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Fishing Year 2012 Northeast Multispecies Sector Operations Plans and Contracts A Supplemental Environmental Assessment

Supplements the Environmental Assessment for the final rule approving the fishing year 2012 northeast multispecies sector operations plans and contracts

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TABLE OF CONTENTS

1.0	INTRODUCTION							
	1.1	SECTOR EXEMPTIONS	6					
		1.1.1 Universal Exemptions						
		1.1.2 Sector-Specific Exemptions						
2.0	PUR	POSE AND NEED FOR THE PROPOSED ACTION	15					
3.0	PRO	POSED ACTION AND ALTERNATIVES	15					
	3.1	4.5-INCH OR GREATER MESH SIZE FOR DIRECTED REDFISH TRIPS EXEMPTION ALTERNATIVES	15					
		3.1.1 Alternative 1- 4.5-inch mesh size or greater for directed redfish trips exemption	15					
		3.1.2 Alternative 2 – No Action	17					
	3.2	INDUSTRY FUNDED AT-SEA MONITORING PROGRAM FOR VESSELS TARGETING REDFISH WITH 4.5-INCH OR GREATER						
		MESH ALTERNATIVES	17					
		3.2.1 Alternative 1- Industry funded at-sea monitoring program for vessels targeting redfish with 4.5-inch or greater mesh	17					
		3.2.2 Alternative 2- No Action						
	3.3	CONSIDERED BUT REJECTED ALTERNATIVES	20					
4.0	AFF	ECTED ENVIRONMENT	20					
	4.1	REDNET	21					
5.0	IMP	ACTS OF THE PROPOSED ACTION AND ALTERNATIVES	22					
	5.1	DIRECT AND INDIRECT IMPACTS OF THE PROPOSED ACTION						
		AND NO-ACTION ALTERNATIVES	24					
	5.2	4.5-INCH MESH SIZE OR GREATER FOR DIRECTED REDFISH	•					
		TRIPS EXEMPTION ALTERNATIVES	26					
		5.2.1 Alternative 1- 4.5-inch mesh size or greater for directed redfish trips	26					
		exemption						
	5 2	5.2.2 Alternative 2 – No Action	28					
	5.3	INDUSTRY FUNDED AT-SEA MONITORING PROGRAM FOR VESSELS TARGETING REDFISH WITH 4.5-INCH OR GREATER						
		MESH ALTERNATIVES	29					
		5.3.1 Alternative 1- Industry funded at-sea monitoring program for vessels targeting redfish with 4.5-inch or greater mesh						
		5.3.2 Alternative 2- No Action						
	5.4	CUMULATIVE EFFECTS ANALYSIS						
		Past, Present and Reasonably Foreseeable Future Actions						
		Other Fishing Effects: Past, Present and Reasonably Foreseeable Future Groundfish and Related Management Actions						
		Non-Fishing Effects: Past, Present, and Reasonably Foreseeable Future						
		Actions	44					
		Summary of Cumulative Effects						
6.0	LIST	OF PREPARERS AND PERSONS/AGENCIES CONSULTED	48					

7.0		IPLIANCE WITH APPLICABLE LAWS AND EXECUTIVE	
	ORD	ERS	48
	7.1	MAGNUSON-STEVENS FISHERY CONSERVATION AND	
	7.1	MANAGEMENT ACT	48
	7.2	ENDANGERED SPECIES ACT (ESA)	
	7.3	MARINE MAMMAL PROTECTION ACT (MMPA)	
	7.4	NATIONAL ENVIRONMENTAL POLICY ACT	
		7.4.1 Revised Finding of No Significant Impact (FONSI)	
	7.5	ADMINISTRATIVE PROCEDURE ACT (APA)	
	7.6	PAPERWORK REDUCTION ACT (PRA)	
	7.7 7.8	COASTAL ZONE MANAGEMENT ACT (CZMA)INFORMATION QUALITY ACT (IQA)	
	7.8 7.9	REGULATORY FLEXIBILITY ACT (RFA)	
8.0	REF	ERENCES	55
T TO		A DV FIG	
	_	ABLES Paguing ments when Fishing in the Southern Fishern Management Area	12
		Requirements when Fishing in the Southern Fishery Management Area	
Table	2 FY 20	212 Approved Exemptions and Proposed Supplemental Measures by Sector	19
Table	3 REDI	NET Discard Summary	22
Table	4 REDI	NET Groundfish Catch and Discard Totals	22
Table	5 Redfi	sh Catchsh	22
Table	6 Impa	et Terms	23
Table	7 Sumn	nary of Direct and Indirect Effects of the Alternatives	26
Table	8 Sumn	nary of Aggregated Sector Impacts	33
		ulative Effects Resulting from Implementation of the Proposed Action and CEA	
Basel		mative Effects resulting from implementation of the Proposed Action and CEA	47
			17
LIST	OF FI	GURES	
	-	posed Redfish Exemption Area	16
_	- 1		

1.0 INTRODUCTION

The National Marine Fisheries Service (NMFS) prepared this supplemental analysis to evaluate potential impacts that would result from the approval of an additional exemption and modification for each of the 19 Multispecies sector operations plans. In accordance with the National Environmental Policy Act (NEPA), NMFS previously evaluated the potential impacts associated with the implementation of each of the sector's operations plans in the attached Environmental Assessment (EA). The conclusion reached in this EA was that the action of approving the sector operations plans would not significantly impact the quality of the human environment. All beneficial and adverse impacts of the action were evaluated in the EA, resulting in the conclusion of no significant impacts.

This supplemental EA presents impact information on the physical, biological, habitat, and socio-economic ecosystem components that would result in the approval of an additional exemption and modification described herein. Since this action is closely linked with the approval of the operations plans and would be implemented within the same fishing year (FY2012), the impacts associated with this action were evaluated in this supplemental EA rather than a completely separate EA. This document is not a stand alone document and is only intended to be utilized in conjunction with the attached EA.

As of May 1, 2012, NMFS has approved a total of 19 sectors to operate according to their sector-specific operations plans under an Annual Catch Entitlement (ACE). A sector is defined as a group of persons holding limited access vessel permits who have voluntarily entered into a contract and agree to certain fishing restrictions for a specified period of time, and which has been granted an annual catch entitlement in order to achieve objectives consistent with applicable fisheries management plan (FMP) goals and objectives. In the formation of a sector, sector participants can select who could participate (NEFMC 2009). An ACE is defined as the amount of each allocated groundfish stock (in pounds) that a sector can harvest in a fishing year. All other groundfish vessels that are not associated with a sector operate under Common Pool rules, which, among other restrictions, generally control fishing mortality by limiting the number of days-at-sea (DAS).

NMFS prepared one EA to evaluate all nineteen FY 2012 sector operations plans. NMFS prepared the EA in accordance with NEPA, and in compliance with NOAA's Administrative Order (NAO) 216-6, and the sector regulations as described in Amendment 16 to the Northeast Multispecies FMP. ACEs and sector operations plans, including any sector-specific exemptions described in subsequent sections, are only valid for the 2012 fishing year (May 1, 2012 to April 30, 2013). The analysis in this document assumes that 100% of the limited access northeast multispecies permits enroll in sectors for FY 2012. Sections 1.0 through 1.3 of the attached EA contain additional introductory material regarding the multispecies fishery and sectors as a management tool.

The 19 sectors approved to operate in fishing year (FY) 2012 are:

- ❖ Northeast Fishery Sector (NEFS) II
- Northeast Fishery Sector III
- Northeast Fishery Sector IV
- ❖ Northeast Fishery Sector V
- Northeast Fishery Sector VI
- Northeast Fishery Sector VII
- Northeast Fishery Sector VIII
- Northeast Fishery Sector IX
- Northeast Fishery Sector X
- Northeast Fishery Sector XI
- ❖ Northeast Fishery Sector XII
- Northeast Fishery Sector XIII

- Georges Bank Cod Fixed Gear Sector (FGS)
- ❖ Sustainable Harvest Sector 1 (SHS 1)
- Sustainable Harvest Sector 3 (SHS 3)
- ❖ Port Clyde Community Groundfish Sector (PCS)
- ❖ Tri-State Sector (TSS)
- ❖ Northeast Coastal Communities Sector (NCCS)
- Maine Permit Banking Sector (MPBS)

To target redfish, sectors requested to use 5-inch codend mesh size for fishing year (FY) 2011. However, NMFS denied the request due to a lack of available data supporting that the gear could successfully target redfish without harvesting high bycatch or juvenile fish. In the disapproval NMFS explained that the results from the cooperative research project focusing on further developing the redfish fishery, known as REDNET, could potentially provide the necessary data. The REDNET project is a collaborative research network that includes the Massachusetts Division of Marine Fisheries, University of Massachusetts Dartmouth School of Marine Science and Technology, Maine Department of Marine Resources, and local fishermen. NMFS denied this request again for FY 2012 because it was previously rejected and sectors provided no new information supporting the request.

On December 1, 2011, the Sustainable Harvest Sector I and the Northeast Fishery Sectors submitted an exemption request to use 4.5-inch codend mesh in a portion of the Gulf of Maine. In response to NMFS' disapproval the previous year, the sectors included initial research findings from REDNET exploratory fishing trips. However, the late submission of the request prevented NMFS from including any analyses within the environmental assessment for FY 2012 sector operations plans. NMFS explained to the requesting sectors that the initial study results indicated there was potential that 4.5-inch mesh could be used to successfully target redfish with minimal unintended bycatch, but that the study needed to be completed and reviewed prior to the exemption being considered.

The New England Fishery Management Council received preliminary findings from Component 2 (of 6) of the REDNET report at their meeting on February 1, 2012. Following the presentation, the Council asked NMFS to expedite approval of a sector exemption allowing vessels to more easily target redfish.

NMFS granted sectors an exemption from mesh size restrictions allowing vessels to utilize 6.0-inch mesh to target redfish for FY 2012. As proposed by the sectors, the exemption requires vessels on these trips to have a NMFS-certified observer or at-sea monitor on board. NMFS approved this exemption for FY 2012 because, although the 6-inch mesh is smaller than the current legal size for standard trawl gear, it is the same size codend mesh authorized for use on Georges Bank by sector vessels using selective gears. Available mesh selectivity studies show that 6-inch mesh is unlikely to increase sub-legal catch for cod and haddock, but information is lacking for other stocks and mesh sizes. For this reason, NMFS plans to monitor this exemption to ensure that it does not result in a greater retention of sub-legal groundfish, as well as non-allocated species and bycatch.

A report for Component 2 of the REDNET project was completed in April 2012. A review of the report by the Northeast Fisheries Science Center (Center) suggested that the results were encouraging but had limited broad scale applicability. In a May 21, 2012, letter to the Council, NMFS requested that the Council's Research Steering Committee (Committee) review the report at its next meeting and provide comments on the report and the feasibility for granting a regulatory exemption allowing sector vessels to use 4.5-inch mesh to target redfish. The Committee concurred with the technical review by the Center and suggested that an exemption allowing 4.5-inch mesh could be issued on a yearly basis depending on catch results.

While exemptions are normally proposed, reviewed, and approved through the action that approves annual sector operations plans, sectors can request exemptions at any point during the fishing year.

Because the Council has requested NMFS to pursue exemptions allowing sector vessels to more efficiently pursue redfish, and the Committee has endorsed the approval of a 4.5-inch mesh exemption, NMFS is proposing this exemption now. Like the approved 6-inch mesh exemption, all vessels choosing to target redfish with codend mesh as small as 4.5-inches would be required to have an observer or at-sea monitor on board. In addition, the agency is considering including additional restrictions, such as a minimum landings threshold and a maximum discard threshold, that if exceeded, could result in the exemption being revoked by the Regional Administrator.

Because of an increased demand to target redfish using mesh less than 6-inches and the 100-percent observer coverage requirement, the sectors have asked to work with NMFS to develop an industry-funded at-sea monitoring program. After considering the request, the Center has said they could support a small-scale industry-funded program; limitations to the size of the program are due to a limited pool of available observers. Since the additional industry-funded monitors would come from the same pool of NMFS-certified monitors that are required to cover at least 25 percent of FY 2012 groundfish trips, the Center has stated that industry-funded monitoring cannot take away from efforts to monitor all other groundfish trips. This request represents a new monitoring program not previously considered in the sector's operations plan and therefore, NMFS is including it in this action.

1.1 SECTOR EXEMPTIONS

Sectors are approved to operate under certain exemptions from Northeast Multispecies regulations under which non-sector vessels (i.e., the "Common Pool") are required to operate. Amendment 16 granted "Universal exemptions" to sector vessels. Sectors request any additional "sector-specific" exemptions in their operations plans. NMFS analyzed the impacts associated with sector vessels operating under these sector-specific exemptions the attached EA.

1.1.1 Universal Exemptions

Amendment 16 Final EIS to the Northeast Multispecies FMP (NEFMC 2009) analyzed the following universal exemptions for sectors and the general effects of sector formation given these universal exemptions.

- Exemption from groundfish DAS requirements including DAS reductions, differential groundfish DAS counting, the 3/15 rule for gillnets, and 24-hour DAS counting.
- Exemption from trip limits on stocks for which a sector receives an allocation of, except for the following:
 - 1. Halibut: trip limit would continue to be one fish per trip;
 - 2. No vessel, whether in the Common Pool or in any sector, would be allowed to possess any windowpane flounder (both stocks), ocean pout, wolffish, or SNE/MA winter flounder on board at any time. When caught, these species must be returned.
- Exemption from the Georges Bank Seasonal Closure in May.
- Exemption from any additional mortality controls adopted by Amendment 16, including additional seasonal or year-round closures¹, gear requirements, DAS reductions, differential DAS counting, and/or restricted gear areas.

NMFS is granting year-round access to the Eastern U.S./Canada Area for yellowtail flounder as stipulated, but not specified, in Amendment 16.

- Gulf of Maine Rolling Closures in specific blocks as identified in Amendment 16 (specifically Section 4.2.3.9).²
- Exemption from the requirement to use 6.5-inch mesh in the cod-end in haddock separator trawl/ Ruhle trawl when targeting haddock in the Georges Bank Regulated Mesh Area (i.e., authorized to use 6-inch mesh in the cod-end).

The final rule for Amendment 16 published April 9, 2010 (75 FR 18262), reduced the requirement for 72-hour pre-trip notification to 48 hour observer notification for all groundfish vessels. A minimum of 48-hour notification is necessary because of the additional logistical demands imposed upon the NMFS Observer Program due to the projected increase in demand for at-sea monitoring.

1.1.2 Sector-Specific Exemptions

In addition to the universal exemptions approved in Amendment 16, several sectors requested to operate under one or more additional exemptions from the NE multispecies regulations as specified in their sector operations plans.

NMFS approved the following exemptions for use in FY 2012.

1. 120-Day Block Requirement Out of the Fishery for Day Gillnet Vessels

Each Northeast multispecies Day gillnet vessel must take 120 days out of the non-exempt gillnet fishery (50 CFR § 648.82(j)(1)(ii)). Each block out is for a minimum of 7 consecutive days. Additionally, at least 21 of the 120 days must occur between June 1 and September 30.

The 120-Day block out requirement helped ensure that management measures for Day gillnet vessels were comparable to effort controls placed on other fishing gear types. The summer months were chosen because that was a time when gillnet fishing was most prevalent. FW 20 to the FMP (61 FR 55774) implemented the requirement on May 1, 1997.

Sectors requested that their Day gillnet vessels be exempt from the 120-day block out requirement. Sectors wish to increase their operational flexibility and efficiency with this exemption by having the opportunity to fish year-round.

2. 20-Day Spawning Block

Vessels must declare out of the Northeast multispecies DAS program for a 20-day period each calendar year between March 1 and May 31 (§ 648.82(g)). Spawning is most prevalent in the Gulf Of Maine during this time. Therefore, the 20-Day spawning block serves as a mortality-control measure which provides protection to spawning aggregations.

Sectors requested that their vessels be exempt from the 20-day spawning block requirement. Sectors seek to increase their operational flexibility and efficiency with this exemption by having the opportunity to fish year-round.

3. Limitation on the Number of Gillnets for Day Gillnet Vessels

Net limits are in place for Day gillnet vessels in the groundfish regulated mesh areas (RMA). Day gillnet vessels can't fish more than 100 gillnets (of which no more than 50 can be roundfish gillnets) in the GOM RMA (§ 648.80(a)(3)(iv)); 50 gillnets in the GB RMA (§ 648.80(a)(4)(iv)); and 75

Amendment 16 exempts sectors from all rolling closures except for: Blocks 124 and 125 in April; Blocks 132 and 133 in April-May; Block 138 in May; Blocks 139 and 140 in May-June; and Blocks 145, 146,147, and 152 in June.

gillnets in the Southern New England ((§ 648.80(b)(2)(iv)) and Mid-Atlantic RMAs (§ 648.80(c)(2)(v)).

To enforce these regulations each gillnet has either one or two tags attached to it. The number of tags depends on the type of net and RMA fished. These restrictions prevent an uncontrolled increase in the number of nets fished. Such an uncontrolled increase would undermine the applicable DAS effort controls. The gillnet limit was implemented in 1996 by Amendment 7 and revised in Amendment 13.

Sectors requested that their Day gillnet vessels be exempt from gillnet limits. Under this exemption Day gillnet vessels would be able to use up to 150 nets total regardless of RMA and could mark their gear with one tag per net. Sectors seek to increase landings per trip with this exemption.

4. Prohibition on a Vessel Hauling another Vessel's Gillnet Gear

Current regulations prohibit one vessel from hauling another vessel's gillnet gear (§648.14(k)(6)(ii)(A) and §648.84). The regulations help enforce existing regulations because a single vessel is associated with each set of gear.

Sectors requested an exemption to the rules prohibiting hauling another vessels gear. With this exemption fishermen within the same sector could haul each other's gillnet gear. However, all vessels participating in "community" fixed gear would be jointly liable for any violations associated with that gear. Sectors seek to increase their operational flexibility and potentially decrease expenses with this exemption.

