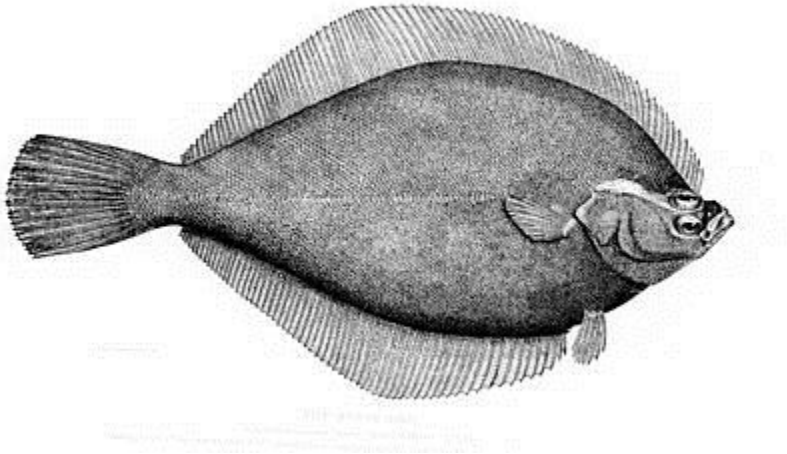
Northeast Multispecies Fishery Management Plan

Partial Exemption from the Georges Bank Yellowtail Flounder Accountability Measures for the Scallop Fishery



DRAFT Environmental Assessment

Including

Regulatory Impact Review

Regulatory Flexibility Act Certification

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1.0 EXECUTIVE SUMMARY

This action, requested by the New England Fishery Management Council (Council), proposes emergency rulemaking, under Secretary of Commerce authority specified in section 305(c) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), to exempt the scallop fishery from accountability measures (AMs) for any Georges Bank (GB) yellowtail flounder catch below the initially allocated 2012 sub-annual catch limit (ACL) of 307.5 mt. This emergency rulemaking, which was requested by the Council, is being proposed in response to the circumstances arising from the unanticipated reduction in the GB yellowtail flounder sub-ACL for the scallop fishery. NMFS previously moved 150.6 mt of the scallop fishery's GB yellowtail flounder sub-ACL to the Northeast multispecies fishery on July 13, 2012 (July 16, 2012; 77 FR 41704). This revision to the sub-ACLs was based on updated catch projection information that showed a high-end estimated of GB yellowtail flounder catch in the scallop fishery to be 174.3 mt. This proposed action is separate and distinct from the revision of the sub-ACLs. Imposing the AM on the scallop fishery based on the reduced sub-ACL that may result in inequitable and substantial negative economic impacts to the scallop fishery. This action would not affect the pound-for-pound overage repayment AM if the total GB yellowtail flounder catch exceeds the FY 2012 stock-level ACL.

This environmental assessment considers 2 alternatives: Alternative 1 to partially exempt the scallop fishery from the Closed Area II access reduction AM should a revised sub-ACL be exceeded up to the initial sub-ACL of 307.5 mt; and the Status Quo/No Action Alternative which, for this action, are the same (i.e., no exemption from overages of the revised sub-ACL).

The alternatives are not expected to have biological, essential fish habitat, nor endangered and other protected species impacts beyond those previously considered in Framework Adjustment 47 (FW 47) to the Northeast Multispecies Fishery Management Plan (FMP). The overall fishing quota available for GB yellowtail flounder remains unchanged from the level analyzed in conjunction with FW 47.

Alternative 1 is expected to have positive economic and social impacts for the scallop fishing fleet and potentially negative impacts for the groundfish fishing fleet. Conversely, as compared to Alternative 1, the No Action/Status Quo Alternative may have negative economic and social impacts for the scallop fishing fleet if the sub-ACL is exceeded. The Status Quo/No Action Alternative is expected to have neutral impacts on the groundfish fishing fleet. Both alternatives are consistent with the applicable laws and Executive Orders, including the Magnuson-Stevens Act.

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3.0 BACKGROUND

During the April 25, 2012, Council meeting in Mystic, CT, members of the NE multispecies fishing industry expressed concern that the 2012 NE multispecies GB yellowtail flounder sub-ACL of 217.7 mt was too low and, as such, would constrain the ability to target other stocks, on GB, such as cod and haddock. Given this concern and indications that the scallop fishery sub-ACL for GB yellowtail flounder may be higher than needed by the scallop fishery in light of more current projected catch information, the Council requested that NMFS create a GB yellowtail flounder working group to explore the possibilities of increasing the amount of GB yellowtail sub-ACL allocated to the groundfish fishery. The request suggested that the working group include members from the Transboundary Management Guidance Committee (TMGC), Council Groundfish and Scallop Committees, and NMFS and Council staff. The Council requested that the working group review the possibility of revising the sub-ACLs for the scallop and groundfish fisheries based on new information suggesting that the projections of GB yellowtail flounder catch in the scallop fishery were much higher than needed, and to consider modification of the U.S. and Canadian shares of GB yellowtail flounder established through the Understanding.

In response to this request, NMFS formed a working group, which also included fishing industry and nongovernmental organization representatives. The working group held teleconferences on May 11, 2012, and May 18, 2012, a 1-day workshop in New Bedford, MA, on May 23, 2012, and teleconferences on May 31, 2012, and June 15, 2012. During these five meetings, the working group discussed a range of short-term and long-term measures for GB yellowtail flounder management, in addition to the Council requests made at its April 2012 meeting. The working group recognized that the most effective short-term tool to address the Council's request was to utilize existing regulatory authority provided to NMFS to revise, in-season, sub-ACLs allocated to the scallop and groundfish fisheries for GB yellowtail flounder. To determine the feasibility and magnitude of potential revisions of the scallop and groundfish sub-ACLs, the working group asked for updated projections by NMFS's Northeast Fisheries Science Center (NEFSC) of expected catch of GB yellowtail flounder in scallop fishing year (FY) 2012 by the scallop fishery. In addition, the working group discussed the concept of "indemnity" for the scallop fishery that would exempt it from any post sub-ACL revision AM.

In addition to the working group meetings, a joint Groundfish Committee and Scallop Committee (Joint Committee) was convened on June 18, 2012 in Portland, ME, to discuss the Council's original requests and review the discussions from the working group. On that same date, the NEFSC provided revised projections of GB yellowtail flounder catch by the scallop fishery ranging from 47.6 mt to 174.3 mt, with a median projection of 105.2 mt. Using these new projections, the Joint Committee recommended to the Council that they request that NMFS use its current regulatory authority to reduce the scallop GB yellowtail flounder sub-ACL to 90 percent of 174.3 mt (156.9 mt), and increase the groundfish GB yellowtail flounder sub-ACL by the amount of this reduction (150.6 mt) to 368.3 mt. In addition, the Joint Committee requested emergency action to temporarily relieve the scallop fishery from any AM triggered by catch less than 307.5 mt that would otherwise be required, based on the reduced sub-ACL. In making this recommendation, the Joint Committee emphasized that, if the overall ACL for GB yellowtail flounder were exceeded, there would still be an AM in place, calling for a pound-for-pound reduction in the amount of the overage in the FY 2013 U.S./Canada Total Allowable Catch

(TAC). At its June 21, 2012, meeting, the Council adopted the Joint Committee recommendations by passing a two-part motion, requesting that NMFS revise the scallop and groundfish sub-ACLs for GB yellowtail flounder based on the NEFSC updated projection of catch in the scallop fishery and requested an emergency action to temporarily relieve the scallop fishery from any AM that would have been triggered by catch of GB yellowtail flounder less than 307.5 mt.

NMFS revised the sub-ACLs quickly using existing authority provided to the Regional Administrator through Framework Adjustment 47 to the NE Multispecies FMP (July 16, 2012; 77 FR 41704). This action reduced the scallop fishery GB yellowtail flounder sub-ACL to 156.9 mt and increased the groundfish sub-ACL for GB yellowtail flounder to 368.3 mt. As a result of this revision, closed areas AMs for the scallop fishery will be triggered by any GB yellowtail flounder catch by the fishery exceeding 156.9 mt rather than 307.5 mt.

Given that the scallop fishery's revised GB yellowtail flounder sub-ACL for 2012 was 90% of the high-end of the possible estimated range of catch, it is likely that the scallop fishery will not exceed their revised sub-ACL. However, the Council rationalized that the use of emergency rulemaking authority was necessary to exempt the scallop fishery from any AM for catch below the initial scallop sub-ACL of 307.5 mt due to uncertainties that remained about the projected yellowtail flounder catch, concern that the scallop fishery should not be subjected to AMs based on a significant decrease of the sub-ACL midway through the fishing year, and because a backstop AM would still take effect should the entire ACL be exceeded.

To address the possible inequitable and negative impacts to the scallop fishery resulting from the revised sub-ACL for GB yellowtail flounder, NMFS is proposing to exempt the scallop fishery from AMs for any GB yellowtail flounder catch above the revised 156.9 mt sub-ACL, up to their initial fishing year 2012 sub-ACL. Use of notice and comment rulemaking affords the public full opportunity to provide comments on the partial exemption from scallop fishery from AMs. This exemption would also apply to any further revisions to the scallop sub-ACL, should subsequent analysis of actual scallop fishery catch of yellowtail flounder indicate additional revision of the sub-ACLs between the two fisheries may be possible. Any catch above 307.5 mt would still require scallop AMs to be implemented, consistent with the current NE Multispecies and Atlantic Scallop FMP requirements. No changes will be made to the fishery-level AM; thus, if the total ACL of 547.8 mt is exceeded for any reason, the overage will be repaid pound-for-pound in a subsequent fishing year.

4.0 PURPOSE AND NEED FOR ACTION

Purpose: To provide a partial exemption from the GB yellowtail flounder accountability measures for the scallop fishery.

Need: This action is needed to minimize negative socio-economic impacts to the scallop fleet that may result from the implementation of AMs should the revised yellowtail flounder scallop fishery sub-ACL be exceeded in fishing year 2012.

This action is designed to complement an action previously implemented under Regional Administrator authority to adjust the groundfish and scallop GB yellowtail flounder sub-ACLs. The adjustment was designed to ensure that utilization of the resource was optimized for both fleets while minimizing negative socio-economic impacts to fishery participants. Additional harvest opportunity was provided to the groundfish fleet by adjusting the sub-ACLs. The adjustment of the scallop sub-ACL resulted in a reduction of 49 percent from the initial scallop fishing year 2012 catch level. This action is necessary to ensure that this GB yellowtail flounder catch adjustment, based on projected not actual catch data, does not put the scallop fishery at risk of facing an AM which, in turn, could have a negative economic impact on the fishery participants.

The magnitude of the adjustment is large and, despite having been informed by the best available projection information, does create a much lower threshold for triggering the scallop fishery AM if no action is taken. There is also need to maintain equitability between the two fisheries that utilize the GB yellowtail flounder resource. Thus, the proposed action is expected to enhance consistency with National Standard 4 of the Magnuson-Stevens Act regarding requirements for fishing measures to be fair and equitable and National Standard 8 regarding the requirement to minimize adverse economic impacts.

The Council utilizes sub-ACLs, an optional requirement under the National Standard 1 guidelines, to help ensure overall ACLs are not exceeded by holding accountable the respective fisheries that catch GB yellowtail flounder. The overarching objective in using ACLs is to ensure that catch of a particular stock is constrained within established mortality targets, which is key in helping ensure that stocks do not become overfished. There remains a definitive need to ensure that GB yellowtail is not subject to overfishing (i.e., catch does not cause the fishing mortality target to be exceeded); however, the need of potentially constraining the scallop fishery to the revised, lower sub-ACL is not necessary. The remains in place for the scallop fishery at the initial sub-ACL level of 307.5 mt and the total catch level was not modified by the adjustment of the sub-ACL. The total fishery ACL is expected to ensure that the overall fishing mortality objectives for GB yellowtail flounder are not compromised by the sub-ACL revision or the proposed action.

5.0 PROPOSED ACTION AND ALTERNATIVES

5.1 ALTERNATIVE 1—PARTIAL EXEMPTION FROM GB YELLOWTAIL FLOUNDER AMS FOR THE SCALLOP FISHERY (PREFERRED ALTERNATIVE)

Alternative 1 proposes to exempt the scallop fishery for the 2013 fishing year from any AM for fishing year 2012 GB yellowtail flounder catch below 307.5 mt but above the revised sub-ACL of 156.9 mt. This is the catch level established as the initial fishing year 2012 GB yellowtail flounder sub-ACL for the scallop fishery.

By specifying that the scallop fishery would be exempt from any overage below 307.5 mt, the AM exemption would apply to the current sub-ACL of 156.9 mt as well as any subsequent adjustments made during the fishing year that further reduced the scallop fishery GB yellowtail flounder sub-ACL. Under Alternative 1, the AM would still be triggered if the GB yellowtail catch by the scallop fishery in FY 2012 exceeds 307.5 mt.

As outlined in Framework Adjustment 47 to the NE Multispecies FMP, the scallop fishery AM is only triggered if both the sub-ACL exceeded and overall GB yellowtail flounder ACL exceeded (i.e., fishery level ACL) or if the scallop fishery catch of yellowtail flounder is 150 percent or more of sub-ACL.

As outlined in Framework Adjustment 23 to the Scallop FMP, the scallop fishery AM is only triggered if both the sub-ACL is exceeded and the overall GB yellowtail flounder ACL is exceeded (i.e., the fishery level ACL), or if the scallop fishery catch of yellowtail flounder exceeds the scallop-specific sub-ACL by 50 percent or more.

Table 1. Comparison of Alternative 1 and the Status Quo/No Action Alternative actions resulting from scallop fishery GB yellowtail flounder catch scenarios.

	Catch less than or equal to 156.9 mt sub-ACL	Catch greater than 156.9 mt sub-ACL but less than or equal to 307.5 mt	Catch greater than 307.5 mt
Alternative 1	No AM	Scallop fishery exempted from AM	AM required per Scallop Framework Adjustment 23: If catch is greater than 461.25 mt (150 percent of sub-ACL) or sub-ACL (307.5) is exceeded and fishery-level ACL (547.8 mt) is exceeded
Status Quo/No Action	No AM	AMs required per Scallop Framework Adjustment 23 and NE Mults FW 47: If catch is greater than 235.35 mt (150 percent of sub-ACL) or sub-ACL of 156.9 is exceeded and fishery-level ACL (547.8 mt) is exceeded	Any catch above 156.9 mt would potentially trigger AM, as outlined for catch greater than sub-ACL (adjacent column)

The AM implemented for the scallop fishery, when necessary, closes statistical areas 562 and a small portion of 525, for a period of time that increases with an increasing percent overage. Figure 1shows the GB yellowtail flounder AM closure area for the scallop fishery.

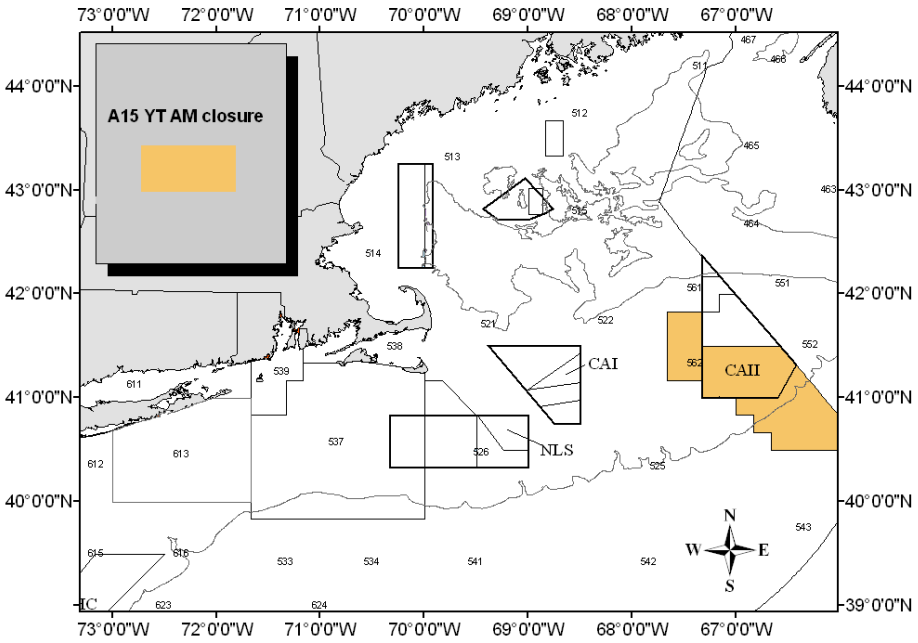


Figure 1. GB Scallop Fishery Accountability Measure - Yellowtail Closure.

Table 2 and Table 3, are the AM closure schedules, dependent on if the scallop Closed Area II access are is open or closed to scallop fishing for the fishing year in which the AM is effective.

Table 2. GB AM closure schedule for years when the Closed Area II access area is open.

Overage	Limited Access Scallop Fleet Closure
3% or less	Oct-Nov
3.1-14%	Sept-Nov
14.1-16%	Sept-Jan
16.1-39%	Aug-Jan
39.1-56%	Jul-Jan
Greater than 56%	Mar-Feb

Table 3. GB AM closure schedule for years when the Closed Area II access area is closed.

Overage	Limited Access Scallop Fleet Closure
1.9% or less	Sept-Nov

2.0 -2.9%	Aug-Jan
3.0 -3.9%	Mar, and Aug-Feb
4.0 - 4.9%	Mar, and Jul-Feb
5.0 -5.9%	Mar-May, and Jul-Feb
6.0% or greater	Mar-Feb

5.2 NO ACTION/STATUS QUO ALTERNATIVES

The no action and status quo alternatives are the same in this instance: If no action is taken, the status quo approach for the scallop fishery AM would occur if the sub-ACL is exceeded. Currently, the sub-ACL is 156.9 mt, though this may be further adjusted through the fishing year as more updated yellowtail flounder catch in the scallop fleet information becomes available. As outlined in Table 1, if the fishing year 2012 scallop fishery catch of GB yellowtail flounder is greater than 235.35 mt (150 percent of the current sub-ACL) or current sub-ACL of 156.9 is exceeded and fishery-level ACL (547.8 mt) is exceeded, the status quo/no action alternative would require the AM to be implemented in fishing year 2013. Depending on the magnitude of the overage, the area depicted in Figure 1 would be closed in accordance with the schedules provided in Table 2 and Table 3, above.

If the sub-ACL is further adjusted during the fishing year, the specific sub-ACL trigger points would change; however the general criteria of the status quo would remain in effect. The scallop fishery catch of GB yellowtail flounder would have to exceed the revised sub-ACL by more than 150 percent or exceed the revised sub-ACL.

The fishery level AM for overages of the fishing year 2012 GB yellowtail flounder ACL of 547.8 mt remains unaffected by this proposed action. Thus, any overage of the 547.8 mt ACL will be repaid pound-for-pound in the 2013 fishing year, per the process outlined in the U.S./Canada Resource Sharing Understanding and the NE Multispecies FMP.

