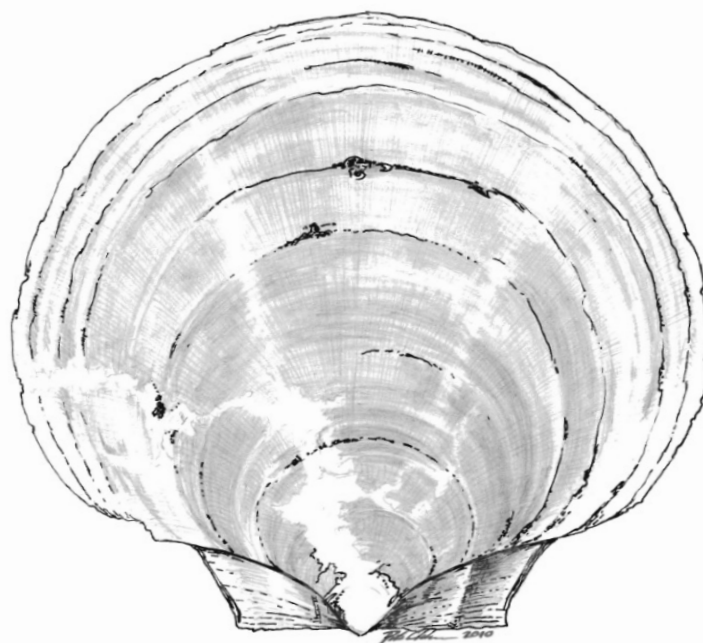


# **Nantucket Lightship Emergency Action to the Atlantic Sea Scallop FMP**

**Environmental Assessment**  
*Including a Regulatory Impact Review*



Prepared by the National Marine Fisheries Service  
May 2011

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A10 – Amendment 10 to the Atlantic Sea Scallop Fishery Management Plan  
A11 – Amendment 11 to the Atlantic Sea Scallop Fishery Management Plan  
A13 – Amendment 13 to the Northeast Multispecies Fishery Management Plan  
A15 – Amendment 15 to the Atlantic Sea Scallop Fishery Management Plan  
AA – Access Area  
ABC – Acceptable Biological Catch  
ACL – Annual Catch Limit  
ACT – Annual Catch Target  
AM – Accountability Measure(s)  
AP – Advisory Panel  
 $B_{MSY}$  – Biomass at Maximum Sustainable Yield  
BiOp, BO – Biological Opinion  
CEQ – Council on Environmental Quality  
CA – Closed Area  
CAI – Closed Area I  
CAII – Closed Area II  
CASA – Catch-At-Age Size-At-Age (model)  
CPH – Confirmation of Permit History  
CV – Coefficient of variation, a standard statistical measure of variation, expressed as a percentage of the mean. Lower CVs indicate more accuracy in the estimates and less variation in data.  
CWA – Cape Wind Associates  
DAS – Day-at-sea  
DMV – Delmarva  
CPUE – Catch per Unit Effort  
DEIS – Draft Environmental Impact Statement  
EA – Environmental Assessment  
EEZ – Exclusive Economic Zone  
ESA – Endangered Species Act  
EFH – Essential Fish Habitat  
    EFH designation life stages  
        A – Adult life stage  
        J – Juvenile life stage  
        E – Egg life stage  
ET, ETA – Elephant Trunk Area  
FMP – Fishery Management Plan  
FR – Federal Register  
FEIS – Final Environmental Impact Statement  
 $F_{MSY}$  – Fishing Mortality at Maximum Sustainable Yield  
FW18 – Framework Adjustment 18 to the Atlantic Sea Scallop Fishery Management Plan  
FW19 – Framework Adjustment 19 to the Atlantic Sea Scallop Fishery Management Plan  
FW21 – Framework Adjustment 21 to the Atlantic Sea Scallop Fishery Management Plan  
FW22 – Framework Adjustment 22 to the Atlantic Sea Scallop Fishery Management Plan  
FY – Fishing Year

GB – Georges Bank  
GC – General Category  
GOM – Gulf of Maine  
GSC – Great South Channel  
G(R)T – Gross (Registered) Tonnage  
HAPC – Habitat Area of Particular Concern  
HC – Hudson Canyon  
HP – Horsepower  
LA – Limited Access  
LAGC – Limited Access General Category  
LPUE – Landings per unit effort, usually a DAS in this document  
IFQ – Individual Fishing Quota  
IRFA – Initial Regulatory Flexibility Analysis  
IVR – Interactive Voice Reporting  
LA – Limited Access  
LAGC – Limited Access General Category  
LIPA – Long Island Power Authority  
LNG – Liquefied Natural Gas  
LPUE – Landings per Unit Effort  
*M* – Natural Mortality  
MA – Mid-Atlantic  
MAFMC – Mid-Atlantic Fishery Management Council  
MFMT – Maximum Fishing Mortality Target  
MSST – Maximum Sustainable Stock Threshold  
M-S Act – Magnuson Stevens Act  
MSY – Maximum Sustainable Yield  
NE – New England or Northeast  
NEFMC – New England Fishery Management Council  
NEFSC – Northeast Fisheries Science Center  
NEPA – National Environmental Policy Act  
NGOM – Northern Gulf of Maine  
NLCA – Nantucket Lightship Closed Area  
NLS – Nantucket Lightship Scallop Access Area  
NMFS – National Marine Fisheries Service  
NOAA – National Oceanographic Atmospheric Administration  
OA – Open Area  
OFD – Overfishing Definition  
OFL – Overfishing Limit  
OY – Optimum Yield  
RIR – Regulatory Impact Review  
RSA – Research Set-Aside  
SAFE – Stock Assessment and Fishery Evaluation (report)  
SAMS – Scallop Area Management Simulator (model)  
SARC – Stock Assessment Review Committee  
SASI – Swept Area Seabed Impact (model)  
SAW – Stock assessment workshop