5. Limitation on the Number of Gillnets that May be Hauled on George's Bank When Fishing Under a Groundfish/Monkfish DAS

Day gillnet vessels fishing on a groundfish DAS can't possess, deploy, fish, or haul more than 50 nets on Georges Bank (§ 648.80(a)(4)(iv)). As a result, these regulations limit the number of gillnets vessels can haul on Georges Bank when fishing under a groundfish/monkfish DAS. Amendment 13 implemented this limit as a groundfish mortality control

Sectors requested an exemption to Georges Bank net hauling limits. The exemption would not permit the use of additional nets. Dually permitted sector vessels would simply haul nets they deployed in accordance to the Monkfish FMP more efficiently. Sectors seek to increase landings per trip with this exemption.

6. Limitation on the Number of Hooks that may be Fished

Vessels can't fish or possess more than 2,000 rigged hooks in the GOM RMA ($\S648.80(a)(3)(iv)(B)(2)$), more than 3,600 rigged hooks in the GB RMA ($\S648.80(a)(4)(iv)(B)(2)$, more than 2,000 rigged hooks in the SNE RMA ($\S648.80(b)(2)(iv)(B)(1)$), or more than 4,500 rigged hooks in the MA RMA ($\S648.80(c)(2)(v)(B)(1)$)). A 2002 interim action (67 FR 50292) initially implemented these hook limits as a way to control fishing effort. Amendment 13 made these limits permanent.

Sectors requested that their vessels be exempt from hook limits. With this exemption sectors seek to increase landings per trip by increasing the number of hook days associated with each trip.

7. Length and Horsepower Restrictions on DAS Leasing

Amendment 16 exempts sector vessels from the requirement to use northeast multispecies DAS to harvest groundfish. However, some sector vessels would still need to use northeast multispecies DAS when fishing for monkfish. The Monkfish FMP includes a requirement that limited access monkfish Category C and D vessels harvesting more than the incidental monkfish possession limit must fish

under both a monkfish and a groundfish DAS. Therefore, sector vessels still use and lease northeast multispecies DAS. Multispecies vessels can currently lease DAS from other vessels provided that the vessel receiving the DAS has no more than 20% greater horsepower and/or is no more than 10% greater in baseline length of the lessee vessel (§648.82(k)(4)(ix). The DAS leasing restrictions maintain the character of the fleet and control groundfish fishing effort through vessel characteristics.

Sectors requested an exemption to allow DAS leasing within and between approved sectors that is not restricted by vessel characteristics. This leasing would occur for the purpose of complying with the Monkfish FMP. Sectors seek to expand the DAS leasing pool with this exemption.

8. GOM Sink Gillnet Mesh Exemption

The minimum mesh size for gillnets in the GOM RMA is 6.5 inches (16.51 cm) (§ 648.80(a)(3)(iv)). Minimum mesh size requirements reduce overall mortality on groundfish stocks by reducing discards and improving the survival of sub-legal groundfish. This exemption would allow sector vessels to use 6-inch (15.24-cm) mesh stand-up gillnets in the GOM RMA from January 1, 2013, to May 31, 2013. Sectors requested this exemption to increase haddock catch rates. The January through April timeline is consistent with the pilot program originally proposed in Amendment 16. It is also the time period when haddock are most available in the GOM.

This exemption would prohibit using tie-down gillnets on trips in the GOM. However, sector vessels could still transit the GOM RMA with tie-down gillnets if the nets are properly stowed and not available for immediate use (§ 648.23(b)).

Day gillnets vessels participating in a sector are restricted to the limit of 50 stand-up sink gillnets during this period. However, Day gillnet vessels granted both the Sink Gillnet Mesh Size Restrictions in the GOM exemption and the general net limit exemption (exemption 3 above) could fish up to 150 stand-up sink gillnets in the GOM RMA during this period (up to 150 nets total in all RMAs). To improve enforceability and increase flexibility, vessels using this exemption would declare their intent on a trip-by-trip basis through a VMS form. Please note there is no limit on the number of nets that participating Trip gillnet vessels are able to fish with, possess, haul, or deploy, during this period. This is because Trip gillnet vessels are required to remove all gillnet gear from the water before returning to port at the end of a fishing trip.

9. Prohibition on Discarding

Sector vessels may not discard any legal-sized fish of the 14 allocated stocks while at sea (\S 648.87 (b)(1)(v)(A)). Amendment 16 contained this provision to ensure accurate monitoring of sector ACE.

Sectors requested a partial exemption from this prohibition due to operational and safety concerns. Vessels store the unmarketable catch on deck separate from food grade product. This takes up valuable deck and hold space while potentially creating unsafe working conditions for sector vessels at sea. Dealers typically absorb the cost associated with disposing of the unmarketable fish. The cost varies according to the amount and condition of the fish. The burden to the dealer is in labor and record keeping. This burden takes approximately 15 minutes per offload. Dealers often sell some of the damaged fish as bait to partially offset the cost of disposal. If high discard trips became a recurring event the dealer may decide to pass off some of the costs to the fisherman. However, this scenario is not likely to occur.

This regulatory exemption defines, "unmarketable" fish as "any legal-sized fish the vessel owner/captain elects not to retain because of poor quality as a result of damage prior to, or from, harvest." The determination of what fish to discard is at the discretion of the vessel operator, but must be based on physical damage to the fish.

All vessels in a sector opting for this exemption will be required to discard legal-sized unmarketable fish at sea on all trips, with or without an observer on board. All legal-sized unmarketable allocated fish will be accounted for in the overall sector-specific discard rates through observer and at-sea monitor coverage. This is the same way discards of undersized fish are currently incorporated.

NMFS will modify the sector-specific discard rates for each sector with this exemption due to a change in the treatment of unmarketable fish (from landings to discards). Once the discarding exemption takes effect and the discard rates have been modified, unmarketable fish discarded by the sector's vessels on observed trips will be deducted from the sector's ACE and incorporated into the sector's discard rates to account for discarding on unobserved trips.

There is a financial incentive for vessel operators to retain and market as much of their catch of allocated stocks as possible. Since discarded fish still counts against the sector's ACE and are incorporated into the sector's discard rates, retaining fish maximizes the value a sector's ACE.

This exemption would allow sector vessels to discard legal-sized unmarketable fish at sea. This exemption seeks to alleviate operational and safety concerns for sector vessels.

10. Daily catch reporting by Sector Managers for Sector Participating in the Closed Area I Hook Gear Haddock Special Access Program

Sector vessels submit daily reports to the Sector Manager while fishing in the Closed Area I Hook Gear Haddock SAP. The Sector Manager then compiles this information and submits it to NMFS (§ 648.85(b)(7)(v)(C)). Sectors can request an exemption from SAP reporting requirements but can't request an exemption from any other reporting requirements.

Framework 40A implemented this reporting requirement to help NMFS monitor quota in real time. Amendment 16 alleviated reporting requirements for sector vessels participating in other Special Management Programs (SMPs). However, reporting requirements remained in place for the CA I Hook Gear Haddock SAP. This allowed NMFS to monitor the overall haddock TAC, which applies to sector and common pool vessels fishing in this SAP.

This exemption would relax the requirement that vessels submit a daily catch report to the Sector Manager. Instead, the sector would require each vessel to submit their own report to NMFS via VMS. This exemption seeks to reduce the administrative burden on the Sector Manager. Further, because sector vessels must already submit VMS catch reports for operating in one or more Broad Stock Areas on the same trip, requiring similar reporting for the Closed Area I Hook Gear Haddock SAP would maintain consistency.

11. Gear Requirements in the U.S./Canada Management Area

The United States and Canada coordinate the management of several transboundary fisheries stocks in the U.S./Canada Management Area. These stocks include GB cod, GB haddock, and GB yellowtail flounder. The U.S./Canada area consists of Eastern and Western sections. GB cod and GB haddock generally occur in the Eastern U.S./Canada Area while GB yellowtail flounder occur across the full U.S./Canada Management Area. The U.S./Canada Sharing Agreement establishes the amount of fish each country can harvest. The management objective for these shared stocks is to achieve but not exceed the U.S. fraction of the harvest (NEFMC 2003).

Current regulations require that a NE multispecies vessel fishing with trawl gear in the Eastern U.S./Canada Area fish with a Ruhle trawl, a haddock separator trawl, or a flounder trawl net (§ 648.85(a)(3)(iii)). Amendment 13 included provisions to constrain U.S. catches of the three shared stocks (69 FR 22906, 4/27/04). Vessels tend to reach the TAC for GB cod first. Therefore, to help avoid exceeding the U.S. fraction, Amendment 13 required vessels to use gear designed to minimize

the catch of cod. Amendment 13 restricted the use of trawl gear so that only the haddock separator trawl and the flounder trawl net could be in the Eastern U.S./Canada Area. Use of the Ruhle trawl, which also minimizes cod catch, was later approved through an in-season action in 2008 (73 FR 53158, 8/15/08), extended through an interim rule in 2009 (74 FR 17030, 4/13/09; 74 FR 55158, 10/27/09), and made permanent by Amendment 16.

Application of this gear requirement does not apply to the Western US/Canada Area (69 FR 22906, 4/27/04). Gear requirements in the Western U.S./Canada Area are not necessary since each of these three gear types affect cod selectivity, and the cod TAC is specific only to the Eastern U.S./Canada Area.

Sectors requested an exemption to allow their vessels to use any type of trawling gear while fishing in the U.S./Canada area. Sectors seek to increase catch rates of all allocated stocks with this exemption.

12. Requirement to Power a VMS While at the Dock

Vessels use a VMS unit to submit area declarations, hail reports, and catch information to NMFS. The VMS enables NMFS to monitor catch, DAS use, gear requirements, and trip limits (75 FR 18262, 4/9/10).

Per § 648.10(b)(4), groundfish vessels must have an approved and operational VMS on board:

- to fish on a Northeast multispecies DAS
- to fish on a sector trip, or
- when a common pool vessel has declared their intent to fish in more than one broad stock area on the same trip.

Once a multispecies vessel declares its first DAS or sector trip, it must use a properly functioning VMS for the remainder of the fishing year. The VMS unit must transmit accurate positional information (i.e., polling) at least every hour, 24 hours per day, throughout the year (§ 648.10(c)(1)(i)). A limited access Northeast multispecies vessel may power down its VMS only when done in accordance with the power down rules specified at § 648.10(c)(2).

Vessels can power down a VMS:

- if the vessel will be out of the water for more than 72 consecutive hours, or
- if the vessel does not participate in any fisheries and will not move from the dock/mooring for a minimum period of 30 consecutive days.

Powering down a VMS requires a letter of exemption from the NMFS Regional Administrator.

Sectors requested an exemption from keeping the VMS units powered while tied to the dock or on a mooring. This exemption seeks to reduce costs and energy consumption for sector vessels. Vessels granted this exemption and electing to power down must submit the appropriate VMS declaration, as specified on the sector's letter of authorization. Since sectors may only request exemptions from NE multispecies regulations, this exemption only applies to NE multispecies requirements. Therefore, if the vessel has permits for other FMPs, it must continue to comply with the requirements of those FMPs. For instance, a vessel in a sector granted this exemption that has a surfclam/ocean quahog permit would still need to have active VMS 24 hours a day, 7 days a week. Sector vessels would not be fishing for groundfish under DAS or groundfish trip limits. Therefore, they did not request an exemption from these non-groundfish provisions.

13. DSM Requirements for Vessels Fishing West of 72°30' W. long.

Amendment 13 adopted the concept that sectors are responsible for monitoring sector catch. However, it provided few details for that requirement. Amendment 16 formalized this requirement by

specifying that a sector operations plan must detail how a sector will monitor its catch to ensure it does not exceed the sector allocation. To accomplish this task Amendment 16 further specified that sectors must develop and implement an independent third-party Dockside Monitoring Program (DSM). DSM would allow sectors to monitor landings from sector trips and ACE utilization. The DSM program was implemented to ensure that catch is accurately documented and that sectors are monitored equally. DSM requirements are specified at § 648.87(b). Although dockside monitoring provisions within Framework 45 required dockside monitors to inspect fish holds, NMFS later determined that the pre-landing hail required of vessels provided an efficient and effective means for observation and enforcement of landings. NMFS eliminated the requirement for monitors to inspect fish holds through an interim final correction amendment, which filed on July 18, 2011 (76 FR 42577).

In July 2011, NMFS determined that the funding that would have been spent on dockside monitoring was better spent helping sectors reduce expenses. The regulations state that NMFS shall determine the level of dockside monitoring based on available Federal funding. As a result, dockside monitoring is not mandatory for FY 2012.

Currently, Amendment 16 to the FMP requires the fishing industry to solely fund dockside monitoring to beginning at the start of fishing year 2013 (i.e., May 1, 2013). This requirement will become effective then, unless amended by the Council in a future management action.

Upon receiving exemption requests to the DSM requirements for vessels fishing in southern New England and Mid-Atlantic waters, the Regional Administrator, in a September 1, 2010 letter to the Council, requested that the Council consider establishing a geographic boundary outside of which DSM would not be required. At its November 18, 2010, meeting, the Council considered this request, and supported removal of DSM from the list of prohibited exemptions to allow sectors to request geographic- and gear-based exemptions from DSM.

Sectors requested an exemption from DSM requirements for vessels fishing west of 72°30' W. long. Sectors noted that a small amount groundfish bycatch has been observed in these areas, and monitoring of such trips is not a beneficial use of financial resources. This exemption seeks to alleviate DSM burdens and cost for sector vessels on trips which do not catch much groundfish.

14. DSM Requirements for Handgear A-Permitted Sector Vessels

As explained in exemption number 13, Amendment 16 formalized dockside monitoring requirements. DSM requirements are specified at § 648.87(b). Framework Adjustment 45 removed DSM requirements for Handgear A- and B-permitted vessels, as well as for Small Vessel-permitted vessels (Category HA, HB and C, respectively) in the common pool. The small quantities of groundfish landed by these permit categories made monitoring such common pool trips uneconomical.

Sectors requested an exemption from DSM requirements for limited access Handgear A-permitted sector vessels. NMFS uses trip start and trip end hails to deploy the enforcement resources which monitor offloads. Therefore, since these are reporting requirements, vessels utilizing this exemption will need to comply with all hail requirements. This exemption seeks to alleviate DSM burdens and cost for sector Handgear A vessels since these vessels traditionally catch small quantities of groundfish.

15. DSM Requirements for Monkfish trips in the monkfish Southern Fishery Management Area (SFMA)

As explained in exemption number 13, Amendment 16 formalized dockside monitoring requirements. DSM requirements are specified at § 648.87(b). Directed monkfish trips are considered sector trips

unless a vessel is fishing in a Northeast multispecies exempted fishery (§ 648.80). These are sector trips because gear used on such trips can catch and retain groundfish.

Vessels have different mesh requirements for their nets when fishing in the SFMA under a northeast multispecies DAS or sector trip, compared to fishing under a monkfish DAS. Table 3.3-2 summarizes the mesh requirements when fishing in the SFMA. Vessels issued both a monkfish limited access permit and a northeast multispecies limited access permit must comply with the more restrictive set of management measures. Therefore, a vessel that is fishing under concurrent monkfish DAS and northeast multispecies DAS on a sector trip must abide by the more restrictive monkfish gear requirements.

Sectors requested an exemption from DSM for sector trips declared into the monkfish SFMA when fishing on a concurrent monkfish/NE multispecies. As part of this exemption sector vessels must:

- 1. fish the entirety of its trip in the SFMA
- 2. properly stow non-conforming gear stowed (§ 648.23(b))
- 3. comply with dockside monitoring hail requirements (§ 648.87(b)(5)(i)(A))
- 4. determine with their dockside monitoring provider how to notify their provider that a given sector trip is utilizing this exemption.

Sector trips declared into the SFMA monkfish fishery using 10-inch (25.4-cm) or larger mesh, as required in the Monkfish FMP, landed only a small amount of groundfish in FY 2010. Therefore, sectors seek this exemption to alleviate DSM burdens and cost on trips which typically land small quantities of groundfish.

Table 1 Mesh Requirements when Fishing in the Southern Fishery Management Area

Fishing Under a	Gear	Mesh Requirements	Regulation Citation
Northeast multispecies DAS or sector trip	Trawl	a minimum 6-inch (15.2-cm) diamond mesh or 6.5-inch (16.5-cm) square mesh through the body and 6.5-inch (16.5-cm) square or diamond mesh applied to the codend of a trawl net	§ 648.80(b)(2)(i)
	Gillnet	minimum mesh size of 6.5 inches (16.5 cm) throughout the entire net	§ 648.80(b)(2)(iv)
Monkfish DAS	Trawl	minimum 10-inch (25.4-cm) square or 12-inch (30.5-cm) diamond mesh throughout the codend and for at least 45 continuous meshes forward of the terminus of the net	§ 648.91(c)(1)(i)
	Gillnet	minimum diamond mesh size of 10 inches (25.4 cm) or larger	§ 648.91(c)(1)(iii)

16. Prohibition on Fishing Inside and Outside the Closed Area I Hook Gear Haddock SAP while on the Same Trip

Multispecies vessels fishing on a trip within the Closed Area I Hook Gear Haddock SAP are prohibited from deploying fishing gear outside of the SAP on the same trip when they are declared into the SAP (§ 648.85(b)(7)(iv)(G)). This restriction was established to avoid potential quota monitoring and enforcement complications that could arise when a vessel fishes both inside and outside the SAP on the same trip (Framework Adjustment 40-A, 2004). This exemption would allow sectors vessels to fish both inside and outside the Closed Area I Hook Gear Haddock SAP on the same trip. However, to ensure accurate accounting of catch in this SAP, sector vessels using this exemption are prohibited from towing a trawl, or setting fixed gear, across the border of the SAP. NMFS will use the daily VMS catch report from vessels participating in this SAP to identify catch from inside this SAP separately from catch outside the SAP on the same trip. Sectors wish to increase their operational flexibility and efficiency with this exemption by having the opportunity to fish both inside and outside the SAP on the same trip.

17. 6.5-inch Minimum Mesh Size Requirement

Minimum mesh size restrictions (§ 648.80(a)(3)(i), (a)(4)(i), (b)(2)(i), (c)(2)(i)) were implemented under Amendment 13 (69 FR 22906, 4/27/04) in conjunction with other management measures, including FW 42, to reduce overall mortality on groundfish stocks, change the selection pattern of the fishery to target larger fish, improve survival of sublegal fish, and allow sublegal fish more opportunity to spawn before entering the fishery (Framework 42, 2006).