5.3 ALTERNATIVES CONSIDERED, BUT REJECTED

No other alternatives were formally considered because this is a narrow, one-time, and temporary rule with a specific purpose. However, additional approaches to increasing the fishing year 2012 GB yellowtail flounder ACL, avoiding catch, and other short-term measures to mitigate the potential problems arising from the low sub-ACLs available to both fleets were discussed by the Working Group and the Council's Groundfish and Scallop Committees. These alternatives are largely unrelated to the concept of exempting the scallop fishery from an AM; however, they are included in Appendix A for a more complete record of the approaches considered for the 2012 fishing year

The fishery level AM for overages of the fishing year 2012 GB ACL of 547.8 mt remain unaffected by this proposed action. It was briefly discussed by the Working Group to remove

any accountability at the sub-ACL levels for both groundfish and scallops and rely solely on the fishery-level ACL. This approach was largely rejected as fishery participants were concerned that completely removing accountability at the sub-ACL level would not incentivize yellowtail flounder avoidance and could create a 'race to fish' scenario. Under this scenario, groundfish sectors would still be constrained by their respective Annual Catch Entitlement (ACE).

The Working Group and Council Committees also briefly discussed when and by how much to revise the GB yellowtail flounder sub-ACLs. These discussions were not extensive, nor were any other approaches other than revising the scallop sub-ACL to 90 percent of the projected GB yellowtail flounder catch for the fishing year. Prior to the updated catch projection provided by the NEFSC in June 2012, the Working Group had contemplated a stepwise revision of sub-ACLs throughout the fishing year as catch data becomes available throughout the fishing year.

6.0 AFFECTED ENVIRONMENT

The following section includes a description of the valued ecosystem components (VECs) likely to be affected in the area of this proposed action. This description borrows heavily from the affected environment sections of the EAs prepared for FW 47 to the NE Multispecies FMP and FW 23 to the Atlantic Sea Scallop FMP. There has been little change in the biological or physical components of the environment since the implementation of Amendment 16 to the NE Multispecies FMP and Amendment 15 to the Atlantic Sea Scallop FMP, other than changes in stock status.

6.1 PHYSICAL ENVIRONMENT

The scope of impacts related to this action are expected to be almost entirely restrained to the Georges Bank area. Though scallop and groundfish fisheries operate in other areas the partial exemption is not expected to change where effort is going to occur because it does not increase the likelihood that the scallop sub-ACL or overall ACL for GB yellowtail flounder will be exceeded. Therefore detailed description of the physical environment was limited to GB. The Gulf of Maine and Southern New England physical environments are described in FWs 47 and 23.

6.1.1 Georges Bank

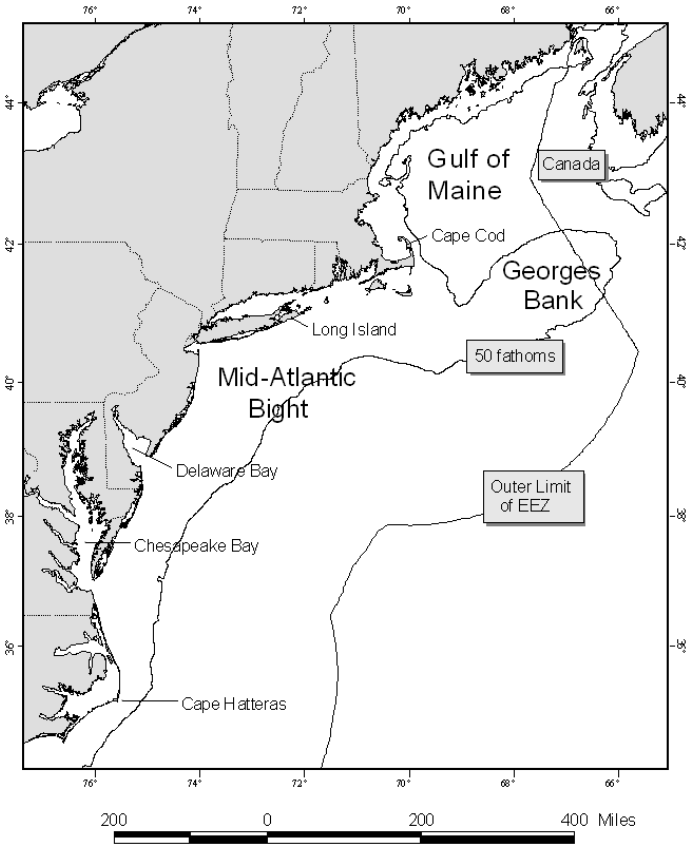


Figure 2. Northeast U.S. shelf ecosystem, including Georges Bank.

GB (Figure 1) is a shallow (3 to 150 m depth), elongate (161 km wide by 322 km long) extension of the continental shelf that was formed during the Wisconsinian glacial episode. It is characterized by a steep slope on its northern edge and a broad, flat, gently sloping southern flank and has steep submarine canyons on its eastern and southeastern edges. It is characterized by highly productive, well-mixed waters and strong currents. The Great South Channel lies to the west. Natural processes continue to erode and rework the sediments on GB. It is anticipated that erosion and reworking of sediments by the action of rising sea level as well as tidal and storm currents reduces the amount of sand and cause an overall coarsening of the bottom sediments (Valentine and Lough 1991).

Bottom topography on eastern GB is characterized by linear ridges in the western shoal areas; a relatively smooth, gently dipping seafloor on the deeper, easternmost part; a highly energetic peak in the north with sand ridges up to 30 m high and extensive gravel pavement; and steeper and smoother topography incised by submarine canyons on the southeastern margin. The central region of GB is shallow, and the bottom is characterized by shoals and troughs, with sand dunes superimposed within. The area west of the Great South Channel, known as Nantucket Shoals, is similar in nature to the central region of GB. Currents in these areas are strongest where water depth is shallower than 50 m. Sediments in this region include gravel pavement and mounds, some scattered boulders, sand with storm-generated ripples, and scattered shell and mussel beds.

Tidal and storm currents range from moderate to strong, depending upon location and storm activity.

Oceanographic frontal systems separate water masses of the Gulf of Maine and GB from oceanic waters south of GB. These water masses differ in temperature, salinity, nutrient concentration, and planktonic communities, which influence productivity and may influence fish abundance and distribution.

GB has been historically characterized by high levels of both primary productivity and fish production. The most common groups of benthic invertebrates on GB in terms of numbers collected were amphipod crustaceans and annelid worms, and overall biomass was dominated by sand dollars and bivalves (Theroux and Wigley 1998). Using the same database, four macrobenthic invertebrate assemblages that occur on similar habitat type were identified (Theroux and Grosslein 1987):

- The Western Basin assemblage is found in comparatively deepwater (150 to 200 m) with relatively slow currents and fine bottom sediments of silt, clay, and muddy sand. Fauna are comprised mainly of small burrowing detritivores and deposit feeders, and carnivorous scavengers.
- The Northeast Peak assemblage is found in variable depth and current strength and includes coarse sediments, consisting mainly of gravel and coarse sand with interspersed boulders, cobbles, and pebbles. Fauna tend to be sessile (coelenterates, brachiopods, barnacles, and tubiferous annelids) or free-living (brittle stars, crustaceans, and polychaetes), with a characteristic absence of burrowing forms.
- The Central GB assemblage occupies the greatest area, including the central and northern portions of GB in depths less than 100 m. Medium-grained shifting sands predominate this dynamic area of strong currents. Organisms tend to be small to moderately large with burrowing or motile habits. Sand dollars are most characteristic of this assemblage.
- The Southern GB assemblage is found on the southern and southwestern flanks at depths from 80 to 200 m, where fine-grained sands and moderate currents predominate. Many southern species exist here at the northern limits of their range. Dominant fauna include amphipods, copepods, euphausiids, and starfish.

Common demersal fish species in GB are offshore hake, blackbelly rosefish, Gulf Stream flounder, silver hake, red hake, goosefish (monkfish), Atlantic cod, haddock, pollock, yellowtail flounder, windowpane flounder, winter flounder, winter skate, little skate, longhorn sculpin, white hake, American plaice, witch flounder, and thorny skate.

6.1.2 Essential Fish Habitat (EFH)

EFH is defined by the Sustainable Fisheries Act of 1996 as "[t]hose waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The Atlantic sea scallop fishery is prosecuted in concentrated areas in and around GB and off the Mid-Atlantic coast, in waters extending from the near-coast out to the edge of the continental shelf. Atlantic sea scallops occur primarily in depths less than 110 meters on sand, gravel, shells, and cobble substrates (Hart et al. 2004). The GB areas fished by the scallop fishery have been identified as EFH for benthic life stages of species that are managed under the Northeast Multispecies FMP;

Atlantic sea scallop; monkfish; deep-sea red crab; northeast skate complex; Atlantic herring; summer flounder, scup, and black sea bass; tilefish; squid, Atlantic mackerel, and butterfish; Atlantic surfclam and ocean quahog FMPs.

In general, EFH for species and life stages that rely on the seafloor for shelter (e.g., from predators), reproduction, or food is vulnerable to disturbance by bottom tending gear. The most vulnerable habitat is more likely to be hard or rough bottom with attached epifauna. The EFH associated with GB is potentially effected by scallop fishing. For more information on the geographic area, depth, and EFH description for each applicable life stage of these species, the reader is referred to Table 45 of the scallop Amendment 15 EIS.
Summaries of EFH descriptions and maps for Northeast region species can be accessed at http://www.nero.noaa.gov/hcd/webintro.html. Designations for all species are being reviewed and updated in NEFMC Essential Fish Habitat Omnibus Amendment 2.

6.1.3 Gear Types and Interaction with Habitat

The groundfish fleet fishes for target species with a number of gear types: trawl, gillnet, and hook and line gear (including jigs, handline, and non-automated demersal longlines). This section discusses the characteristics of each of the gear types as well as the typical impacts to the physical habitat associated with each of these gear types.

6.1.3.1 Gear Types

The characteristics of typical gear types used by the multispecies fishery are summarized in Table 15.

Table 4 -- Descriptions of the fixed gear types used by the multispecies fishery

Gear Type	Trawl	Sink/ Anchor Gillnets	Bottom Longlines	Hook and Line
Total Length	Varies	90 m long per net.	~450 m.	Varies
Lines	N/A	Leadline and floatline with webbing (mesh) connecting	Mainline is parachute cord. Gangions (lines from mainline to hooks) are 15 inches long, 3 to 6 inches apart, and made of shrimp twine	One to several with mechanical line fishing
Nets	Rope or large-mesh size, depends upon target Species	Monofilament, mesh size depends on the target species (groundfish nets minimum mesh size of 6.5 inches	No nets, but 12/0 circle hooks are required.	No nets, but single to multiple hooks, "umbrella rigs"
Anchoring	N/A	22 lb (9–11 kg) Danforth-style anchors are required at each end of the net string	20-24lb (9-11kg) anchors, anchored at each end, using pieces of railroad track, sash weights, or Danforth anchors, depending on currents	No anchoring, but sinkers used (stones, lead)
Frequency/ Duration of Use	Tows last for several hours	Frequency of trending changes from daily (when targeting groundfish) to semi-weekly (when targeting monkfish and skate)	Usually set for a few hours at a time	Depends upon cast/target species

6.1.3.2 Trawl Gear

Trawls are classified by their function, bag construction, or method of maintaining the mouth opening. Function may be defined by the part of the water column where the trawl operates (e.g., bottom) or by the species that it targets (Hayes 1983). Mid-water trawls are designed to catch pelagic species in the water column and do not normally contact the bottom. Bottom trawls are designed to be towed along the seafloor and to catch a variety of demersal fish and invertebrate species.

The mid-water trawl is used to capture pelagic species throughout the water column. The mouth of the net typically ranges from 110 m to 170 m and requires the use of large vessels (Sainsbury 1996). Successful mid-water trawling requires the effective use of various electronic aids to find the fish and maneuver the vessel while fishing (Sainsbury 1996). Tows typically last for several hours and catches are large. The fish are usually removed from the net while it remains in the water alongside the vessel by means of a suction pump. In some cases, the fish are removed from the net by repeatedly lifting the cod end aboard the vessel until the entire catch is in the hold.

Three general types of bottom trawl are used in the Northeast Region, but bottom otter trawls account for nearly all commercial bottom trawling activity. There is a wide range of otter trawl types used in the Northeast as a result of the diversity of fisheries and bottom types encountered in the region (NREFHSC 2002). The specific gear design used is often a result of the target

species (whether found on or off the bottom) as well as the composition of the bottom (smooth versus rough and soft versus hard). A number of different types of bottom otter trawl used in the Northeast are specifically designed to catch certain species of fish, on specific bottom types, and at particular times of year. Bottom trawls are towed at a variety of speeds, but average about 5.6 km/hour (3 knots). Use of this gear in the Northeast is managed under several federal FMPs. Bottom trawling is also subject to a variety of state regulations throughout the region.

A flatfish trawl is a type of bottom otter trawl designed with a low net opening between the headrope and the footrope and more ground rigging on the sweep. This type of trawl is designed so that the sweep follows the contours of the bottom, and to get fish like flounders - that lie in contact with the seafloor - up off the bottom and into the net. It is used on smooth mud and sand bottoms. A high-rise or fly net with larger mesh has a wide net opening and is used to catch demersal fish that rise higher off the bottom than flatfish (NREFHSC 2002).

Bottom otter trawls that are used on "hard" bottom (i.e., gravel or rocky bottom), or mud or sand bottom with occasional boulders, are rigged with rockhopper gear. The purpose of the "ground gear" in this case is to get the sweep over irregularities in the bottom without damaging the net. The purpose of the sweep in trawls rigged for fishing on smooth bottoms is to herd fish into the path of the net (Mirarchi 1998).

The raised-footrope trawl was designed to provide vessels with a means of continuing to fish for small-mesh species without catching groundfish. Raised-footrope trawls fish about 0.5 to 0.6 m above the bottom (Carr and Milliken 1998). Although the doors of the trawl still ride on the bottom, underwater video and observations in flume tanks have confirmed that the sweep in the raised-footrope trawl has much less contact with the seafloor than the traditional cookie sweep that it replaces (Carr and Milliken 1998).

6.1.3.3 Gillnet Gear

The fishery also uses individual sink/anchor gillnets which are about 90 m long and are usually fished as a series of 5 to 15 nets attached end-to-end. A vast majority of “strings” consist of 10 gillnets. Gillnets typically have three components: the leadline, webbing and floatline. In New England, leadlines are approximately 30 kilogram (kg)/net. Webs are monofilament, with the mesh size depending on the species of interest. Nets are anchored at each end using materials such as pieces of railroad track, sash weights, or Danforth anchors, depending on currents. Anchors and leadlines have the most contact with the bottom. For New England groundfish, frequency of tending ranges from daily to semiweekly (NREFHSC 2002).

A bottom gillnet is a large wall of netting equipped with floats at the top and lead weights along the bottom. Bottom gillnets are anchored or staked in position. Fish are caught while trying to pass through the net mesh. Gillnets are highly selective because the species and sizes of fish caught are dependent on the mesh size of the net. Bottom gillnets are used to catch a wide range of species. Bottom gillnets are fished in two different ways, as "standup" and "tiedown" nets (Williamson 1998). Standup nets are typically used to catch Atlantic cod, haddock, pollock, and hake and are soaked (duration of time the gear is set) for 12 to 24-hours. Tiedown nets are used

to catch flounders and monkfish and are left in the water for 3 to 4 days. Other species caught in bottom gillnets in are dogfish and skates.

6.1.3.4 Hook and Line Gear

Hand Lines/Rod and Reel

The simplest form of hook-and-line fishing is the hand line, which may be fished using a rod and reel or simply "by hand". The gear consists of a line, sinker (weight), gangion, and at least one hook. The line is typically stored on a small spool and rack and varies in length and the sinkers vary from stones to cast lead. The hooks can vary from single to multiple arrangements in "umbrella" rigs. An attraction device must be used with the hook, usually consisting of a natural bait or an artificial lure. Hand lines can be carried by currents until retrieved or fished in such as manner as to hit bottom and bounce (Stevenson et al. 2004). Hand lines and rods and reels are used in the Northeast Region to catch a variety of demersal species.

Mechanized Line Fishing

Mechanized line-hauling systems have been developed to allow smaller fishing crews to work more lines, and to use electrical or hydraulic power to work the lines on the spools. The reels, also called "bandits", are mounted on the vessel bulwarks with the mainline wound around a spool. The line is taken from the spool over a block at the end of a flexible arm and each line may have a number of branches and baited hooks.

Jigging machines are used to jerk a line with several unbaited hooks up in the water to snag a fish in its body and is commonly used to catch squid. Jigging machine lines are generally fished in waters up to 600 m (1970 ft) deep. Hooks and sinkers can contact the bottom, depending upon the way the gear is used and may catch a variety of demersal species.

6.1.3.5 Longlines

The remaining gear type that is used by the fishery are bottom longlines which are a long length of line, often several miles long, to which short lengths of line ("gangions") carrying baited hooks are attached. Longlining is undertaken for a wide range of bottom species. Bottom longlines typically have up to six individual longlines strung together for a total length of more than 450 m and are deployed with 9 to 11 kg anchors. The mainline is a parachute cord. Gangions are typically 40 centimeters (cm) long and 1 to 1.8 m apart and are made of shrimp twine. These longlines are usually set for a few hours at a time (NREFHSC 2002).
When fishing with hooks, all hooks must be 12/0 circle hooks. A "circle hook" is, defined as a hook with the point turned back towards the shank and the barbed end of the hook is displaced (offset) relative to the parallel plane of the eyed-end or shank of the hook when laid on its side. The design of circle hooks enables them to be employed to reduce the damage to habitat features that would occur with use of other hook shapes (NREFHSC 2002).

6.1.3.6 Gear Interaction with Habitat

Historically, commercial fishing in the region has been conducted using hook and line, longline, gillnets and trawls. For decades, trawls have been intensively used throughout the region and

have accounted for the majority of commercial fishing activity in the multispecies fishery off New England.

Amendment 13 (NEFMC 2003) describes the general effects of bottom trawls on benthic marine habitats. The primary source document used for this analysis was an advisory report prepared for the International Council for the Exploration of the Seas (ICES) that identified a number of possible effects of beam trawls and bottom otter trawls on benthic habitats (ICES 2000). This report is based on scientific findings summarized in Lindeboom and de Groot (1998), which were peer-reviewed by an ICES working group. The focus of the report is the Irish Sea and North Sea, but it also includes assessments of effects in other areas. Two general conclusions were: 1) low-energy environments are more affected by bottom trawling; and 2) bottom trawling affects the potential for habitat recovery (i.e., after trawling ceases, benthic communities and habitats may not always return to their original pre-impacted state). Regarding direct habitat effects, the report also concluded that:

- Loss or dispersal of physical features such as peat banks or boulder reefs (changes are always permanent and lead to an overall change in habitat diversity, which in turn leads to the local loss of species and species assemblages dependent on such features);
- Loss of structure-forming organisms such as bryozoans, tube-dwelling polychaetes, hydroids, seapens, sponges, mussel beds, and oyster beds (changes may be permanent leading to an overall change in habitat diversity, which could in turn lead to the local loss of species and species assemblages dependent on such biogenic features);
- Reduction in complexity caused by redistributing and mixing of surface sediments and the degradation of habitat and biogenic features, leading to a decrease in the physical patchiness of the seafloor (changes are not likely to be permanent); and
- Alteration of the detailed physical features of the seafloor by reshaping seabed features such as sand ripples and damaging burrows and associated structures that provide important habitats for smaller animals and can be used by fish to reduce their energy requirements (changes are not likely to be permanent).