SBNMS – Stellwagen Bank Marine Sanctuary  
SBRM – Standardized bycatch reporting methodology  
SCH – Great South Channel  
SCHCL – Proposed Great South Channel Closure  
SDC – Status Determination Criteria  
SH/MW – Shell Height-Meat Weight (relationship)  
SMAST – School of Marine Science and Technology, University of Massachusetts  
Dartmouth  
SNE – Southern New England  
SNE/MA – Southern New England/Mid-Atlantic  
SSC – Science and Statistical Committee  
TAC – Total Allowable Catch. This includes discards for finfish species, but not for scallops  
which have a much lower discard mortality rate.  
PDT – Scallop Plan Development Team  
U10 – A classification for large scallops, less than 10 meats per pound.  
USGS – United States Geological Survey  
VEC – Valued Ecosystem Component  
VIMS – Virginia Institute of Marine Science  
VMS – Vessel Monitoring System  
VTR – Vessel Trip Reports  
WGOM – Western Gulf of Maine  
WHOI – Woods Hole Oceanographic Institute  
YTF/YT – Yellowtail flounder

# NANTUCKET LIGHTSHIP EMERGENCY ACTION TO THE ATLANTIC SEA SCALLOP FMP

## 1.0 Purpose and Need for the Action

Based on concerns regarding the scallop resource, the purpose of this action is to close the Nantucket Lightship Scallop Access Area (NLS) in 2011 to prevent vessels from landing scallops and catching yellowtail within this access area upon its scheduled re-opening on June 15, 2011.

The need for this action is to avoid the following three risks associated with vessels deciding to fish in NLS before Framework 22, if approved, is implemented:

- First, fishing activity in NLS in Fishing Year (FY) 2011 could lead to an overage of the limited access scallop sub-annual catch limit (ACL), as proposed in Amendment 15.
- Second, there is an increased risk of exceeding the Southern New England/Mid-Atlantic (SNE/MA) yellowtail flounder sub-ACL, which would trigger a fleet-wide accountability measure in FY 2012 (i.e., a seasonal closure of statistical areas 534, 539, and 613).
- Third, the success of the entire scallop area rotation program depends on timely openings and closing of access areas. NLS was not scheduled to be accessible in FY 2011 under Framework 22, and if vessels fish there under an administrative loophole caused by late development and implementation of Framework 22, the overall yield from that area will be reduced, which could compromise the overall success of the area rotation program.

Regardless of whether or not Framework 22 is, or is not, approved, the Stock Assessment and Fishery Evaluation (SAFE) report, representing the best scientific information available regarding the status of the scallop resource, indicates that the NLS should not be open to scallop harvest in FY 2011. Because fishing in NLS in FY 2011 would have future implications on the success of scallop yield in future FYs, this action would likely be implemented for the entirety of FY 2011's NLS fishing season (June 15, 2011 - January 31, 2011).

## 2.0 Background Information

This emergency action would close NLS to scallop fishing prior to its scheduled opening on June 15, 2011. NOAA's National Marine Fisheries Service (NMFS) is taking this emergency action to prevent scallop and yellowtail catch that would result from opening the area prior to the implementation of Framework Adjustment 22 to the Scallop FMP (Framework 22), which would close NLS to scallop fishing in FY 2011. Framework 22 proposes to close the NLS, but it will not be implemented, if approved, until after the area is scheduled to open on June 15, 2011. The level of catch that is expected during the short period that the NLS would be open was not anticipated by the New England Fishery Management Council (Council) or NMFS in developing Framework 22. If the NLS opens, it is likely to generate a high level of scallop landings and yellowtail flounder catch, which would threaten the FMP's ability to remain under the ACLs established for the scallop and yellowtail flounder fisheries, and thereby triggering unexpectedly the accountability measures, to the detriment of the scallop fishery.

The Council adopted Amendment 15 and Framework 22 at its September and November 2010 meetings, respectively. The proposed rules for Amendment 15 and Framework 22 published in the Federal Register on April 11 and April 29, 2011, respectively (76 FR 19929 and 76 FR 23940), with the comment periods ending on May 26, 2011, for Amendment 15 and May 31, 2011, for Framework 22. Amendment 15 and Framework 22 will be implemented after June 15, 2011, if approved.

In summary, Amendment 15 proposes the formal process for setting ACLs and accountability measures (AMs) for scallops and sub-ACLs and AMs for the Georges Bank (GB) and Southern New England/Mid-Atlantic (SNE/MA) yellowtail flounder (yellowtail) stocks. Framework 22 proposes scallop management measures for FY 2011 through 2013 based on the ACL/AM process included in Amendment 15 and thus, is contingent upon approval and implementation of Amendment 15. Among other management measures, Framework 22 would set the scallop allocations (i.e., days-at-sea (DAS), access area trips, and limited access general category (LAGC) individual fishing quotas (IFQ)) for FY 2011 through 2013, including adjustments to the FY 2010 scallop access area rotational schedule, closure of the NLS, and trip allocations for three other access areas that were closed in FY 2010 (Hudson Canyon (HC), Closed Area I (CAI), and Closed Area II (CAII); See Table 1). Tables 1 through 3 identify the specific allocations and access area schedules for each fishing year (i.e., 2011, 2012, and 2013) for both the limited access fleet (i.e., full-time, part-time, and occasional vessels) and the LAGC IFQ fleet. Therefore, the need for, and analysis of, closing NLS has been fully vetted and discussed in FW 22 itself, and its environmental impacts have been analyzed in its proposed EA. This EA, to some extent, incorporates and relies on these FW 22 discussions and analyses. Table 4 outlines the specific FY 2011 access area trip allocations and possession limits.