FW 42 set requirements for trawl codends in the SNE RMA to be made of either square or diamond mesh no smaller than 6.5 inches. The minimum mesh requirements implemented by FW 42 are intended to reduce discards of yellowtail flounder thereby increasing the rate of yellowtail flounder rebuilding. Since yellowtail flounder stock was not rebuilding quickly, even small improvements in rebuilding were considered important (Framework 42, 2006).

This exemption would allow sector vessels to use 6-inch mesh codends in all regulated mesh areas to target redfish. The exemption is intended to increase the catch of redfish, increase the operational flexibility of sector vessels, and increase profit margins of sector fishermen. Sectors participating in the directed redfish fishery under this exemption will be required to declare their intention to the Sector Manager at least 48 hours prior to departure, comply with the pre-trip notification system (PTNS) requirements, and may only use this exemption on trips carrying either an at-sea monitor or NEFOP observer to monitor catch and bycatch. Daily catch reports must be submitted to the sector manager to ensure that all catch is harvested within the sector's ACE.

If approved, the proposed exemption allowing vessels to use codend mesh \underline{of} 4.5-inches or greater would essentially replace this exemption. This exemption would apply to vessels targeting redfish with codend mesh \geq 4.5 inches but \leq 6.5 inches .

18. Prohibition on a Vessel Hauling Another Vessel's Hook Gear

Current regulations prohibit one vessel from hauling another vessel's hook gear (§§ 648.14(k)(6)(ii)(B)). The regulations facilitate the enforcement of existing regulations as a single vessel is associated with each set of gear. Sectors have requested an exemption to the rules prohibiting hauling another vessels gear. The exemption would allow fishermen from within the same sector to haul each other's hook gear. However, all vessels participating in "community" fixed gear would be jointly liable for any violations associated with that gear. Additionally, each member intending to haul the same gear will be required to mark the gear consistent with §§ 648.14(k)(6)(ii)(B) and 648.84(a).

19. Requirement to Declare Intent to Fish in the Eastern US/CA Area Haddock SAP and CA II Yellowtail/Haddock SAP Prior to Departure

Multispecies vessels are required to declare that they will be fishing in either the Eastern US/CA Haddock SAP or the CA II Yellowtail/Haddock SAP prior to leaving the dock (§ 648.85(b)(8)(v)(D) and § 648.85(b)(3)(v)). Framework 40A (2004) implemented this measure so that vessels fishing strictly in those areas could be credited days-at-sea (DAS) for their transit time to and from those SAPs. Sectors are requesting an exemption from having to declare their intent to fish in those areas because they are no longer limited by multispecies DAS and their catch is limited to their ACE. Therefore, this exemption will allow sector vessels to declare their intent to fish in these SAPs while at sea. Sectors seek to increase their efficiency with this exemption.

2.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

This action is needed to facilitate the implementation of an additional sector exemption and industry funded at-sea monitoring program. The purpose of this action is to provide additional opportunities for sectors to pursue redfish within the timeframe of FY 2012. The Council has requested that NMFS pursue ways to allow sector vessels to more efficiently pursue redfish. Following the completion of an initial research component of the REDNET gear research study, which was endorsed by the Council's Research Steering Committee, NMFS is considering the 4.5-inch mesh sector exemption request. Additionally, NMFS is considering an industry-funded at-sea monitoring program for trips targeting redfish. Each sector seeking to utilize either the proposed exemption or an industry-funded at-sea monitoring program will provide an addendum to their operations plan.

3.0 PROPOSED ACTION AND ALTERNATIVES

The following sections describe the proposed action and other alternatives considered in this assessment.

3.1 4.5-INCH OR GREATER MESH SIZE FOR DIRECTED REDFISH TRIPS EXEMPTION ALTERNATIVES

3.1.1 Alternative 1- 4.5-inch mesh size or greater for directed redfish trips exemption

Alternative 1 is the approval of the 4.5-inch mesh size or greater for directed redfish trips exemption as described below.

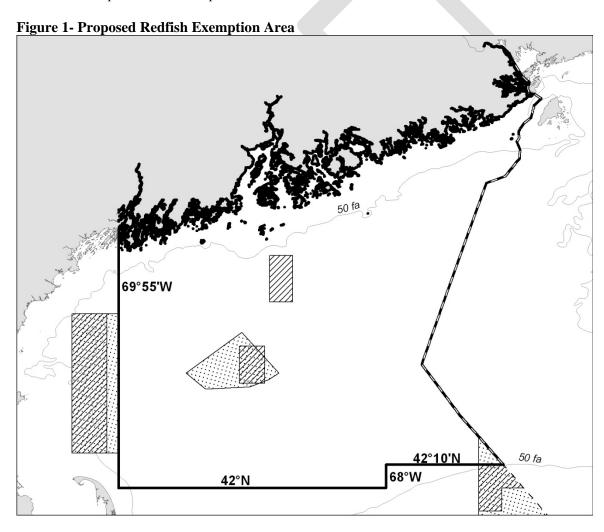
Minimum mesh size restrictions (§ 648.80(a)(3)(i), (a)(4)(i), (b)(2)(i), (c)(2)(i)) were implemented under Amendment 13 (69 FR 22906, 4/27/04) in conjunction with other management measures, including FW 42, to reduce overall mortality on groundfish stocks, change the selection pattern of the fishery to target larger fish, improve survival of sublegal fish, and allow sublegal fish more opportunity to spawn before entering the fishery (Framework 42, 2006).

FW 42 set requirements for trawl codends in the SNE RMA to be made of either square or diamond mesh no smaller than 6.5 inches. The minimum mesh requirements implemented by FW 42 are intended to reduce discards of yellowtail flounder thereby increasing the rate of yellowtail flounder rebuilding. Since yellowtail flounder stock was not rebuilding quickly, even small improvements in rebuilding were considered important (Framework 42, 2006).

Sectors have requested an exemption from the minimum mesh size that would allow their vessels to use codend mesh as small as 4.5-inches to target redfish. Additionally, consistent with the Sustainable Harvest Sector request, NMFS proposes to limit the use of this exemption to the Gulf of Maine in an

area east of the Western Gulf of Maine closed area (Figure 1). Sectors participating in the directed redfish fishery under this exemption will be required to declare their intention to the Sector Manager at least 48 hours prior to departure, comply with the pre-trip notification system (PTNS) requirements, and may only use this exemption on trips carrying either an at-sea monitor or NEFOP observer to monitor catch and bycatch. Daily catch reports must be submitted to the sector manager to ensure that all catch is harvested within the sector's ACE. The Regional Administrator reserves the right to revoke this exemption if it is negatively impacting spawning fish or populations of stocks the current minimum mesh sizes were intended to protect. Similar to the exemption that allows vessels to fish with 6-inch codend mesh, this exemption seeks to increase the catch of redfish, increase the operational flexibility of sector vessels, and increase profits of sector fishermen. If approved, this exemption would essentially replace the 6-inch codend mesh exemption for directed redfish trips.

For the purposes of this EA, NMFS analyzed the impacts of the 4.5-inch mesh size or greater for directed redfish trips exemption for approval to all sectors. However, NMFS would independently approve or disapprove the exemption for each individual sector in the final rule. If approved, this exemption would only apply to FY 2012 sectors which request them. Table 2 summarizes the which sectors have requested this exemption.



3.1.1.1 Option A- Multiple mesh sizes on a directed redfish trip

Option A would allow the use of 4.5-inch mesh or greater on targeted redfish tows. 6.5-inch or greater mesh would be required on all other tows that are not specifically targeting redfish. Under this option, discards on tows using 6.5-inch mesh or greater would not count towards the sector specific discard rate. This is intended to prevent data bias as well as incentive for industry to take industry-funded observers to lower discard rates for non-redfish strata.

3.1.1.2 Option B- Minimum landings threshold

Option B would require between 80 and 95% of catch to be redfish when vessels are targeting redfish using codend mesh smaller than 6.5 inches. Sectors that are unable to land more than 80% of redfish for two consecutive months would have their exemption revoked. This threshold would be measured cumulatively throughout the fishing year. NMFS will monitor this threshold on a monthly basis. Sectors that exceed the threshold (i.e. catch is less than 80% redfish when fishing with mesh smaller than 6.5 inches) will be given one month to come into complaince. Sectors that exceed the threshold for two consecutive months could have their exemption revoked. This threshold would be measured cumulatively throughout the fishing year.

3.1.1.3 Option C- Maximum discard allowance

Option C would establish a bycatch/discard threshold between 1 and 7% of regulated NE multispecies and ocean pout. NMFS will monitor this allowance on a monthly basis. Sectors that exceed the allowance will be given one month to come into compliance. Sectors that exceed the threshold for two consecutive months would have their exemption revoked. This threshold would be measured cumulatively throughout the fishing year.

3.1.1.4 Option D- No multiple mesh sizes, minimum landings threshold, or maximum discard threshold

Option D would not allow multiple mesh sizes on a directed redfish trip. Therefore, under this option sector vessels would only be able to use one mesh size (4.5-inch or greater) for the duration of the trip It would also not require a minimum landings threshold or a maximum discard threshold.

3.1.2 Alternative 2 – No Action

The No Action Alternative is the disapproval of the 4.5-inch mesh size or greater for directed redfish trips exemption addendum to any sector's operations plan. Alternative 2 would result in sector vessels operating under the operations plans as approved for the start of the 2012 FY on May 1, 2012. The No Action Alternative serves as the baseline scenario as it represents a continuation of the current condition. Table 2 below summarizes the sector-specific exemptions currently approved for FY 2012.

3.2 INDUSTRY FUNDED AT-SEA MONITORING PROGRAM FOR VESSELS TARGETING REDFISH WITH 4.5-INCH OR GREATER MESH ALTERNATIVES

3.2.1 Alternative 1- Industry funded at-sea monitoring program for vessels targeting redfish with 4.5-inch or greater mesh

Alternative 1 is the approval of operations plan modification for a sector to use an industry funded atsea monitoring program for vessels targeting redfish with 4.5-inch mesh or greater. This modification could be applied to the already approved 6-inch mesh exemption as well as the proposed 4.5-inch or greater exemption. For the purposes of this EA, NMFS analyzed the impacts this modification for all

sectors. However, NMFS would independently approve or disapprove this operation plan modification for each individual sector in the final rule. If approved, this modification would only apply to FY 2012 sectors that request it. Table 2 below summarizes which sectors have requested this operations plan modification.

Sector vessels using 6-inch mesh to target redfish are required to have a NMFS approved observer or at-sea monitor on board. Due to an increased demand to target redfish using mesh less than 6.5 inches, there are not enough NMFS approved observers or at-sea monitors available given a coverage rate of 25% for all trips. So, sectors have asked to work with NMFS to develop an industry-funded at-sea monitoring program. Sectors have said that they would establish a contract with a NMFS-approved at-sea monitoring provider to monitor any trip targeting redfish that is not randomly assigned a monitor through the current at-sea monitoring program. After considering the request, the Center has said they could support a small-scale industry-funded program, beyond the coverage rate of 25%. However, because this request represents a new monitoring program not previously considered in the sector's operations plan and could increase effort on the fishery to a level not considered in the FY 2012 sector environmental assessment, this request is being included in the action for public comment. Any sector wishing to develop an industry-funded at-sea monitoring program must develop a plan which must be approved by NMFS and included as an amendment to their current operations plan. Under this program, industry will call-in through a separate call in system and industry funded vessels would not have the opportunity for federal coverage via PTNS.

3.2.2 Alternative 2- No Action

The No-Action Alternative is the disapproval of the modification to any sector's operations plan. Alternative 2 would result in sector vessels operating under the operations plans as approved for the start of the 2012 FY on May 1, 2012. The No Action Alternative serves as the baseline scenario as it represents a continuation of the current condition.

Table 2 indicates which sectors requested this operations plan modification, and summarizes previously approved sector-specific exemptions.

Table 2 FY 2012 Approved Exemptions and Proposed Supplemental Measures by Sector

		FGS	NCCS	NEFS II	NEFS III	NEFS IV	NEFS V	NEFS VI	NEFS VII	NEFS VIII	NEFS IX	NEFS X	NEFS XI	NEFS XII	NEFS XIII	PCS	SHS 1	SHS 3	SST
	FY 2012 Approved Exemptions		•	•		•						•			•	•	•	•	
1	120 Day Gillnet Block out of the Fishery	Χ	Х		Χ			Х	Χ			Χ	Х	Χ	Х	Х	Χ	Χ	Х
2	20 Day Spawning Block	Χ	Χ	Χ	Χ		X	Х	Χ	Χ	X	X	Χ	Χ	Χ	Χ	Χ	Χ	Х
3	Limits on the Number of Gillnets for Day Gillnet Vessels	Χ			Χ			Х	Χ			X	Χ	Χ	Χ	Χ	Χ	Χ	Х
4	Prohibition on a vessel's hauling another Vessel's gillnet gear	Χ		Х	Х			Х	Χ			Χ	Х	Х	Х	Х	Х	Χ	Х
5	Limits on the Number of Gillnets that May be Hauled on GB when fishing on a Groundfish/Monkfish DAS	Х			Х			Х	Х			Х	Х	Х	Х	Х	Х	Х	Х
6	Limits on the Number of Hooks that May be Fished	Χ	Χ		Х			X	Χ			Χ	Χ	X			Χ	Χ	Χ
7	DAS Leasing Program Length and Horsepower Restrictions	Χ		X	Х	Х	Х	Х	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
8	GOM Sink Gillnet Mesh Exemption January Through April	Χ			X			Χ	Х			Χ	Х	Х	Χ	Χ	Χ	Χ	Χ
9	Extension of the GOM Haddock Sink Gillnet Program Through May	Χ		,	X			Х	Χ			Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
10	Prohibition on Discarding	Χ											Χ	Х			Χ	Χ	
11	Daily catch reporting by Sector Managers for Sector vessels that fish in the CA I Hook Gear Haddock SAP	X	Х		Х			Х	X			Х	Х	Х	Х		Х	Х	Х
12	Gear Requirements in the US/CA Management Area	Χ		Х	Χ		X	Х	Χ	Χ	Χ	Χ	Х	Х	Х		Х	Χ	Х
13	Powering VMS While at the Dock	X	X	Χ	Χ	Χ	X	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ
14	DSM Requirements for Vessels Fishing West of 72°30′ W. Long.	X		Χ	X		X	Х	Χ	Χ	Χ	Χ			Χ		Χ	Χ	Χ
15	DSM requirements for Handgear A-permitted Sector Vessels	X		Х	Χ			X	Χ	Χ		Χ					Χ	Χ	Χ
16	DSM Requirements for Monkfish Trips in the Monkfish SFMA	Х		X	Х		X	Х	Χ	Χ	Χ	Χ			Х		Х	Χ	Х
17	Prohibition on Fishing Inside and Outside the CA I Hook Gear Haddock SAP While on the Same Trip	X						Х	Х		Х	Х			Х		Х	Х	Х
18	6.5-Inch Minimum Mesh Size Requirement to Allow 6-Inch Mesh for Targeted Redfish Trips	X		Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
19	Prohibition on a Vessel Hauling Another Vessel's Hook Gear	Χ			Χ			Χ	Χ			Χ			Χ		Χ	Χ	
20	Requirement to declare intent to fish in the Eastern US/CA SAP and CA II YT/haddock SAP from the dock	Х					Х	Х	Х	Х	Х	Х			Х		Х	Х	Х
	Proposed FY 2012 Supplemental Measures																		
	4.5-inch mesh size or greater for directed redfish trips exemption			Х	Х	Х	Х	Χ	Χ	Χ	Χ	Χ	Х	Χ	Х		Х		
	Industry funded at-sea monitoring program for vessels targeting redfish with 4.5-inch or greater mesh			Х				Х			Х						Х		

3.3 CONSIDERED BUT REJECTED ALTERNATIVES

While exemptions are normally proposed, reviewed, and approved through the action that approves annual sector operations plans, sectors can request exemptions at any point during the fishing year. Because the New England Fishery Management Council (Council) has requested NMFS to pursue exemptions allowing sector vessels to more efficiently pursue redfish, and the Council's Research Steering Committee has endorsed the approval of a 4.5-inch mesh exemption, NMFS is proposing this exemption now. NMFS considered placing season or gear restrictions on the exemption. However, NMFS rejected these options because it unnecessarily placed additional restrictions on vessels when the minimum landings threshold and maximum discard allowance options would achieve the same conservation benefits without the additional restrictions.

In preparation of this EA, NMFS considered allowing sectors to propose either entirely new exemptions or variations of previously approved exemptions unrelated to redfish. However, NMFS considered this alternative unreasonable because sectors need to operate with additional exemptions within the current fishing year (FY2012). Allowing sectors to propose entirely new exemptions or changing already approved exemptions to the list of alternatives could result in implementation delays due to the timeframes associated with the additional analysis, impacts review and rule making. In addition, this action is intended to be a continuing part of approving FY 2012 sector operations plans, in which other alternative measures have already been considered. The FY 2012 sectors will have an opportunity to propose any new or revised exemptions in their operations plans for FY 2013.

4.0 AFFECTED ENVIRONMENT

The attached EA includes detailed descriptions of the valued ecosystem components (VECs) which comprise the affected environment. Section 4.1 provides background data in support of these VECs. Discussion of physical environment/habitat/EFH is included in Section 4.2 of the attached EA and describes the primary geographic areas affected by the alternatives (Gulf of Maine, Georges Bank, and Southern New England), habitat, EFH and gear types. Allocated target species are addressed in Section 4.2 of the attached EA, which includes species and stock status descriptions, assemblages of fish species, stock status trends, areas closed to fishing in the northeast region, and gear interactions. A discussion of non-allocated target species and bycatch, including spiny dogfish, skates and monkfish as well as gear interactions with these species, is included in Section 4.3 of the attached EA. Protected resources are addressed in Section 4.4 of the attached EA. This section discusses protected resources present in the area, protected species potentially affected, species not likely to be affected, and the interactions between gear and protected resources. Human communities within the affected environment are addressed in Section 4.5 of the attached EA, and include an overview of the New England groundfish fishery and an overview of each sector. No changes to the description of the affected environment, as described in the attached EA, have occurred with one exception which is presented below.