A more recent evaluation of the habitat effects of trawling and dredging was prepared by the Committee on Ecosystem Effects of Fishing for the National Research Council's Ocean Studies Board (NRC 2002). Trawl gear evaluated included bottom otter trawls and beam trawls. This report identified four general conclusions regarding the types of habitat modifications caused by trawls:

- Trawling reduces habitat complexity;
- Repeated trawling results in discernible changes in benthic communities;
- Bottom trawling reduces the productivity of benthic habitats; and
- Fauna that live in low natural disturbance regimes are generally more vulnerable to fishing gear disturbance.

An additional source of information for various gear types that relates specifically to the Northeast region is the report of a "Workshop on the Effects of Fishing Gear on Marine Habitats off the Northeastern U.S." sponsored by the NEFMC and Mid-Atlantic Fishery Management Council (MAFMC) in October 2001 (NEFSC 2002). A panel of invited fishing industry members and experts in the fields of benthic ecology, fishery ecology, geology, and fishing gear technology convened for the purpose of assisting the NEFMC, MAFMC, and NMFS with: 1)

evaluating the existing scientific research on the effects of fishing gear on benthic habitats; 2) determining the degree of impact from various gear types on benthic habitats in the Northeast; 3) specifying the type of evidence that is available to support the conclusions made about the degree of impact; 4) ranking the relative importance of gear impacts on various habitat types; and 5) providing recommendations on measures to minimize those adverse impacts. The panel was provided with a summary of available research studies that summarized information relating to the effects of bottom otter trawls, bottom gillnets, and longlines. Relying on this information plus professional judgment, the panel identified the effects and the degree of impact of these gears on mud, sand, and gravel/rock habitats.

Additional information is provided in this report on the recovery times for each type of impact for each gear type in mud, sand, and gravel habitats ("gravel" includes other hard-bottom habitats). This information made it possible to rank these three substrates in terms of their vulnerability to the effects of bottom trawling, although other factors such as frequency of disturbance from fishing and from natural events are also important. In general, impacts from trawling were determined to be greater in gravel/rock habitats with attached epifauna. Impacts on biological structure were ranked higher than impacts on physical structure. Effects of trawls on major physical features in mud (deep water clay-bottom habitats) and gravel bottom were described as permanent, and impacts to biological and physical structure were given recovery times of months to years in mud and gravel. Impacts of trawling on physical structure in sand were of shorter duration (days to months) given the exposure of most continental shelf sand habitats to strong bottom currents and/or frequent storms.

According to the panel, impacts of sink gillnets and longlines on sand and gravel habitats would result in low degree impacts (NEFSC 2002). Duration of impacts to physical structures from these gear types would be expected to last days to months on soft mud but could be permanent on hard bottom clay structures along the continental slope. Impacts to mud would be caused by gillnet lead lines and anchors. Physical habitat impacts from sink gillnets and longlines on sand would not be expected.

The contents of a second expert panel report, produced by the Pew Charitable Trusts and entitled "Shifting Gears: Addressing the Collateral Impacts of Fishing Methods in U.S. Waters" (Morgan and Chuenpagdee 2003), was also summarized in Amendment 13. This group evaluated the habitat effects of 10 different commercial fishing gears used in U.S. waters. The report concluded that bottom trawls have relatively high habitat impacts, bottom gillnets and pots and traps have low to medium impacts, and bottom longlines have low impacts. As in the International Council for Exploration of the Sea (ICES) and National Research Council (NRC) reports, individual types of trawls and dredges were not evaluated. The impacts of bottom gillnets, traps, and longlines were limited to warm or shallow water environments with rooted aquatic vegetation or "live bottom" environments (e.g., coral reefs).

6.2 BIOLOGICAL ENVIRONMENT

6.2.1 Atlantic Sea Scallop Resource

The Atlantic sea scallop (*Placopetcen magellanicus*) is a bivalve mollusk that is distributed along the continental shelf, typically on sand and gravel bottoms from the Gulf of St. Lawrence

to North Carolina (Hart and Chute, 2004). The species generally inhabit waters less than 20° C and depths that range from 30-110 m on GB, 20-80 m in the Mid-Atlantic, and less than 40 m in the near-shore waters of the Gulf of Maine. Although all sea scallops in the US EEZ are managed as a single stock per Amendment 10, four regional components and six resource areas are recognized. Major aggregations occur in the Mid-Atlantic from Virginia to Long Island (Mid-Atlantic component), GB, the Great South Channel (South Channel component), and the Gulf of Maine (Hart and Rago, 2006; NEFSC, 2007). These four regional components are further divided into six resource areas: Delmarva (Mid-Atlantic), New York Bight (Mid-Atlantic), South Channel, southeast part of GB, northeast peak and northern part of GB, and the Gulf of Maine (NEFMC, 2007). Assessments focus on two main parts of the stock and fishery that contain the largest concentrations of sea scallops: GB and the Mid-Atlantic, which are combined to evaluate the status of the whole stock (NEFMC, 2007). The Scallop Plan Development Team is currently working on revising estimates for all reference points, landings, effort, and LPUE in consideration of FY 2013 – 2014 (2015 default) measures under Framework 24. The following information is based on the best available final information on the scallop resource.

Biomass

The scallop abundance and biomass on GB increased after implementing closures and effort reduction measures between 1995 and 2000. Biomass and abundance declined between 2004 and 2007 because of poor recruitment and the reopening of portions of groundfish closed areas, but has been increasing since then due to improved recruitment.

The most recent scallop biomass surveys were conducted in 2011 by four different survey groups: The NEFSC, SMAST, VIMS, and the Woods Hole Oceanographic Institute's Habitat Camera project (HabCam). Preliminary results (NEFMC Scallop PDT, 2012) from these various surveys are outlined in Table 4.

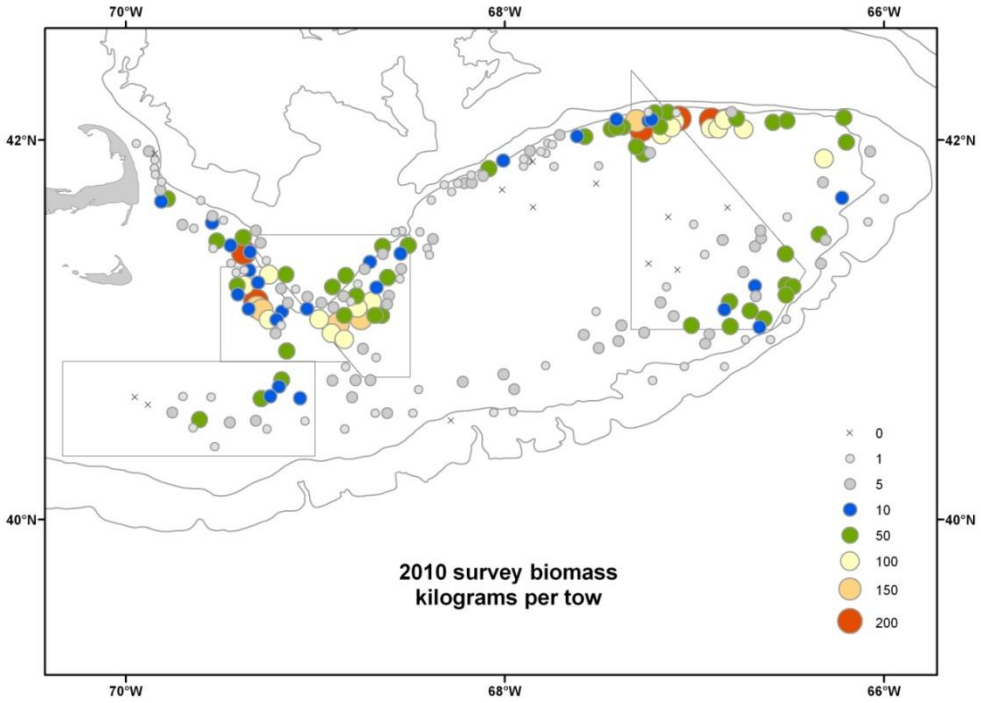
Table 5. Preliminary 2011 total biomass estimates from all scallop surveys (in mt). The "biomass" refers to scallop meat weight, which is estimated using a shell height/meat weight (SH:MW) conversion factor.

Area	NMFS Dredge	SMAST Video	Habcam Photo	VIMS Survey Dredge
GB				
CAI Access	14,873	12,582	18,084	
CAI Closed	6,100	6,290	6,726	
CAII Access	14,244	12,846	9,165	20,169
CAII Closed	11,061	16,307	20,050	
NLS Access	3,950	3,312	5,584	
NLS Closed	86	2,806	2,944	
South Channel	26,491	18,450		
NEP	4,715	8,050	8,259	
Southeast Part	2,212	3,566	4,086	

Total	**80,379**	**87,563**		
Mid-Atlantic				
Delmarva	3,371	5,939		2,287
Elephant Trunk	2,106	2,187		
Hudson Canyon South	17,023	19,316		
New York Bight	9,490	7,721		
Long Island	20,300	16,310		16,676
Virginia Beach	26			
Total	**52,316**	**51,473**		
Outside regular survey		7,689		6,109

As in both 2009 and 2010, scallop biomass increased on GB in 2011. This was mainly due to increased growth rates and strong recruitment in the Great South Channel, along with continuing concentrations on the Northern Edge and in the central portion of Closed Area I, especially just south of the "sliver" access area. The highest concentrations of biomass on GB are currently on the Northern Edge, within Closed Area I, and within the Great South Channel (Figure 1).

Figure 3. Biomass chart for GB from the 2010 and 2011 NMFS sea scallop surveys. (Note that the scale of the legends for each year are not identical).



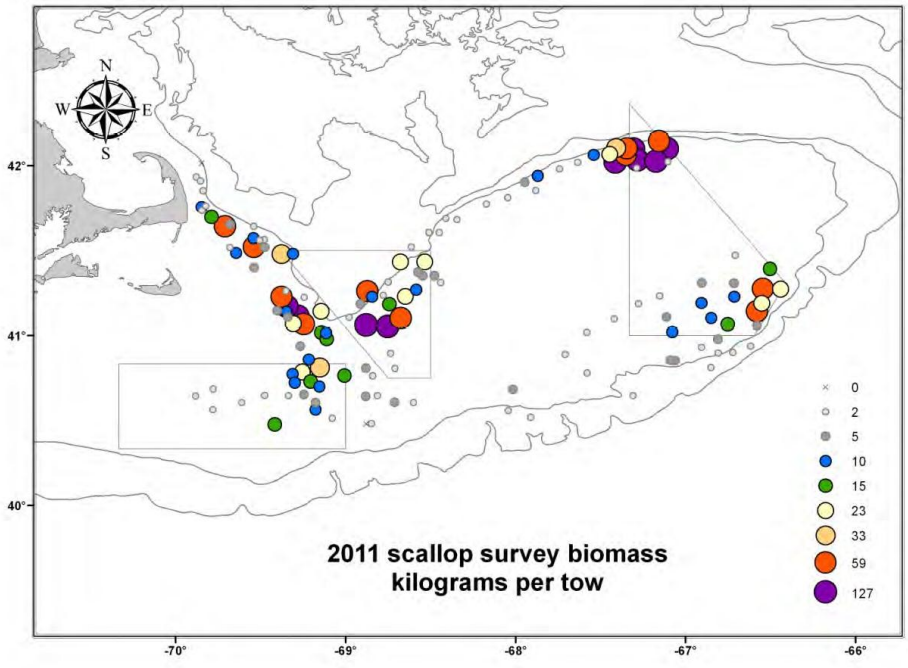


Table 6. LPUE from full-time trips (All trips >1200 lb., includes compensation trips)

Month	Number of trips	Scallop lb.	Average lb./trip	Average LPUE
3	167	2516653	15070	2028
4	81	1218452	15043	1812
5	53	740866	13979	1714
6	26	288308	11089	1403
7	9	114967	12774	1390
9	8	41475	5184	1082
11	7	108819	15546	1254
12	6	65777	10963	950
Grand Total	**361**	**5130861**	**14213**	**1812**

Table 7. LPUE from full-time trips by category (All trips >1200 lb., includes compensation trips)

Category	Month	Number of trips	Scallop lb.	Average lb./trip	Average LPUE
FT DR					
	3	124	1957478	15786	2112
	4	62	955015	15403	1897
	5	42	616906	14688	1803
	6	21	245106	11672	1530
	7	7	100038	14291	1563
	9	7	39619	5660	1148
	11	7	108819	15546	1254
	12	6	65777	10963	950
FT DR Total		**280**	**4124302**	**14730**	**1880**
FT SMD	3	32	418557	13080	1617
	4	17	243339	14314	1517
	5	10	111035	11104	1295
FT SMD Total		**66**	**814940**	**12348**	**1452**
FT TRW	3	11	140618	12783	2276
FT TRW Total		**15**	**191619**	**12775**	**2117**

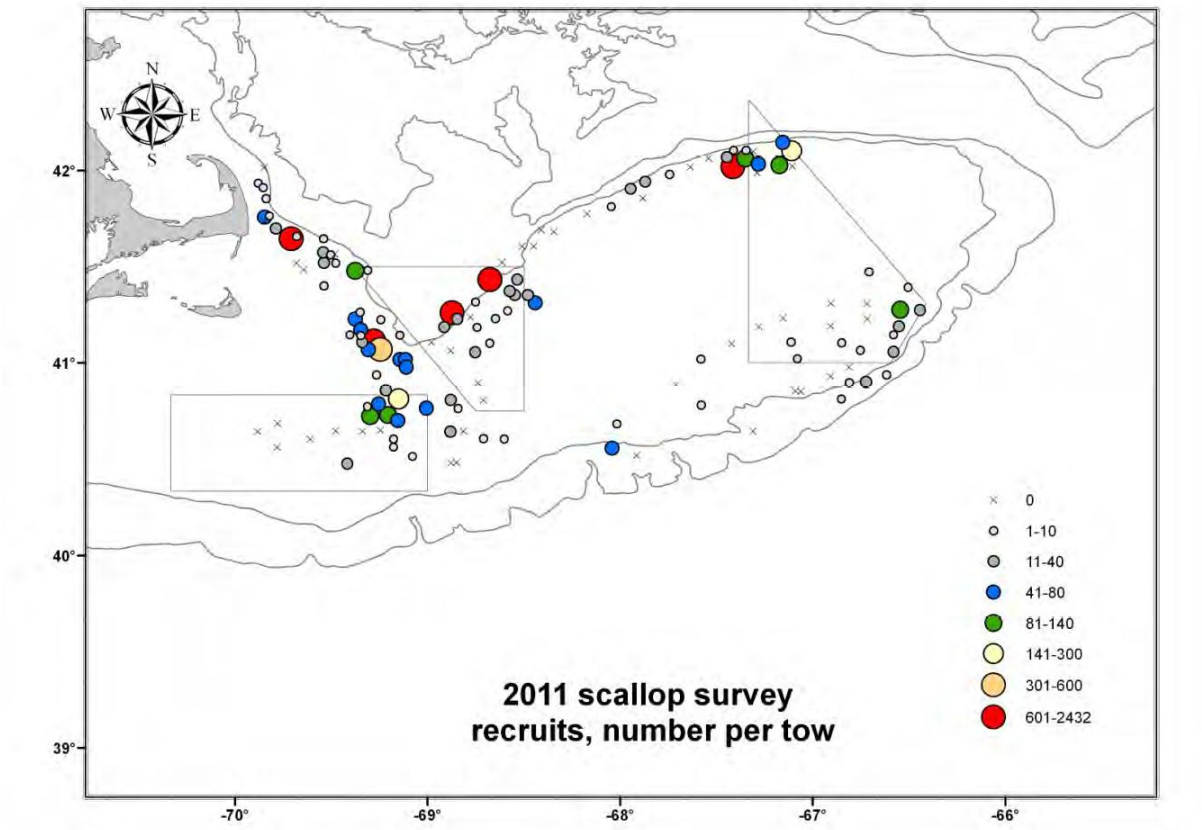
Table 8. LPUE from full-time trips by category (All trips >1200 lb., excludes compensation trips)

Category	Month	Number of trips	Scallop lb.	Average lb./trip	Average LPUE
FT DR					
	3	108	1798010	16648	2135
	4	50	815796	16316	1920
	5	29	489588	16882	1880
	6	11	176184	16017	1735
	11	6	105106	17518	1339
FT DR Total		**214**	**3526072**	**16477**	**1973**
FT SMD	3	25	362363	14495	1696
	4	13	219158	16858	1615
FT SMD Total		**44**	**669211**	**15209**	**1623**
FT TRW	3	9	121539	13504	2274
FT TRW Total		**11**	**152867**	**13897**	**2121**

Recruitment

Moderately strong recruitment was observed on GB in 2011 (2009 year class), especially in the South Channel, on the Northern Edge of CAI, and in a small area of the Southeast part of CAII (Figure 3). Looking at trends for both portions of the scallop stock there is a strong recruitment pattern in place currently for GB, with four years in a row of particularly productive recruitment.