**Table 1. Access Area schedule proposed in Framework 22. Note that Framework 22 would convert the Elephant Trunk Access Area (access area since 2007) to open area status, to be fished as an open area under DAS and thus, is not presented in this table.**

| Access Area | 2011                                       | 2012                                       | 2013                                       |
|-------------|--|--|--|
| CAII        | Open<br>(June 15, 2011 – January 31, 2012) | Open<br>(June 15, 2012 – January 31, 2013) | Open<br>(June 15, 2013 – January 31, 2014) |
| NLA         | Closed                                     | Open<br>(June 15, 2012 – January 31, 2013) | Open<br>(June 15, 2013 – January 31, 2014) |
| CAI         | Open<br>(June 15, 2011 – January 31, 2012) | Open<br>(June 15, 2012 – January 31, 2013) | Closed                                     |
| HC          | Open                                       | Open                                       | Open                                       |
| DMV         | Open                                       | Open                                       | Open                                       |



**Table 2. Scallop Access Area Trip Allocations for Full-time Limited Access Scallop Vessels during FY 2011-2013.\***

| <b>FY</b>                               | <b>CAI</b> | <b>CAII</b> | <b>NLAA</b> | <b>HC</b> | <b>Delmarva</b> | <b>Elephant Trunk</b> |
|---|------------|-------------|-------------|-----------|-----------------|-----------------------|
| 2011<br>(Current/Status Quo/No Action)  | -          | -           | 1           | -         | 1               | 2                     |
| 2011<br>(Proposed under FW 22)          | 1.5        | 0.5         | -           | 1         | 1               | N/A                   |
| 2012<br>(Proposed Proposed under FW 22) | 0.5        | 1           | 0.5         | 1.5       | 0.5             |                       |
| 2013<br>(Proposed under FW 22)          | -          | 1           | 1           | 1.5       | 0.5             |                       |

\* Split-fleet trips are identified by “0.5” and “1.5”: The “0.5” indicates that half the fleet would be allocated one full trip into a specific access area and the “1.5” indicates that all full-time vessels would be allocated one full trip into a specific access area and half of the vessels would be allocated an additional full trip into that area.

**Table 3. Scallop Open Area DAS Allocations for FYs 2011 through 2013.**

| <b>Permit Category</b> | <b>FY 2011 (Current/Status Quo/No Action)</b> | <b>FY 2011 (Proposed under FW 22)</b> | <b>FY 2012 (Proposed under FW 22)</b> | <b>FY 2013 (Proposed under FW 22)</b> |
|------------------------|---|---------------------------------------|---------------------------------------|---------------------------------------|
| Full-Time              | 38  | 32                                    | 34                                    | 26                                    |
| Part-Time              | 15  | 13                                    | 14                                    | 11                                    |
| Occasional             | 3   | 3                                     | 3                                     | 3                                     |

**Table 4. FY 2011 access area trip allocations and possession limits proposed in Framework 22 (Note: NLS is proposed to be closed under FW 22 for FY 2011).**

| <b>Vessel Permit Category</b> | <b>lb/trip</b> | <b>Total Trips</b> | <b>Hudson Canyon (HC)</b> | <b>DMV</b> | <b>CAI</b>               | <b>CAII</b>              |
|-------------------------------|----------------|--------------------|---------------------------|------------|--------------------------|--------------------------|
| <b>Full-time*</b>             | 18,000         | 4                  | 1                         | 1          | ½ Fleet: 1<br>½ Fleet: 2 | ½ Fleet: 1<br>½ Fleet: 0 |
| <b>Part-time</b>              | 14,400         | 2                  | Up to 1                   | Up to 1    | Up to 2                  | Up to 1                  |
| <b>Occasional</b>             | 6,000          | 1                  | Up to 1                   | Up to 1    | Up to 1                  | Up to 1                  |
| <b>LAGC IFQ</b>               | 400            | N/A                | 593                       | 593        | 890                      | 0                        |

\* Framework 22 would allocate “split fleet” trips into some access areas where half the fleet would be allocated one trip into CAI and one trip in CAII, while the other half of the fleet would be allocated two trips into CAI and no trips into CAII.

FY 2011 began on March 1, 2011, and FY 2010 scallop fishery regulations proposed by Framework 21 (See Tables 2 and 3) to the FMP remain in effect until superseded by Amendment 15 and Framework 22, if approved. The major allocation differences between the current FY 2011 roll-over measures and those that would be implemented under Framework 22 are related to the limited access fleet’s DAS allocations and the locations of the access area to which they would be allocated trips. The DAS for part-time and occasional vessels would be the same as the current FY 2011 roll-over allocations, but the full-time vessels would have their DAS reduced from 38 DAS to 32 DAS. These decreases are the result of modifications to the landings-per-unit effort (LPUE) calculation applied to the DAS model. Because the proposed DAS allocations under Framework 22 are less than what the fleet will be allocated at the start of FY 2011, Framework 22 included a payback measure that stated that any DAS overages that are incurred by an individual vessel during the interim between March 1, 2011, and the implementation of Framework 22, if approved, would be deducted from the vessel’s FY 2012 DAS allocation.