4.1 REDNET

Historically, redfish has represented a substantial fishery in the region. A directed redfish fishery began in the 1930's and total landings rose from 100 mt to a peak of over 117,000 mt in 1951 and then steadily declined to 1,189 mt in 2008. Traditionally, vessels targeting redfish in the Gulf of Maine have used otter trawls with relatively smaller mesh. Given the steady decline of the redfish population, the minimum mesh size was increased over time to its current 6.5 in (165 mm) requirement. In recent years, the restrictions in the multispecies FMP have aided in the recovery of the redfish resource; the 2008 Groundfish Assessment Review Meeting (GARM III) indicated that redfish is not overfished and overfishing is not occurring.

Recently, the relatively large ACL for redfish has not been caught in the current multispecies fishery which includes catch retention rules and larger minimum mesh sizes than are desirable to target redfish. Therefore, redfish has been targeted for research and development of a sustainable harvest strategy through the Northeast Cooperative Research Partners Program in the 2010 funding cycle. A group that includes the Maine Department of Marine Resources, the Massachusetts Division of Marine Fisheries and the University of Massachusetts School for Marine Science and Technology joined with other members of the scientific community and the industry to develop a research plan to develop a sustainable, directed, redfish trawl fishery in the Gulf of Maine. The redfish cooperative research project or "REDNET" sought to achieve three fishery conservation and management goals:

- Redirecting fishing effort in the multispecies fishery away from stocks that are overfished to stocks that are considered rebuilt (e.g. redfish).
- Achieving optimum yield, by increasing commercial landings of redfish through development of a directed fishery under the adaptive management ability of groundfish sectors.
- Increasing the economic viability of groundfish sectors by providing access to the ACL of a recovered species and thus generating much needed revenue for the industry.

There are six components of the REDNET project. Component 2 was recently completed and was deemed to be very successful. All five trips, totaling 25 days, resulted in economically viable catches of redfish using a 4.5 in mesh codend without substantial incidental/bycatch of regulated species. Effort was widely distributed spatially and temporally, entirely in the Gulf of Maine across the entire year. Depth did appear to effect the size composition of redfish and pollock was the most abundant incidental catch, as historic participants in the redfish fishery indicated. The data collected through REDNET to date, indicates a targeted redfish fishery could be successful using a small mesh codend.

Table 3 REDNET Discard Summary

	Cod	Witch Flounde r	Haddoc k	Whit e Hake	Plaic e	Pollock	Dogfish	Redfish
Total REDNET catch (lbs)	1,180	125	1,059	2071	52	10,052	26,379	232,380
Total Discards (lbs)	143	9	87	43	18	2,745	26,379	10423
% Of Catch Discarded	12	7	8	2	35	27	100	4

Table 4 REDNET Groundfish Catch and Discard Totals

	Groundfish (Excluding Redfish)	Groundfish (Including Redfish)							
Total Catch (lbs)	14,539	273,296							
Total Discards (lbs)	3,045.35	13,468.35							
% of Catch Discarded	20.95	4.93							

Table 5 Redfish Catch

Total Catch	273,296
Total Redfish Catch	232,380
% of Catch That Was Redfish	85.03

5.0 IMPACTS OF THE PROPOSED ACTION AND ALTERNATIVES

In order to capture the greatest extent of potential impacts associated with Alternative 2, the proposed action, the direct and indirect impacts associated with all sector vessels operating under the redfish exemption are analyzed in Section 5.1. However, sectors would only be approved to operate under additional exemptions that they requested.

Section 5.1, establishes criteria for evaluating the impact of each alternative on the VECs identified in Section 4 (physical environment/habitat/EFH, allocated target species, non-allocated target species and bycatch, protected resources, and human communities) and discusses impacts. Cumulative impacts of the proposed action in combination with other past, present, and reasonably foreseeable actions are discussed in Section 5.2.

Table 6 defines the impact terms used in this section.

Table 6 Impact Terms

	Impact	Definition								
	Direction									
VEC	Positive (+)	Negative (-)	Negligible (Negl)							
Allocated target species, other landed species, and protected resources	Actions that increase stock/population size	Actions that decrease stock/population size	Actions that have little or no positive or negative impacts to stocks/populations							
Physical Environment/ Habitat/EFH	Actions that improve the quality or reduce disturbance of habitat	Actions that degrade the quality or increase disturbance of habitat	Actions that have no positive or negative impact on habitat quality							
Human Communities	Actions that increase revenue and social wellbeing of fishermen and/or associated businesses Actions that decrease revenue and social wellbeing of fishermen and/or associated businesses		Actions that have no positive or negative impact on revenue and social well-being of fishermen and/or associated businesses							
	Impact (Qualifiers:								
Low (L, as in low positive or low negative)	To a lesser degree									
High (H; as in high positive or high negative)	To a substantial degree									
Likely	Some degree of uncertain	ct								
		ligible Positive EGL) (+)								
High	Low	Low	High							

As cited in the discussion of impacts within this section, increased "operational flexibility" generally has positive impacts on human communities as sectors and their associated exemptions grant fishermen some measure of increased "operational flexibility." By removing the limitations on vessel effort (amount of gear used, number of days declared out of fishery, trip limits and area closures) sectors help create a more simplified regulatory environment. This simplified regulatory environment grants fishers greater control over how, when, and where they fish, without working under increasingly complex fishing regulations with higher risk of inadvertently violating one of the many regulations. The increased control granted by the sectors and their associated exemptions may also allow fishermen to maximize the ex-vessel price of landings by timing them based on the market.

There is the added benefit to human communities from the removal of regulatory constraints on effort as removing these limits can reduce frustration. Typical effort control management serves to constrain fishing ability but it has little impact on controlling expectations. As a result, the level of frustration rises with the inability to meet expectations (Smith, 1980). Under sector management expectations are controlled by the level of ACE granted each sector, but the ability to fish is still constrained by the management tools of the previous system. Each exemption that removes the management control on effort will allow fishing ability to rise to expectations and reduce frustration.

5.1 DIRECT AND INDIRECT IMPACTS OF THE PROPOSED ACTION AND NO-ACTION ALTERNATIVES

The potential impacts of the universal exemptions and general requirements of sector operation (e.g., operations plan) are evaluated in the Amendment 16 Final EIS in accordance with NEPA requirements (NEFMC 2009). A detailed discussion of potential impacts of requested Sector-specific exemptions that went into effect on May 1, 2012 are provided in detail in Sections 5.1.3 through 5.1.5 of the attached EA. The description of the No-Action Alternatives is equivalent to the proposed action from the attached EA. However, under this supplemental EA, the effects of the No-Action Alternative mean a lack of further flexible fishery management for additional sector vessels. The No-Action Alternative serves as the baseline scenario as it represents a continuation of the current condition, including the operation of all sectors under exemptions approved for May 1, 2012. In addition to the No-Action Alternative, the following sections evaluate the potential impacts of the 4.5-inch mesh exemption and the industry funded at-sea monitoring program.

For the purpose of this analysis, the physical environment is defined as the sub-regions comprised of the Gulf of Maine, Georges Bank, the southern New England/Mid-Atlantic areas, and the continental slope. EFH is defined by the SFA as "[t]hose waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity".

There are 14 allocated target groundfish stocks (GOM cod, Georges Bank [GB] cod, GOM haddock, GB haddock, American plaice, witch flounder, GOM winter flounder, GB winter flounder, Cape Cod/GOM yellowtail flounder, GB yellowtail flounder, southern New England/Mid-Atlantic [SNE/MA] yellowtail flounder, redfish, pollock, and white hake). These stocks are managed under the Northeast Multispecies FMP.

Non-allocated target species and bycatch are defined in Section 4.4 of the attached EA and may include a broad range of species. For purposes of this assessment, and following the convention established in Amendment 16 EIS, the non-allocated target species and bycatch most likely to be affected by sectors operation include spiny dogfish, skates, and monkfish, typically the top three species caught along with allocated target species.

As discussed in Section 4.5 of the attached EA, there are numerous protected species that inhabit the environment within the Northeast Multispecies FMP management unit, and that therefore potentially occur in the operations area of the sectors. These species are afforded protection under the Endangered Species Act of 1973 (ESA; i.e., for those designated as threatened or endangered) and/or the Marine Mammal Protection Act of 1972 (MMPA), and are under NMFS' jurisdiction. As listed in Table 4.5.1-1, 19 marine mammal, sea turtle, and fish species are classified as endangered or threatened under the ESA; the remaining species in Table 4.5.1-1 are protected by the MMPA and are known to interact with the Northeast multispecies fishery.

This supplemental EA considers the approval of an additional exemption and operations plan modification for sectors and evaluates the effect this may have on people's way of life, traditions, and community. These "social impacts" may be driven by changes in fishery flexibility, opportunity, stability, certainty, safety, and/or other factors. Impacts would be most likely experienced across communities, gear cohorts, and/or vessel size classes. Section 4.6 in the attached EA includes a description of the sector participants as well as their homeports.

Summary of Conclusions of Impacts from Alternatives

Table 7 provides a summary of conclusions regarding direct and indirect impacts that would occur as a result of the exemption and operations plan modification. Impacts of the exemption would vary from low negative to low positive, but would not be significant (see Table 7). Impacts from the operations plan modification would range from negligible to low positive, but would not be significant (see Table 7). Additional discussion on potential impacts to physical environment/habitat/EFH, allocated target species, non-allocated target species and bycatch, protected resources, and human communities is provided in Sections 5.2 and Section 5.3.

Table 7 Summary of Direct and Indirect Effects of the Alternatives

		Value	d Ecosystem Comp	onents (VECs)		
	Physical Environment	В	iological Environme	nt	Human C	ommunities
ALTERNATIVE	Physical Env./Habitat (incl. EFH)	Allocated Target Species	Non-allocated Target Species and Bycatch	Protected Resources	Ports	Sector Participants
4.5-inch mesh size of greater for directed redfish trips exemption	or					
Alt 1-						
Grant Exemption Option A-						
Multiple mesh sizes on a directed redfish trip	L(+)	L(-)	L(-)	Negl	Likely L(+)	Likely L(+)
Option B- Minimum landings threshold	L(+)	L(-)	L(-)	Negl	Likely L(+)	Likely L(+)
Option C- Maximum discard allowance	L(+)	L(-)	L(-)	Negl	Likely L(+)	Likely L(+)
Option D- No multiple mesh sizes, minimun landings threshold, o maximum discard threshold	n	L(-)	L(-)	Negl	Likely L(+)	Likely L(+)
Alternative 2- No Action	Negl	Negl	Negl	Negl	Negl	Negl
Industry funded at- sea monitoring program for vessels targeting redfish with 4.5-inch or greater mesh	3					
Alt 1 –	Negl	L(+)	L(+)	Negl	L(+)	L(+)
Grant Modification						
Alt 2-	Negl	Negl	Negl	Negl	Negl	Negl
No Action						

5.2 4.5-INCH MESH SIZE OR GREATER FOR DIRECTED REDFISH TRIPS EXEMPTION ALTERNATIVES

5.2.1 Alternative 1- 4.5-inch mesh size or greater for directed redfish trips exemption

This exemption would allow sector vessels to use 4.5-inch mesh codends or greater to target redfish. The exemption seeks to increase CPUE by retaining a greater proportion of the fish in the trawls codend. Because sector members would operate under an ACE, a minor increase in CPUE would result in fewer geardays.

Impacts to physical environment/habitat/EFH would likely be low positive for all options, because there would be a minor increase in CPUE, and a reduction in trawling geardays for redfish. There is a negligible difference between the options as there is no expected difference in CPUE between them.

The exemption could result in greater retention of sub-legal groundfish. Impacts to allocated target species are therefore expected to be low negative for all options. While sector vessels fish under an ACE and all landings of allocated stocks are counted against that ACE, NMFS set minimum mesh sizes to reduce discard mortality and allow greater escapement of sub-legal groundfish, with the purpose of expanding the stock age structure and increasing yield-per-recruit and spawning stock biomass.

The REDNET Component 2 demonstration fishing activity (Kanwit 2012) resulted in a kept redfish catch of 221,957 lbs and discards of 10,423 lbs or about 4.5%. When the kept redfish catch was plotted with the discarded redfish catch based on time of year fished, the highest levels were seen on the July and September trips. The redfish catch data were also plotted against the depth fished and suggested catches of smaller fish at shallower depths.

According to NMFS data, white hake, pollock and plaice were the top three groundfish stocks by live weight landed on sector redfish trips in FY 2010 and FY 2011. The REDNET report showed their largest groundfish catch besides redfish was pollock then more distantly followed by white hake, Atlantic cod and haddock.

Compared to Option D, the use of multiple mesh sizes (Option A) would have negligible impacts on allocated target species because ultimately the harvest would be controlled by the ACE.

Compared to Option D, Options B and C would mitigate some of the adverse impacts of this exemption. A minimum landings threshold (Option B) and a maximum discard allowance (Option C), would limit the impact of the reduced mesh size on the non-redfish groundfish stocks. These options would ensure that the exemption is being used to target redfish and not other groundfish stocks. Therefore, Options B and C would both limit the retention of sub-legal groundfish. There is no discernible difference in terms of allocated target species impacts between Options B and C.

The exemption could also result in greater retention of non-allocated target species and bycatch such as SNE/MA winter flounder. Spiny dogfish was the largest component of the bycatch observed in the REDNET Component 2 report. Impacts to non-allocated target species and bycatch are expected to be low negative for all options. However, non-allocated target species and bycatch have management measures in place to limit their catch and control mortality, with which sector vessels would still be required to comply.

Compared to Option D, the use of multiple mesh sizes (Option A) would have negligible impacts on non-allocated target species and bycatch. Assuming a relatively constant ratio of non-allocated target species and bycatch to allocated target stocks, ACEs would likely limit the potential for impacts to non-allocated target species and bycatch.

Compared to Option D, Options B and C would mitigate some of the adverse impacts of this exemption on non-allocated target species and bycatch. A minimum landings threshold (Option B) and a maximum discard allowance (Option C), would limit the impact of the reduced mesh size on the non-allocated target species and bycatch. These options would ensure that the exemption is being used to target redfish and not non-allocated target species and bycatch. Therefore, Options B and C would both limit catch of non-allocated target species and bycatch. There is no discernible difference in terms of non-allocated target species and bycatch impacts between Options B and C.

Impacts to protected resources would be negligible for all options because the change in mesh size is not expected to change the nature of impacts to protected resources and the potential decrease in geardays is minor. There is a negligible difference between the options as none are expected to impact CPUE. Therefore, a negligible difference in trawl geardays is expected and consequently impacts to protect resources between the options are also negligible.

In order to utilize the mesh-size exemption, a fishermen would potentially have to purchase a new codend with mesh size under 6.5 inches, which is an upfront cost. A 4.5-inch code end for a vessel with an engine of 400 HP, or greater, would be \$1,815 (O'Rourke, personal communication). If a vessel purchased an entire new net specialized to target redfish, costs would be greater. By increasing operational flexibility, this exemption would likely increase the expected short run profits of sector fishermen, even beyond the upfront costs of new gear. However, if the exemption was revoked, as a result of the thresholds in Options B or C being met, a fisherman may not be able to recoup the costs and short run costs would exceed revenues. Importantly, the actions of individual vessels in the sector would affect all members in the sector, setting up a situation where a fishermen may not recoup his investment because of the actions of another sector member. In addition, if disturbance to spawning aggregations slowed stock rebuilding efforts or adversely effected populations of stocks the current minimum mesh sizes were intended to protect, long run profits may decrease. Therefore, compared to the No Action Alternative, the resulting impacts on human communities for all options are likely to be low positive, but could be low negative if costs are not recouped.

Option A would provide greater operational flexibility to fishermen since they could use multiple mesh sizes during the same trip. Therefore Option A would potentially provide greater economic benefit to sector participants and ports when compared to Option D.

Compared to Option D, Options B and C have the potential for less short term economic benefit if fishermen cannot realize the minimum landings threshold or the maximum discard allowance. However, in the long term Option B and C would have more positive impacts on human communities compared to Option D due to the mitigated impacts on stock age structure. There is no discernible difference in terms of human communities impacts between Options B and C.

As the maximum landing threshold in Option B increases, more redfish are caught resulting in less catch of sublegal groundfish and non-target species and bycatch. Therefore, within the range considered under Option B a maximum landings threshold of 95% would mitigate the adverse impacts of this exemption on allocated target species, as well as non-target species and bycatch more than the 80% threshold. Similarly, as the minimum discard allowance in Option C decreases, more redfish are caught resulting in less catch of sublegal groundfish and non-target species and bycatch, Therefore, within the range considered under Option C, the 1% maximum discard allowance would mitigate the adverse impacts of this exemption on allocated target species, as well as non-target species and bycatch more than the 7% allowance. NMFS anticipates that within the ranges considered in Options B and C impacts to the physical environment/habitat/EFH and protected resources would be negligible because there would be no difference in CPUE. Sector vessels would have more flexibility and therefore more expected revenue under an 80% minimum landings threshold and a 7% maximum discard allowance than a 95% threshold or 1% allowance.

5.2.2 Alternative 2 – No Action

The No-Action Alternative would result in negligible impacts on physical environment/habitat/EFH, allocated target stocks, non-allocated target species and bycatch, and protected resources since fishing effort would not increase over the current baseline level.

Compared with Alternative 1, additional sector vessels would not be provided an opportunity to benefit from the increase in the operational flexibility and potential revenue from increased landings.

However, there would be no additional costs of purchasing new gear. Consequently, revenues and costs would be unchanged. Therefore, the No-Action Alternative would result in negligible economic and social impacts to both ports and sector participants.

5.3 INDUSTRY FUNDED AT-SEA MONITORING PROGRAM FOR VESSELS TARGETING REDFISH WITH 4.5-INCH OR GREATER MESH ALTERNATIVES

5.3.1 Alternative 1- Industry funded at-sea monitoring program for vessels targeting redfish with 4.5-inch or greater mesh

This alternative would allow a sector to use an industry funded at-sea monitoring program for vessels targeting redfish with 4.5-inch mesh or greater. Alternative 1 would result in negligible impacts on physical environment/habitat/EFH, and protected resources since fishing effort would not increase over the current baseline level. Impacts on allocated target stocks and non-allocated target species and bycatch would be low positive due to the increase in observer coverage and associated benefits with increased monitoring.