Figure 4. Recruitment chart for GB from the 2011 NMFS sea scallop survey

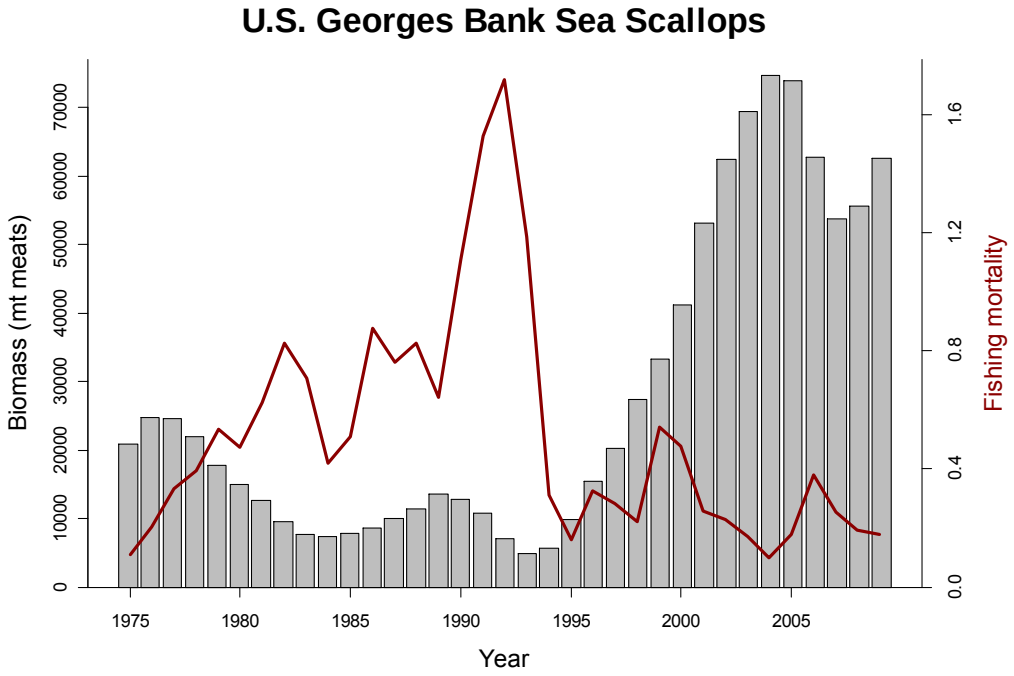


Mortality

Four types of mortality are accounted for in the assessment of the sea scallop resource: natural mortality, and three components of fishing mortality, due to discards, incidental fishing mortality (non-catch fishing mortality), and landings. The updated stock assessment established new values for natural mortality on both stocks. The new estimates is M = 0.12 for GB (NEFSC, 2010), compared to 0.10 used for the resource overall in previous assessments. Discard mortality occurs when scallops are discarded on directed scallop trips because they are too small to be economically profitable to shuck or due to high-grading during access area trips to previously-closed areas. Total discard mortality is estimated at 20% (NEFSC, 2007). Incidental mortality is non-landed mortality associated with scallop dredges that likely kill and injure some scallops that are contacted but not caught by crushing their shells. The most recent assessment in 2010 used 0.20 on GB (NEFSC, 2010), compared to earlier values of 0.15 on GB. The increase in assumed values for both natural and incidental mortality is expected to reduce the productivity potential of the stock, which is likely to cause the model to produce less (over) optimistic projections moving forward.

Finally, fishing mortality, the mortality associated with scallop landings on directed scallop trips, was calculated separately for GB and the Mid-Atlantic because of differences in growth rates. Fishing mortality peaked for both stocks in the early 1990s, but has decreased substantially since then as tighter regulations were put into place including area closures and days-at-sea limits, and biomass levels recovered. In general, *F* has remained fairly stable on GB since 1995 (Figure 5). The formal stock status update was prepared through FY 2009 as part of SARC 50 (NEFSC, 2010), and the F_{max} reference point was changed to F_{msy}. F_{msy} for the whole stock was estimated from the Stochastic Yield Model (SYM) to be 0.38. SARC 50 estimated that overall fishing mortality in 2009 was 0.38, consistent with recent years. Since the fishing mortality in 2009 was equal to F_{msy}, overfishing did not occur (*F* must be above the threshold). The fishing mortality for 2010 and 2011 will be estimated later this spring.

Figure 5. Fishing mortality (red line) and biomass estimates (y-1, gray bars) from the Catch-At-Age Size-At-Age (CASA) model for scallops on GB (top) and in the Mid-Atlantic (bottom), through 2009. Updated estimates through 2011 are not available until late spring 2012.



PROTECTED RESOURCES

The following protected species are found in the environment in which the sea scallop fishery is prosecuted. A number of them are listed under the Endangered Species Act of 1973 (ESA) as endangered or threatened, while others are identified as protected under the Marine Mammal Protection Act of 1972 (MMPA). An update and summary is provided here to facilitate consideration of the species most likely to interact with the scallop fishery relative to the preferred alternative.

A more complete description of protected resources inhabiting the action area is provided in Amendment 15 to the Sea Scallop FMP (See Amendment 15 to the Atlantic Sea Scallop Fishery

Management Plan, Section 4.3, Protected Species, for a complete list. An electronic version of the document is available at http://www.nefmc.org/scallops/index.html.).

Cetaceans--Status
North Atlantic right whale (Eubalaena glacialis)--Endangered
Humpback whale (Megaptera novaeangliae)--Endangered
Fin whale (*Balaenoptera physalus*)--Endangered
Blue whale (*Balaenoptera musculus*)--Endangered
Sei whale (*Balaenoptera borealis*)--Endangered
Sperm whale (*Physeter macrocephalus*)--Endangered
Minke whale (*Balaenoptera acutorostrata*)--Protected
Beaked whale (*Ziphius* and *Mesoplodon spp.*)--Protected
Pilot whale (*Globicephala* spp.)--Protected
Spotted and striped dolphin (*Stenella spp.*)--Protected
Risso's dolphin (*Grampus griseus*)--Protected
White-sided dolphin (*Lagenorhynchus acutus*)--Protected
Common dolphin (*Delphinus delphis*)--Protected
Bottlenose dolphin: coastal stocks (*Tursiops truncatus*)--Protected
Harbor porpoise (*Phocoena phocoena*)--Protected

Pinniped--Status
Harbor seal (*Phoca vitulina*)--Protected
Gray seal (*Halichoerus grypus*)--Protected
Harp seal (*Phoca groenlandica*)--Protected
Hooded seal (*Crystophora cristata*)--Protected

Sea Turtle--Status
Leatherback sea turtle (*Dermochelys coriacea*)--Endangered
Kemp's ridley sea turtle (*Lepidochelys kempii*)--Endangered
Green sea turtle (*Chelonia mydas*)--Endangered[1]
Loggerhead sea turtle –(*Caretta caretta*) Threatened[2]

Fish--Status
Shortnose sturgeon (Acipenser brevirostrum) Endangered
Atlantic salmon (Salmo salar) Endangered
Atlantic sturgeon (Acipenser oxyrinchus oxyrinchus)
Gulf of Maine Distinct Population Segment (DPS)-Threatened
New York Bight DPS--Endangered
Chesapeake Bay DPS--Endangered
Carolina DPS--Endangered

[1] Green sea turtles in U.S. waters are listed as threatened except for the Florida breeding population, which is listed as endangered. Due to the inability to distinguish between these populations away from the nesting beach, green sea turtles are considered endangered wherever they occur in U.S. waters.

[2] Northwest Atlantic Distinct Population Segment (DPS) which encompasses loggerheads found north of the equator, south of 60° N latitude, and west of 40° W longitude.

South Atlantic DPS--Endangered

Threatened and Endangered Species Not Likely to be Affected by the Alternatives under Consideration

According to the most recent Biological Opinion (Opinion) issued by NMFS on July 12, 2012, the agency has previously determined that species not likely to be affected by the Atlantic Sea Scallop FMP or by the operation of the fishery include the shortnose sturgeon, the Gulf of Maine distinct population segment (DPS) of Atlantic salmon, hawksbill sea turtles, and the following whales: North Atlantic right, humpback, fin, sei, blue, and sperm whales, all of which are listed as endangered species under the ESA. NMFS also concluded that the continued authorization of the sea scallop fishery would not have any adverse impacts on cetacean prey, and that it would not affect the oceanographic conditions that are conducive for calving and nursing of large cetaceans.

The primary gear types used in the scallop fishery are dredges and bottom trawls. The greatest amount of effort and landings for scallops are accounted for by dredge vessels, which may interact with sea turtles. Atlantic sturgeon are not known to interact with scallop dredge gear. Trawl vessels may interact with sea turtles and Atlantic sturgeon. The scallop fishery primarily affects sea turtles in the Mid-Atlantic from May through November, with the majority of interactions occurring between June and October (Haas et al. 2008; Murray 2011; Warden 2011). Sea turtle interactions outside the Mid-Atlantic (i.e., on Georges Bank and in the Gulf of Maine) and outside the above months are considered to be rare. Individuals from all five Atlantic sturgeon DPSs can occur throughout the action area at any time.

Based on the best available information, we anticipate up to 161 loggerhead interactions in scallop dredge gear annually as a result of the continued operation of the scallop dredge fishery. For fishing year 2012 (pre-TDD), 129 of those interactions are expected to result in serious injuries or mortality. For fishing year 2013 and beyond (post-TDD), 46 of those interactions are expected to result in serious injuries or mortalities each year. That represents a 64% reduction in serious injury/mortality from 2012 to 2013 and beyond. These are estimates of total observed plus unobserved, but quantifiable, interactions in the dredge fishery annually.

As indicated above, gear modifications including chain mats and the impending requirement of the TDD are expected to reduce the number of lethal interactions (including serious injuries) for all sea turtles that interact with scallop dredge gear. Murray (2011) estimated an average of 105 hard-shelled sea turtles per year (125 turtles reduced to 20) were not captured in dredge gear from September 26, 2006, through 2008 because chain mats were utilized. These 105 turtles represent the unobserved, quantifiable interactions estimated in the fishery since chain mats were implemented (Murray 2011; Warden and Murray 2011). Thus, the estimated maximum conservation benefit of chain mats could be expressed as 105 sea turtles per year (if all the turtles captured in the dredge suffered serious injuries/mortalities and all those excluded from the dredge did not). If all of those 105 turtles survived the interaction with the chain mat, and would not have survived had they been captured in the bag, then the maximum conservation benefit of chain mats alone could be viewed as an 84% ((125-20)/125) reduction in serious injury and mortality. However, there was not enough information in the Murray (2011) analysis to evaluate

how the chain mat affected the injury and mortality rate of sea turtles in the gear, though by design the chain mat is intended to reduce the likelihood of a sea turtle's capture in the dredge bag. There is no evidence suggesting that the injury rate of a chain mat equipped dredge is higher than that of a traditional dredge for sea turtles captured in the dredge. As stated in Murray (2011), the realized conservation benefit could be better quantified if mortality and injury rates in traditional gear were refined, and serious injury/mortality rates in chain mat gear were known.

The continued operation of the scallop fishery is also expected to result in the total annual capture of one leatherback, two Kemp's ridleys, and one green sea turtle in dredge gear. Interactions of Kemp's ridley and green sea turtles with scallop dredge gear are expected to be either lethal or non-lethal. Interactions of leatherback sea turtles with scallop dredge gear are expected to be non-lethal given the use of chain mats (which should exclude all leatherbacks from the dredge bag) and the likelihood that all leatherback interactions will occur within the water column rather than on the bottom. However, if an interaction occurs with a dredge not equipped with chain mats, the interaction could be lethal.

Scallop trawl gear is expected to result in the estimated annual average capture of up to 140 loggerhead sea turtles, of which up to 66 are expected to be lethal. Scallop trawl gear is also expected to result in the total annual capture of one leatherback, one Kemp's ridley, and one green sea turtle annually. These interactions may be either lethal or non-lethal. Loggerhead, leatherback, and green sea turtles interacting with scallop dredge and trawl gear are expected to include both juvenile and adult sea turtles, while Kemp's ridley sea turtles interacting with scallop fishing gear are expected to include only benthic immature individuals.

Finally, the continued operation of the scallop fishery is expected to result in the capture of one Atlantic sturgeon annually, which may come from any of the five DPSs which are assessed above. Given an estimated mortality rate of 5% in commercially fished bottom otter trawl gear and a capture rate of one Atlantic sturgeon per year, we anticipate one Atlantic sturgeon mortality in scallop trawl gear every 20 years. We expect that these interactions could be with Atlantic sturgeon from any of the five DPSs, but are likely to occur in this proportion: NYB 46%; SA 29%; CB 16%; GOM 8%; and Carolina 0.5%.

The reader is referred to Section 4.3.1.1 of the scallop Amendment 15 EIS for a complete description regarding species not likely to be affected by the alternatives under consideration. These species descriptions include the cetaceans and pinnipeds listed above. In addition, it is noted that according to the 2011 List of Fisheries, there have been no documented marine mammal species interactions with either the sea scallop dredge fishery or the Atlantic shellfish bottom trawl fishery; therefore, the scallop fishery is considered a Category III fishery under the MMPA (i.e., a remote likelihood or no known incidental mortality and serious injuries of marine mammals).

6.2.2 Non-Target Species

Non-target species (sometimes referred to as incidental catch or bycatch) include species caught by scallop gear that are both landed and not landed, including small scallops. The impacts of the scallop fishery on bycatch have been minimized to the extent practicable through management measures involving ring size, larger twine top, limits on effort, etc. In general, rotational area

management is designed to improve and maintain high scallop yield, while minimizing impacts on groundfish mortality and other finfish catches. Access programs may even reduce fishing mortality for some finfish species, because the total amount of fishing time in access areas is low compared with fishing time in open areas due to differences in LPUE. Incidental catch is sometimes higher in access areas compared to open areas, but in general total scallop landings is also usually higher in access areas.

Potential non-target species caught incidentally in the scallop fishery were identified in Amendment 15 and Framework 23 based on discard information from the 2009 SBRM report (NEFSC 2009) and various assessments such as GARM III and the Skates Data-poor Workshop. Based on a report presented by NEFSC (2009), the Scallop PDT identified the following species as having more than 5% of total estimated catch from discards in the scallop fishery: monkfish, skate (overall), and windowpane flounder. The status of these species is listed in Table 9.

Data from GARM III show that the scallop fishery caught more than 5% of the bycatch (compared to overall catch) for some multispecies stocks by region. GB and Southern New England yellowtail flounder were caught in amounts greater than 5%, but Cape Cod yellowtail only has occasional spikes over 5%. Although there is greater than 5% caught in both the GB /Gulf of Maine and Southern New England /Mid-Atlantic regions for windowpane flounder, the catch is generally greater in Southern New England / Mid-Atlantic. The Skate Data-poor Working Group identified the greatest bycatch for the scallop fishery as little and winter skates. See Table 9 for the current status of these species (Source: http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm).

Table 9. Status of non-target species known to be caught in scallop fishing gear (GB – GB; GOM – Gulf of Maine; MA – Mid-Atlantic; SNE-Southern New England).

Species	Stock	Overfished?	Overfishing?
Summer flounder (fluke)	Mid-Atlantic Coast	No	No
Monkfish	GOM/Northern GB	No	No
Monkfish	Southern GB/MA	No	No
Northeast Skate Complex	Barndoor skate	No	No
Northeast Skate Complex	Clearnose skate	No	No
Northeast Skate Complex	Little skate	No	No
Northeast Skate Complex	Rosette skate	No	No
Northeast Skate Complex	Smooth skate	No	No
Northeast Skate Complex	Thorny skate	Yes	No
Multispecies	Windowpane - GOM/GB	Yes	Yes
Multispecies	Windowpane - SNE/MA	No	No
Multispecies	Winter flounder - GB	No	No
Multispecies	Winter flounder - GOM	Unknown	No
Multispecies	Winter flounder - SNE/MA	Yes	No
Multispecies	Yellowtail flounder - CC/GOM	Yes	Yes
Multispecies	Yellowtail flounder - GB	Yes	No
Multispecies	Yellowtail flounder - SNE/MA	Yes	Yes

Atlantic Surfclam	Mid-Atlantic Coast	No	No
Ocean Quahog	Atlantic Coast	No	No

6.3 HUMAN COMMUNITIES (ECONOMIC AND SOCIAL TRENDS)

6.3.1 Introduction

This section of the document summarizes the economic and social trends of the scallop fishery, including trends in landings, revenues, prices and foreign trade for the sea scallop fishery since 1994. This section provides background information about the scallop fishery in various ports and coastal communities in the Northeast. See Framework 23 for further details and graphs on economic and social trends. Yellowtail flounder is not included in this analysis because the information that was used to allow the transfer of 150.6 mt of GB yellowtail flounder indicates that the scallop fishery is not expected to exceed the revised sub-ACL or that the sub-ACL will be constraining to the scallop fishery. Therefore, this action is not expected to impact the baseline GB yellowtail flounder fishery. See Framework 47 for further details and graphs on economic and social trends of the GB yellowtail founder fishery.

6.3.2 Trends in Landings, prices and revenues

In the fishing years 2009 and 2010, the landings from the northeast sea scallop fishery stayed above 56 million pounds, surpassing the levels observed historically (Figure 10). The recovery of the scallop resource and consequent increase in landings and revenues is striking given that average scallop landings per year were below 16 million pounds during the 1994-1998 fishing years, less than one-third of the present level of landings. Landings information from the 2011 fishing year indicates another year of landings in the 50 – 60 million lb range, but finalized data is not yet available. The landings by the general category vessels declined, however, in 2010 as a result of the Amendment 11 implementation that restricts TAC for the limited access general category (LAGC) fishery to 5.5% of the total catch, which is now specified as the ACL under Amendment 15.

Figure 6. Scallop landings by permit category and fishing year (dealer data)

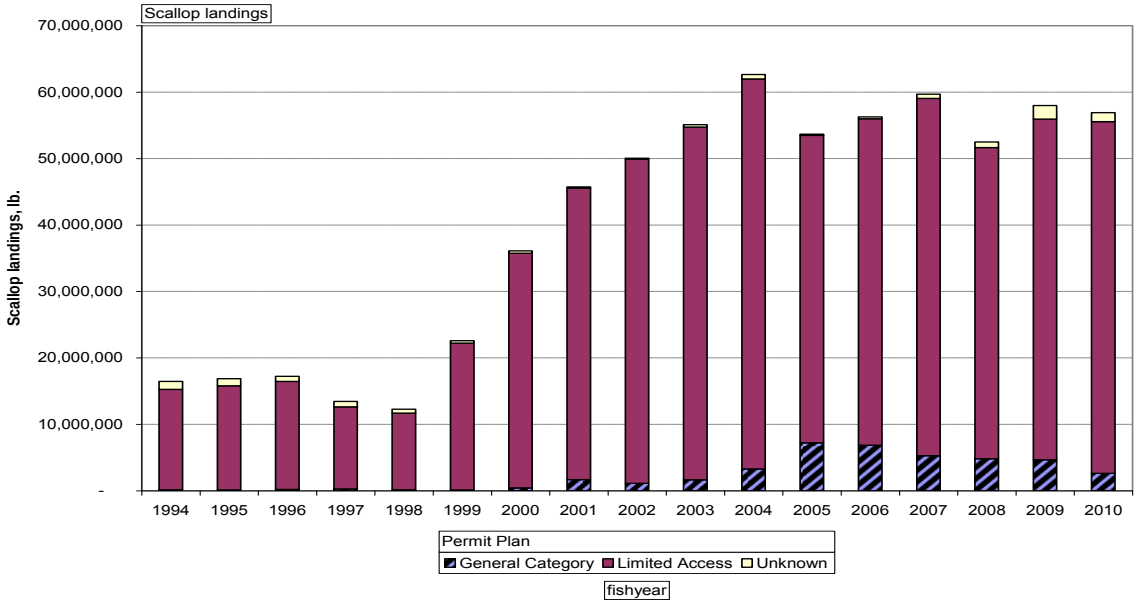
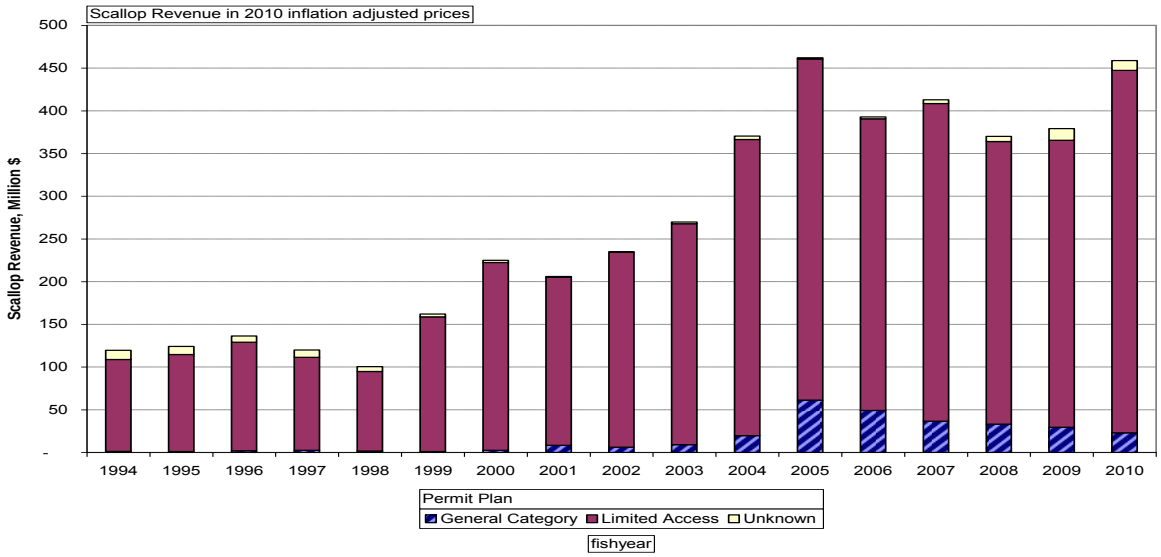


Figure 11 shows that total fleet revenues tripled from about $120 million in 1994 to over $450 million in 2010 (in inflation-adjusted 2010 dollars). The increase in total fleet revenue was mainly due to the increase in scallop landings and the increase in the number of active limited access vessels during the same period. Landings amounted to over 55 million lb. and revenue increased to more than $550 million so far in the FY 2011 (March to Dec. 2011).