Framework 22 proposes the same total number of trips (four to full-time vessels; 2 to part-time vessels, and 1 to occasional vessels) with the same possession limits based on permit category, but it allocates those trips to different areas. With the exception of Delmarva, which allocates one access area trip to full-time vessels under both the current and proposed FY 2011 allocations, the access area trips proposed under Framework 22 would be allocated to different areas than what the fleet currently has access to since the start of FY 2011. Specifically, the Elephant Trunk Access Area (ETAA) is scheduled to become part of the open areas under Framework 22, but it continues to be an access area with allocated trips from March 1 until implementation of Framework 22, if approved. This area is proposed to convert to an open area, as it was prior to 2007, because the scallop biomass in that area is no longer large enough to qualify it as an access area under the scallop access area program. As such, it would remain open to scallop harvest under Framework 22, and vessels could fish in this area under open area DAS. Full-time vessels also have a trip allocated into NLS under the current measures, which opens on June 15, 2011. Framework 22 includes access area trips into HC, CAI, and CAII, but does not allocate trips into NLS in FY 2011. Framework 22 would close NLS upon its implementation and reopen the area in FYs 2012 and 2013. Similar to the DAS payback measures, Framework 22 included payback measures for vessels that decided to take their FY 2011 ETAA and NLS trips prior to Framework 22’s implementation and subsequent reordering of the access area schedule. Under Framework 22, any vessel that lawfully declares an ETAA trip during the interim would receive a DAS deduction based on the landings from that ETAA trip in FY 2012. Additionally, Framework 22 stated that, should the NLS open on June 15, 2011, prior to the implementation of Framework 22, a vessel that lawfully lands scallop from NLS during the interim will have those pounds deducted from an allocated access area trip in FY 2012.

As in previous specification frameworks, because a delay in implementation was anticipated, the payback measures included in Framework 22 were intended to be disincentives and were designed in a way that individual vessels would be responsible for their overages. However, with only two months into the fishing year, scallop fishing effort has been very heavy,

particularly due to the current value of the fishery. Industry members have recently explained that there is very large incentive and personal gain for vessels to increase catch at this particular time. The price of scallop meats is at record levels since the start of FY 2011; scallops have been worth an average of \$9.48/lb. With the price of fuel expected to increase, vessels may be interested in taking advantage of these high scallop prices now.

At the start of FY 2011, under the measures that rolled over from FY 2010, the limited access fleet has fished 2,105 DAS, which is 15.8 percent of the total DAS currently allocated to the fishery (See the NMFS Scallop Open area DAS Usage Monitoring report at [http://www.nero.noaa.gov/ro/fso/Reports/ScallopProgram/scaldas11\\_APR.pdf](http://www.nero.noaa.gov/ro/fso/Reports/ScallopProgram/scaldas11_APR.pdf)). Although full-time vessels have two trips allocated into the ETAA, which would revert to an open area under Framework 22, scallop yield in that area is low and, as a result, trips are generally more costly than in open areas. Most vessels have not declared their FY 2011 trips into the ETAA and have instead used their compensation trips from FY 2010. In the DMV, there have been 285 limited access scallop trip declarations in that area, resulting in a landings estimate of 4,165,243 lb. Of these trips, 232 were declared FY 2011 trips (with the remainder being compensation trips). Full-time vessels (313 vessels) each have one trip into DMV, which means a total of 313 trips, while part-time vessels (34 vessels) may choose to take one of their two allocated trips in Delmarva. There are currently no scallop vessels with occasional scallop permits. The number of trips that have already fished in Delmarva has reached 67 percent of the total trips that could be taken there only two months into FY 2011. As the June 15, 2011, opening of NLS approaches, and because Framework 22 would likely not be implemented prior to June 15, 2011, interest in fishing in NLS, regardless of the payback measures in FY 2012, is likely increasing.

In the days leading up to the Council meeting on April 28, 2011, the scallop industry reported that many industry members would prefer to fish an NLS trip in FY 2011 and accept the consequences in FY 2012 and urged the Council to request that NMFS close the NLS. A vessel has the decision to not fish in NLS but potentially pay later if AMs (i.e., DAS reductions) are triggered by other vessels, or the decision to fish in NLS now to at least mitigate some of the loss from DAS reductions if AMs are triggered. Several speakers commented that while the industry overall understands that there are long-term risks and costs associated with fishing in NLS this year, not fishing in that area could be a very difficult and costly decision for individual vessel owners. These vessel owners believe that there are more benefits this year since current scallop prices are unexpectedly high. It was pointed out that these are very lucrative trips, about \$180,000 for a trip under a week long, and that will be a major driving force affecting fishing behavior. The scallop industry has warned that if some vessels fish in the NLS, it is likely that majority of vessels will follow suit so that they remain competitive with scallop landings of other vessels. As a result, similar to FY 2010, a very high level of scallop fishing effort could occur in the NLS within the first 2 or 3 weeks it is open. This request to close the NLS was described as a proactive measure to help maintain the successful management of this fishery, which is the result of strong partnerships between managers and the fishing industry.

### 3.0 Alternatives Including the Proposed Action

#### 3.1 Alternative 1: No Action

Under this alternative, the NLS would open on June 15, 2011, based on FY 2010 management measures that carried over to FY 2011. NLS would remain open until Framework 22 is implemented, if approved. It is likely that up to 6 M lbs. of scallops could be harvested from NLS in as little as two to three weeks after it opens. If Framework 22 is implemented in FY 2011, which would likely occur after June 15, 2011, limited access vessels would be able to use up to one access area trip in FY 2011 and LAGC IFQ vessels would have a fleet-wide allocation of 714 trips into the area (See Table 5).