Alternative 1 would provide greater operational flexibility to sector participants since they would have increased opportunities to use the proposed 4.5-inch mesh, or greater, for directed redfish trips or the existing exemption in which sector vessels can use 6 inch mesh size or greater for directed redfish trips. Under this alternative, sectors with an approved industry-funded at-sea monitoring program would forfeit the opportunity to have a randomly-assigned federally funded observer or at-sea monitor on a declared redfish trip, and would be required to pay for an at-sea monitor. At-sea monitors cost approximately \$662 per seaday. This increase in costs reduces the net revenue per trip. Accordingly, it may take a vessel more trips to recoup upfront costs invested. However, if the exemption was revoked as the result of the sector triggering the thresholds in Options B or C (Alternative 1 in 5.2), a fisherman may not be able to recoup the up-front costs. If a vessel was at sea on a redfish trip when the exemption was revoked, the vessel may not be able to recoup the costs of paying for the at-sea monitor given the inability to continue harvesting fish on that trip. Also, industry-funded trips would not occur if NEFOP was at risk of being compromised. Meaning, if by shifting NEFOP-coverage to a redfish trip comprises the ability of NEFOP to cover its target of 25% of all other sector trips, the redfish trip would not occur given the lack of available NEFOP coverage. In summary, the increased operational flexibility and income from additional trips and catch is likely to outweigh the expense of paying for observer coverage. Therefore, Alternative 1 is expected to have a low positive impact on human communities.

5.3.2 Alternative 2- No Action

The No-Action Alternative would result in negligible impacts on physical environment/habitat/EFH, allocated target stocks, non-allocated target species and bycatch, and protected resources since fishing effort would not increase over the current baseline level.

Compared with Alternative 1, additional sector vessels would be prevented from taking the exemption trips target redfish when they want. As such, they would not be provided with an opportunity to benefit from the increase in the operational flexibility and potential revenue from increased landings. However, there would be no additional costs of at-sea monitoring for industry funded trips. Consequently, revenues and costs would be expected to be unchanged. Therefore, the No-Action Alternative would result in negligible economic and social impacts to both ports and sector participants.

5.4 CUMULATIVE EFFECTS ANALYSIS

The need for a cumulative effects analysis (CEA) is referenced in the CEQ regulations implementing NEPA (40 CFR Part 1508.25). CEQ regulations define cumulative impacts as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other action." The purpose of this CEA is to consider the effects of the proposed action and the combined effects of many other actions on the human environment over time that would be missed if each action were evaluated separately. CEQ guidelines recognize that it is not practical to analyze the cumulative effects of an action from every conceivable perspective, but, rather, the intent is to focus on those effects that are truly meaningful. The CEA baseline in this case consists of the combined effects of all FY 2012 sectors, and the past, present, and reasonably foreseeable future fishing and non-fishing actions which are described below.

This CEA assesses the combined impact of the direct and indirect effects of the proposed additional exemptions analyzed for all 19 sectors with the impact from the past, present, and reasonably foreseeable future fishing actions, as well as factors external to the multispecies fishery that affect the physical, biological, and socioeconomic resource components of the groundfish environment. This analysis is focused on the VECs (see below) and because this action is being taken just months after the 2012 Sectors were approved, it relies heavily on the analysis contained in the attached Sector EAs.

Valued Ecosystem Components (VECs): The CEA focuses on VECs specifically including:

- Physical environment/habitat (including EFH);
- Regulated stocks (allocated target groundfish stocks);
- Non-allocated target species and bycatch;
- Protected resources/endangered species; and
- Human communities (ports of sector operation and sector members).

Temporal and Geographic Scope of the Analysis: The temporal range that will be considered for habitat, allocated target species, non-allocated target species and bycatch, and human communities, extends from 2004, the year that Amendment 13 was implemented, to May 1, 2013, the beginning of the next fishing year. While the effects of actions prior to Amendment 13 are considered (see Amendment 16 for a full cumulative effects analysis), the cumulative effects analysis for this action is focused primarily on Amendment 13 and subsequent actions because Amendment 13 implemented the sector process and included major changes to management of the groundfish fishery, including substantial effort reductions.

The temporal range considered for the protected resources VEC begins in the 1990's when NMFS started generating stock assessments for marine mammals and developed recovery plans for sea turtles that inhabit waters of the U.S. EEZ.

The CEA examines future actions through April 30, 2013. This is the end of FY 2012 and the period of approval for this action. All sectors requested approval of their operations plans for one year. Therefore, the cumulative effects will need to be reassessed as part of the NEPA action taken for FY 2013.

The geographic scope considered for cumulative effects to habitat, allocated target species, and non-allocated target species and bycatch consists of the range of species, primary ports, and geographic areas (habitat) discussed in Section 4.0 (Affected Environment) of the attached EA. The range of each endangered and protected species as presented in Section 4.5 will be the geographic scope for that

VEC. The geographic scope for the human communities will consist of those primary port communities from which sector vessels originate and/or land their catch.

Summary of Direct/Indirect Impacts of the Proposed Action

The direct and indirect effects on the VECs from the FY 2012 supplemental EA (proposed action) compared to what the impacts would be if no additional exemptions or operations plan modifications were granted (No-Action) are summarized in Table 4.

Impacts to the physical and biological environment from the proposed exemption were assessed and found to be negligible with the exception habitat and, as well as allocated target species and non-target species. The exemption has low positive impacts on physical environment/habitat/EFH because of the expected reduction in trawling geardays for redfish. The exemption has a low negative impact on allocated target species and non-target species because it could result in greater retention of sub-legal groundfish. Impacts to the physical and biological environment from operations plan modification were assessed and found to be negligible with the exception of allocated target species and non-target species . Impacts to these VECs are considered to be low positive because due to the increase in observer coverage.

Other notable impacts would occur in ports and to sector participants. The exemption and operations plan modification would have likely have low positive impacts on human communities due to the increased operational flexibility and higher revenue. However, if the exemption disturbs to a point where spawning aggregations slowed stock rebuilding efforts or adversely effected populations of stocks the current minimum mesh sizes were intended to protect, long run profits may decrease. The resulting impacts human communities are therefore likely to be low positive but could possibly be low negative.

Past, Present and Reasonably Foreseeable Future Actions

Detailed information on the past, present, and reasonably foreseeable future actions that may impact this action can be found in the EIS for Amendment 16 to the NE multispecies FMP in addition FY 2012 Sector EA (attached). The information on relevant past, present and reasonably foreseeable future actions and their impacts are summarized in this section.

Aggregate Sector Impacts

Data from FY 2010 is presented in Section 4.1 and Section 5.1 of the FY 2012 Sector EA. General trends in catch, trips, and geardays for sector vessels fishing with groundfish gear are down. These downward trends are likely correlated with a reduction in the ACL in FY 2010 over FY 2009. Further reduction in ACL occurred in FY 2011.

The FY 2012 sector-specific harvest rules, State Permit Bank Sectors, sector-specific exemptions, and the State Permit Bank Sector-specific exemption are incorporated into the sector-specific impacts. In aggregate, they would have negligible impacts on physical environment/habitat/EFH, allocated target species, and non-allocated target species and bycatch. While the aggregate impact would be low negative for protected resources and aggregate impacts to human communities would be low positive.

Impacts related to general sector operations are considered below and summarized in Table 8.

Other Sector Operation Items

The potential impacts of the proportion of ACL in sectors is likely to be negligible to physical environment/habitat/EFH, allocated target stocks, non-allocated target species and bycatch, and protected resources, because there would likely be little potential for change in the potential amount of

catch, which would be controlled by ACEs for each sector. However, the catch may increase for abundant stocks such as haddock because of the increased flexibility to selectively target these stocks with gear specifically designed for this purpose. Sector participants would likely benefit from the ability to fish their ACE, which represents the majority of the ACL for the fleet, without effort control restrictions. This added flexibility, which would result in increased revenues, would result in low positive impacts to the sectors' ports.

The ability to transfer ACE within an allotment period results in a net increase of zero, having no impact on achieving target mortality rates, and would have a low positive impact on human communities and negligible impacts on the physical and biological environment.

Based on the sector's minor consolidation predictions in conjunction with State Permit Banks, it is anticipated that there would be negligible impacts to all VECs associated with permit consolidation. Consequently, based on this prediction, it is anticipated that there would be negligible impacts to all VECs associated with redistribution of effort due to ongoing sector operations. However, further reductions in groundfish ACE may result in effort shift into other fisheries.

Because the majority of the allowed catch for the fishery would belong to sectors, a greater proportion of the groundfish stocks would be monitored. More monitoring data would be generated, covering a larger percentage of the groundfish stocks, which would be a positive contribution for stock assessments and future regulation that rely on these assessments. Allocated target stocks, non-allocated target species and bycatch, and protected resources would experience a low positive cumulative impact because additional monitoring would provide information for more effective management of the fishery and a better understanding of interactions between fisheries and protected species. There would be a negligible effect on habitat, and a low negative impact on human communities due to the increased monitoring and enforcement costs.

Summary of Impacts from Sector Operations

Overall, the cumulative impacts associated with all sector operations are as follows: negligible impacts to physical environment/habitat/EFH, allocated target species, non-allocated target species and bycatch; low negative for protected resources; and low positive impacts to the human communities.

Table 8 Summary of Aggregated Sector Impacts

	Physical Environment	Bi	ological Environi	Human Communities		
Sector	Physical Habitat (incl. EFH)	Allocated Target Species	Non-allocated Target Species and Bycatch	Protected Resources	Ports	Sector Participants
AGGREGATE SECTOR IMPACTS						
Proportion of ACL	Likely Negl	Negl	Negl	Negl	L+	L+
Inter-Sector transfer of ACE	Negl	Negl	Negl	Negl	L+	L+
Consolidation of Permits	Negl	Negl	Negl	Negl	Negl	Negl
Redistribution of Effort	Negl	Negl	Negl	Negl	Negl	Negl
Monitoring	Negl	L+	L+	L+	L-	L-
Summary of Impacts	Negl	Negl	Negl	L-	L+	L+

Other Fishing Effects: Past, Present and Reasonably Foreseeable Future Groundfish and Related Management Actions

The following is a summary of the past, present, and reasonably foreseeable future fishing actions and effects thought most likely to impact this cumulative effects assessment. For additional information on the cumulative effects and to view the complete summary of the history of the NE Multispecies FMP, please see Amendment 16 to the NE Multispecies FMP.

Physical Environment/Habitat/EFH

Past and Present Actions: Amendments 13 and 16 as well as FWs 42, 44 and 45 to the Northeast Multispecies FMP reduced fishing effort. Reduction in fishing effort results in less gear interaction with bottom habitat, effectively producing positive effects for the physical environment.

NMFs implemented FWs 40A and 40B in 2004 and 2005. These FWs increased the number of cod caught with hook gear since previously non-hook vessels could now join the GB Cod Hook Sector. FW 41 allowed non-sector vessels to participate in the Hook Gear Haddock SAP established under FWs 40A and 40B. These actions had a negligible to low positive effect on habitat because hook gear has minimal impacts to bottom habitat. Further, FW 40B removed net limits for trip gillnet vessels, which may have resulted in gear switching to gillnets. While only slight effort changes occurred as a result of FW 40B, switching from gears with more bottom interaction to gillnets would have resulted in a negligible to low positive impact from the removal of the net limit for trip gillnet vessels.

The ALWTRP requires the use of sinking groundlines, which may have a negligible to low negative impact on habitat due to associated bottom sweep by the groundline. In addition, required use of weak links in gillnets may result in floating "ghost gear," which could snag on and damage bottom habitat.

Spawning stock biomass of spiny dogfish declined rapidly in response to a directed fishery during the 1990's. NFMS initially implemented management measures for spiny dogfish in 2001. These measures have been effective in reducing landings and fishing mortality. NMFS declared the spiny dogfish stock rebuilt for the purposes of U.S. management in May 2010. Prior to FY 2009, spiny dogfish trip limits and quotas were kept low to allow the species to rebuild. Fishermen typically retained spiny dogfish caught incidentally to other target fisheries. The quota was tripled in FY 2009 to 12 million pounds, and the daily trip limit was increased from 600 to 3,000 pounds. A 20 million pound TAL level and a 3,000 pound trip limit is in place for FY 2011. Most of the landed catch has historically been with bottom gillnets, not bottom trawls. Gillnets have a low impact on vulnerable benthic habitats and no appreciable amount of additional trawling was expected as a result of the quota and trip limit increase. Therefore, this FMP has likely had a negligible effect on physical environment/habitat/EFH.

The Monkfish FMP and its modifications have resulted in a reduction in fishing effort, which has resulted in less habitat-gear interaction. Amendment 5 to the Monkfish FMP did not change the DAS and trip limits. Framework Adjustment 7 to the Monkfish FMP (2011) increased the annual catch target for monkfish and increased the DAS and trip limits for category B and D permitted vessels in the Northern Fishery Management Area. Overall, due to the historic reduction in fishing effort, the Monkfish FMP has had a positive impact on physical resources.

Amendment 3 to the skate FMP seeks to sufficiently reduce discards and landings to rebuild stocks of winter, thorny, and smooth skates, and to prevent other skates from becoming overfished. The reduction in fishing effort should result in fewer habitat and gear interactions, a likely positive impact to the physical environment.

The HPTRP final rule (published February 19, 2010 (50 CFR 229.33)) expanded temporal and seasonal requirements within the HPTRP management areas for gillnet gear. This includes sink gillnet gear which is capable of catching groundfish species. The rule is not likely to modify the way that gillnet gear is used in a manner that would affect EFH and habitat. However, it would at least seasonally reduce fishing effort in closure areas. While gillnets have a small impact on benthic habitats, the HPTRP final rule would reduce geardays in closed areas. Therefore, the HPTRP rule is likely having a low positive effect on the physical environment/habitat/EFH.

Although scallop dredges have been shown to be associated with adverse impacts to some types of bottom habitat (NEFMC 2003b), no measure contained in Amendment 15 to the Scallop FMP is likely to increase adverse impacts to areas designated as EFH. Therefore impacts to physical environment/habitat/EFH are expected to be negligible.

Amendment 17 to the Northeast Multispecies FMP is administrative and is not projected to alter fishing behavior. Therefore, impacts to physical environment/habitat/EFH are expected to be negligible.

Frameworks 46 and 47 resulted in relatively minor adjustments in the context of the fishery and as such, on the whole are considered to have had a negligible impact on physical environment/habitat and EFH.

Future Actions: The EFH Omnibus Amendment will provide for a review and update of EFH designations, identify habitat areas of particular concern, as well as provide an update on the status of current knowledge of gear impacts. It will also include new proposals for management measures for minimizing the adverse impact of fishing on EFH that will affect all species managed by the NEFMC, in a coordinated and integrated manner. The net effect of new EFH and habitat areas of particular concern designations and more targeted habitat management measures should be positive for EFH.

Any future rule-making to revise the HPTRP could result in additional restrictions on gillnet fisheries. While, gillnets have a small impact on benthic habitat, any future modifications to the HPTRP that further restricts the use of gillnets would likely have a low positive effect on physical conditions due to the decreased fishing effort.

Framework 48 to the multispecies FMP is under development and potential impacts to habitat cannot be inferred as of the date of this EA.

The action to partially exemption the scallop industry from the Georges Bank yellowtail flounder accountability measures is not expected to adversely affect the physical environment because effort is not expected to change in reaction to the partial exemption.

Summary of Impacts: Management measures in Amendment 13, FW 42, Amendment 16, Amendment 3 to the Skate FMP, FW 44 and FW 45 have had positive effects on habitat due to reduced fishing efforts, consequently reducing gear interaction with habitat. The HPTRP could result in seasonal closures. These closures would result in a low positive impact by reducing fishing effort and the associated bottom interactions. Further, the omnibus EFH amendment would result in targeted habitat protection. This would have positive effects on benthic habitat and physical resources. FWs 40A, 40B, and 41 resulted in negligible to low positive effects on habitat by decreasing bottom impacts as more cod is caught with low impact fixed gear. The ALWTRP resulted in low negative to negligible effects on habitat due to the required use of a sinking groundline which may sweep the bottom and the potential for "ghost gear." The dogfish and scallop FMPs generally increased fishing effort for certain species and generally resulted in negligible to low negative effects on habitat. The Monkfish FMP has generally resulted in positive impacts on habit through fewer habitat and gear interactions. The proposed TED requirements would likely have negative effects on habitat due to potentially increased towing time. Amendment 17 is administrative in nature and would have negligible impacts on habitat. Frameworks 46 and 47 resulted in relatively minor adjustments in the context of the fishery and as such, on the whole are considered to have had a negligible impact on physical environment/habitat and EFH.

Overall, the cumulative effect of past, present, and reasonably foreseeable future fishing actions have resulted in positive effects on habitat.

Allocated Target Species

Past and Present Actions: Although management measures for groundfish were first enacted for the EEZ in 1977 under the original Multispecies FMP, the dramatic increase in larger vessels, bigger gear, and electronic aids, such as fish finders and navigation equipment, contributed to a greater efficiency and intensity of fishing. This in turn resulted in a precipitous drop in landings during the 1980's to an all-time low in the early 1990's. The following discussion is limited to past actions beginning with the implementation of Amendment 13. However, it should be noted that management actions taken prior to Amendment 13 have generally controlled effort on managed groundfish stocks, decreased impacts to habitat, reduced gear interactions with protected species, and had a negative impact on human communities. However, because actions prior to Amendment 13 did not rebuild overfished stocks to sustainable levels, greater effort reductions were necessary.

Amendments 13 and 16, as well as FWs 42, 44 and 45, implemented restrictions on fishing effort in order to rebuild groundfish stocks. These restrictions had positive effects on groundfish. In contrast, FW 40A and 40B allowed for minor increases in fishing effort on cod and/or haddock resulting in low negative impacts on these species. FW 41 expanded participation in the Hook and Gear Haddock SAP to non-sector vessels. However due to the small overall effort increase under this framework it had a negligible effect on allocated target species.