Figure 7. Scallop revenue by permit category and fishing year in 2010 inflation adjusted prices (dealer data)



The trends in revenue per full-time vessel were similar to the trends for the fleet as a whole. The average scallop revenue per limited access vessel tripled from about $400,000 in 1994 to over $1,200,000 in 2010 as a result of higher landings combined with an increase in ex-vessel price to about $8.00 per pound of scallops. Average price for scallops increased to about $9.90 per pound so far in FY 2011 (March – December 2011), thus average revenue per full-time vessel is expected to exceed the levels in FY 2010 (See Table 10). Although total landing and the number of general category vessels declined after the implementation of Amendment 11, average revenue for LAGC IFQ fishery increased to nearly $75,000 in 2010 from an average of $38,000 in 2008.

Table 10. Available FY 2011 scallop landings and price per lb (January and February 2012 data are not yet available).

Fishing Year	MONTH	**Sum of SSCVAL**	**Sum of SSCLAND**	**Price**
2010	1	15022610	1534914	9.787265
	2	19694728	2079377	9.471456
2010 Total		34717338	3614291	9.605574
2011	3	48573364	5229544	9.28826
	4	61486393	6315561	9.735698
	5	88837901	9006999	9.863208
	6	68736200	7223223	9.516001
	7	47064992	4740285	9.928726
	8	90634469	9275592	9.771287
	9	53910079	5165918	10.43572
	10	36249401	3532352	10.26211
	11	28591819	2694624	10.61069
	12	20624409	1880815	10.96568
2011 Total		544709027	55064913	9.892125
Grand Total		579426365	58679204	9.874476

6.3.3 Trends in effort and LPUE

There has been a steady decline in the total DAS used by the limited access scallop vessels from FYs 1994 to 2010 as a result of the effort-reduction measures since Amendment 4 (1994). Total DAS-used declined further in 2008 to 24,121 days as the open area DAS allocations are reduced by 30 percent from 51 days to 35 days per full-time vessel, but increased to 26,300 in 2009 as the limited access vessels received access area trips (5 trips per vessel). Open area DAS allocations were slightly higher in 2010 (38 DAS versus 37 DAS in 2009). Total DAS-used by the limited access vessels were slightly higher in FY 2010 despite lower number of access area trips (4 trips per vessel).

The impact of the decline in effort below 30,000 DAS since 2005 (with the exception of 2007) on scallop revenue per vessel was small, however, due to the increase in LPUE from about 1600 pounds per day-at-sea in 2007 to over 2000 pounds per DAS since 2010. For trends in LPUE by permit plan and category please see Figure 7 and Figure 8 in Appendix I of Framework 23.

6.3.4 Trends in the meat count and size composition of scallops

Meat count, or the number of meats it takes to make up one pound of scallops, is an indication of how successful the fishery and management plan is in increasing yield from the scallop resource. The Scallop FMP strives for lower meat counts because it means that a fewer number of scallops are harvested from the resource, contributing to lower fishing mortality and higher fishing efficiency. Average scallop meat count has declined continuously since 1999 as a result of effort-reduction measures, area closures, and an increase in ring sizes implemented by the Scallop FMP. The share of larger scallops increased with the share of U10 scallops rising to 15 percent in 2009 and 2010 compared to less than 10 percent in 2000-2004. The share of 11-20

count scallops increased from 12 percent in 1999 to 63 percent in 2010 and, the share of 30 or more count scallops declined from 30 percent in 1999 to less than 1 percent in 2010. Larger scallops priced higher than the smaller scallops contributed to the increase in average scallop prices in recent years despite larger landings. The size composition of landings has continued to increase toward larger scallops. The proportion of 11-20 count scallops in total landings increased from about 58 percent in 2010 (March to November) to about 78 percent in 2011 (March to November) while the share of 20-30 count scallop declined from 17 percent in 2010 to 3.7 percent in 2011 (Table 11).

Table 11. Scallop landings (in lb) by market size as a percent of total.

MONTHGRP	MKTSIZE	2010	2011
Dec-Feb	UNDER 10 COUNT	0.40%	NA
	11-20 COUNT	5.10%	NA
	21-30 COUNT	3.89%	NA
	31+	0.02%	NA
	NA	0.35%	NA
Mar-Nov	UNDER 10 COUNT	15.05%	15.68%
	11-20 COUNT	58.36%	78.47%
	21-30 COUNT	15.34%	3.78%
	31+	0.09%	0.51%
	NA	1.40%	1.56%
Grand Total		100.00%	100.00%

6.3.5 The trends in participation by permit, vessel characteristics and gear type

The limited access scallop fishery consists of 347 vessels. It is primarily full-time, with 250 full-time dredge, 52 full-time small dredge vessels and 11 full-time net boats. No occasional permits are left in the fishery because those 32 were converted to part-time small dredge in 2010. Similarly, there are only two part-time permits because most were converted into full-time dredge vessels after 2000.

Since 2001, there has been considerable growth in fishing effort and landings by vessels with general category permits, primarily as a result of resource recovery and higher scallop prices. Amendment 11 implemented a limited entry program for the general category fishery reducing the number of general category permits after 2007. In 2011 application year, there were 288 LAGC IFQ permits, 102 NGOM and 279 incidental catch permits in the fishery totaling 670 permits. Although not all vessels with general category permits were active in the years preceding 2008, there is no question that the number of vessels (and owners) that hold a limited access general category permit under the Amendment 11 regulations are less than the number of general category vessels that were active prior to 2008.

6.3.6 Landings by gear type

Most limited access category effort is from vessels using scallop dredges, including small dredges. The number of vessels using scallop trawl gear has decreased continuously and has been at 11 full-time trawl vessels since 2006. In comparison, there has been an increase in the numbers of full-time and part-time small dredge vessels after 2002. About 80 percent of the scallop pounds are landed by full-time dredge and about 13 percent landed by full-time small dredge vessels since the 2007 fishing year.

Most general category effort is, and has been, from vessels using scallop dredge and other trawl gear. The percentages of scallop landings show that landings made with a scallop dredge in 2011 continue to be the highest compared to other general category gear types.

6.3.7 Trends in ownership patterns in the scallop fishery

The scallop limited access fishery has a highly concentrated ownership structure. According to the ownership data for 2011, only 71 out of 343 vessels belonged to single boat owners. The rest were owned by several individuals and/or different corporations with ownership interest in more than one vessel. This in contrast to the LAGC IFQ Fishery which is dominated mostly with single boat owners (155 out of 259 vessels belonged to the single boat owners).

6.3.8 Trends in Foreign Trade

One of most substantial change in the trend for foreign trade for scallops after 1999 was the striking increase in scallop exports. The increase in landings especially of larger scallops led to a tripling of U.S. exports of scallops from about 5 million lb in 1999 to about 25 million lb per year since 2005. In 2010, exports were about 25 million lb and imports were 51.9 million lb. From January to October 2011, exports were 26.5 million lb and imports were 52.5 million lb. A rebuilt scallop fishery benefited the nation by reducing the scallop trade deficit from over $230 million in 1994 to less than $90 million since 2009.

6.3.9 Dependence on the Scallop Fishery

Both full-time and part-time limited access vessels had a high dependence on scallops as a source of their income. Full-time limited access vessels had a high dependence on scallops as a source of their income and the majority of the full-time vessels (94 percent) derived more than 90 percent of their revenue from the scallop fishery in 2010. Comparatively, part-time limited access vessels were less dependent on the scallop fishery in 2010, with only 46 percent of part-time vessels earning more than 90 percent of their revenue from scallops.

LAGC permit holders (IFQ and NGOM) are less dependent on scallops compared to vessels with limited access permits. In 2010, only about half (49 percent) of IFQ permitted vessels earned greater than 50 percent of their revenue from scallops. Among NGOM permitted vessels, only 31 percent earned more than 50 percent of their revenue from scallops in 2010. Scallops still comprise the largest proportion of the revenue for these general category vessels, accounting for 59 - 66 percent of the revenue for IFQ and NGOM vessels respectively.

The relative ease with which a vessel is able to switch between fisheries is an indicator of the dependence on any one fishery or species. The general category fishery has a large percentage of

vessels that have permits in other fisheries and landings of corresponding species. Please refer to Framework 23 Appendix 1 (Table 34 through Table 39) to see the number and percentage of scallop vessels with permits from other fishery management plan, as well as the number scallop vessels that have actual landings of other species. These tables also describe a limited access fishery where a large percentage of vessels have permits in other fisheries but relatively few vessels actually landing species other than scallops.

6.3.10 Trends in scallop landings by port

The landed value of scallops by port landing fluctuated from 1994 through 2010 for many ports. During the past five years, five ports have consistently brought in the most landed value: New Bedford, MA; Cape May, NJ; Newport News, VA; Barnegat Light/Long Beach, NJ, and Seaford, VA. In addition to bringing in the most landed value, in 1994 scallop landings represented more than 37 percent of the total landed value for New Bedford, MA and Cape May, NJ, and more than 65 percent of the total landed value for Newport News and Barnegat Light/Long Beach, NJ. This increased in 2010 to 84 percent and 87 percent for New Bedford, MA and Cape May, NJ, respectively, and 97 percent and 90 percent for Newport News and Barnegat Light/Long Beach, NJ, respectively. Collectively, 2010 has the highest landed value of scallops since 2005. 75 percent of ports saw an increase in the percentage of landed scallop value to total landed value in 2010 compared to 2009.

The largest numbers of permitted limited access scallop vessels are currently in the ports of New Bedford, MA and Cape May, NJ, which represent 38 percent and 19 percent of the total, respectively. Of the 349 permitted limited access vessels in 2010, 199 originate from New Bedford, MA and Cape May, NJ. In addition to having the greatest number of permitted limited access scallop vessels, New Bedford, MA also has the greatest number of general category scallop vessels. Gloucester, MA, Boston, MA, and Point Judith, RI, also have high numbers of general category scallop vessels. These major ports can also be described by the characteristics of the vessels that hail from each port. On average limited access vessels are larger, by length and weight, than their general category counterparts.

7.0 ENVIRONMENTAL CONSEQUENCES – ANALYSIS OF IMPACTS

7.1 IMPACTS OF ALTERNATIVE 1 (PREFERRED)

7.1.1 Physical Environment/EFH

The proposed measures of Alternative 1 are not expected to adversely affect the physical environment because effort is not expected to change in reaction to the partial exemption. The physical environment impacts are expected to be similar for both Alternative 1 and the Status Quo/No Action Alternative. Under Alternative 1 or the Status Quo/No Action it is unlikely that there will be any change in effort for scallops. The projections used to make the transfer of 150.6 mt indicated that neither the prior 307.5 mt or the current 156.9 mt GB yellowtail flounder sub-ACLs were expected to constrain the scallop fishery. Therefore, the effort is likely to be dictated by the available scallop allocation, which is unchanged by this action. However, if AMs are triggered at the sub-ACL or ACL level the potential impacts on the physical environment

will be analyzed in a subsequent action, but would generally be neutral or positive, as effort would likely be reduced.

7.1.2 Biological Environment

7.1.2.1 Target Populations

The proposed action would likely have no effect on the scallop population in GB because the scallop allocation is unchanged. The number of allocated access area trips and open area DAS are unchanged by Alternative 1 and the Status Quo/No Action Alternative. Further the AM for scallops on GB remain in place.

7.1.2.2 Non-Target Populations

The proposed action is not expected to have an effect on non-target species. Effort is not expected to change in reaction to the partial exemption. The projections used to make the transfer of 150.6 mt indicated that neither the prior 307.5 mt or the current 156.9 mt GB yellowtail flounder sub-ACLs were expected to constrain the scallop fishery. Therefore, the effort is likely to be dictated by the available scallop allocation, which is unchanged by this action. Therefore the impacts on non-target populations are not expected to differ for Alternatives 1 or the Status Quo/No Action Alternative.

7.1.2.3 Protected Resources

The proposed action is not expected to have an effect on protected resources. Effort is not expected to change in reaction to the partial exemption. The projections used to make the transfer of 150.6 mt indicated that neither the prior 307.5 mt or the current 156.9 mt GB yellowtail flounder sub-ACLs were expected to constrain the scallop fishery. Therefore, the effort is likely to be dictated by the available scallop allocation, which is unchanged by this action. Therefore the impacts on protected resources are not expected to differ for Alternatives 1 or the Status Quo/No Action Alternative

7.1.3 Impact of Action on Human Communities

7.1.3.1 Scallop Fishery

Compared to the No Action alternative, the preferred alternative is expected to bring positive benefits to the local fishing communities which have historically depended on the scallop fishery. This exemption changes the trigger point where the AM is implemented for the scallop fishery regarding their sub-ACL for GB yellowtail flounder. This would be beneficial to the scallop industry on GB as they would not have to redirect their effort and could continue to target scallops in the areas and during the time of year that have been the most efficient historically. Based on the best available information used to project catch and make sub-ACL revisions, it is unlikely that the scallop fishery will exceed their sub-ACL of 156.9 mt.

Under this alternative, the scallop fishery would not have an AM implemented unless it exceeds its original sub-ACL for GB yellowtail flounder (307.5 mt) by 50% or more (>461.25 mt), or if the scallop fishery exceeds its sub-ACL of 307.5 mt and the overall ACL for GB yellowtail is

exceeded. Depending on the severity of the overage, portions of the GB yellowtail flounder stock area would be closed to fishing for up to a year (Figure 1, Table 2, Table 3). In FY 2009, 3,015,119 lb of scallop were caught in the area that could potentially be closed if the AM were implemented (Table 11). Depending on the percentage that the sub-ACL is exceeded by and whether or not Closed Area II is open, the pounds landed under the AM range from zero to 3,015,119 lb (Table 11, Table 12). In FY 2011, the average price for scallops was $9.94/lb. Therefore the amount of scallops caught in the area that would be affected by the AM represents nearly $30 million worth of scallops ($29,970,282.86), however the total fishery value in this year was $581,471,531. Although it is unlikely that the sub-ACL will be exceeded, Alternative 1 would exempt the scallop industry from the requirements of this AM and allow them to land these scallops as usual.

Table 12. Sum of landings in the current GB AM schedule under Framework 23 for years when Closed Area II is open (2009, All limited access vessels)

Overage	LA Closure	Sum of landings for 2009	% of Total
3% or less	Oct-Nov	0	0%
3.1-14%	Sept-Nov	63300	2%
14.1-16%	Sept-Jan	63300	2%
16.1-39%	Aug-Jan	93300	3%
39.1-56%	Jul-Jan	256222	8%
Greater than 56%	All year	3015119	100%

Table 13. Sum of landings in the current GB AM schedule under Framework 23 for years when Closed Area II is closed (2009 and 2010, All limited access vessels)

Overage	LA Closure	Sum of landings for 2009 and 2010	% of Total
1% or less	Sept-Nov	0	0%
2%	Aug-Jan	26000	57%
3%	Aug-Mar	26000	57%
4%	Jul-Mar	45675	100%
5%	Jul-May	45675	100%
6% or greater	All year	45675	100%

7.1.3.2 Groundfish Fishery

There could be negative impacts to the groundfish fishery if the fishery level ACL is exceeded. If the combined GB yellowtail flounder catch stays within the total fishery ACL level of 547.8 mt, there are no impacts to the groundfish fishery. Overages of the fishery-level ACL are paid back, pound-for-pound, as part of the U.S. Canada Understanding. It would be possible partially exempt the scallop fishery from the FY 2012 AM and have no impact on groundfish. This is wholly dependent on if the total fishery level ACL is exceeded.

The analysis used to effect the revision of the FY2012 sub-ACLs indicated that the scallop fishery would likely use a high-end estimated 156.9 mt. The revised sub-ACL is 90 percent of this estimated catch level. Arguably, any pound-for-pound repayment affects both the scallop and groundfish fisheries. The Council is contemplating different ways to allocate the available U.S. catch limit between the scallop and groundfish fishery as part of the development of management measures for FY2013. The current method would set the sub-ACLs after an analysis of how much GB yellowtail flounder is expected to be taken by the scallop fishery in FY2013 with the remainder allocated to the groundfish fishery. If a pound-for-pound repayment is required and this allocation structure is used, the repayment could have a disproportionate impact on the groundfish fishery largely dependent on how much GB yellowtail flounder the scallop fishery is projected to catch in FY 2013.