**Table 5. End of FY 2011 Allocation under No Action, if Framework 22 is approved.**

| Vessel Permit Category | lb/trip | Total Trips | Hudson Canyon (HC) | DMV     | CAI                      | CAII                     | NLS     |
|------------------------|---------|-------------|--------------------|---------|--------------------------|--------------------------|---------|
| Full-time              | 18,000  | 5           | 1                  | 1†      | ½ Fleet: 1<br>½ Fleet: 2 | ½ Fleet: 1<br>½ Fleet: 0 | 1       |
| Part-time*             | 14,400  | 2           | Up to 1            | Up to 1 | Up to 2                  | Up to 1                  | Up to 1 |
| Occasional**           | 6,000   | 1           | Up to 1            | Up to 1 | Up to 1                  | Up to 1                  | Up to 1 |
| LAGC IFQ               | 400     | N/A         | 593                | 593     | 890                      | 0                        | 714     |

#### 3.2 Alternative 2: Proposed Action (Preferred)

Under this alternative, the NLS would close on June 15, 2011, consistent with the proposed access area allocations in Framework 22, and remain closed for up to one year (the maximum length of an emergency action).

### 4.0 Affected Environment

The following is excerpted or summarized primarily from the FEIS for Amendment 15 to the Atlantic Sea Scallop Fishery Management Plan (NEFMC, 2010) and the EA for the proposed Framework 22 rule to that plan (NEFMC 2011a). The reader is referred to these documents (Available at: <http://www.nefmc.org/scallops/index.html>) for more detailed information on the fisheries and other resources described below.

#### 4.1 Atlantic Sea Scallop Resource

The Atlantic sea scallop (*Placopetca 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 Georges Bank, 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

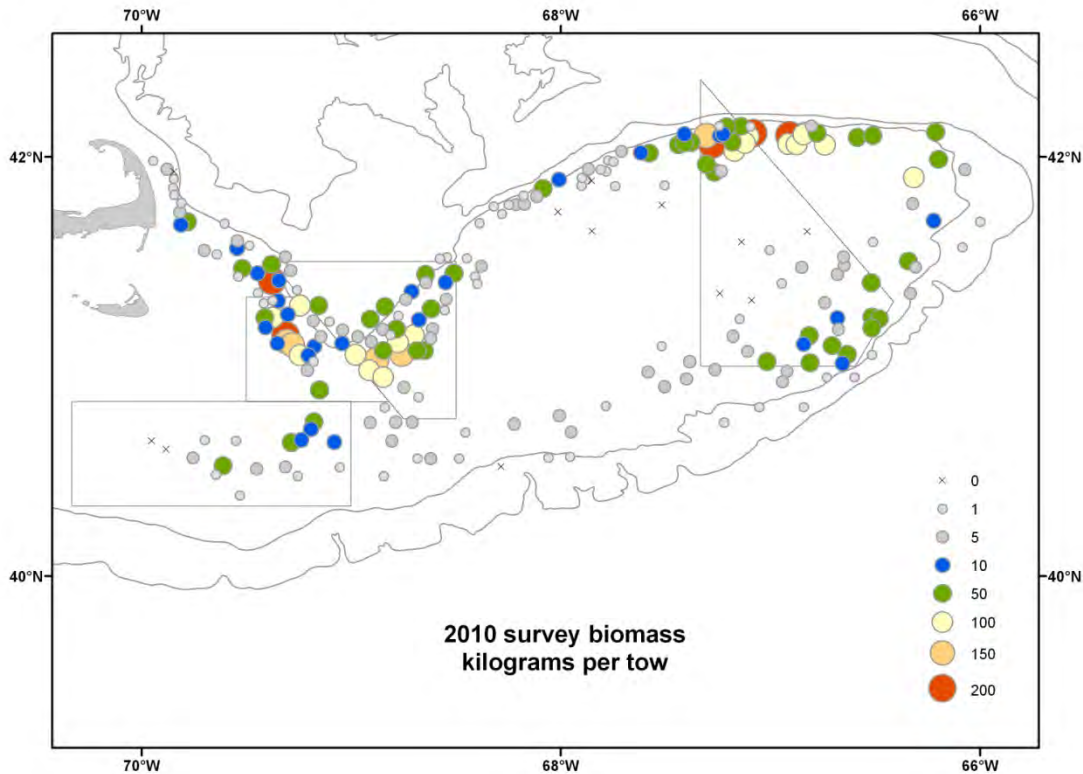
resource areas are recognized. Major aggregations occur in the Mid-Atlantic from Virginia to Long Island (Mid-Atlantic component), Georges Bank, the Great South Channel (South Channel component), and the Gulf of Maine (Hart and Rago, 2006; NEFSC, 2007). These four regional components are further divided into six resource areas: Delmarva (Mid-Atlantic), New York Bight (Mid-Atlantic), South Channel, southeast part of Georges Bank, northeast peak and northern part of Georges Bank, 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: Georges Bank and the Mid-Atlantic, which are combined to evaluate the status of the whole stock (NEFMC, 2007). In 2009, sea scallops were not overfished and overfishing was not occurring.

The fishery is prosecuted using dredges and trawls which have restrictions on width, mesh, and ring sizes. The fishery is managed through limited access and general category permits with specified limits on trips in management access areas and days-at-sea outside of these areas. Within the access areas, vessels are allowed to possess 18,000 lb per trip. The access areas are reviewed annually and are opened and closed to protect the harvesting of smaller scallops. The general category vessels are regulated through trip limits and may land up to 400 lb meat or 50 bushels of whole scallops.