The results of the GARM III show stocks of ocean pout and Atlantic halibut are being fished at a sustainable level, but the biomass indicates stocks have not yet been rebuilt and are considered to be overfished. The stocks of GB haddock and pollock are rebuilt, and GOM haddock, Acadian redfish, and American plaice are no longer overfished or experiencing overfishing. This indicates Amendment 13 and FW 42 management actions have had positive effects on certain groundfish stocks. GOM cod and southern windowpane flounder are not overfished, but they are experiencing overfishing. All other groundfish stocks are overfished and are still experiencing overfishing. The management measures in Amendment 16 to the Northeast Multispecies FMP seek to address the overfishing.

Changes in the ACLs, TACs, and rebuilding strategies for some groundfish species and the implementation of the GOM Cod Spawning Protection Area a introduced measures that slightly reduced overall fishing effort and protected some spawning areas. Therefore, FW 45 had a low positive impact on the overall allocated target stocks.

Because skates, monkfish, and spiny dogfish are managed by FMPs other than the Northeast Multispecies FMP, the impacts of these management measures on allocated groundfish species are briefly discussed below.

The spiny dogfish FMP has resulted in an increase in stock biomass such that the most recent data indicates that the female spawning stock biomass is likely to be above the most recently calculated MSY biomass (B_{MSY}). This development has resulted in increases in both quota and trip limits for this species set by the FY 2010 and 2011 specifications NMFS and he MAFMC set a 20 million pound total allowable landings level and a 3,000 pound trip limit for the fishing year specifications for the FY 2011. With this increase in quotas and trip limits, it is likely that there will be an increase in the amount of spiny dogfish caught and landed by vessels fishing for groundfish. Dogfish is primarily caught incidentally in the multispecies fishery. Therefore, a rebuilt spiny dogfish stock would have negligible effects on allocated target groundfish species.

Monkfish is commonly caught along with groundfish and is one of the top target species that is not allocated to sectors by an ACE. Monkfish are currently regulated by the Monkfish FMP, which was implemented in 1999. The FMP was designed to stop overfishing and rebuild the stocks through:

- limiting the number of vessels with access to the fishery and allocating DAS to those vessels
- setting trip limits for vessels fishing for monkfish
- implementing minimum fish size limits, gear restrictions, and mandatory time out of the fishery during the spawning season

Amendment 5 to the Monkfish FMP implemented ACLs and AMs, and included both DAS and trip limits associated with the new catch targets based on updated stock information. The Monkfish FMP and subsequent amendments and framework actions have reduced fishing effort over the last decade. This has resulted in positive impacts for allocated target species.

As indicated in Table 87 of the Final EIS for Amendment 16 to the Northeast Multispecies FMP, skates comprised nearly half the landings by weight for FY 2006 and 2007, under the Category B DAS (multispecies) program. Skates are currently managed under an FMP. Amendment 3 to the FMP was implemented in 210 and limited skate possession to 500 lbs on common pool B DAS trips. The purpose of Amendment 3 to the Skate FMP regulations are to reduce discards and landings sufficiently to rebuild stocks of winter, thorny, and smooth skates, and to prevent other skates from becoming overfished. The new management measures in Amendment 3 may result in a reduction in fishing effort to rebuild biomass. Therefore, the likely impacts would be positive for the allocated multispecies stocks, which are simultaneously targeted with skates.

NMFS amended the regulations implementing the HPTRP in 2010 to address harbor porpoise mortalities (75 FR 7383). Under this rule, closure areas were implemented to reduce harbor porpoise interactions with fishing. Further, under the ALWTRP, seasonal closure areas and restrictions for commercial gillnets, including sink gillnets in the northeast, have been implemented. These take reduction plans could result in a restriction of fishing effort in closed areas; which would result in a negligible to positive impacts to groundfish species in the closed areas.

The target stock for Amendment 15 to the Scallop FMP is the Atlantic sea scallop. Yellowtail flounder (all three stocks) is a common bycatch species in the scallop fishery. Due to the rate of yellowtail flounder catch in the scallop fishery, Amendment 16 to the Multispecies FMP established a yellowtail flounder ACL sub-component for the scallop fishery. Under Amendment 15 of the Scallop FMP, AMs for the catch of yellowtail flounder in the scallop fishery were established. Therefore, yellowtail flounder caught in the scallop fishery will be considered a sub-ACL controlled by an AM. Adoption of ACLs and AMs for the scallop fishery and the yellowtail flounder bycatch should provide an incentive for scallop fishermen to reduce their yellowtail bycatch in order to maximize scallop yield. For this reason, Amendment 15 to the Scallop FMP should inherently have low positive impacts on allocated target species.

Amendment 17 to the Northeast Multispecies FMP is administrative and is not likely alter fishing behavior. Therefore, impacts to allocated target species are expected to be negligible.

Framework 46 adjusted the maximum allowable catch of haddock in the herring fishery, and does not impact the overall ACL. As such impacts would be negligible to allocated target species. Framework 47 resulted in relatively minor adjustments in the context of the fishery as a whole. Therefore, it is considered to have had a negligible impact on allocated target species.

Future Actions: The provisions in the EFH Omnibus Amendment could result in greater habitat protection for areas that are highly vulnerable to the adverse effects of fishing, resulting in a likely positive effect on groundfish.

Any future revisions to the HPTRP could result in additional restrictions on gillnet fisheries. Future actions would likely result in vessels facing additional restrictions and decreased fishing effort, possibly resulting in positive impacts to groundfish and other species that are taken incidentally in the gillnet fishery.

As described in a Notice of Intent to prepare an EIS (74 FR 88 May 8, 2009), NMFS is considering increasing the size of the escape opening for TEDs in the summer flounder fishery, expanding the use of TEDs to other trawl fisheries, and modifying the geographic scope of the TED requirements. Since the sectors operate under an ACE, and assuming that the ACE is met, the TED requirements would likely have a negligible effect on the target species as the same quantity of targeted fish would be landed.

Framework 48 to the multispecies FMP is under development and potential impacts to target species cannot be inferred as of the date of this EA.

The action to partially exemption the scallop industry from the georges bank yellowtail flounder accountability measures is not expected to adversely affect allocated target species because effort is not expected to change in reaction to the partial exemption.

Summary of Impacts: Amendment 13, FW 42, Amendment 16, FW 44, and FW 45 have had (or would be expected to have) positive effects on allocated target species. Other FMPs that affect other species landed by groundfish sectors also result in positive effects on allocated target species. Future measures that will likely restrict fishing effort (EFH Omnibus, HPRTP) will also have positive effects

on allocated target species. Actions that increase fishing effort (i.e., FWs 40A, 40B, 41) had low negative or negligible effects on allocated target species. Amendment 17, ALWTRP and TED requirements would all have negligible impacts on allocated resources. Frameworks 46 and 47 had negligible impacts to allocated target species. Overall, the cumulative effect of past, present, and reasonably foreseeable future fishing actions have resulted in positive effects on allocated target species.

Non-allocated Target Species and Bycatch

Past and Present Actions: Non-allocated target species and bycatch are those species that dominate bycatch (i.e., dogfish) or are the primary alternate species that are landed by groundfishermen (i.e., monkfish and skates). Northeast multispecies FMP management actions that reduce fishing effort (i.e., Amendment 13, FW 42, 44, and 45, and Amendment 16) have or will likely have indirect positive effects on non-allocated target species and bycatch caught in conjunction with the allocated target species. Conversely, actions that increase fishing effort (i.e., FW 40A, FW 40B, 41) have negligible or low negative effect on both landed species and bycatch.

Spiny dogfish was one of the top non-groundfish species landed by multispecies vessels under the Category B (regular) DAS program (Table 87 of Amendment 16 Final EIS). This species primarily interacts with gillnet and hook and line gear, and represented over 90 percent of the bycatch reported by the GB Cod Fixed Gear and Hook Sectors in 2006 and 2007. Since the spiny dogfish stock is managed under a FMP separate from the Northeast Multispecies FMP, the impacts of the spiny dogfish FMP are briefly discussed. The spiny dogfish FMP was implemented in 2000 in response to a decline in the female spawning stock biomass, and it initiated stock rebuilding measures. Included among the approved management measures in the FMP was the requirement that the MAFMC and NEFMC jointly develop annual specifications, which include a commercial quota to be allocated on a semi-annual basis, and other restrictions to assure that fishing mortality targets will not be exceeded. Based upon the 2009 updated stock assessment performed by the Northeast Fisheries Science Center, the spiny dogfish stock is not presently overfished and overfishing is not occurring. NMFS declared the spiny dogfish stock rebuilt for the purposes of U.S. management in May 2010. The dogfish FMP has resulted in a positive impact to the dogfish stock, the primary bycatch species of the groundfish fleet.

Monkfish is commonly caught along with groundfish and is considered one of the top target species that is not allocated to sectors by an ACE (i.e., non-allocated target species). Monkfish are currently regulated by the Monkfish FMP, which was implemented in 1999. The Monkfish FMP and subsequent amendments (such as Amendment 5) and framework actions have reduced fishing effort over the last decade, which has resulted in positive impacts for groundfish and non-groundfish stocks (including bycatch).

Skates comprised nearly half the landings by weight for FY 2006 and 2007 under the Category B DAS (multispecies) program (see Table 87 of the Final EIS for Amendment 16 to the Northeast Multispecies FMP). Skates are currently managed under a separate FMP NMFS implemented Amendment 3 to the Skate FMP in 2010 to reduce discards and landings sufficiently to rebuild stocks of winter, thorny, and smooth skates, and to prevent other skates from becoming overfished. The new management measures in Amendment 3 may reduce fishing effort to rebuild biomass. Therefore, the impacts would be positive for non-allocated target species.

As with allocated target species, revisions to the HPTRP and the ALWTRP could result in additional restrictions on vessels, possibly resulting in negligible to positive impacts to bycatch through effort reductions.

Amendment 15 to the Scallop FMP implemented specific gear and area restrictions that should reduce bycatch of various non-target species. Effort controls to maintain sustainability in the scallop fishery have reduced effort and increased efficiency of the fleet, which reduces impact on non-allocated target species and bycatch. Overall, if mortality on scallops is higher than expected and ACLs are exceeded, AMs will be implemented to correct the overage. That reduced effort would have beneficial impacts on non-allocated target species. Further, it would be expected that AMs developed for yellowtail flounder would also reduce impact on other non-allocated targeted and bycatch species. While there may be a benefit to non-yellowtail flounder bycatch species due to AMs in Amendment 15 and reduced fleet effort due to increased efficiency, impacts from Amendment 15 to Scallop FMP on non-allocated target species and bycatch would be negligible because specific AMs or sub-ACLs for other non-allocated targeted and bycatch species have not been established under this Amendment,

Amendment 17 to the Northeast Multispecies FMP is administrative and is not expected to alter fishing behavior. Therefore, impacts to non-allocated target and bycatch species are expected to be negligible.

Framework 46 adjusted the maximum allowable catch of haddock in the herring fishery, and does not impact the overall ACL. As such impacts for Framework 46 are considered negligible to non-allocated target species. Framework 47 resulted in relatively minor adjustments in the context of the fishery as a whole. Therefore, it is considered to have had a negligible impact on non-allocated target species.

Future Actions: Implementation of the EFH Omnibus Amendment may result in additional habitat protections for which there is an indirect positive effect to bycatch species, as they would also receive protection. Similar to allocated species, any future revisions to the HPTRP could result in additional restrictions on gillnet fisheries, possibly resulting in positive impacts to non-allocated target species and bycatch through effort reductions.

NMFS is considering increasing the size of the escape opening for TEDs in the summer flounder fishery, expanding the use of TEDs to other trawl fisheries, and modifying the geographic scope of the TED requirements (74 FR 88 May 8, 2009) to protect sea turtles as part of the Strategy. Because TEDs with a larger escapement opening would likely exclude some of non-turtle species from capture in the codend, the TED requirements would likely have a positive effect on non-allocated target species and bycatch.

Framework 48 to the multispecies FMP is under development and potential impacts to non-target species and bycatch cannot be inferred as of the date of this EA.

The action to partially exemption the scallop industry from the Georges Bank yellowtail flounder accountability measures is not expected to adversely affect non-allocated target species and bycatch because effort is not expected to change in reaction to the partial exemption.

Summary of Impacts: Actions that reduce fishing effort have had positive effects on non-allocated target species and bycatch because in general, less fishing effort results in less impact from fishing on non-allocated target species and bycatch. Further FMPs developed for non-allocated target species (such as monkfish, dogfish, and skates) have resulted in positive impacts to these species. However, recent groundfish actions that reduce fishing effort may not have benefited non-allocated target species to a great extent, due to the percentage of these species caught as bycatch, and increased targeting of non-groundfish species. Conversely, actions that increase fishing effort (i.e., FW 40A, FW 40B, FW 41) are considered to have low negative or negligible effects on non-allocated target species and bycatch because more fishing generally results in more non-allocated target species and bycatch. TEDs requirements would likely have a positive effect on non-allocated target species and bycatch and discards as they would likely exclude some of these species from capture in the codend. Amendment 17 would have negligible impacts on non-allocated target species and bycatch as it is an

administrative action. Frameworks 46 and 47 had negligible impacts to non-allocated target species. Overall, the cumulative effect of past, present, and reasonably foreseeable future fishing actions have resulted in positive effects on non-allocated target species and bycatch.

Protected Resources

Past and Present Actions: Reductions in fishing effort through the implementation of management actions such as Amendment 13, FWs 42, 44 and 45, Amendment 16 have generally had positive effects on protected resources by limiting the amount of fishing gear used in their geographic range during the fishing year, which may result in reductions in the rates of gear interaction with endangered species and other protected resources. FWs 40A, 40B, and 41 allowed minor increases in fishing with fixed gear, which were expected to have negligible impacts on protected resources.

In addition to these actions, NMFS has implemented specific regulatory actions to reduce injuries and mortalities from gear interactions. NMFS implemented the ALWTRP in 1999 with subsequent rule modifications, restrictions, and extensions. ALWTRP includes:

- time and area closures for trap/pot fisheries (e.g., lobster and black sea bass) and gillnet fisheries (e.g., anchored gillnet and shark gillnet fisheries)
- gear requirements, including a general prohibition on having line floating at the surface in these fisheries; a prohibition on storing inactive gear at sea
- restrictions on setting shark gillnets off the coasts of Georgia and Florida and drift gillnets in the Mid-Atlantic.
- and non-regulatory aspects such as gear research, public outreach, scientific research, a network to inform mariners when right whales are in an area, and increasing efforts to disentangle whales caught in fishing gear.

The intent of the ALWTRP is to positively affect large whales by reducing injuries and deaths of large whales (North Atlantic right, humpback, and fin) in waters off the U.S. East Coast due to incidental entanglement in fishing gear.

The HPTRP was implemented in 1998 and was expected to have a positive impact on harbor porpoises. Additional HPTRP measures implemented in 2010 placed additional management restrictions for gillnetters.

The Skate and Monkfish FMPs have historically resulted in a reduction in fishing effort, which has resulted in less fishery interactions with protected resources. Therefore, these FMPs have had positive impact on protected resources.

Under the dogfish FMP, it is likely that there will be an increase in the amount of spiny dogfish caught and landed by vessels fishing for groundfish. Because vessels capturing spiny dogfish primarily use bottom gillnets, this fishery would be subject to protected resources take minimization measures such as pinger requirements and closed areas in the HPTRP and ALWTRP. Therefore, the dogfish FMP would have a negligible effect on protected resources.

Bycatch is one of the primary factors affecting Atlantic sturgeon cited in NMFS' listing for the five DPSs of Atlantic sturgeon. Previous analyses concluded that to remain stable or grow, populations of Atlantic sturgeon can sustain only very low anthropogenic sources of mortality (Kahnle *et al.* 2007). It is apparent, therefore, that reductions in bycatch mortality will most likely be required in order to recover Atlantic sturgeon. Current estimates for DPS are noted in Section 4.5.2.5 of the attached EA. Although NMFS does not have information necessary to determine the sex or spawning condition of Atlantic sturgeon encountered by the groundfish fishery, these encounters may include both males and females and fish that may or may not spawn during that year. Therefore, encounters of Atlantic

sturgeon by the groundfish fishery are expected to be a subset of the entire population, as opposed to being comprised exclusively of the smaller annual spawning population.

On February 6, 2012, NMFS issued two final rules (77 FR 5880-5912; 77 FR 5914-5982) listing five Distinct Population Segments (OPS) of Atlantic sturgeon as threatened or endangered. Four DPSs (New York Bight, Chesapeake Bay, Carolina and South Atlantic) are listed as endangered and one DPS (Gulf of Maine) is listed as threatened. The effective date of the listing is April 6, 2012.

NMFS has reinitiated consultation on the ten fisheries, including the NE Multispecies FMP. NMFS has determined that allowing these fisheries to continue during the reinitiation period will not violate ESA sections 7(a)(2) and 7(d). Preliminary analysis indicates that multiple DPSs of Atlantic sturgeon may be affected by the continued operation of these fisheries. During the reinitiation period, NMFS will also review information on listed whales and sea turtles that has become available since consultations on these FMPs were last completed and will incorporate new information and analysis into the biological opinions as appropriate. NMFS anticipates completing the consultations prior to FY 2013.

NMFS has determined that the continued operation of the NE Multispecies FMP during the reinitiation period is not likely to jeopardize the continued existence of any Atlantic sturgeon DPS. This is based on the short time period encompassed by the reinitiation period and consequently, the scale of any interactions with Atlantic sturgeon that may occur during this period.

NMFS will implement any appropriate measures outlined in the Biological Opinion (BO) to mitigate harm to Atlantic sturgeon Further, the encounter rates and mortalities for Atlantic sturgeon that have been calculated as part of the preliminary analysis of NEFOP data (as discussed in Section 4.5.4 of the attached EA) include encounters and mortalities by all fisheries utilizing large-mesh sink gillnet and otter trawl gear, including the spiny dogfish, and monkfish fisheries. Thus, it is likely that rates of encounters and mortalities by the groundfish fishery would be lower than those estimates. Finally, this EA evaluates a temporary action, one that is only in place for FY 2012. Therefore, impacts resulting from the approval of the proposed action are not likely to be significant.