There is a higher likelihood that a fishery-level ACL overage could occur under the proposed action in comparison to the No Action/Status Quo Alternative because there may be less of an incentive for the scallop fishery to ensure GB yellowtail flounder catch does not exceed 156.7 mt under the proposed action. The groundfish fishery, prosecuted almost exclusively through sector operations for GB yellowtail flounder, has a strong incentive to stay within its sub-ACL of 368.3 mt as the overage AM is to repay the overage pound-for-pound at the Annual Catch Entitlement (ACE) level. There is also 22.6 mt for the other sub-component fishery under the total fishery ACL of 547.8 mt

Preliminary information indicates that the allowable GB yellowtail flounder catch levels will be further reduced in FY 2013. If the ACL is exceeded for FY 2012, this, in conjunction with the projected low available harvest, could have a disproportionate effect on groundfish based on the current allocation process of GB yellowtail flounder to the scallop fleet. Stated more plainly, the groundfish fishery may repay a larger share of any such overage than would the scallop fishery. Catch estimates through early September 2012 indicate that the scallop fishery has taken roughly 82 percent of the revised 156.7 mt sub-ACL. The groundfish fishery has taken only 10 percent of its 368.3 mt sub-ACL. The scallop fleet engages in a voluntary bycatch avoidance program, but this revision represents a sizable shift in their sub-ACL for GB yellowtail flounder in the middle of the fishing season. Despite the analysis and the expectation that they will not exceed their sub-ACL, they may have to modify their operations to avoid Georges Bank yellowtail flounder. It is not possible to infer from the currently available data if the total fishery level ACL will be exceeded in FY 2012 and if so, by what magnitude. It is also not possible to precisely predict what impacts may result for either fishery. If an overage does occur and a pound-for-pound repayment is required, the effects of such action paired with the potentially lower catch limit will be fully analyzed in the action that develops and implements the repayment.

To provide some relative context to the potential magnitude of impacts Framework Adjustment 47 indicated the total value of all species, including all U.S/Canada stocks, other groundfish stocks, and non-groundfish species harvested from the U.S./Canada Area was estimated as $34.5 million for fishing year 2010. It is not feasible to expect that no fishing would occur on Georges Bank in FY 2013, even if a significant overage of the GB yellowtail flounder ACL occurs and scallop access and groundfish opportunity is greatly reduced. Thus, impacts to the groundfish fishery, while unlikely to occur at all, would be less than the total value of all species harvest from Georges Bank. The total groundfish fishery value was estimated to be slightly more than $115 million in 2010.

7.2 NO ACTION/STATUS QUO ALTERNATIVE

7.2.1 Physical Environment/EFH

The impacts of the No Action/Status Quo Alternative would be expected to be similar to the impacts of the preferred alternative, as described in Section 7.1.1. The No Action/Status Quo Alternative is not expected to adversely affect the physical environment because effort would likely remain consistent. The previously implemented action (July 16, 2012; 77 FR 41704) that lowered of the scallop sub-ACL may result in nominal reduction in effort on GB, in an effort to avoid yellowtail bycatch. The physical environment impacts are expected to be similar for both Alternative 1 and the No Action/Status Quo Alternative.

7.2.2 Biological Environment

7.2.2.1 Target Populations

If the No Action/Status Quo Alternative is implemented there would not be any changes to the way scallop fishery sub-ACLs are administered. Under this option, when a sub-ACL is caught the AMs that apply to the scallop fishery are implemented. The particular AMs are specified by the Atlantic Sea Scallop FMP. The AMs are implemented without regard to whether other components have caught their allocation and without regard to whether the overall ACL is exceeded.

Under this option, the concept is that fishing mortality is partitioned to each subcomponent by allocating a portion of the ACL. Each subcomponent is then held to its allocation through the implementation of measures, including AMs. The projections used to make the transfer of 150.6 mt indicated that neither the prior 307.5 mt or the current 156.9 mt GB yellowtail flounder sub-ACLs were expected to constrain the scallop fishery. As a result, neither option is expected to increase the likelihood of overfishing.

7.2.2.2 Non-Target Populations

If the No Action/ Status Quo Alternative is adopted there would not be expected to be any direct impacts on other species. The projections used to make the transfer of 150.6 mt indicated that neither the prior 307.5 mt or the current 156.9 mt GB yellowtail flounder sub-ACLs were expected to constrain the scallop fishery. As a result, neither option is expected to increase the likelihood of overfishing.

7.2.2.3 Impact of Action on Protected Resources

This alternative is expected to have the same potential effects on protected resources as those described in the Alternative 1 (Section 7.1.2.3), because it is not expected that there would be any additional effort or fishing time under any of the alternatives. The same protected species range throughout the area proposed in this alternative, as do in Alternative 1. Overall, the impacts of both alternatives are expected to be minimal.

7.2.3 Impact of Action on Human Communities

Based on the analysis that was done to allow the transfer of 150.6 mt of GB yellowtail flounder it is not expected that the revised sub-ACL will be constraining to the scallop fishery or that the sub-ACL will be exceeded. The scallop fleet engages in a voluntary bycatch avoidance program, but this revision represents a sizable shift in their sub-ACL for GB yellowtail flounder in the middle of the fishing season. Despite the analysis and the expectation that they will not exceed their sub-ACL, they may have to modify their operations to avoid Georges Bank yellowtail flounder.

Under the No Action Alternative if the scallop sub-ACL for GB yellowtail flounder is exceeded, the AM put in place by FW 23 and FW 47 would go into place (Table 2, Table 3, Figure 1). This accountability measure would have a profound effect on the way the scallop fishery is prosecuted. In FY 2009 3,015,119 lb of scallop were caught in the area that could potentially be closed if the AM were implemented (Table 12). Depending on the percentage that the sub-ACL is exceeded by and whether or not Closed Area II is open, the pounds landed under the AM range from zero to 3,015,119 lb (Table 12, Table 13). Although it is unlikely that the sub-ACL will be exceeded the No Action Alternative poses a risk to scallop fishermen. In FY 2011, the average price for scallops was $9.94/lb. Therefore the amount of scallops caught in the area that would be affected by the AM represents nearly $30 million worth of scallops ($29,970,282.86). The potential impacts of this AM on human communities we analyzed in FW 47 to the NE Multispecies FMP and FW 23 to the Scallop FMP.

It is not expected that the No Action/Status Quo Alternative would impact the groundfish fishery unless the total GB yellowtail flounder ACL is exceeded. In the unlikely scenario that the sub-ACL is exceeded, the impacts would be similar to those described in section 7.1.3.2.

8.0 CUMULATIVE EFFECTS

8.1 INTRODUCTION TO CUMULATIVE IMPACTS

A cumulative effects assessment (CEA) is a required part of an EIS or EA according to the Council on Environmental Quality (CEQ) (40 CFR part 1508.7) and NOAA's agency policy and procedures for NEPA, found in NOAA Administrative Order 216-6. The purpose of the CEA is to integrate into the impact analyses, the combined effects of many actions 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. This section serves to

examine the potential direct and indirect effects of the alternatives in this EA together with past, present, and reasonably foreseeable future actions that affect the groundfish environment. It should also be noted that the predictions of potential synergistic effects from multiple actions, past, present and/or future would generally be qualitative in nature. Because this action would exempt the scallop fishery from the AM requirements for a NE regulated multispecies, this section relies heavily on the EAs from FW 47 to the NE multispecies FMP and the FW 23 to the Atlantic Sea Scallop FMP.

Valued Ecosystem Components (VEC)
The CEA focuses on VECs specifically including:
1. Regulated groundfish stocks (non-target);
2. Non-groundfish species (target catch and bycatch);
3. Endangered and other protected species;
4. Habitat, including non-fishing effects; and
5. Human Communities (includes economic and social effects on the fishery and fishing communities).

Temporal Scope of the VECs
While the effects of historical fisheries are considered, the temporal scope of past and present actions for regulated groundfish stocks, non-groundfish species, habitat and the human environment is primarily focused on actions that have taken place since implementation of the initial NE Multispecies FMP in 1977. An assessment using this timeframe demonstrates the changes to resources and the human environment that have resulted through management under the Council process and through U.S. prosecution of the fishery, rather than foreign fleets. For endangered and other protected species, the context is largely focused on the 1980s and 1990s, when NMFS began generating stock assessments for marine mammals and turtles that inhabit waters of the U.S. EEZ. In terms of future actions, this analysis examines the period between implementation of this EA and 2016.

8.1.1 Temporal and Geographic Scope

The temporal range that would be considered for regulated groundfish stocks, non-groundfish species, endangered and other protected species, habitat, including non-fishing effects, and human communities extends from 2010, the year that Amendment 16 to the NE multispecies FMP were implemented, through May 1, 2013 the beginning of the next fishing year. While the effects of actions prior to these actions are considered (see Amendment 16 for a full cumulative effects analysis), the cumulative effects analysis for this action is focused primarily on Amendment 16 and subsequent actions because this action included major changes to management.

The temporal range considered for endangered and other protected species begins in the 1990's when NMFS began generating stock assessments for marine mammals and developed recovery plans for sea turtles that inhibit waters of the U.S. EEZ. In terms of future actions, the analysis examines this action through May 1, 2013, which is the beginning of the subsequent fishing year when new management measures would be implemented.

The broad geographic scope considered for cumulative effects to habitat, regulated groundfish stocks, and non-groundfish species consists of the range of species, primary ports, and geographic areas (habitat) discussed in the Affected Environment section, Section 6.0. Similarly, the range of each endangered and protected species as presented in Section 0 would be the broad geographic scope for that VEC, however, the most likely geographic scope for all cumulative effects would be the GB waters where the portion of the scallop fishery that encounters GB yellowtail flounder occurs. The geographic scope for the human communities would consist of those primary port communities from which vessels fishing for scallops originate.

8.2 PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

Table 14 summarizes the combined effects of other past, present and reasonably foreseeable future actions that affect the VECs, i.e., actions other than those alternatives under development in this document.

Note that most of the actions affecting this exemption and considered in Table 14 come from fishery-related activities (e.g., Federal fishery management actions). As expected, these activities have fairly straightforward effects on environmental conditions, and were, are, or would be taken, in large part, to improve those conditions. The reason for this is the statutory basis for Federal fisheries management - the reauthorized Magnuson-Stevens Act. That legislation was enacted to promote long-term positive impacts on the environment in the context of fisheries actions. More specifically, the act stipulates that management comply with a set of National Standards that collectively serve to optimize the conditions of the human environment. Under this regulatory regime, the cumulative impacts of past, present, and future Federal fishery management actions on the VECs should be expected to result in positive long-term outcomes. Nevertheless, these actions are often associated with offsetting impacts. For example, constraining fishing effort frequently results in negative short-term socio-economic impacts for fishery participants. However, these impacts are usually necessary to bring about long-term sustainability of a given resource and as such should, in the long-term, promote positive effects on human communities, especially those that are economically dependent upon the managed resource.

Non-fishing activities were also considered when determining the combined effects from past, present and reasonably foreseeable future actions. Activities that have meaningful effects on the VECs include the introduction of chemical pollutants, sewage, changes in water temperature, salinity, dissolved oxygen, and suspended sediment into the marine environment. These activities pose a risk to the all of the identified VECs in the long term. Human induced non-fishing activities that affect the VECs under consideration in this document are those that tend to be concentrated in near shore areas. Examples of these activities include, but are not limited to agriculture, port maintenance, beach nourishment, coastal development, marine transportation, marine mining, dredging and the disposal of dredged material. Wherever these activities occur, they are likely to work additively or synergistically to decrease habitat quality and, as such, may indirectly constrain the sustainability of the managed resources, non-target species, and protected resources. Decreased habitat suitability would tend to reduce the tolerance of these VECs to the impacts of fishing effort. Mitigation of this outcome through regulations that would reduce fishing effort could then negatively impact human communities.

8.2.1 Past and Present Actions

Table 14. Summary effects of past, present and reasonably foreseeable future actions on the VECs identified.

VEC	Past Actions	Present Actions	Reasonably Foreseeable Future Actions	Combined Effects of Past, Present, Future Actions
Regulated groundfish stocks, including yellowtail flounder (non-target)	**Mixed** Combined effects of past actions have decreased effort, improved habitat protection, and implemented rebuilding plans when necessary. However, some stocks remain overfished	**Positive** Current regulations continue to manage for sustainable stocks. This action is not expected to have an effect on groundfish populations as ACLs will remain in place.	**Positive** Future actions are anticipated to continue rebuilding and strive to maintain sustainable stocks	**Short-term Negative** Several stocks are currently overfished, have overfishing occurring, or both, including GB yellowtail flounder. **Long-Term Positive** Stocks are being managed to attain rebuilt status
Non-groundfish species, including scallops (target catch and bycatch)	**Positive** Combined effects of past actions have decreased effort and improved habitat protection	**Positive** Current regulations continue to manage for sustainable stocks, thus controlling effort on direct and discard/bycatch species	**Positive** Future actions are anticipated to continue rebuilding and target healthy stocks, thus limiting the take of discards/bycatch	**Positive** Continued management of directed stocks will also control incidental catch/bycatch
Endangered and other protected species	**Positive** Combined effects of past fishery actions have reduced effort and thus interactions with protected resources	**Positive** Current regulations continue to control effort, thus reducing opportunities for interactions	**Mixed** Future regulations will likely control effort and thus protected species interactions, but as stocks improve, effort will likely increase, possibly increasing interactions	**Positive** Continued effort controls along with past regulations will likely help stabilize protected species interactions
Habitat, including non-fishing effects	**Mixed** Combined effects of effort reductions and better control of nonfishing activities have been positive but fishing activities and non-fishing activities continue to reduce habitat quality	**Mixed** Effort reductions and better control of nonfishing activities have been positive but fishing activities and non-fishing activities continue to reduce habitat quality	**Mixed** Future regulations will likely control effort and thus habitat impacts but as stocks improve, effort will likely increase along with additional non-fishing activities	**Mixed** Continued fisheries management will likely control effort and thus fishery related habitat impacts but fishery and non-fishery related activities will continue to reduce habitat quality
Human Communities (includes economic and social effects on the fishery and fishing communities)	**Mixed** Fishery resources have supported profitable industries and communities but increasing effort and catch limit controls have curtailed fishing opportunities	**Mixed** Fishery resources continue to support communities but increasing effort and catch limit controls combined with nonfishing impacts such as rising fuel costs have had a negative economic impact	**Short-term Negative** As effort controls are maintained or strengthened, economic impacts will be negative **Long-term Positive** As stocks improve, effort will likely increase which would have a positive impact	**Short-term Negative** Lower revenues would likely continue until stocks are fully rebuilt **Long-term Positive** Sustainable resources should support viable communities and economies

Impact Definitions:
-Regulated Groundfish Stocks, Non-groundfish species, Endangered and Other Protected Species: positive=actions that increase stock size and negative=actions that decrease stock size
-Habitat: positive=actions that improve or reduce disturbance of habitat and negative=actions that degrade or increase disturbance of habitat
-Human Communities: positive=actions that increase revenue and well-being of fishermen and/or associated businesses and negative=actions that decrease revenue and well-being of fishermen and/or associated businesses

8.3 CUMULATIVE IMPACTS OF THE PROPOSED ACTION

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 8.1.

8.3.1 Cumulative Effects on Regulated Groundfish Stocks, including Yellowtail Flounder (Non-Target)

Actions that reduce fishing effort have had positive effects on non-target species and bycatch because in general, less fishing effort results in less impact to non-allocated target species and bycatch. Conversely, actions that increase fishing effort are considered to have low negative effects on non-target species and bycatch because more fishing generally results in more bycatch. Catch of primary non-target species in the scallop fishery is monitored and controlled through other FMPs.

GB yellowtail flounder has historically been a non-target species for the scallop fishery. In recent years, low quota levels have led to this stock being used more extensively as bycatch in the groundfish fishery. Preliminary information indicates that the stock will be further reduced in FY 2013. If the ACL is exceeded for FY 2012, this, in conjunction with the projected low available harvest, could a disproportionate effect on groundfish based on the allocation of GB yellowtail flounder to the scallop fleet. Therefore, when considering the cumulative effects of this action in combination with past, present, and reasonably foreseeable future actions, no significant impacts to regulated groundfish stocks from the proposed action are expected.

8.3.2 Cumulative Effects on Non-Groundfish Species, including Scallops (Target Species and Non-Target)

Actions that reduce fishing effort have had positive effects on non-target species and bycatch because in general, less fishing effort results in less impact to non-allocated target species and bycatch. Conversely, actions that increase fishing effort are considered to have low negative effects on non-target species and bycatch because more fishing generally results in more bycatch. Catch of primary non-target species in the scallop fishery is monitored and controlled through other FMPs.

The cumulative impacts of past and present management actions have resulted in substantial effort reductions in the scallop fishery. Sea scallop biomass has mostly increased since 1999, and the resource has not been overfished. It is estimated that area rotation management and allocating effort using ACL management will end overfishing permanently and provide a healthy resource for scallop fishermen to harvest for the long-term. Overall, the realized reductions in effort from past management actions have been positive for the scallop resource.

The management measures described in Table 14 are expected to have overall neutral impacts on target species (scallops). If the sub-ACL for GB yellowtail flounder were to be exceeded. The primary impact would likely be on scallop catches. The increased likelihood that an AM might be triggered creates additional uncertainty on the location of scallop fishing activity. In terms of scallop management, this makes it more difficult to determine the appropriate effort levels

necessary to achieve mortality targets if effort is shifted to an area with lower scallop catch rates. This complicates scallop management and could result in exceeding scallop mortality targets. Preliminary specifications in FW 24 will likely propose reductions in effort and trips. If the scallop sub-ACL for Georges Bank yellowtail flounder were to be exceeded, the AM combined with lower allocations in FW 24 could have enhanced negative impacts.

The long-term trend has been positive for cumulative impacts to target and non-target species. Further, indirect impacts from the effort reductions in other FMPs are also thought to contribute to scallop mortality reductions. These factors, when considered in conjunction with the proposed action which would have negligible impacts to the target species because there are respective catch limits, would not have any significant cumulative impacts. Overall, the cumulative effect of past, present, and reasonably foreseeable future fishing actions have resulted in positive effects on the target and non-target species. Therefore, when considering the cumulative effects of this action in combination with past, present, and reasonably foreseeable future actions, no significant impacts to non-target species from the proposed action are expected.

8.3.3 Cumulative Effects on Endangered and Other Protected Species

As noted in Table 14, the combined impacts of past federal fishery management actions have reduced fishing effort, and therefore reduced interactions with protected resources. Current management measures, including those implemented through Amendment 16 to the NE Multispecies FMP, are expected to continue to control effort and catch, and therefore continue to lessen interactions with protected resources. Proposed changes to fishery measures should have minimal impacts on protected species. The fishing effort for scallops is not expected to increase, as this action is simply indemnifying the scallop industry from the requirements of their AM. They would still be limited by the ACL put in place for scallops. The modifications in program administration rules and effort control measures are not expected to have major impacts, since they would not change fishing in areas or with gears that affect protected species.

