.00	0.00	0.29	41	24.85	20410	2639000	1158779.00	454.00	1034	707.90	754	296.20	316
4768	2011	Witch Flounder	Haddock Otter Trawl	Tri-State Sector																		
4769	2011	Witch Flounder	Handline	Fixed Gear Sector	4	99	36	36.36	0.00	0.00	0.00	0	0.00	0	153649	39442.50	0.00	0	57.20	117	17.30	43
4770	2011	Witch Flounder	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	0	18542	6504.80	0.00	0	12.00	26	4.40	9

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4771	2011	Witch Flounder	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
4772	2011	Witch Flounder	Handline	NEFS 11																		
4773	2011	Witch Flounder	Handline	NEFS 12																		
4774	2011	Witch Flounder	Handline	NEFS 13																		
4775	2011	Witch Flounder	Handline	NEFS 2																		
4776	2011	Witch Flounder	Handline	NEFS 3																		
4777	2011	Witch Flounder	Handline	NEFS 5																		
4778	2011	Witch Flounder	Handline	NEFS 6																		
4779	2011	Witch Flounder	Handline	NEFS 7																		
4780	2011	Witch Flounder	Handline	NEFS 8																		
4781	2011	Witch Flounder	Handline	NEFS 9																		
4782	2011	Witch Flounder	Handline	Port Clyde Community Groundfish Sector																		
4783	2011	Witch Flounder	Handline	Sustainable Harvest Sector 1																		
4784	2011	Witch Flounder	Handline	Tri-State Sector																		
4785	2011	Witch Flounder	Large Mesh Gillnet	Fixed Gear Sector	19	803	234	29.14	0.00	0.00	0.84	613	76.34	463	2307839	595528.00	1.00	4	280.80	819	83.30	236
4786	2011	Witch Flounder	Large Mesh Gillnet	NCCS																		
4787	2011	Witch Flounder	Large Mesh Gillnet	NEFS 10	14	364	149	40.93	0.00	0.00	0.32	162	44.51	982	1139521	444970.30	7.00	18	302.00	508	105.20	193
4788	2011	Witch Flounder	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.12	61	4.70	1939	4076694	932163.20	88.00	385	481.80	1332	128.90	326
4789	2011	Witch Flounder	Large Mesh Gillnet	NEFS 12	7	99	22	22.22	0.00	0.00	0.27	19	19.19	75	1102911	231008.30	9.00	43	385.70	438	80.40	93
4790	2011	Witch Flounder	Large Mesh Gillnet	NEFS 13																		
4791	2011	Witch Flounder	Large Mesh Gillnet	NEFS 2																		
4792	2011	Witch Flounder	Large Mesh Gillnet	NEFS 3	35	2133	724	33.94	0.00	0.00	0.13	201	9.42	3444	3531995	1122435.60	53.00	167	810.80	2170	289.50	732
4793	2011	Witch Flounder	Large Mesh Gillnet	NEFS 5																		
4794	2011	Witch Flounder	Large Mesh Gillnet	NEFS 6																		
4795	2011	Witch Flounder	Large Mesh Gillnet	NEFS 7	5	15	8	53.33	0.00	0.00	0.00	0	0.00	64	64534	41154.30	0.00	0	49.50	57	32.90	37
4796	2011	Witch Flounder	Large Mesh Gillnet	NEFS 8																		
4797	2011	Witch Flounder	Large Mesh Gillnet	NEFS 9																		
4798	2011	Witch Flounder	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	15	558	146	26.16	0.00	0.00	0.16	53	9.50	891	1857095	452719.70	60.00	246	412.20	740	101.90	182
4799	2011	Witch Flounder	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.31	33	29.20	210	894379	334188.20	15.00	40	369.50	429	133.30	152
4800	2011	Witch Flounder	Large Mesh Gillnet	Tri-State Sector																		
4801	2011	Witch Flounder	Ruhle Trawl	Fixed Gear Sector																		
4802	2011	Witch Flounder	Ruhle Trawl	NCCS																		
4803	2011	Witch Flounder	Ruhle Trawl	NEFS 10																		
4804	2011	Witch Flounder	Ruhle Trawl	NEFS 11																		
4805	2011	Witch Flounder	Ruhle Trawl	NEFS 12																		
4806	2011	Witch Flounder	Ruhle Trawl	NEFS 13	16	56	9	16.07	0.00	0.00	0.67	28	50.00	3446	804866	142583.50	1.00	6	285.30	308	63.90	68
4807	2011	Witch Flounder	Ruhle Trawl	NEFS 2																		
4808	2011	Witch Flounder	Ruhle Trawl	NEFS 3																		
4809	2011	Witch Flounder	Ruhle Trawl	NEFS 5	4	5	0	0.00						67	52344	0.00	0.00		23.30	24	0.00	0
4810	2011	Witch Flounder	Ruhle Trawl	NEFS 6																		
4811	2011	Witch Flounder	Ruhle Trawl	NEFS 7																		
4812	2011	Witch Flounder	Ruhle Trawl	NEFS 8																		
4813	2011	Witch Flounder	Ruhle Trawl	NEFS 9																		
4814	2011	Witch Flounder	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
4815	2011	Witch Flounder	Ruhle Trawl	Sustainable Harvest Sector 1	8	11	2	18.18	0.00	0.00	0.00	0	0.00	2229	152932	6603.20	0.00	0	42.60	46	10.40	11