Despite a decline in biomass in the past few years, the overall trend shows a considerable increase since 1994, especially in the Georges Bank closed areas (NEFSC, 2007). Scallop biomass on Georges Bank has increased by a factor of 18 and in the Mid-Atlantic Bight by a factor of 8 (Hart and Rago, 2006), which is likely due to very strong recruitment in the Mid-Atlantic and improved management in both the Mid-Atlantic and Georges Bank (NEFMC, 2007). The resource remains in relatively good condition even though mortality was above target for 2003-2004 and 2008-2009 with a greater share of the landings coming from older and larger scallops. Whole-stock estimates indicate that annual abundance, annual egg production, and biomass were relatively high during 2009, with recruitment relatively low.

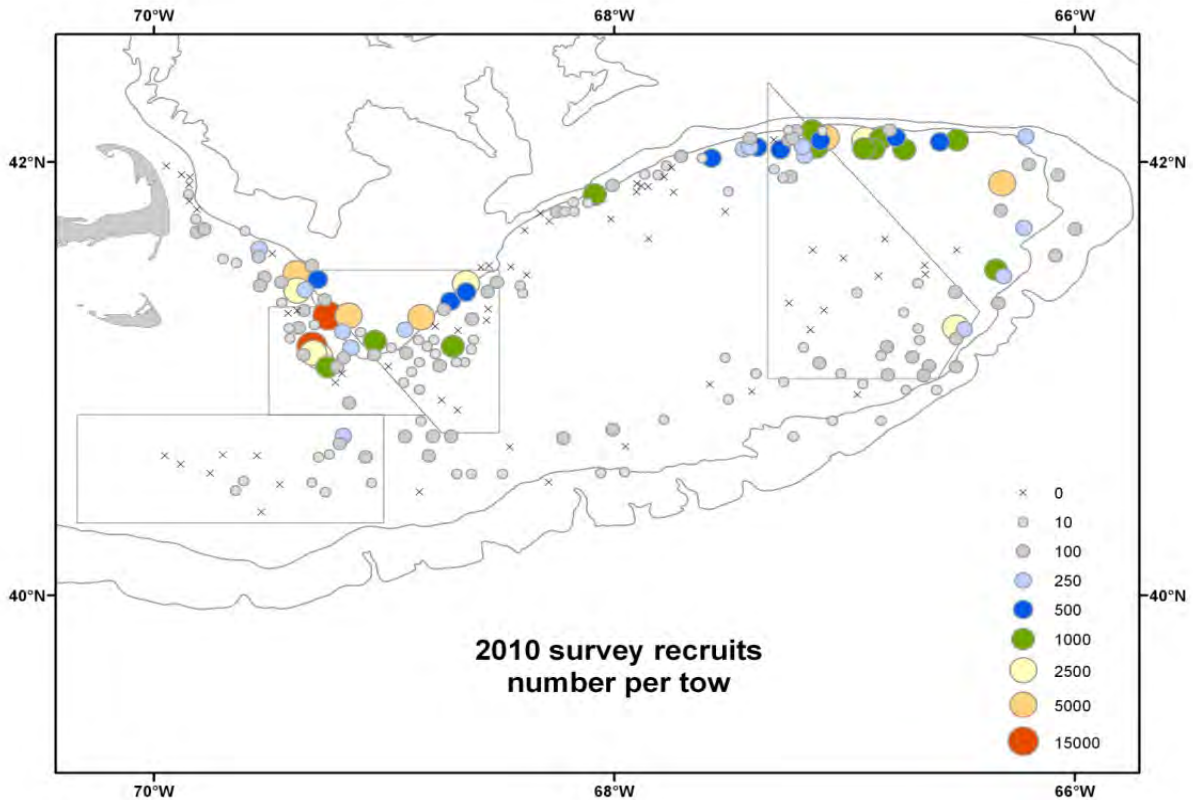
The scallop abundance and biomass on Georges Bank increased from 1995-2000 after implementing closures and effort reduction measures. Biomass and abundance then declined from 2006-2008 because of poor recruitment and the reopening of portions of groundfish closed areas. The year 2009 saw an increase in biomass on Georges Bank and survey estimates in 2010 follow suit. This increase is 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 Georges Bank are currently on the Northern Edge, within Closed Area I, and within the Nantucket Lightship closed area.

**Figure 1 - Biomass chart for Georges Bank from the 2010 NMFS sea scallop survey**



Continued strong recruitment was observed on Georges Bank in 2010 (2009 year class), especially in the South Channel, on the Northern Edge, and in a small area of the Southeast part of CA II. Recruitment in the Mid-Atlantic was poor following a good year class in 2008, and extremely spatially limited. Most areas of recruitment were observed in the open area on the south rim of Hudson Canyon, with a few small pockets in the Hudson Canyon closed area and Elephant Trunk. Looking at trends for both portions of the scallop stock there is a strong recruitment pattern in place currently for Georges Bank, with three years in a row of great recruitment. The drop-off in the Mid-Atlantic is somewhat drastic, but it is not inconsistent with the variable pattern shown by the stock of several strong years followed by a drop-off and recovery.

**Figure 2 – Recruitment on Georges Bank from 2010 NMFS scallop survey**



#### **4.2 Non-Target Species**

Non-target species (incidental catch and ‘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, open area DAS, etc. Potential non-target species caught incidentally in the scallop fishery were identified in Amendment 15 and Framework 22 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 Plan Development Team 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 6.