Future regulations will likely control effort and thus protected species interactions, but as stocks improve, effort will likely increase, possibly increasing interactions. Continued effort controls along with past regulations will likely help stabilize protected species interactions. There continues to be numerous current and planned future specific programs to minimize the potential take and interaction with protected, endangered, and threatened species. Examples include time and area closures for harbor porpoise and turtle bycatch avoidance devices in trawl and dredge fisheries. These species and gear specific programs are designed to further insure positive recovery of protected species. Overall, the combination of past, present, and future actions is expected to stabilize protected species interactions and lead to positive impacts to protected species. Therefore, when considering the cumulative effects of this action in combination with past, present, and reasonably foreseeable future actions, no significant impacts to protected species from the proposed action are expected.

8.3.4 Cumulative Effects on Habitat

As noted in Table 14, the combined impacts of past federal fishery management actions have reduced fishing effort, and therefore have been positive for habitat protection. In addition, better control of non-fishing activities has also been positive for habitat protection. However, both

fishing and non-fishing activities continue to decrease habitat quality. None of the fishery measures are expected to have substantial impacts to habitat or EFH. The proposed action is not expected to increase fishery-related effort or, by extension, fishery-related impacts to habitat.

Future regulations will likely control effort and thus habitat impacts but as stocks improve, effort will likely increase along with additional non-fishing activities. Continued fisheries management will likely control effort and thus fishery related habitat impacts but fishery and non-fishery related activities will continue to reduce habitat quality. A comprehensive effort is underway to evaluate habitat, including Essential Fish Habitat, through the Council process. This action, when completed, is expected to provide positive impacts for fishery-related habitat by implementing area closures for sensitive habitat areas and/or gear restrictions designed to mitigate adverse habitat impacts. Overall, the combination of past, present, and future actions is expected to reduce fishing effort and hence reduce damage to habitat; however, it is likely that fishing and non-fishing activities will continue to degrade habitat quality. Therefore, when considering the cumulative effects of this action in combination with past, present, and reasonably foreseeable future actions, no significant impacts to EFH/habitat from the proposed action are expected.

8.3.5 Cumulative Effects on the Human Communities

As noted in Table 14, the combined impacts of past federal fishery management actions have reduced effort, and therefore have curtailed fishing opportunities. Past and current management measures, including those implemented through Amendment 16 to the FMP, maintain effort and catch limit controls, which together with non-fishing impacts such as rising fuel costs have had significant negative short term economic impacts on human communities.

The action is expected to have immediate positive effects on the communities that depend on the GB scallop fishery. Exempting the scallop fleet from their AM for GB yellowtail flounder up to 307.5 mt would allow scallop fishermen to continue to target scallops on GB in the most efficient and preferable way possible should the scallop fishery catch between 156.9 mt and 307.5 mt of GB yellowtail flounder.

Current information on the status of the GB yellowtail flounder stock indicates that future quotas will likely be substantially reduced from the FY 2012 level. The future quota level will be established this fall and implemented for the start of FY 2013 (May 1, 2013). In addition, if an AM is required because the FY 2012 ACL or sub-ACLs are exceeded, the potential future catch levels would be lower which, in turn, would have a negative impact to groundfish fishery participants. It will not be known if an overage has occurred, and what level of reduction in future catch is necessary as an AM, until sometime in FY 2013. It is also not possible at this time to know if the fishery level ACL will be exceeded. The analysis used to effect the sub-ACL revisions earlier this year indicated that it was unlikely that the scallop fishery would exceed the revised sub-ACL. However, the potential combination of reduced catch level because of the stock status and an AM would have strong negative impact on the groundfish fishery. Yellowtail flounder have the potential to limit the ability of the groundfish fishery to target other stocks. If quotas are reduced, as expected by the current stock information, the groundfish fishery on GB may be substantially limited by the available yellowtail flounder. If an AM is triggered, the negative effects may be compounded.

Under the No Action/Status Quo Alternative if the scallop sub-ACL for GB yellowtail flounder is exceeded, the AM put in place by FW 23 and FW 47 would go into place (Table 2, Table 3, Figure 1). This accountability measure would have a profound effect on the way the scallop fishery is prosecuted. Although it is unlikely that the sub-ACL will be exceeded the No Action/Status Quo Alternative poses a risk to scallop fishermen. The amount of scallops caught in the area that would be affected by the AM represents nearly $30 million worth of scallops. Selecting Alternative 1 would mitigate some of the potential future impacts on human communities by changing the trigger point where the AM is required in the unlikely event that the scallop sub-ACL for GB yellowtail flounder is exceeded.

Overall, the combination of past, present, and future actions is expected to enable a sustainable harvest of groundfish stocks, which should lead to a long term positive impact on fishing communities and economies.

9.0 APPLICABLE LAW

9.1 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

Section 301 of the MSA requires that the regulations implementing any fishery management plan be consistent with the ten national standards. Below is a list of the national standards and descriptions of how the proposed action complies with each standard.

- **Conservation and management measures shall prevent overfishing while achieving on a continuing basis, the optimum yield from each fishery for the United States fishing industry.**

The proposed action would not cause overfishing to occur in either the scallop or the NE multispecies fishery. The established GB yellowtail flounder allowable catch limit was established consistent with National Standard 1 of the Magnuson-Stevens Act and, as such, reduces available catch to compensate for both scientific and management uncertainty so that overfishing does not occur. Overages of the catch limit result in accountability measures in subsequent fishing years that are designed to further reduce the possibility of future overages and overfishing. Furthermore, the catch level set for this fishing year is designed to achieve optimum yield.

- **Conservation and management measures shall be based on the best scientific information available.**

The GB yellowtail flounder catch limit was established using the best available scientific information. The scientific stock assessment for GB yellowtail flounder is conducted jointly by scientist from both the U.S. and Canada using previously peer-reviewed methods. These data are further vetted by the NEFSC Groundfish Plan Development Team and Scientific and Statistical Committee prior to being used in the fishery.

Detailed catch accounting, based on landing and discard information, is used to quantify the total catch of GB yellowtail flounder. Discards are estimated using peer reviewed methodology that uses observation data collected at sea on both groundfish and scallop vessels. The catch

information will be used to determine if an overage of the scallop sub-ACL has occurred and, in turn, if an AM is required.

- **To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.**

The proposed action is applicable to one stock, GB yellowtail flounder, and to a lesser extent, multiple stocks of various NE multispecies and scallops that occur in the same area. The management does occur at the individual fish stock level with coordination of management occurring between the various stocks co-occurring and captured in both the NE multispecies and scallop fisheries. GB yellowtail flounder is managed collaboratively by the U.S. and Canada as the stock is a transboundary stock.

- **Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.**

The proposed action pertains to any vessel with a valid Federal scallop limited access permit to fish within the GB broad stock area. The accountability measures in question are applied consistently across such permits, without discrimination based on home state or principle port of landing.

- **Conservation and management measures shall, where practicable consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.**

The proposed exemption is designed to maximize efficiency in the utilization of the GB yellowtail flounder resource. The exemption will ensure that scallop vessels may optimize use of both GB yellowtail flounder and scallops.

- **Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.**

The proposed AM exemption is consistent with the requirements of the NE Multispecies FMP at this time, because an AM is still in place for the scallop fishery at a 307.5 mt level of GB yellowtail flounder. An overall stock-level AM remains in place for the fishery as well. The impacts of this partial AM exemption on the target scallop resource have also been assessed, and found to be minimal.

- **Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.**

The proposed measures do not duplicate any existing fishery regulations, or impose any new costs on the affected parties. Further, these measures minimize cost to the extent practicable.

- **Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse impacts on such communities.**

The proposed action considers the importance of GB yellowtail flounder as bycatch in the scallop fishery, thereby providing sustained participation by communities involved in scallop fishing. By increasing the trigger point where an FY 2012 AM may be triggered, the scallop fishery may maximize efficiency in the fishery while avoiding yellowtail flounder bycatch. This provides sustained participation for this fishing year and minimizes the adverse impacts that would result from more constrained scallop fishing operations. If exempted from an AM, as proposed, the impact on fishing communities involved in the scallop fishery are minimized as the potential for reduced access to the scallop fishery in a future fishing year is lessened. The previously approved transfer of 150.6 mt to the groundfish fishery was designed to allow the groundfish fishery continued fishing opportunity throughout FY 2012. The catch projections used in the transfer suggest that the potential for adverse impacts to both fisheries is minimal, as it is unlikely that either the scallop sub-ACLs or fishery level ACL will be exceeded.

- **Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.**

This proposed action is consistent with the bycatch requirements of the NE Multispecies FMP. Even with the partial AM exemption, there remains incentive for the scallop fishery to avoid yellowtail flounder catch as there remains accountability at 307.5 mt and at the overall fishery ACL level.

- **Conservation and management measures shall, to the extent practicable, promote safety of human life at sea.**

The proposed action promotes safety at sea consistent with the NE multispecies and Scallop FMPs.

9.2 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

NEPA provides a mechanism for identifying and evaluating environmental issues associated with Federal actions, and for considering a reasonable range of alternatives to avoid or minimize adverse environmental impacts. This document is designed to meet the requirements of both the MSA and NEPA.

9.2.1 Environmental Assessment (EA)

The required elements of an EA are specified in 40 CRS 1508.9(b), and are included in this document as indicated below:

- Need for this action: Section 4.0
- Alternatives considered: Section 5.0
- Environmental impacts of proposed action: Section 7.0
- The agencies and persons consulted on this action are listed in Section 10.0 & 11.0

In addition, Section 6.0 of this document includes a discussion of the affected environment for this action as a basis to evaluate the impacts of the alternatives specified for this action.

9.2.2 Finding of No Significant Impact

NOAA Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant in making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1. Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?

The proposed action is not reasonably expected to jeopardize the sustainability of any target species that may be affected. The GB yellowtail flounder catch limit is established annually through a joint U.S. and Canada process, with the eventual shared catch set at a level that is designed to ensure the stock is not subjected to overfishing and rebuilds the stock by 2032. The partial exemption of the AM for the scallop fishery is not expected to jeopardize the sustainability of the stock as the FY 2012 shared catch limit is designed to prevent overfishing. Furthermore, the U.S. portion of the total GB yellowtail flounder catch limit and the scallop fishery specific sub-ACL are likewise set at levels that are designed to minimize the potential for overfishing; thus, ensuring the sustainability of the target species.

2. Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?

The proposed action is not reasonably expected to jeopardize the sustainability of any non-target species. The managed species under the groundfish FMP complex, the scallop resource, and other fish species captured incidentally are all strictly managed in a manner to prevent overfishing. The proposed exemption does not alter the existing catch limits for GB yellowtail flounder or any other managed species; thus, sustainability of non-target species is not jeopardized by the proposed action.

3. Can the proposed action reasonably be expected to allow substantial damage to the ocean and coastal habitats and/or EFH as defined under the Magnuson-Stevens Act and identified in FMPs?

The proposed exemption is not expected to adversely affect the physical environment. The impact of the fishing effort and gears used to harvest the established FY 2012 quotas for GB yellowtail, groundfish, and scallops has been previously analyzed in Framework Adjustment 47 to the NE Multispecies FMP and were determined to not adversely affect the physical environment. As the proposed action does not modify the overall catch limits for any species, including GB yellowtail flounder, there are no expected changes beyond those previously analyzed and determined to not adversely affect the physical environment.

4. Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

No, the action is not expected to have a substantial impact on public health or safety. This action does not materially modify the fishing operations of the scallop or groundfish fisheries. The catch limits for these fisheries have been previously analyzed in Framework Adjustment 47 to the NE Multispecies FMP and were determined to not have a substantial adverse impact on public health or safety. As the proposed action does not modify the overall catch limits for any species, including GB yellowtail flounder, there are no expected substantial adverse impacts on public health or safety.

5. Can the proposed action be reasonably expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

The proposed action is not expected to adversely affect endangered, threatened species, marine mammals, or critical habitat for such species. The action proposes to modify the point at which the scallop fishery GB yellowtail flounder AM may be triggered and, as such, is not expected to modify scallop fishing effort or location. The catch limits for scallops remains unchanged by this action and is expected to be the limiting factor on scallop effort. The effort for the FY 2012 scallop fishery has previously been determined to not adversely affect the species and habitat in question.

6. Can the proposed action reasonably be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

This action is not expected to have a substantial impact on biodiversity and ecosystem function within the affected area. The affected area has been impacted by fisheries for many decades, yet continues to be a productive environment for target and non-target species.

7. Are significant social or economic impacts interrelated with natural or physical environmental effects?

The proposed action would likely have some beneficial social and economic impacts by reducing the potential for a scallop fishery AM that would reduce access in a future fishing year. The

previously approved transfer of 150.6 mt to the groundfish fishery was designed to allow the groundfish fishery continued fishing opportunity throughout FY 2012. The catch projections used in the transfer suggest that the potential for adverse impacts to both fisheries is minimal, as it is unlikely that either the scallop sub-ACLs or fishery level ACL will be exceeded. Additional detail can be found in sections 7.1.3 and 8.3.5. Thus, it is not expected that the proposed action will have significant social or economic impacts.

8. Are the effects on the quality of human communities likely to be highly controversial?

The effects of the proposed action on the quality of human communities are not expected to be highly controversial. The action was widely discussed in public forums, both in a specific GB yellowtail flounder working group and at Council and Council-related meetings (e.g., Committee meetings). The action is being proposed in response to a request by the Council to partially exempt the scallop fishery from an AM. The transparency in developing this action was deliberate and done in an effort to minimize controversialist. Despite some anticipated opposition to the proposed action, if implemented, the overall quota levels are unchanged by this action, scallop fishery accountability is maintained at the initially established sub-ACL level of 307.5 mt, and the fishery level AM remains effective. Previous analysis conducted in conjunction with sub-ACL adjustment indicates that there is a low likelihood that the scallop sub-ACL will be exceeded. Thus, the proposed action is not expected to highly controversial.

9. Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

No, the proposed action cannot be reasonably expected to result in substantial impacts to unique areas or ecological critical areas. No such areas exist within GB.

10. Are the effects on human communities likely to be highly uncertain or involve unique or unknown risks?

The proposed action is not expected to result in highly uncertain effects on human communities or involve unique or unknown risks. Partial exemption of the scallop fishery from AMs does not materially change the fishery operations for FY 2012. Accountability is maintained at the initial scallop sub-ACL level of 307.5 mt and at the overall fishery level. The catch level is not modified by the proposed action. As such, there are no uncertain, unique, or unknown risks.

11. Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

The proposed action is related to other recent management actions for the groundfish and scallop FMPs which implemented the majority of the management measures currently in effect. While some of these actions resulted in significant impacts to the human environment (e.g., Amendment 16 to the NE Multispecies FMP), the proposed action is insignificant and would not result in additional significant cumulative impacts.

12. Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

The proposed action is not likely to affect objects listed in the National Register of Historic Places or cause significant impact to scientific, cultural, or historical resources.

13. Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

This action would not result in the introduction or spread of any nonindigenous species.

14. Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

No, the proposed action is not likely to establish precedent for future actions with significant effects. Accountability measures are mandated by the Magnuson-Stevens Act. This action does not change or challenge that requirement. Accountability remains in place, as required, at the overall fishery ACL and accountability is maintained for the scallop fishery, as specified by NE Multispecies FMP.

15. Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

The proposed action would not threaten a violation of Federal, state, or local law or requirements to protect the environment. The action complies with all applicable laws.

16. Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

As specified in the responses to the first two criteria of this section, the proposed action is not expected to result in cumulative adverse effects that would have a substantial effect on target or non-target species.

DETERMINATION: In view of the information presented in this document and the analysis contained in the supporting EA prepared for this action, it is hereby determined that the proposed emergency action to exempt the scallop fleet from its GB yellowtail flounder AM would not significantly impact the quality of the human environment as described above and in the supporting EA. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

Regional Administrator, Northeast Region **Date**

9.2.3 Opportunity for Public Comment

NMFS will follow the procedures specified in the MSA and the Administrative Procedures Act to provide opportunity for public comment on the proposed action. Prior to publication of a proposed rule in the Federal Register, public comment was taken during GB yellowtail flounder working group meetings and meetings of the Council and it's Groundfish and Scallop Committees.

9.3 MARINE MAMMAL PROTECTION ACT (MMPA)

NOAA Fisheries Service has reviewed the impacts of the proposed partial exemption 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 units of the subject fisheries. For further information on the potential impacts of the fishery and the proposed management action, see Section 7.1.

9.4 ENDANGERED SPECIES ACT (ESA)

The ESA determinations previously made for Framework Adjustment 47 to the NE multispecies FMP remain unchanged by this action. Framework Adjustment 47 established the FY 2012 GB yellowtail flounder catch levels for both the groundfish and scallop fisheries. Further, a July 2012 Biological Opinion for the scallop fishery determined that the Atlantic sea scallop fishery is not likely to jeopardize the continued existence of any Atlantic sturgeon distinct population segment or any sea turtle species.

9.5 ADMINISTRATIVE PROCEDURE ACT (APA)

Section 553 of the APA establishes procedural requirements applicable to informal 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. NMFS will follow the procedures specified in the APA to provide opportunity for public comment on the proposed action.

9.6 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. This action does not propose to modify any existing collections, or to add any new collections; therefore, no review under the PRA is necessary.

9.7 COASTAL ZONE MANAGEMENT ACT (CZMA)

NMFS made a general consistency determination that the NE Multispecies FMP, is consistent to the maximum extent practicable with the enforceable policies of the approved coastal management programs of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and North Carolina. This general consistency determination applies to the current FMP, and all subsequent routine Federal actions carried out in accordance with the FMP such as framework adjustments and specifications. This determination was submitted to the above states on October 21, 2009. To date, North Carolina, Rhode Island, Virginia, Connecticut, New Hampshire, and New Jersey, Delaware, and Pennsylvania have concurred with the general consistency determination. Consistency was inferred for those states that did not respond.

9.8 INFORMATION QUALITY ACT (SECTION 515)

In accordance with the Information Quality Act (Public Law 106-554), the Office of Management and Budget directed each Federal agency to issue guidelines that ensure the quality, objectivity, utility, and integrity of information disseminated by federal agencies. The NOAA Section 515 Information Quality Guidelines require a series of actions for each new information product subject to the Information Quality Act. Information must meet standards of utility, integrity, and objectivity. This section provides information that demonstrates compliance with these standards.

9.8.1 Utility of Information Product

A. Is the information helpful, beneficial or serviceable to the intended user?

This action proposes partially exempt the scallop fishery from GB yellowtail flounder accountability measures. The EA and the Federal Register document prepared for this action include a description of the proposed measure, the reasons why such measures are necessary, and the environmental impacts of the proposed measure. The Federal Register notice provides a summary of the information contained in the EA to inform interested public in the scope and purpose of the proposed action. This proposed action is consistent with the NE Multispecies and Scallop FMPs.

B. Is the data or information product an improvement over previously available information? Is it more current or detailed? Is it more useful or accessible to the public? Has it been improved based on comments from or interactions with customers?

The EA contains the most recent information available on the status of GB yellowtail flounder along with the impacts of the proposed measures, based upon the best available scientific information. The EA will be made available to the public for comment. The Federal Register notice will also be made available to the public to review and comment on the proposed measures.