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4816	2011	Witch Flounder	Ruhle Trawl	Tri-State Sector																		
4817	2011	Wolffish	Bottom Longline	Fixed Gear Sector	24	369	47	12.74	0.00	0.00	0.39	75	20.33	0	1269498	152519.70	220.00	1831	241.80	448	28.70	62
4818	2011	Wolffish	Bottom Longline	NCCS																		
4819	2011	Wolffish	Bottom Longline	NEFS 10	3	34	10	29.41	0.00	0.00	0.39	15	44.12	0	49858	17254.90	52.00	150	14.70	34	4.40	10
4820	2011	Wolffish	Bottom Longline	NEFS 11																		
4821	2011	Wolffish	Bottom Longline	NEFS 12																		
4822	2011	Wolffish	Bottom Longline	NEFS 13																		
4823	2011	Wolffish	Bottom Longline	NEFS 2																		
4824	2011	Wolffish	Bottom Longline	NEFS 3	12	293	77	26.28	0.00	0.00	0.22	49	16.72	0	298479	79608.30	169.00	634	140.80	308	38.80	81
4825	2011	Wolffish	Bottom Longline	NEFS 5																		
4826	2011	Wolffish	Bottom Longline	NEFS 6																		
4827	2011	Wolffish	Bottom Longline	NEFS 7																		
4828	2011	Wolffish	Bottom Longline	NEFS 8																		
4829	2011	Wolffish	Bottom Longline	NEFS 9																		
4830	2011	Wolffish	Bottom Longline	Port Clyde Community Groundfish Sector																		
4831	2011	Wolffish	Bottom Longline	Sustainable Harvest Sector 1																		
4832	2011	Wolffish	Bottom Longline	Tri-State Sector																		
4833	2011	Wolffish	Bottom Otter Trawl	Fixed Gear Sector																		
4834	2011	Wolffish	Bottom Otter Trawl	NCCS																		
4835	2011	Wolffish	Bottom Otter Trawl	NEFS 10	17	538	165	30.67	0.00	0.00	0.33	186	34.57	0	1690509	440369.40	2132.00	8184	290.90	584	79.60	170
4836	2011	Wolffish	Bottom Otter Trawl	NEFS 11	9	146	43	29.45	0.00	0.00	0.47	75	51.37	0	311558	74652.00	79.00	330	72.90	157	21.90	47
4837	2011	Wolffish	Bottom Otter Trawl	NEFS 12	5	140	40	28.57	0.00	0.00	0.39	57	40.71	0	177907	54104.20	151.00	497	61.20	143	20.40	42
4838	2011	Wolffish	Bottom Otter Trawl	NEFS 13	96	543	136	25.05	0.00	0.00	0.31	144	26.52	0	5651557	1951213.70	421.00	1219	1290.10	1474	496.90	562
4839	2011	Wolffish	Bottom Otter Trawl	NEFS 2	102	2467	552	22.38	0.00	0.00	0.12	102	4.13	0	12296414	3254352.90	7572.00	28610	2303.70	3433	707.70	1001
4840	2011	Wolffish	Bottom Otter Trawl	NEFS 3	3	24	2	8.33	0.00	0.00	0.00	0	0.00	0	53664	4363.00	0.00	0	15.90	28	1.40	2
4841	2011	Wolffish	Bottom Otter Trawl	NEFS 5	56	645	211	32.71	0.00	0.00	0.00	0	0.00	0	6189506	2065282.80	0.00	0	713.00	1031	256.80	371
4842	2011	Wolffish	Bottom Otter Trawl	NEFS 6	17	216	42	19.44	0.00	0.00	0.33	49	22.69	0	3980042	1085318.40	355.00	1302	611.90	673	226.50	247
4843	2011	Wolffish	Bottom Otter Trawl	NEFS 7	32	217	45	20.74	0.00	0.00	0.34	56	25.81	0	2565524	842882.60	136.00	414	656.00	729	254.80	279
4844	2011	Wolffish	Bottom Otter Trawl	NEFS 8	43	202	37	18.32	0.00	0.00	0.37	53	26.24	7	3265183	771702.50	170.00	719	794.30	846	273.70	292
4845	2011	Wolffish	Bottom Otter Trawl	NEFS 9	119	722	132	18.28	0.00	0.00	0.24	88	12.19	0	13236959	3431257.40	1161.00	4479	2594.80	2795	970.90	1047
4846	2011	Wolffish	Bottom Otter Trawl	Port Clyde Community Groundfish Sector	15	159	48	30.19	0.00	0.00	0.29	45	28.30	0	499763	164841.10	135.00	409	259.60	339	92.10	117
4847	2011	Wolffish	Bottom Otter Trawl	Sustainable Harvest Sector 1	183	1500	318	21.20	0.00	0.00	0.18	128	8.53	12	23310625	6559250.50	3440.00	12225	4486.40	4939	1702.90	1862
4848	2011	Wolffish	Bottom Otter Trawl	Tri-State Sector	7	15	4	26.67	0.00	0.00	0.00	0	0.00	0	420738	41397.50	0.00	0	96.40	104	17.40	19
4849	2011	Wolffish	Extra Large Mesh Gillnet	Fixed Gear Sector	33	1275	343	26.90	0.00	0.00	0.61	771	60.47	0	7890632	2045826.40	37.00	143	565.30	1478	150.30	394
4850	2011	Wolffish	Extra Large Mesh Gillnet	NCCS																		
4851	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 10	9	120	62	51.67	0.00	0.00	0.00	0	0.00	0	412304	169256.30	0.00	0	107.50	175	59.70	90
4852	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 11	10	202	84	41.58	0.00	0.00	0.34	97	48.02	0	668560	152866.60	80.00	350	81.10	204	38.70	84
4853	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 12																		
4854	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 13																		
4855	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 2																		