GARM III for multispecies identified that the scallop fishery caught more than 5% of the bycatch (compared to overall catch) for some species by region. Georges Bank (GB) and Southern New England (SNE) 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/GOM and SNE regions for windowpane flounder, the catch is generally

greater in SNE. The Skate Data-poor Working Group identified the greatest bycatch for the scallop fishery as little and winter skates. See Table 6 for the current status of these species.

Yellowtail flounder is one of several species that was intended to be protected by the groundfish closed areas. The Georges Bank yellowtail flounder stock is predominately found on the southeastern and northwestern portions of Georges Bank, overlapping the scallop access areas in Closed Areas I and II. Unlike spawning cod and haddock, yellowtail flounder tend to be present in these locations year-round. The Southern New England stock of yellowtail flounder was one of the primary intended beneficiaries of the Nantucket Lightship Area. Most of this stock occurs in the portions of the Nantucket Lightship Area that have been closed to scallop fishing, or in other areas of Southern New England and the Mid-Atlantic region where scallop fishing occurs in open areas. More details about the biological characteristics of groundfish species in the closed areas is provided in the FEIS for Amendment 13 to the Multispecies FMP.

**Table 6. Status of non-target species known to be caught in scallop fishing gear.**

| <i>Species</i>          | <i>Stock</i>                 | <i>Overfished?</i> | <i>Overfishing?</i> |
|-------------------------|------------------------------|--------------------|---------------------|
| 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                 | Yes                 |
| Northeast Skate Complex | Thorny skate                 | No                 | Yes                 |
| Multispecies            | Windowpane - GOM/GB          | Yes                | Yes                 |
| Multispecies            | Windowpane - SNE/MA          | Yes                | No                  |
| Multispecies            | Winter flounder - GB         | Yes                | Yes                 |
| Multispecies            | Winter flounder - GOM        | Unknown            | Unknown             |
| Multispecies            | Winter flounder - SNE/MA     | Yes                | Yes                 |
| Multispecies            | Yellowtail flounder - CC/GOM | Yes                | Yes                 |
| Multispecies            | Yellowtail flounder - GOM    | No                 | Yes                 |
| Multispecies            | Yellowtail flounder - SNE/MA | Yes                | Yes                 |
| Atlantic Surfclam       | Mid-Atlantic Coast           | No                 | No                  |
| Ocean Quahog            | Atlantic Coast               | No                 | No                  |

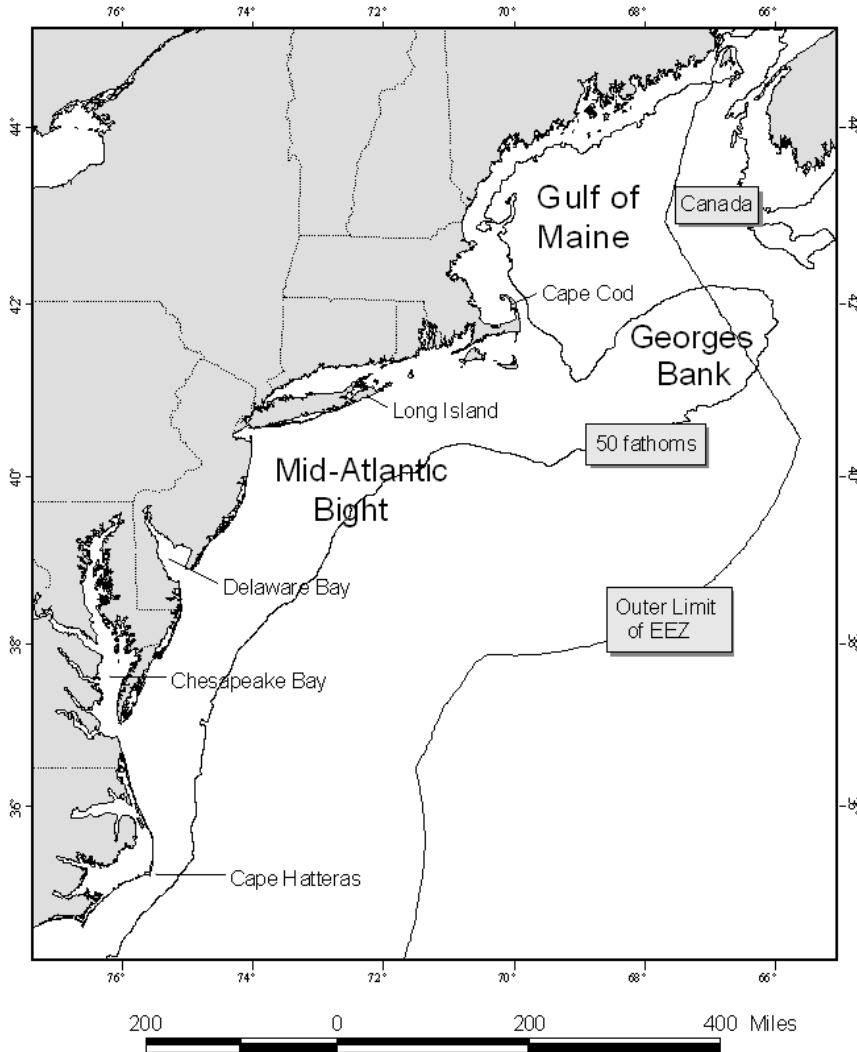
#### **4.3 Physical Environment and EFH**

The Northeast U.S. Shelf Ecosystem includes the area from the Gulf of Maine south to Cape Hatteras, extending from the coast seaward to the edge of the continental shelf, including the slope sea offshore to the Gulf Stream to a depth of 2,000 m (Figure 3, Sherman et al. 1996). Four distinct sub-regions are identified: the Gulf of Maine, Georges Bank, the Mid-Atlantic



Bight, and the continental slope. The physical oceanography and biota of these regions were described in the Scallop Amendment 11. Much of this information was extracted from Stevenson et al. (2004), and the reader is referred to this document and sources referenced therein for additional information. Primarily relevant to the scallop fishery are Georges Bank and the Mid-Atlantic Bight, although some fishing also occurs in the Gulf of Maine.