Amendment 15 to the Scallop FMP had measures that would be unlikely to alter scallop fishery impacts on protected resources. Therefore, impacts to protected resources are expected to be negligible.

Amendment 17 to the Northeast Multispecies FMP is administrative and is not expected to alter fishing behavior. Therefore, impacts to protected resources are negligible.

The impacts of Framework 46 contained measures that would be considered to be negligible to protected species as the catch cap would be part of the groundfish allocation structure, and would only allow for the herring fishery to catch what has already been allocated and analyzed. Framework 47 resulted in relatively minor adjustments in the context of the fishery as a whole. Therefore, it is considered to have had a negligible impact on protected resources.

Future Actions: The impacts of the EFH Omnibus Amendment on protected resources would likely be negligible. Any future modifications to the HPTRP may be implemented if harbor porpoise interaction reduction goals are not met, which would result in a positive impact on protected resources through additional reductions in harbor porpoise interactions.

The sea turtle strategy is a gear-based approach to addressing sea turtle bycatch and would decrease impacts to sea turtles from fishing operations. NMFS is working to develop and implement bycatch reduction measures in all trawl fisheries in the Atlantic and Gulf of Mexico (72 FR 7382, February 15, 2007) and is considering amendments to the regulatory requirements for TEDs (72 FR 7382).

Changes in TED regulatory requirements would increase protection of sea turtles; therefore, this action would result in a positive impact on protected resources.

Serious injuries and mortalities of Atlantic sturgeon in commercial fishing gear are a likely concern for the long term persistence and recovery of the DPSs, and are a primary reason cited for the proposals to list the DPSs under the ESA. If final listing determinations are issued, the existing Section 7 consultation for the multispecies fishery would be reinitiated consistent with the requirement to reinitiate formal consultation where discretionary Federal agency involvement or control of the action has been retained and a new species is listed that may be affected by the action. During the reinitiation, the effects of the multispecies fishery on the five DPSs would be fully examined. Along with the impacts analysis, the formal consultation process will result in conservation recommendations and, if pertinent, reasonable and prudent measures, which would be actions deemed necessary or appropriate to minimize the impacts of take.

Framework 48 to the multispecies FMP is under development and potential impacts to protected resources cannot be inferred as of the date of this EA.

The action to partially exemption the scallop industry from the georges bank yellowtail flounder accountability measures is not expected to adversely affect the physical environment because effort is not expected to change in reaction to the partial exemption.

Summary of Impacts: Management actions that reduce fishing effort often also reduce gear interaction with protected resources, resulting in positive effects. FWs 40A, 40B, and 41 allowed minor increases in fishing, which have negligible to low negative impacts on protected resources. With the exception of the EFH Omnibus Amendment, all other management actions described were designed to benefit or be negligible to protected resources. Therefore, these actions are all considered to have positive effects on this VEC. Overall, the cumulative effect of these past, present, and reasonably foreseeable future fishing actions have resulted in positive effects on protected resources.

Human Communities

Past and Present Actions: Past and present actions that have had negative short-term and low positive long-term impacts to the port communities and positive impacts to sector members include Amendment 13, FWs 42, and 45, and Amendments 16 and 17 to the Northeast multispecies FMP. These actions both substantially cut fishing effort in order to rebuild stocks by mandated timeframes, resulting in economic losses in the short-term. Because these actions are designed to rebuild the groundfish stocks and stabilize the fishing industry, these actions are expected to have long-term positive effects on the human communities.

FW 40A implemented the Closed Area I Hook Gear Haddock SAP which allowed increased opportunities for the GB Cod Fixed Gear and Hook Sector to fish healthy haddock stocks using hook gear only, resulting in a low positive effect for members of this sector. FW 41 allowed non-sector vessels to participate in the Closed Area I Hook Gear Haddock SAP, which extended the positive economic effects to non-sector vessels and increased revenue for the port communities, resulting in a low positive effect. FW 40B allowed vessels with no hook history to join the GB Cod Hook Sector and contribute their historical cod landings to the sector's allocation based on landings made with gear types other than hook gear, resulting in a low positive impact to the sector participants.

The ALWTRP had impacts on the human community ranging from low negative to negligible; primarily because these measures required minor gear modifications for gillnet gear to reduce impacts to protected resources. Similarly, actions of the HPTRP could have negative impacts, particularly if the impacts from this plan compound reductions implemented via Amendment 16.

Historically, the spiny dogfish FMP has had a low negative impact on human communities because of the implementation of quotas and trip limits, therefore, reducing revenue. However, the FY 2009 and FY 2010 specifications increased the quota and trip limits because the species is no longer considered overfished nor is overfishing occurring. This increase in quota and the rebuilding goal of the FMP will likely have a positive impact on the human communities because there will be a sustainable fishery available for harvest.

The Monkfish FMP has resulted in a reduction in fishing effort while the stock was rebuilding, which resulted in less revenue and a low negative impact on human communities. Over the long term, a sustainable monkfish fishery through management actions would result in long term beneficial impacts. Amendment 5 is currently considering a range of alternatives which would establish ACLs and AMs that would likely control fishing effort at a level that achieves optimum yield while preventing overfishing, which may continue the long-term positive effect.

Amendment 3 to the Skate FMP will likely have negative economic impacts on the ports and sector members because of the expected restrictions on fishing effort. Similarly, the actions of the HPTRP could have negative impacts, particularly if the impacts from this plan compound reductions implemented via Amendment 16.

Amendment 17 to the Northeast Multispecies FMP is an administrative action clarified and streamline the procedures and requirements with which NOAA-sponsored, state-operated permit banks must comply in order to lease allocation to a sector and sector vessels. Therefore, due to its administrative nature, Amendment 17 had negligible impacts on human communities.

Most of the measures in Amendment 15 to the Scallop FMP will not change economic impacts for the scallop fishery, or are expected to have indirect economic benefits. Amendment 15 would result in the establishment of AMs and a yellowtail flounder bycatch ACE. Because this yellowtail flounder bycatch ACE would be accounted for under Amendment 16 to the Multispecies FMP, the establishment of yellowtail flounder AMs are designed to rebuild the yellowtail flounder stocks and stabilize the fishing industry, these actions are expected to have a low positive effect on the human communities that rely on groundfish. Further, the sub-ACL of yellowtail flounder would represent the amount that has been caught in the scallop fishery in the past; therefore, the AMs would apply to the scallop fishery (such as in the case of an overage), and not necessarily be applied against the sector's ACE. This would result in an additional positive impact on human communities, as the sector vessels would not likely be held accountable for an overage from the scallop fleet.

Framework 46 increased the amount of haddock the herring fishery can catch before reaching its cap; however, it effectively does so by reallocating fish from the groundfish fishery. This can lead to negative *attitudes*, especially by smaller operators in the groundfish fleet who perceive the much larger herring vessels to be unfairly benefitted by these types of measures. Therefore, a negligible to low negative impact to human communities resulted from this framework.

Framework 47 resulted in relatively minor adjustments in the context of the fishery as a whole. Therefore, it is considered to have had a negligible impact on human communities.

Future Actions: Cumulative effects of the EFH Omnibus Amendment cannot easily be determined. Similar to the 2010 modifications to the HPTRP, potential future modifications could result in additional reductions in fishing effort which would result in a negative impact on human communities.

As described in a Notice of Intent to prepare an EIS as part of the Sea Turtle Strategy (74 FR 88 May 8, 2009), NMFS is considering modification of TED requirements. New TED requirements would likely have a negative economic effect on sector members that trawl because of the costs associated

with adding and/or modifying TEDs to comply with the new regulation and the costs associated with a decrease in landed species if vessels would not offset a loss in catch.

Framework 48 to the multispecies FMP is under development and potential impacts to human communities cannot be inferred as of the date of this EA.

The action to partially exemption the scallop industry from the Georges Bank yellowtail flounder accountability measures could have negative impacts to the groundfish fishery if the fishery level ACL is exceeded.

Summary of Impacts: The effects of past, present, and reasonably foreseeable future fishery management actions have been positive on nearly all VECs with the exception of human communities. Management measures designed to benefit protected resources and restrict fishing effort have low negative effects on the human communities. However, the establishment of ACLs through sectors and the ultimate goal of rebuilding groundfish stocks to sustainable levels will benefit the human communities eventually. Overall, the cumulative effect of past, present, and reasonably foreseeable future fishing actions have resulted in negative effects on human communities in the long-term.

Non-Fishing Effects: Past, Present, and Reasonably Foreseeable Future Actions

Non-fishing activities that occur in the marine nearshore and offshore environments and their watersheds can cause the loss or degradation of habitat and/or affect the species that reside in those areas. Table 5.2.4-1 in the attached original sector EA provides a summary of past, present, and reasonably foreseeable non-fishing activities and their expected effects on VEC's in the affected environment. The following discussions of impacts are based on past assessments of activities and assume these activities will likely continue into the future as projects are proposed. More detailed information about these and other activities and their impacts are available in the publications by Hansen (2003) and Johnson et al. (2008).

Construction/Development Activities and Projects: Construction and development activities include, but are not limited to, point source pollution, agricultural and urban runoff, land (roads, shoreline development, wetland loss) and water-based (beach nourishment, piers, jetties) coastal development, marine transportation (port maintenance, shipping, marinas), marine mining, dredging and disposal of dredged material and energy-related facilities, all of which are discussed in detail in Johnson et al. (2008). These activities can introduce pollutants (through point and non-point sources), cause changes in water quality (temperature, salinity, dissolved oxygen, suspended solids), modify the physical characteristics of a habitat or remove/replace the habitat altogether. Many of these impacts have occurred in the past and present and their effects would likely continue in the reasonably foreseeable future. It is likely that these projects would have negative impacts caused from disturbance, construction, and operational activities in the area immediately around the affected project area. However, given the wide distribution of the affected species, minor overall negative effects to offshore habitat, protected resources, allocated target stocks, and non-allocated target species and bycatch are anticipated because the affected areas are localized to the project sites, which involve a small percentage of the fish populations and their habitat. Thus, these activities for most biological VECs would likely have an overall low negative effect due to limited exposure to the population or habitat as a whole. Any impacts to inshore water quality from these permitted projects. including impacts to planktonic, juvenile, and adult life stages, are uncertain but likely minor due to the transient and limited exposure. It should be noted that wherever these activities co-occur, they are likely to work additively or synergistically to decrease habitat quality and, as such, may indirectly constrain the sustainability of the allocated target stocks, non-allocated target species and bycatch, and protected resources.

Restoration Projects: Other regional projects that are restorative or beneficial in nature include estuarine wetland restoration; offshore artificial reef creation, which provides structure and habitat for many aquatic species; and eelgrass (*Zostera marina*) restoration, which provides habitat for, among other things, juvenile Atlantic cod. These types of projects improve habitats, including nursery habitats for several commercial groundfish species. Due to past and present adverse impacts from human activities on these types of habitat, restorative projects likely have slightly positive effects at the local level.

Protected Resources Rules: The NMFS final Rule on Ship Strike Reduction Measures (73 FR 60173, October 10, 2008) is a non-fishing action in the United States-controlled North Atlantic that is likely to affect endangered species and protected resources. The goal of this rule is to significantly reduce the threat of ship strikes on North Atlantic right whales and other whale species in the region. Ship strikes are considered the main threat to North Atlantic right whales; therefore, NMFS anticipates this regulation will result in population improvements to this critically endangered species.

Energy Projects: Cape Wind Associates (CWA) has received approval to construct a wind farm on Horseshoe Shoal, located between Cape Cod and Nantucket Island in Nantucket Sound, Massachusetts. The CWA project would have 130 wind turbines located as close as 4.1 miles off the shore of Cape Cod in an area of approximately 24 square miles with the turbines being placed at a minimum of 1/3 of a mile apart. The potential impacts associated with the CWA offshore wind energy project include the construction, operation, and removal of turbine platforms and transmission cables; thermal and vibration impacts; and changes to species assemblages within the area from the introduction of vertical structures. Other offshore projects that can affect VECs include the construction of offshore liquefied natural gas (LNG) facilities such as the project "Neptune." As it related to the impacts of the proposed action, the Neptune project is expected to have small, localized impacts where the pipelines and buoy anchors contact the bottom.

Summary of Impacts: Most of the impacts from these aforementioned activities are uncertain but would likely range from negative to low negative in the immediate areas of the project site. However, on a larger-scale population level, these activities are likely to have a low negative to negligible impact on a population level, considering that the large portion of the populations have a limited or negligible exposure to these local non-fishing perturbations and that existing regulatory requirements would likely mitigate the severity of many impacts (see Table 5.2.4-1 in the attached original sector EA).

Summary of Cumulative Effects

The following analysis summarizes the cumulative effects of past, present, and reasonably foreseeable future actions in combination with the proposed action on the VECs identified in Section 5.1.

Physical Environment/Habitat/EFH

While the impact analysis in this action is focused on direct and indirect impacts to the physical environment and EFH, there are a number of non-fishing impacts that must be considered when assessing cumulative impacts. Many of these activities are concentrated near-shore and likely work either additively or synergistically to decrease habitat quality. Other non-fishing factors such as climate change and ocean acidification are also thought to play a role in the degradation of habitat. The effects of these actions, combined with impacts resulting from years of commercial fishing activity, have negatively affected habitat. However, impacts from the proposed action were found to be negligible to low positive. Therefore, when considering the cumulative effects of this action in combination with past, present, and reasonably foreseeable future actions, no significant impacts to the physical environment, habitat or EFH from the proposed action are expected.

Allocated Target Species

As found in the cumulative effects analysis for Amendment 16 to the FMP (NEFMC 2009), the long-term trend has been positive for cumulative impacts to target species. While several groundfish species remain overfished or overfishing is occurring, substantial effort reductions because implementation of the NE Multispecies FMP have allowed several stocks to rebuild and the rebuilding process for others is underway. Further, indirect impacts from the effort reductions in other FMPs are also thought to contribute to groundfish mortality reductions. These factors, when considered in conjunction with the proposed action which would have low negative to low positive impacts to allocated target species, would not have any significant cumulative impacts.

Non-allocated Target Species and Bycatch

The primary non-allocated target and bycatch species analyzed for the purposes of this EA are monkfish, spiny dogfish, and skates. Management efforts in the past have led to each of these species being managed under their own FMP, and with the exception of smooth and thorny skates which are overfished; none of these species is overfished, nor is overfishing occurring. Impacts to all of these species from the proposed action were found to be low negative to low positive. However, when taken into context with past actions to manage to the mortality of these species and the Amendment 3 action to the Skate FMP which adds further skate rebuilding measures would not result in any significant cumulative impacts.

Protected Resources

The proposed action would have negligible impacts on protected resources. Historically, the implementation of FMPs has resulted in reductions in fishing effort and as a result, past fishery management actions are thought to have had a slightly positive impact on strategies to protect protected species. Gear entanglement continues to be a source of injury or mortality, resulting in some adverse effects on most protected species to varying degrees. One of the goals of future management measures will be to decrease the number of marine mammal interactions with commercial fishing operations. Measures adopted by Amendment 16 to the Northeast Multispecies FMP will substantially reduce the overall commercial fishing effort and the amount of groundfish that can be caught, relative to historical amounts that have been harvested by the commercial multispecies fleet. The cumulative result of these actions to meet mortality objectives will be positive for protected resources. The effects from non-fishing actions are also expected to be low negative as the potential for localized harm to VECs exists. The combination of these past actions along with future initiatives to reduce turtle interactions through the Sea Turtle Strategy when considered with the proposed action would not result in significant cumulative impacts.

Human Communities and Social and Economic Environment

Although vessels would potentially have to purchase new gear or pay for at-sea monitoring to utlize the exemptions, the proposed action would have low positive impacts due to the increased flexibility and revenue that the exemptions would provide. Past management actions have had significant negative impacts on communities that depend on the groundfish fishery, particularly as a result of decreases in revenue. Although special programs implemented through Amendment 13 and subsequent framework actions have provided the industry additional opportunities to target healthier groundfish stocks, substantial increases in landings and revenue will likely not take place until further stock rebuilding occurs under the Amendment 16 rebuilding plan. Impacts from the proposed action when taken into consideration with past, present, and reasonably foreseeable future actions would likely due little to change this finding.

Table 9 Cumulative Effects Resulting from Implementation of the Proposed Action and CEA Baseline

Baseline							
		Habitat Impacts	Biological Impacts			Human Community Impacts	
		Habitat	Allocated Target Species	Non- allocated Target Species and Bycatch	Endangered/ Protected Species	Ports	Sector Participants
Cumulative Effect Baseline	Effects of Sectors (see Table 8)	Negl	Negl	Negl	L(-)	L(+)	L(+)
	Effects of Past, Present, and Reasonably Foreseeable Future Non-Fishing Actions	(-) to L(-)	L(-)	L(-)	L(-)	Negl to L(-)	Negl to L(-)
	Effects of Past, Present, and Reasonably Foreseeable Future Fishing Actions	(+)	(+)	(+)	(+)	(-)	(-)
Direct and Indirect Effects of Proposed/Supplemental Action (see Table 7)		Negl to L(+)	L (-) to L(+)	L (-) to L(+)	Negl	L(+)	L(+)
Cumulative Effects Summary of Effects from implementation of Proposed Action and Cumulative Effect Baseline		Negl	Negl	Negl	Likely L(-)	L(+)	L(+)

6.0 LIST OF PREPARERS AND PERSONS/AGENCIES CONSULTED

This document was prepared by the National Marine Fisheries Service staff in the Sustainable Fisheries Division (William Whitmore, Brett Alger), and the National Environmental Policy Act Group (Brian Hooper). In addition, this document was reviewed by NMFS staff in the following divisions:

Habitat Conservation Division, Northeast Region Office, Gloucester, MA Protected Resource Division, Northeast Region Office, Gloucester, MA Sustainable Fisheries Division, Northeast Region Office, Gloucester, MA NEPA Group, Northeast Region Office, Gloucester, MA Social Sciences Branch, Northeast Fisheries Science Center, Gloucester, MA

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7.0 COMPLIANCE WITH APPLICABLE LAWS AND EXECUTIVE ORDERS

7.1 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

Section 301 of the Magnuson-Stevens Act requires that FMPs contain conservation and management measures that are consistent with the ten National Standards. The most recent FMP changes implemented by Amendment 16 address how the proposed management actions comply with the National Standards. Under Amendment 16, the NEFMC adopted conservation and management measures that would end overfishing and rebuild NE multispecies stocks to achieve, on a continuing basis, the optimum yield for NE multispecies stocks and the U.S. fishing industry using the best scientific information available consistent with National Standards 1 and 2. The NE Multispecies FMP and implementing regulations manage all 20 groundfish stocks (13 species) throughout their entire range, as required by National Standard 3. Section 9.1.1 of Amendment 16 describes how the sector measures implemented under that action do not discriminate among residents of different states consistent with National Standard 4, do not have economic allocation as their sole purpose (National Standard 5), account for variations in these fisheries (National Standard 6), avoid unnecessary duplication (National Standard 7), take into account fishing communities (National Standard 8), addresses bycatch in fisheries (National Standard 9), and promote safety at sea (National Standard 10). By proposing to meet the National Standards requirements of the Magnuson-Stevens Act through future FMP amendments and framework actions, the NEFMC will ensure that overfishing is prevented, overfished stocks are rebuilt, and the maximum benefits possible accrue to the ports and communities that depend on these fisheries and the Nation as a whole.