4856	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 3	30	513	171	33.33	0.00	0.00	0.26	141	27.49	0	1669677	331562.90	166.00	836	354.60	651	103.30	200
4857	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 5																		
4858	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 6																		
4859	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 7	9	194	53	27.32	0.00	0.00	0.00	0	0.00	0	1092447	343227.40	0.00	0	173.90	267	69.70	97
4860	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 8																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4861	2011	Wolffish	Extra Large Mesh Gillnet	NEFS 9																		
4862	2011	Wolffish	Extra Large Mesh Gillnet	Port Clyde Community Groundfish Sector																		
4863	2011	Wolffish	Extra Large Mesh Gillnet	Sustainable Harvest Sector 1																		
4864	2011	Wolffish	Extra Large Mesh Gillnet	Tri-State Sector																		
4865	2011	Wolffish	Haddock Otter Trawl	Fixed Gear Sector																		
4866	2011	Wolffish	Haddock Otter Trawl	NCCS																		
4867	2011	Wolffish	Haddock Otter Trawl	NEFS 10																		
4868	2011	Wolffish	Haddock Otter Trawl	NEFS 11																		
4869	2011	Wolffish	Haddock Otter Trawl	NEFS 12																		
4870	2011	Wolffish	Haddock Otter Trawl	NEFS 13	3	11	2	18.18	0.01	0.00	0.34	3	27.27	0	61728	2195.60	12.00	337	70.10	75	11.50	12
4871	2011	Wolffish	Haddock Otter Trawl	NEFS 2	16	20	11	55.00	0.00	0.00	0.43	15	75.00	0	258754	185171.60	492.00	688	124.80	136	72.50	78
4872	2011	Wolffish	Haddock Otter Trawl	NEFS 3																		
4873	2011	Wolffish	Haddock Otter Trawl	NEFS 5																		
4874	2011	Wolffish	Haddock Otter Trawl	NEFS 6																		
4875	2011	Wolffish	Haddock Otter Trawl	NEFS 7	6	11	4	36.36	0.00	0.00	0.00	0	0.00	0	53451	9349.60	0.00	0	73.30	79	31.50	34
4876	2011	Wolffish	Haddock Otter Trawl	NEFS 8																		
4877	2011	Wolffish	Haddock Otter Trawl	NEFS 9	16	44	8	18.18	0.00	0.00	0.86	29	65.91	0	457000	113328.20	79.00	319	148.50	158	47.40	51
4878	2011	Wolffish	Haddock Otter Trawl	Port Clyde Community Groundfish Sector																		
4879	2011	Wolffish	Haddock Otter Trawl	Sustainable Harvest Sector 1	38	165	42	25.45	0.00	0.00	0.48	77	46.67	0	2584464	1158779.00	163.00	364	707.90	754	296.20	316
4880	2011	Wolffish	Haddock Otter Trawl	Tri-State Sector																		
4881	2011	Wolffish	Handline	Fixed Gear Sector	4	99	36	36.36	0.00	0.00	0.00	0	0.00	0	153649	39442.50	0.00	0	57.20	117	17.30	43
4882	2011	Wolffish	Handline	NCCS	4	26	9	34.62	0.00	0.00	0.00	0	0.00	0	18542	6504.80	0.00	0	12.00	26	4.40	9
4883	2011	Wolffish	Handline	NEFS 10	3	20	1	5.00	0.00					0	17388	511.50	0.00	0	8.60	20	0.50	1
4884	2011	Wolffish	Handline	NEFS 11																		
4885	2011	Wolffish	Handline	NEFS 12																		
4886	2011	Wolffish	Handline	NEFS 13																		
4887	2011	Wolffish	Handline	NEFS 2																		
4888	2011	Wolffish	Handline	NEFS 3																		
4889	2011	Wolffish	Handline	NEFS 5																		
4890	2011	Wolffish	Handline	NEFS 6																		
4891	2011	Wolffish	Handline	NEFS 7																		
4892	2011	Wolffish	Handline	NEFS 8																		
4893	2011	Wolffish	Handline	NEFS 9																		
4894	2011	Wolffish	Handline	Port Clyde Community Groundfish Sector																		
4895	2011	Wolffish	Handline	Sustainable Harvest Sector 1																		
4896	2011	Wolffish	Handline	Tri-State Sector																		
4897	2011	Wolffish	Large Mesh Gillnet	Fixed Gear Sector	19	803	234	29.14	0.00	0.00	0.19	110	13.70	0	2307839	595528.00	665.00	2577	280.80	819	83.30	236
4898	2011	Wolffish	Large Mesh Gillnet	NCCS																		
4899	2011	Wolffish	Large Mesh Gillnet	NEFS 10	14	364	149	40.93	0.00	0.00	0.21	91	25.00	0	1139521	444970.30	265.00	679	302.00	508	105.20	193
4900	2011	Wolffish	Large Mesh Gillnet	NEFS 11	24	1299	318	24.48	0.00	0.00	0.29	295	22.71	0	4076694	932163.20	125.00	547	481.80	1332	128.90	326
4901	2011	Wolffish	Large Mesh Gillnet	NEFS 12	7	99	22	22.22	0.00	0.00	0.00	0	0.00	0	1102911	231008.30	0.00	0	385.70	438	80.40	93
4902	2011	Wolffish	Large Mesh Gillnet	NEFS 13																		
4903	2011	Wolffish	Large Mesh Gillnet	NEFS 2																		
4904	2011	Wolffish	Large Mesh Gillnet	NEFS 3	35	2133	724	33.94	0.00	0.00	0.10	119	5.58	0	3531995	1122435.60	1008.00	3172	810.80	2170	289.50	732
4905	2011	Wolffish	Large Mesh Gillnet	NEFS 5																		