C. What media are used in the dissemination of the information? Printed publications? CD-ROM? Internet? Is the product made available in a standard data format? Does it use consistent attribute naming and unit conventions to ensure that the information is accessible to a broad range of users with a variety of operating systems and data needs?

The Federal Register document that announces the proposed measures, as well as the EA that analyzes the potential impact of such measures, will be made available in printed publication and on the Internet website for the Northeast Regional Office.

9.8.2 Integrity of Information Product

The information product meets the following standards for integrity:

- If information is confidential, it is safeguarded pursuant to the Privacy Act and Titles 13, 15, and 22 of the U.S. Code (confidentiality of census, business and financial information).

- (e.g., Confidentiality of Statistics of the Magnuson-Stevens Fishery Conservation and Management Act; NOAA Administrative Order 216-100 - Protection of Confidential Fisheries Statistics; 50 CFR 229.11, Confidentiality of information collected under the Marine Mammal Protection Act.)

9.8.3 Objectivity of Information

(1) Indicate which of the following categories of information products apply for this product:

□ **Original Data**
□ **Synthesized Products**
□ **Interpreted Products**
□ **Hydro meteorological, Hazardous Chemical Spill, and Space Weather Warnings, Forecasts, and Advisories**
□ **Experimental Products**
X **Natural Resource Plans**
□ **Corporate and General Information**

(2) Describe how this information product meets the applicable objectivity standards. (See the DQA Documentation and Pre-Dissemination Review Guidelines for assistance and attach the appropriate completed documentation to this form.)

What published standard(s) governs the creation of the Natural Resource Plan? Does the Plan adhere to the published standards? (See the NOAA Sec. 515 Information Quality Guidelines, Section II(F) for links to the published standards for the Plans disseminated by NOAA.)

Any management action under this FMP must comply with the requirements of the MSA, the National Environmental Policy Act, the Regulatory Flexibility Act, the Administrative Procedures Act, the Paperwork Reduction Act, the Coastal Zone Management Act, the Endangered Species Act, the Marine Mammal Protection Act, and Executive Orders 12612 (Federalism), 12630 (Property Rights), 12866 (Regulatory Planning), and 13158 (Marine Protected Areas). The proposed action is designed to be consistent with the National Standards of the MSA and all other applicable laws.

Was the Plan developed using the best information available? Please explain.

Analyses for the proposed measures incorporate the most comprehensive and accurate data available from the NEFSC. These data represent the best information available. National Standard 2 requires that the FMP's conservation and management measures shall be based upon the best scientific information available. The proposed measures are designed to be in compliance with National Standard 2, by making use of the best available scientific information.

Have clear distinctions been drawn between policy choices and the supporting science upon which they are based? Have all supporting materials, information, data and analyses used within the Plan been properly referenced to ensure transparency?

The policy choices (i.e., management measures) that are proposed are supported by the available scientific information. The supporting materials and analyses used to develop these measures are contained in readily available documents that are properly referenced in the EA.

Describe the review process of the Plan by technically qualified individuals to ensure that the Plan is valid, complete, unbiased, objective and relevant. For example, internal review by staff that were not involved in the development of the Plan to formal, independent, external peer review. The level of review should be commensurate with the importance of the Plan and the constraints imposed by legally enforceable deadlines.

The partial exemption of the scallop fleet from this AM involves the Northeast Regional Office and scientific data from the NEFSC. The NEFSC technical review is conducted by senior level scientists with specialties in population dynamics, stock assessment methods, demersal resources, population biology, and the social sciences. Review by staff at the Regional Office is conducted by those with expertise in fisheries management and policy, habitat conservation, protected species, and compliance with the applicable law.

9.9 REGULATORY IMPACT REVIEW (RIR)

This section contains a RIR, in compliance with Executive Order (E.O.) 12866 and the Regulatory Flexibility Act. The information contained in this section complements the information in other sections of this EA. The principal elements of the Regulatory Impact Review include a description of the management objectives, a description of the fishery, a statement of the problem**,** a description of each selected alternative, including the "no action" alternative; and an economic analysis of the expected effects of each selected alternative relative to the baseline. The management objectives underlying the proposed action are described in Section 4.0, descriptions of the fisheries involved are found is Section 6.0, descriptions of the alternatives are in Section 5.0, and an economic analysis is in Section 7.1.3. The baseline against which the proposed alternatives are compared is the No Action alternative.

9.9.1 Regulatory Flexibility Act (RFA)

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration (SBA) that this proposed emergency rule, if adopted, would not have a significant economic impact on a substantial number of small entities.

In 2010 there were 347 permitted scallop vessels in the limited access category and 730 in the general category. Mean annual gross sales for vessels in the limited access category are just over $1 million, while for the general category this figure is slightly under $80K.
The small business size standard threshold criteria for both shell and finfish fishing are gross sales above $4.0 million annually (13 CFR 121.201). Below this level, fishing buisnesses are considered to be small entities under the SBA. No individual vessel was estimated to gross more than $3 million in any one fishing year from 1994 to 2010; therefore, the majority all of the vessels in the scallop fishery are considered small business entities under the SBA criteria. This action, if implemented, effectively changes the point at which GB yellowtail flounder accountability measures are triggered for the scallop fishery. The AM is required by both the Scallop FMP and the Magnuson-Stevens Act, and must minimize the impact on small regulated entities to the extent practicable, while ensuring compliance with the regulatory and statutory requirements for fishery accountability.

Previous analysis conducted for Framework Adjustment 47 to the NE Multispecies FMP concluded that less than 1 percent of total scallop fishery revenues came from areas potentially affected by the GB yellowtail flounder AM. Framework Adjustment 47 is available on the Council's website: http://www.nefmc.org/nemulti/index.html. The analysis referenced here can be found on page 302 of the final framework document. Furthermore, the analysis concluded that a significant effect on profitability is likely to be minimal if the scallop fishery AM were triggered. Because all participating scallop vessels are deemed to be small regulated entities, there would be no disproportionate impacts.

As compared to the status quo, the proposed action reduces the likelihood that the scallop fishery GB yellowtail flounder AM will be triggered. Under the proposed action, the scallop fishery AM would be implemented under the following circumstances: 1) If the total ACL is not exceeded but the scallop fishery catch of GB yellowtail flounder exceeded 461.3 mt (i.e., exceeded 307.5 mt by 50 percent); or 2) if the total GB yellowtail flounder ACL is exceeded and

the scallop fishery catch exceeds 307.5 mt. By comparison, the status quo would trigger the AM if: 1) the total GB yellowtail flounder ACL is not exceeded but the scallop fishery catch exceeds 235.0 mt (i.e., 50 percent above the 156.7 mt revised sub-ACL); or if the total fishery ACL is exceeded and the revised scallop sub-ACL of 156.7 is exceeded.
The potential impact to the groundfish fishery is the same under both the status quo and the proposed action. If the total fishery ACL is exceeded, a pound-for-pound repayment of the overage is required in a subsequent fishing year. The overage repayment provision is required by the NE Multispecies FMP, consistent with the Magnuson-Stevens Act and the U.S./Canada Resource Sharing Understanding.

It cannot currently be determined if the total fishery ACL will be exceeded and a repayment implemented in fishing year 2013. Analysis conducted of potential Georges Bank yellowtail flounder in the scallop fishery used to revise the current fishing year sub-ACLs indicated that the scallop fishery catch at the highest end of the projected range would be 174.3 mt. Catch of this magnitude in the scallop fishery paired with potential catch of 368.3 mt in the groundfish fishery would not exceed the total fishery ACL. However, other fisheries that catch Georges Bank yellowtail flounder are counted against the total fishery ACL. If an overage repayment does occur, the impacts to the groundfish fishery that result is required by regulation and statute, as previously described. Thus, the impacts of such a measure on groundfish small business entities would be minimized to the extent practicable, consistent with the applicable requirements.
There are several concurrent processes underway that will culminate in proposed measures for Framework Adjustment 48 to the NE Multispecies FMP. These potential measures include possible reductions in the overall Georges Bank yellowtail flounder catch limit for both fisheries and changes in how the allocation of Georges Bank yellowtail flounder is allocated between both fisheries. These measures, if adopted, could result in potentially higher or lower impacts to the groundfish fishery if the FY 2012 total fishery ACL is exceeded. It cannot currently be determined which options will ultimately be adopted so determining the potential impacts to the groundfish fishery are uncertain at this time. A full impact analysis for the Framework Adjustment 48 measures will be conducted in late 2012 or early 2013.

The proposed action will reduce the likelihood that the scallop fishery AM may be triggered. The prior analysis concluded that the potential economic impacts of the scallop fishery AM, if triggered, are unlikely to be significant to the small entities of the scallop fishery. The potential impacts of the proposed action to the groundfish are the same as the status quo and, if necessary, minimized to the extent practicable consistent with the applicable requirements for the fishery. Because the proposed rule would reduce the likelihood of triggering the scallop fishery AM, it would not have a significant impact on a substantial number of scallop fishery small entities. As a result, an initial regulatory flexibility analysis is not required and none has been prepared.

9.10 E.O. 12866 (REGULATORY PLANNING AND REVIEW)

The purpose of E.O 12866 is to enhance planning and coordination with respect to new and existing regulations. This E.O. requires the Office of Management and Budget (OMB) to review regulatory programs that are considered to be "significant." Section 9.9 of this document represents the RIR, which includes an assessment of the costs and benefits of the proposed action, in accordance with the guidelines established by E.O. 12866. The analysis included in the RIR shows that this action is not a "significant

regulatory action" because it would not affect in a material way the economy or a sector of the economy.

9.11 E.O. 13132 (FEDERALISM)

This E.O. established nine fundamental federalism principles for Federal agencies to follow when developing and implementing actions with federalism implications. The E.O. also lists a series of policy making criteria to which Federal agencies must adhere when formulating and implementing policies that have federalism implications. However, no federalism issues or implications have been identified relative to the proposed partial AM exemption. This action does not contain policies with federalism implications sufficient to warrant preparation of an assessment under E.O. 13132.

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11.0 AGENCIES CONSULTED

The following agencies were consulted in the preparation of this document:

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13.0 APPENDIX A. CONSIDERED BUT REJECTED ALTERNATIVES

Potential Management Options Related to GB Yellowtail Flounder

OPTION 1 - QUOTA/ACL TRANSFER AND RELATED OPTIONS
Purpose: Acquire more quota.

Option 1A: Options relating to acquisition of additional quota through U.S./Canada process

- Sub-option 1A-1: Re-negotiate fishing year 2012 YTF shared Total Allowable Catch (TAC).
- Description:
    - The upper bound of the 2012 TRAC recommendation was 1,400 mt
    - U.S. overfishing limit for 2012 is 1,617 mt
    - 2012 TMGC agreement set the TAC at 1,150 mt
    - SSC recommendation for 2012 ABC was also 1,150 mt

  Notes: Increasing the U.S. TAC would require revision of the ABC; 2012 TRAC for 2013 catch advice will be completed in late June (there is a concern that the poor condition of this stock may continue)
- Working group feedback: Supportive of concept
- Sub-option 1A-2: Transfer unused Canadian quota to U.S. after the close of the Canadian fishery.
- Description: The 2012 Canadian TAC has been fully allocated to the Canadian groundfish and scallop fisheries; however the fishing year in Canada ends on December 31, 2012. If any portion of the Canadian TAC is unused after December 31, the U.S. could request or negotiate for that to be transferred to the U.S. TAC for use for the remainder of the 2012 U.S. fishing year (January 1– April 30, 2013).
- Working group feedback: Supportive of concept

Option 1B: Transfer Annual Catch Limit (ACL) from the scallop to groundfish fishery (updated 2012 scallop catch will be provided at the June 18 Groundfish/Scallop Committee)
Description: Transfer a portion of the scallop sub-ACL to the groundfish fleet based on an updated estimate of scallop fishery catches of GB YTF in 2012. This could be done either as a single 'lump sum' transfer or in a series of small transfers (see option 2B).
Working group feedback: Mixed – supported by groundfish fleet; scallop fleet has varying concerns but is not completely opposed to transfer

OPTION 2 - TRIP LIMITS, ROLLING TRANSFERS, PARTIAL AREA CLOSURE; SELECTIVE GEAR
Purpose: Extend fishing opportunity

The following options could be used in combination or as stand-alone options:

Option 2A: Trip limits for sector vessels
Description: Trip limit for groundfish sector vessels fishing in the U.S./Canada Area.

Working group feedback: Not supported

Option 2A-2: Zero possession for commercial groundfish vessels (vessels would still be allocated GB YTF and would therefore need to continue to track their quota)
Description: Groundfish vessels fishing in the U.S./Canada Area would be prohibited from possessing YT.
Working group feedback: Mixed; some supported and some opposed

Option 2B: Rolling series of transfers of YT from scallop to groundfish fleet
Description: Transfer a portion of the scallop sub-ACL to the groundfish fleet in a series of transfers as updated scallop fishery utilization of YT becomes available. An initial transfer could occur as soon as possible that would provide some immediate relief, while posing little risk to scallopers. Following that release, re-evaluation of scallop fishery YT use could occur at fixed intervals (e.g., 2-month spans) and additional transfers made, when possible, if projections indicated underutilization will occur by the scallop fleet. Some 'reserve capacity' for both fleets could be maintained by this system of transfers to serve as a "buffer" for the scallop fleet while also providing for additional groundfish GB YTF availability.
Working group feedback: Mixed - supported by groundfish fleet; scallop fleet has varying concerns but is not completely opposed to transfer

Option 2C: Partial area closure of U.S./Canada Area when a sector's YT ACE is fully utilized (i.e., partial closure of the stock area)
Description: Conceptually, after a sector's ACE has been utilized, this option would close a portion of the stock area that has higher YTF concentrations while allowing continued operations in designated areas that have lower or no YTF concentrations.
Sub options:

- *1*. Allow vessels to fish in the U.S./Canada Area until a fixed percentage of their ACE has been caught (e.g., 80 or 90 percent). Once this threshold has been caught, the area closure would apply and their remaining YT ACE would serve as a bycatch reserve to allow operations in the remaining open area.
- *2*. Allow sector vessels to fish in U.S./Canada Area until the sector's ACE has been fully utilized then prohibit operations in the partial area closure *(see also Bycatch set-aside quota, below)*.

Working group feedback: Some members of the working group provided substantial input on the partial area closure concept during the May 31 teleconference. Specifically,

- The potential area closure(s) should not be large
- Access to other species (haddock, window flounder) needs to be maintained in open areas
- Concerns were raised about the calculation of discard rates charged for trips not encountering YTF
- Access to the designated YTF open areas could be structured similar to a scallop access area with potential declaration requirements, selective gear, or other options
- Generally, groundfish vessels are currently trying to avoid YTF but remain concerned that doing so may result in loss of access to other species

Option 2C-*2*: Bycatch set-aside quota using transferred YTF.
Description:

- Establish bycatch-only pool of fish if additional YT sub-ACL is made available through transfer from scallop fleet or from Canada
- Could be used with the partial area closure option or as a stand-alone provision
- Designed to allow continued fishing after sector YT ACE has been used
- Could be further re-enforced by trip/possession limits or a zero possession requirement
- All fishing would be restricted once the bycatch set-aside quota and sector YT ACE has been used
- Could be paired with gear restrictions

Working group feedback: Idea of a common-access pool of fish was not supported by the working group. Allocation of additional fish to sectors would encourage individual accountability.

Option 2D: Require selective trawl gear type use
Description: Trawl vessels would be required to use either haddock separator or Ruhle trawl gear when fishing in the stock area, either immediately or once portion of GB is closed. (Selective gear for non-trawl vessels could also be used.)
Working group feedback: Concerns were raised that selective gear may under harvest commercially important species, particularly winter flounder. Working group feedback indicated some support for selective gear use in conjunction with discrete access-type areas.

Option 3C: Additional gear modifications
Description: Exploration of gear modifications to further reduce yellowtail flounder bycatch (e.g., low profile dredge for scallop fleet). Would need research and development before implementation could be required.
Working group feedback: Not discussed in May 31, 2012, meeting.

Option 3D: Shift scallop access to areas with lower yellowtail flounder bycatch
Description: Consider access to areas that are currently closed to scallop fishing (i.e., northern edge within Closed Area II); could potentially reduce effort in areas with higher yellowtail flounder bycatch
Working group feedback: Not discussed in May 31, 2012, meeting.

OTHER OPTIONS AND ISSUES

Option 3A: "Hotspot" YT bycatch avoidance
Description: System of catch reporting and fleet advisories designed to help avoid concentrations of YT (i.e., current SMAST scallop program). Could be expanded to include groundfish administered through voluntary informal sector system, SMAST (requires additional funding/staff), agency assistance, or some combination.
Working group feedback: Not discussed in May 31, 2012, meeting.

Option 3B: Scallop sub-ACL "indemnity" concept
Description: Temporarily recuse the scallop fishery from any AM that, under the current scallop regulations, would be required if the sub-ACL is exceeded in 2012. Instead, the pound-for-

pound repayment provisions of the U.S./Canada agreement could be utilized should the TAC be exceeded (for fishing year 2012 TAC=ABC=ACL).
Working group feedback: Concerns have been raised that any potential YTF overage would reduce the groundfish allocation in fishing year 2013 but would not similarly affect the scallop fleet as the sub-ACL for that fleet is established based on projected YT catch. The remainder is then apportioned to the groundfish fleet.

Issue: Reporting Accuracy
Description: Concerns were raised during the working group call that accurate stock-area reporting is critical for effective management and stock assessment. Analysis to reconcile VMS and VTR data is ongoing in the wake of GOM cod and is being looked into for GB YTF as well.
Options: This is not a new issue. Past discussions have contemplated potential VMS declarations, limiting fishing to 1 stock area per trip/declaration, or additional reporting requirements to improve fishing location/stock area information.

Issue: TMGC membership
Description: Different TMGC membership has been suggested by various parties. TMGC membership includes 1 government representative, 1 scientist, and 4 industry representatives for Canada and the U.S. The 4 industry representatives for the U.S. have always been Council members, but this is not a requirement of the Understanding. The Council Chair recommends TMGC members, with assistance from the Executive Committee, and final approval by the Regional Administrator. Inclusion of non-Council members may need to undergo FACA evaluation.
Options: Continue discussion about TMGC membership and process

Issue: Informal TMGC meeting, June 2012
Description: Several members of the TMGC will be in Wood's Hole in late June. A face-to-face meeting or teleconference could be held, as needed, to discuss ongoing U.S./Canada issues (e.g., request for unused YT, TMGC membership, future negotiations, etc.).

Issue: Timing of 2012 GB YTF TRAC assessment and potential Council or Agency action(s)
Description: The 2012 GB yellowtail flounder stock assessment conducted through the TRAC process is scheduled to occur in the week of June 25-29 in Wood's Hole, MA. Any recommendations or actions undertaken for fishing year 2012 should incorporate the new assessment information, particularly with respect to the status of the stock.