The proposed action would comply with all elements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), including the National Standards, and the NE Multispecies FMP. This action is being taken in conformance with the NE Multispecies FMP, which requires that an EA of sector operations plans be prepared in compliance with NEPA, Magnuson-Stevens Act, and other applicable laws and Executive Orders. Amendment 13 to the FMP established the sector operations plan approval process. Amendment 16 to the FMP authorized 17 new sectors and revised the regulations governing all 19 sectors. A final rule published May 2, 2012 (77 FR 26129), approved fishing year (FY) 2012 operations plans for 18 sectors, including the GB Cod Fixed Gear Sector, Sustainable Harvest Sectors I and III, Port Clyde Community Groundfish Sector, Tri-

State Sector, Northeast Coastal Communities Sector, and Northeast Fishery Sectors I through XII. Nothing in this action changes the findings that the measures approved in Amendment 16 or the final rule approving FY 2012 sector operations comply with the provisions of the Magnuson-Stevens Act, NEPA, and other applicable law.

There are no adverse impacts associated with this action, so no EFH assessment or EFH consultation is required, as determined by a Habitat Conservation Division Review (October 9, 2012).

7.2 ENDANGERED SPECIES ACT (ESA)

Section 7 of the ESA requires Federal agencies conducting, authorizing, or funding activities that affect threatened or endangered species to ensure that those effects do not jeopardize the continued existence of listed species. On February 6, 2012, NMFS listed the Gulf of Maine distinct population segment (DPS) of Atlantic sturgeon as threatened, and listed the New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon as endangered. An August 28, 2012, memorandum explained our determination that allowing these fisheries and associated research to continue during the reinitiation period will not violate ESA sections 7(a)(2) and 7(d). The Biological Opinion for the NE multispecies fisheries has been reinitiated, and additional evaluation will be included to describe any impacts of the fisheries on Atlantic sturgeon and define any measures needed to mitigate those impacts, if necessary. It is anticipated that any measures, terms and conditions included in an updated Biological Opinion will further reduce impacts to the species. It is expected that the completion of the Biological Opinion will occur before the beginning of the 2013 NE multispecies fishing year on May 1, 2013 For further information on the potential impacts of the proposed management action, see Section 5.1 of this supplemental EA.

7.3 MARINE MAMMAL PROTECTION ACT (MMPA)

NMFS has reviewed the impacts of the FY 2012 sector operations plan addenda on marine mammals and concluded that the management actions proposed are consistent with the provisions of the MMPA and would not alter existing measures to protect the species likely to inhabit the management unit of the NE multispecies FMP. For further information on the potential impacts of the proposed management action, see Section 5.1.

7.4 NATIONAL ENVIRONMENTAL POLICY ACT

7.4.1 Revised Finding of No Significant Impact (FONSI)

Findings to be completed after public comment period.

7.5 ADMINISTRATIVE PROCEDURE ACT (APA)

Section 553 of the APA establishes procedural requirements applicable to rulemaking by federal agencies. The purpose of these requirements is to ensure public access to the Federal rulemaking process and to give the public adequate notice and opportunity for comment. At this time, no abridgement of the rulemaking process for this action is being requested and the proposed measures would be implemented in accordance with the requirements of the APA.

7.6 PAPERWORK REDUCTION ACT (PRA)

The purpose of the PRA is to control and, to the extent possible, minimize the paperwork burden for individuals, small businesses, nonprofit institutions, and other persons resulting from the collection of information by, or for, the Federal Government. PRA for data collections relating to sectors have been considered and evaluated under Amendment 16 to the FMP and approved by the

Office of Management and Budget (OMB) under OMB Control Number 0648-0605. This action relies upon the existing collections, including those approved by the OMB under Amendment 16, and does not propose to modify any existing collections or to add any new collections. Therefore, no review under the PRA is necessary for this action.

7.7 COASTAL ZONE MANAGEMENT ACT (CZMA)

Section 307(c)(1) of the CZMA requires that all Federal activities which affect any coastal use or resource be consistent with approved state coastal zone management programs (CZMP) to the maximum extent practicable. NMFS has reviewed the relevant enforceable policies of each coastal state in the NE region for this action and has determined that this action is incremental and repetitive, without any cumulative effects, and is consistent to the maximum extent practicable with the enforceable policies of the CZMP of the following states: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, and North Carolina. NMFS finds this action to be consistent with the enforceable policies to manage, preserve, and protect the coastal natural resources, including fish and wildlife, and to provide recreational opportunities through public access to waters off the coastal areas. Pursuant to the general consistency determination provision codified at 15 CFR 930.36(c), NMFS sent a general consistency determination applying to the current NE Multispecies FMP, and all routine Federal actions carried out in accordance with the FMP, to the following states: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, and North Carolina on October 21, 2009. In accordance with that determination, NMFS will send a letter advising those states of this action.

7.8 INFORMATION QUALITY ACT (IQA)

Pursuant to NOAA guidelines implementing Section 515 of Public Law 106-554 (the Data Quality Act), all information products released to the public must first undergo a Pre-Dissemination Review to ensure and maximize the quality, objectivity, utility, and integrity of the information (including statistical information) disseminated by or for federal agencies. The following section addresses these requirements.

Utility

The proposed rule and the supplemental environmental assessment (EA) for the action present a description of the purpose and need of the proposed action (approval of a regulatory exemption allowing vessels to fish with codend mesh as small as 4.5 inches targeting redfish and consideration of a voluntary industry-funded at-sea monitoring program for trips utilizing the exemption), the measures proposed, and the impacts of those measures. A discussion of the reasons for selecting the proposed action is included so that intended users may have a full understanding of the proposed action and its implications. Once a proposed rule is published, it will be the principal means by which the information pertinent to the proposed operations plan will be made available to the public. The proposed rule will have specific information on the proposed number of participants for each sector. The EA contains the various

elements of interest to the public that are necessary for decision makers to make informed decisions based on accurate information. A preliminary review indicates that the exemption request and programs within this action are consistent with the NE Multispecies FMP and the conservation and management goals of the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

The intended users of the information product are participants of the NE multispecies fishery, industry members and other interested members of the public, members of the New England Fishery Management Council (Council), and the National Marine Fisheries Service (NMFS). The principle elements of this action, including the supplemental environmental assessment are the same as those in effect for the 19 sectors approved to operate in FY 2012. The supplemental EA, as well as the EA for FY 2012 sector operations plans, are tiered from the environmental impact statement developed for Amendment 16 to the NE Multispecies FMP and incorporate the most recent information available.

The FY 2012 sector operations plans, EA, and supplemental EA affiliated with this action are available in printed format and will be available in PDF format online through www.regulations.gov. The proposed rule (and the final rule), once published in the <u>Federal Register</u>, will be made available as a printed publication, and on the www.regulations.gov website. The <u>Federal Register</u> documents will provide metric conversions for all units of measurement.

Integrity

Prior to dissemination, information associated with this action, independent of the specific intended distribution mechanism, is safeguarded from improper access, modification, or destruction, to a degree commensurate with the risk and magnitude of harm that could result from the loss, misuse, or unauthorized access to or modification of such information. All electronic information disseminated by NMFS adheres to the standards set out in Appendix III, "Security of Automated Information Resources," of OMB Circular A-130; the Computer Security Act; and the Government Information Security Act. All confidential information (e.g., dealer purchase reports) is safeguarded pursuant to the Privacy Act; Titles 13, 15, and 22 of the United States Code (confidentiality of census, business, and financial information); the Confidentiality of Statistics provisions of the Magnuson Act; and NOAA Administrative Order 216-100, Protection of Confidential Fisheries Statistics.

Objectivity

For the purposes of the Pre-Dissemination Review, this supplemental EA is considered to be a "Natural Resource Plan." Accordingly, the document adheres to the published standards of the Magnuson-Stevens Act; the Operational Guidelines, Fishery Management Plan Process; the EFH Guidelines; the National Standard Guidelines; and NOAA Administrative Order 216-6, Environmental Review Procedures for Implementing the NEPA.

This information product uses information of known quality from sources acceptable to the relevant scientific and technical communities. Information in the amendment, including landings and revenue information, is based upon information from a variety of credible sources including NMFS. NMFS, in conjunction with the commercial fishery, operates multiple data collection programs (e.g., vessel trip reports, commercial dealer databases, NMFS Observer Program, At-Sea Monitoring). These programs incorporate peer-reviewed, scientifically valid sampling protocols. In addition to these sources, additional information is presented that has been accepted and published in peer-reviewed journals or by scientific organizations. Original analyses in these documents were prepared using data from accepted sources.

The policy choices (i.e., the proposed alternatives) are supported by the available scientific information and are clearly articulated in the amendment. The proposed alternatives in this action are designed to meet the goals and objectives of the FMP and the MSA. The supporting materials and

analyses used to develop the alternatives are contained in readily available documents that are specified in the management plan.

The process used in review of the operations plans, environmental analyses, and proposed rule involves NMFS' Northeast Regional Office, NMFS' Northeast Fisheries Science Center (NEFSC), and headquarters. The NEFSC review was conducted by fisheries scientists as well as social scientists and economists. Through the proposed and final rule process, the public and the New England Fishery Management Council will have an opportunity to comment on any aspect of the proposed actions, alternatives, and the supplemental environmental assessment. The review by staff at the Regional Office is conducted by those with expertise in fisheries management and policy, habitat conservation, law enforcement, protected species, and compliance with the applicable laws. Final approval of the action will be by the Regional Administrator, Northeast Region.

7.9 REGULATORY FLEXIBILITY ACT (RFA)

The objective of the RFA is to require consideration of the capacity of those affected by regulations to bear the direct and indirect costs of regulation. If an action would have a significant impact on a substantial number of small entities, an Initial Regulatory Flexibility Analysis must be prepared to identify the need for action, alternatives, potential costs and benefits of the action, the distribution of these impacts, and a determination of net benefits. The RFA requires the Federal rulemaker to examine the impacts of proposed and existing rules on small businesses, small organizations, and small Governmental jurisdictions.

The Small Business Administration (SBA) has defined all fish-harvesting or hatchery businesses that are independently owned and operated, not dominant in their field of operation, and with annual receipts (gross revenues) not in excess of \$4,000,000 as small businesses. In addition, seafood processors with 500 or fewer employees; wholesale industry members with 100 employees or fewer; party and charter vessels with annual receipts not in excess of \$6,500,000; and environmental, conservation, and wildlife organizations with annual receipts less than \$14,000,000 are also classified as small businesses. Small business size standards are not established for the public administration sector (i.e., Federal, state, and local government agencies), but under the RFA, government jurisdictions with populations of less than 50,000 are considered small entities for the purpose of the RFA.

If an action is determined to affect a substantial number of small entities, the analysis must include:

- 1. A description and estimate of the number of small entities and total number of entities in a particular affected sector, and the total number of small entities affected; and
- 2. Analysis of the economic impact on small entities, including the direct and indirect compliance costs of completing paperwork or recordkeeping requirements, effect on the competitive position of small entities, effect on the small entity's cash flow and liquidity, and ability of small entities to remain in the market.

If it is clear that an action would not have a significant economic impact on a substantial number of small entities, the RFA allows Federal agencies to certify the proposed action to that effect to the SBA. The decision on whether or not to certify is generally made after the final decision on the preferred alternatives for the action and may be documented at either the proposed rule or the final rule stage.

Based on the information and analyses provided in earlier sections of this amendment, it is clear that this action would not have a significant economic impact on a substantial number of small entities, and that certification under the RFA is warranted. The remainder of this section establishes the factual basis for this determination, as recommended by the Office of Advocacy at the SBA.

Description of the Reasons Why Action by Agency is Being Considered

The flexibility afforded to sectors includes exemptions from certain specified regulations as well as the ability to request additional exemptions. In this manner, the economic incentive to

maximize the value of the sector ACE places a premium on timing of landings to market conditions as well as changes in the selectivity and composition of species landed on fishing trips. Exemptions approved for sectors through the final rule approving FY 2012 sector operations plans provided sector vessels additional operational flexibility to maximize the value of their allocation. NMFS is proposing to expand on a previously approved sector exemption by allowing sector trawl vessels to harvest redfish using nets with codend mesh as small as 4.5-inches. In addition, this action proposes an industry-funded at-sea monitoring program for sector trips targeting redfish with small mesh nets Further description of the purpose and need for the proposed action is contained in Section 2.0 of this supplemental EA.

The Objectives and Legal Basis for the Proposed Action

There are two objectives of this proposed action. The first is to authorize a regulatory exemption that would allow sector vessels to fish bottom trawls with codend mesh sizes greater or equal to 4.5 inches but less than 6.5 inches when targeting redfish. The second objective proposed would allow sectors to voluntarily create industry-funded at-sea monitoring programs for trips targeting redfish. All sector vessels could potentially utilize the mesh-size exemption. Currently, approximately 26 of 850 sector vessels have expressed interest in developing an industry-funded at-sea monitoring program. The legal basis for the proposed action is the NE Multispecies FMP and promulgating regulations at 50 CFR § 648.87.

Estimate of the Number of Small Entities

Under the SBA size standards for small fishing entities (\$4 million), all permitted and participating vessels in the groundfish fishery are considered to be small fishing entities. Gross sales by any one entity (vessel) do not exceed this threshold. The maximum number of entities that could be affected by the proposed exemptions is 850 permits - the number of vessels enrolled in the 18 sectors that have an approved FY 2012 sector operations plan. However, historical records indicate that only a few dozen vessels have traditionally targeted redfish. Only 4 sectors and 26 vessels have expressed an interest in developing an industry-funded at-sea monitoring program.

Economic Impacts on Small Entities Resulting from Proposed Action

As stated above, sectors are provided the opportunity to request regulatory exemptions to increase efficiencies, enhance operational flexibility, and improve profits. Any economic impacts that result from a regulatory exemption would be increased profits and revenue.

The industry-funded program is voluntary and seen as a means to access additional redfish, improve operational flexibility, and increase revenue. Disapproval of this program could result in missed economic opportunities.

Because of the limited scope of this proposed rule, the impacts of the preferred alternatives would likely only directly affect a small number of small businesses. It is anticipated that approximately 26 vessels will fish 102 trips that will target redfish. This represents roughly 6 percent of active sector vessels and 0.7 percent of the groundfish trips taken by those vessels³. Importantly, the opportunities proposed in this rule are strictly voluntary; these actions were requested by fishermen to provide increased opportunities, flexibility, and revenue and would not result in increased net costs.

³ Based on fishing year 2011 data, the most recent year with complete data

As stated in sections 5.2.1 and 5.3.1, in order to utilize the mesh-size exemption, a fishermen would potentially have to purchase a new codend with mesh size under 6.5 inches, which is an upfront cost. A 4.5-inch cod end for a vessel with an engine of 400 HP, or greater, would be \$1,815 (O'Rourke, personal communication). If a vessel purchased an entire new net specialized to target redfish, costs would be greater (O'Rourke, personal communication). By increasing operational flexibility this exemption would likely increase the expected short run profits of sector fishermen, even beyond the upfront costs new gear. However, if the exemption was revoked, as a result of the thresholds in Options B or C being met, a fisherman may not be able to recoup the costs, and short run costs would exceed revenues. Importantly, the actions of individual vessels in the sector would affect all members in the sector, setting up a situation where a fishermen may not recoup his investment through the actions of another sector member if the exemption is revoked.

Criteria Used to Evaluate the Action

Significant Economic Impacts

The RFA requires Federal agencies to consider two criteria to determine the significance of regulatory impacts: Disproportionality and profitability. If either criterion is met for a substantial number of small entities, then the action should not be certified.

Disproportionality

For this action, all of the directly regulated entities meet the definition of a small entity. No large entities exist. Therefore, because different classes of entities are not an issue, there are no small entities that are disproportionately affected (put at a disadvantage) relative to large entities. If approved, all sector vessels would have the opportunity to utilize smaller codend mesh to target redfish. While not all groundfish vessels are enrolled in a sector, all vessels have the opportunity to enroll in a sector if they wish. These provisions are not restrictions, but rather provide all sector vessels with greater voluntary opportunities to increase catch and revenue. For these reasons, no small entities would be disproportionately affected relative to large entities.

Profitability

As noted above, this action details two voluntary provisions. Sectors and sector vessels would not request these opportunities unless they believed that the additional trips and opportunities would result in increased revenue. There is inherent risk that some upfront costs are not recouped should the exemption be revoked, however, the action is being taken specifically to create opportunities for small entities to increase profitability. Therefore, no reductions in profit are expected for any small entities, and the profitability criterion is not met.

Substantial Number of Small Entities

No small entities are expected to incur any economic costs as a direct result of these actions.

Description of, and Explanation of, the Basis for All Assumptions Used

Because both actions proposed in action are entirely voluntary, there are no negative or disproportional impacts on small entities. This action was requested by small entities to increase operational flexibility and increase revenue. No assumptions are necessary to conduct the analyses in support of this conclusion.

8.0 REFERENCES

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