Table E.4 At-Sea Observer Requirement Determination CV Data Table for NE Multispecies Sectors - (Stock/Gear/Sector)

	Fishing Year	Stock	Gear	Sector	Number Vessels	SubTrips	SubTrips Observed	SubTrips Observed Percent	Discard Ratio	Discard Ratio Variance	CV	SubTrips CV30	SubTrips CV30 Percent	Stock Landings	Kept All	Kept Observed	Discard Observed	Discard UnObserved	Days	Days Full	Days Observed	Days Observed Full
4906	2011	Wolffish	Large Mesh Gillnet	NEFS 6																		
4907	2011	Wolffish	Large Mesh Gillnet	NEFS 7	5	15	8	53.33	0.00	0.00	0.39	10	66.67	0	64534	41154.30	31.00	49	49.50	57	32.90	37
4908	2011	Wolffish	Large Mesh Gillnet	NEFS 8																		
4909	2011	Wolffish	Large Mesh Gillnet	NEFS 9																		
4910	2011	Wolffish	Large Mesh Gillnet	Port Clyde Community Groundfish Sector	15	558	146	26.16	0.00	0.00	0.25	108	19.35	0	1857095	452719.70	200.00	820	412.20	740	101.90	182
4911	2011	Wolffish	Large Mesh Gillnet	Sustainable Harvest Sector 1	9	113	31	27.43	0.00	0.00	0.46	53	46.90	0	894379	334188.20	79.00	211	369.50	429	133.30	152
4912	2011	Wolffish	Large Mesh Gillnet	Tri-State Sector																		
4913	2011	Wolffish	Ruhle Trawl	Fixed Gear Sector																		
4914	2011	Wolffish	Ruhle Trawl	NCCS																		
4915	2011	Wolffish	Ruhle Trawl	NEFS 10																		
4916	2011	Wolffish	Ruhle Trawl	NEFS 11																		
4917	2011	Wolffish	Ruhle Trawl	NEFS 12																		
4918	2011	Wolffish	Ruhle Trawl	NEFS 13	16	56	9	16.07	0.00	0.00	0.00	0	0.00	0	804866	142583.50	0.00	0	285.30	308	63.90	68
4919	2011	Wolffish	Ruhle Trawl	NEFS 2																		
4920	2011	Wolffish	Ruhle Trawl	NEFS 3																		
4921	2011	Wolffish	Ruhle Trawl	NEFS 5	4	5	0	0.00						0	52344	0.00	0.00		23.30	24	0.00	0
4922	2011	Wolffish	Ruhle Trawl	NEFS 6																		
4923	2011	Wolffish	Ruhle Trawl	NEFS 7																		
4924	2011	Wolffish	Ruhle Trawl	NEFS 8																		
4925	2011	Wolffish	Ruhle Trawl	NEFS 9																		
4926	2011	Wolffish	Ruhle Trawl	Port Clyde Community Groundfish Sector																		
4927	2011	Wolffish	Ruhle Trawl	Sustainable Harvest Sector 1	8	11	2	18.18	0.00	0.00	0.00	0	0.00	0	152932	6603.20	0.00	0	42.60	46	10.40	11
4928	2011	Wolffish	Ruhle Trawl	Tri-State Sector																		

APPENDIX F

Timely and Accurate Data

This appendix provides additional information concerning the standards NMFS uses to ensure that observer data as a whole is timely.

Timely Data Submission Requirements

"Must have timely and accurate data submission" is among the top five items that are stressed to the observer and monitor candidates in training, included in a PowerPoint presentation on their first day.

Data can be grouped into three main forms of data: electronic, paper, and biological. Each form of data has a submission time as defined in contracts with service providers and by Northeast Fisheries Science Center's (NEFSC) Fisheries Sampling Branch (FSB) policy. There are two programs, the Northeast Fisheries Sampling Program (NEFOP) and the At-Sea Monitoring Program (ASM), collecting data for catch monitoring in the Northeast (NE) Multispecies fishery. For the remainder of this attachment, the term "observer" will be used to refer to both NEFOP observers and at-sea monitors collecting data for the FSB. Both programs adhere to the same data submission times related to catch monitoring. The electronic form of data is used for the weekly sector catch report. Observers must submit this electronic data within 48 hours of landing. Data are reported through a secure website and include trip statistics such as dates and times, gear type, and haul by haul information on catch (location, species, weight, and fish disposition). The paper logs must be received by NMFS within 5 calendar days. The paper logs have more detailed information that supports the calculations and sampling methods. The electronic data are verified by FSB staff, where tow locations are plotted, gear types are compared to past trips, general ranges of species complexes and weights are tested for accuracy, and species identification photographs are confirmed. The electronic data are verified by a trained FSB editor and loaded to an Oracle database that is shared with the Northeast Regional Office (NERO), sector managers, and vessel owners within 24 hours of receiving it. Once the paper logs are received, a second-level data quality check is performed, comparing the paper data to the electronic data in the database. Biological specimens (collected for tagging studies, to support trainings, or to validate species ids), must be received within 5 calendar days. The full ASM and NEFOP Request for Proposal (i.e. contract Statement of Work) are available online at: http://www.nefsc.noaa.gov/fsb/asm/ and http://www.nefsc.noaa.gov/fsb/program.html. The Section C.4.2.3.1 of the ASM contract defines the data deliverable timeline:

> "Electronic data entry by At-Sea Monitors is required in addition to required paperwork, and shall be managed by the contractor in coordination with the Contracting Officer's Technical Representative (COTR). Submission of At-Sea Monitor data to the NMFS shall be accomplished in a timely manner. The contractor shall work with the COTR to establish the appropriate means to transfer the electronic data to the COTR.
>
> (a). Delivery of paper log data shall be received within 5 calendar days (120 hours) of the vessel landing as referenced in Section F.5.5.
>
> (b). Delivery of electronic data shall be received within 2 calendar days (48 hours) of the vessel landing as referenced in Section F.5.6.

(c). Delivery of biological specimens (whole fish samples) shall be received within 5 calendar days (120 hours) of the vessel landing as referenced in Section F.5.7.
At-Sea Monitors shall send any written data and biological specimens directly to NMFS. The Government will provide shipping and supplies. At-Sea Monitors shall assure that biological samples or whole animals requiring freezing are received by the nearest NMFS freezer facility within twenty-four (24) hours of vessel landing. NMFS has freezers located in major fishing ports (Section J, Attachment 10, Freezer Locations). The transfer or transport of the frozen samples or animals must be received by NMFS (At-Sea Monitor Training Center) within 5 calendar days of the trip landing, unless a delay is authorized by the COTR. Costs for travel associated with transport of biological samples will be reimbursed under the travel provision section herein (Section B Supplies or Services and Prices/Costs Travel CLINS 0002, 1002 and 2002)."

Observers receive written guidance on the Late Trip Submission Policy. Specific criteria are outlined which define late data. The policy also describes the penalty for meeting not these criteria, i.e., being put on priority status for the next 3 trips (memo excerpt below, also available online: http://www.nefsc.noaa.gov/fsb/memos/):

"All FSB observers are required to submit their trip data in a timely manner, specified in the program contract and/or regulations. Trip data includes paper data logs, biological samples, Pre-Trip Vessel Safety Checklist, electronic data, and any digital photographs or film.

Trip data shall be received from at-sea monitors at the conclusion of each deployment and transmitted electronically; using NMFS supplied equipment, to NMFS within 48 hours of the completion of the trip. Paper data logs will not be accepted from the contractor; however paper worksheets may be mailed to NMFS. Paper should be mailed within three (3) days of landing to be received at NMFS within 5 days of the trip landing. Data must be submitted electronically from the contractor within 48 hours of the trip landing date.

Trips should never be submitted late. Although most observers uphold this standard, there have been some problems with late submissions, which have resulted in pre-mature closures of fisheries. Late trips disrupt the data processing deadlines and hold up or confound fisheries management decisions. If an observer submits late data, according to the following criteria, they will be placed on priority status:

- 3 trips in a row are late (electronic, paper, and/or biological samples), OR
- 5 of the last 10 trips are late (electronic, paper, and/or biological samples), OR
- a single trip's electronic data uploaded more than 72 hours after landing, OR
- a single trip's paper logs arrive more than 7 days after landing, OR
- a single trip's biological samples arrive 14 days or more after landing

FSB may approve exceptions for excused lateness or trips that arrive late due to unforeseen mailing/shipping problems. Observers can request an extension via their provider. Extensions or excused lateness are granted by the Contracting Officer's Technical Representative (COTR). However, an observer with history of late trips with multiple excuses may also be considered for priority status. The FSB Data Quality Monitoring and Improvement Measures document provides details on priority and probation policies, as well as consequences for lack of improvement."

Efforts to Ensure Compliance with Time Requirements

Observers, and providers are rated on their adherence to the timely data submission requirements. Data quality is monitored in the Northeast Fisheries Science Center through the Shadow Trip program, priority process, probation process, and decertification standards. Disciplinary steps are taken if the above policies are broken. Below is a description of these efforts.

Monitoring Data Quality: FSB considers data quality a critical component of the mission of all observers and observer programs. Poor quality data may result in unreliable or biased estimates of fishery activity and reflects negatively on the program. The Data Quality Lead, Data Editors, and other FSB staff are tasked with ensuring that all data collected by FSB observers is of the highest quality possible. When an observer's data collection or performance does not meet FSB standards, one or more of the following actions may be taken.

Shadow Trips: If an observer's data quality is questionable (e.g., poor organization, difficulty sampling catch, etc.), a shadow trip may be requested. The Data Quality Lead will communicate the need for a shadow trip to the observer service provider, and assist in scheduling the trip. An experienced FSB staff member would accompany the observer on a trip (typically a single-day trip on a specified gear type) to review and assess their methods. Refer to the Shadow Trip Program document for more details.

Priority status: Priority status is used when there are concerns about an observer's understanding of key concepts. It is an opportunity to provide feedback to the observer before the error is repeated on subsequent trips. Priority status must be approved by the Data Editor Lead, who will communicate with the observer and service provider about the reason(s) for priority status and the expected length of priority status. If trip-by-trip reviews are required, the observer may not redeploy on another trip until the priority trip has been fully edited and debriefed. Trips will be edited immediately, and the observer will be debriefed as soon as possible. The Data Editor Lead will send out status emails after each trip, as well as the final notification when an observer goes off priority status. Priority status may apply to only specific trip types or circumstances (e.g., gear type, trip duration, incidental take of a protected species, etc). In those cases, the observer may redeploy on back-to-back trips until the specified trip type or circumstance occurs.

If at the end of the priority period (maximum five trips), the observer has not rectified the issues noted, or has another egregious error, the observer will be reevaluated and may be recommended for probation status. If the observer successfully completes their priority trips with no further problems, they may resume taking trips in the standard manner. If the issues noted are repeated within three months from the completion of their priority trips, the observer will be reevaluated and may be recommended for probation status.

Probation: Probation status is used when there are serious data quality concerns or a serious breach of protocols. Probation status is the last chance for an observer to show improvement before decertification. Probation status must be approved by the Data Quality Lead, who will write a specific plan for the probation period. The plan must be approved and signed by the Branch Chief, and electronic and hard copies will be submitted to the observer service provider. A minimum of three trips will be planned, and specific trips (e.g., gear type, trip duration) or other measures (e.g., trip-by-trip approval, submitting notebooks, in-person debriefings, etc.) may be required. If the probation plan requires trip-by-trip reviews, the observer may not redeploy on another trip until the probation trip has been fully edited and debriefed. Trips will be edited immediately, and the observer will be debriefed as

soon as possible. The Data Quality Lead will send out status emails after each trip, as well as the final notification at the completion of the probation period.

If at the end of the probation period, the observer has not met the requirements of the probation plan, the probation period may be extended (maximum five trips), or the observer may be recommended for decertification. That determination will be made by the Data Quality Team, and all recommendations for decertification must be approved by the Branch Chief. If the observer successfully completes their probation trips with no further problems, they may resume taking trips in the standard manner. If the issues noted are repeated within three months from the completion of their probation trips, the observer will be reevaluated and may be recommended for decertification.

Emergency probation: This may be invoked at any time if there was reason to believe some egregious violation of procedures, protocols, or Standards of Conduct had been committed. This action will be carried out by the Branch Chief following discussions with the Data Quality Team, including the Data Quality Lead. The Data Quality Lead will notify the Observer Contract COTR, the observer provider Program Manager, and the observer of their decision in writing. Typically, this is a short-term probation pending an investigation as to the nature of the offense.

Decertification: If there is no discernible improvement in the observer's performance during the probationary trips, the observer will be decertified by the Branch Chief. Decertification will be communicated verbally and in writing by FSB staff to the Observer Contract COTR, the observer service provider Program Manager, and the observer.

An observer will automatically be decertified for failure to conform to the Standards of Conduct signed during observer training. Providing false statements to the government is illegal. An observer will be decertified if they falsify data. Falsification is defined as: *The act of deliberately or knowingly fabricating data collected during observed fishing trips, this includes intentional recording of inaccurate data, intentional omission or deletion of data, intentional plagiarism, or, in general, the selective alteration of data.*

The decertification procedure is subject to appeal in writing from the observer to the Branch Chief. The Branch Chief's determination of decertification is final. Decertification would disqualify an observer from re-applying to work as an FSB observer in any program.

Monitoring Data Processing: There are several automated reports that monitor, report, and advise the providers and FSB staff of the progress of data processing:

- A daily report is sent to each observer service provider with two sections: one showing outstanding electronic uploads (i.e., a Pre-Trip Notification System trip that has been completed but hasn't had data uploaded yet), with the number of hours that have elapsed since the date/time land; and one showing trips that have been uploaded, but for which we have not received paper logs yet, with the numbers of days since the date land showing. They are both color coded into classes (yellow=due tomorrow, orange=due today, red=late);
- An hourly report runs during the work week to alert FSB staff of new uploads that they can begin working on;
- A daily report goes out every morning to FSB staff that tracks the progress of data processing; and
- A weekly report provides the achievement rate of meeting the weekly data loading schedule.

Data Usage

Observers collect scientific, management, compliance, and other fisheries data onboard commercial fishing vessels. While the data collected has multiple uses, one is for the calculation of discard rates which are applied to unobserved sector trips. A full explanation of the discard rate calculation procedure is available at: http://www.nero.noaa.gov/nero/regs/infodocs/DiscardCalculations.pdf. Sectors use discard information, as well as information from other sources, to track allocations. It is the responsibility of individual sectors to submit weekly reports to NMFS stating the remaining balance of Allocated Catch Entitlement (ACE) for each sector based upon regulated species landings and discards of vessels participating in that sector and any compliance or enforcement concerns. Once a sector's catch reaches 80% of its ACE, the sector must report any catch on a daily basis. Sector reports are also relied on in estimating catch for ACE and ACL purposes. A description of the weekly reporting requirements is available at:
http://www.nero.noaa.gov/sfd/sectordocs/PreparingSectorManagerReportFY12.pdf.

APPENDIX G

As noted on page 3 of this Summary, Oceana and NOAA Fisheries signed a settlement agreement that stated that specific information would be released, provided that the release complied with the data requirements of Section 402(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). NOAA Fisheries determined that presenting all of the information outlined in Item 3 of the settlement agreement would violate the MSA confidentiality provisions because the level of detail would disclose confidential information provided by individuals participating in the sector program. As a result, the tables in Appendix E present information summarized by stock and gear because, when the data is further categorized by sector, it reveals confidential information.

In a letter dated March 22, 2013, attorneys representing Oceana objected to the NOAA Fisheries decision and contended that the agency should take the following actions to come into compliance with the settlement agreement: "(1) explain the standard it uses to determine when disclosure of aggregate data will directly or indirectly lead to the disclosure of confidential information in violation of the Magnuson-Stevens Act….and (2) present the specified data for all strata except those individual strata that would present a risk of disclosure in violation of the articulated confidentiality standard." This appendix complies with the request to the extent possible under the requirements of MSA Section 402(b).

The standards used to determine when data can be released can be found in Section 402 (b) of the MSA, regulations at 50 CFR Subpart E and on the Northeast Regional Office website (www.nero.noaa.gov/apsd/DataRequestFactSheet.pdf). The fact sheet notes that, "Because the information submitted in vessel and dealer reports is confidential, it can only be provided, with limited exceptions, to the individual who submitted the information, unless that individual provides written authorization to the Agency to release it to someone else."

The MSA and its implementing regulations also specify that the agency may make public information in aggregate or summary form which does not disclose the identity or business of any person who submits such information.

The presentation of information in Table 3 of Appendix E was designed to provide a complete set of data that did not reveal confidential information. The presentation of complete information was thought to be more informative to the public than the redacted presentation of the information by all three strata (sector, fishing gear, and stock area).

In the spirit of full disclosure and transparency, the data presented in Table 4 of Appendix E shows the information by strata (sector, gear, and stock area) for FY2010 and FY2011, with information redacted when it could reveal confidential information. The information is presented for 4928 stratum in which the aggregated information represents the activities of at least three fishing vessels. The strata that have been redacted represent 431 strata in which there was fishing activity by fewer than three vessels which would reveal confidential data as defined in the MSA and implementing regulations, and 3228 strata in which there was no fishing activity. The redacted strata are not distinguished from one another because revealing that

information could provide sufficient information to allow informed users of the data to calculate information for an individual participant. For the same reasons, the derivative information for redacted strata (e.g., number of observed trips, realized CV, percent observer coverage required to achieve CV30) is not revealed.

It has been a longstanding policy standard for NOAA fisheries to withhold information if fewer than three entities contributed information to a single data point. Clearly, the presentation of data submitted by one individual would be confidential information that could not be released. Information submitted by two individuals could not be released because of the ease with which one submitter could calculate the other submitter's information, if the identity of the other submitter could be determined. For the sector strata data, NOAA Fisheries is even more concerned about the possibility that confidential information could be derived because of the amount of public information available about each sector (vessel membership, total annual catch by stock). In addition, other information about sector participants may be widely known (e.g., fishing gears used).