**Figure 3 – Northeast U.S Shelf Ecosystem**

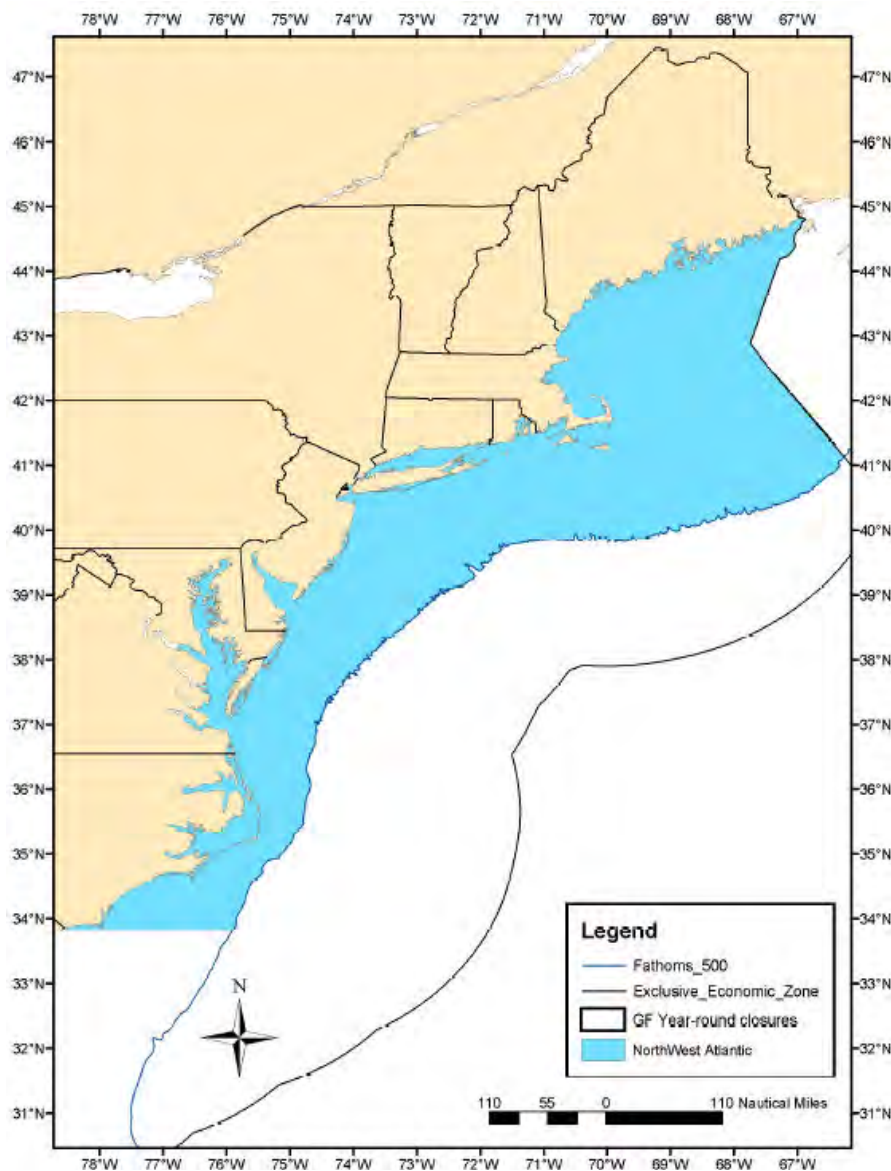


The Atlantic sea scallop fishery is prosecuted in concentrated areas in and around Georges Bank and off the Mid-Atlantic coast, in waters extending from the near-coast out to the edge of the continental shelf (Figure 4). Atlantic sea scallops occur primarily in depths less than 110 meters on sand, gravel, shells, and cobble substrates (Hart et al. 2004). This area, which could potentially be affected by the proposed action, has been identified as EFH for various species. These species include American plaice, Atlantic cod, Atlantic halibut, Atlantic herring, Atlantic sea scallop, Atlantic surfclam, Atlantic wolffish, barndoor skate, black sea bass, clearnose skate, haddock, little skate, longfin squid, monkfish, ocean pout, ocean quahog, pollock, red hake, redfish, rosette skate, scup, silver hake, smooth skate, summer flounder, thorny skate, tilefish, white hake, windowpane flounder, winter flounder, witch flounder and yellowtail flounder. 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.

Most of the current EFH designations were developed in NEFMC Essential Fish Habitat Omnibus Amendment 1 (1998). Most recently, Amendment 16 to the Northeast Multispecies FMP adds Atlantic wolfish to the management unit and includes an EFH designation for the species. For additional information, the reader is referred to the Omnibus Amendment and the other FMP documents listed in Table 28 of the scallop Amendment 15 EIS. In addition, 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.

**Figure 4 – Geographic extent of the Atlantic sea scallop fishery**

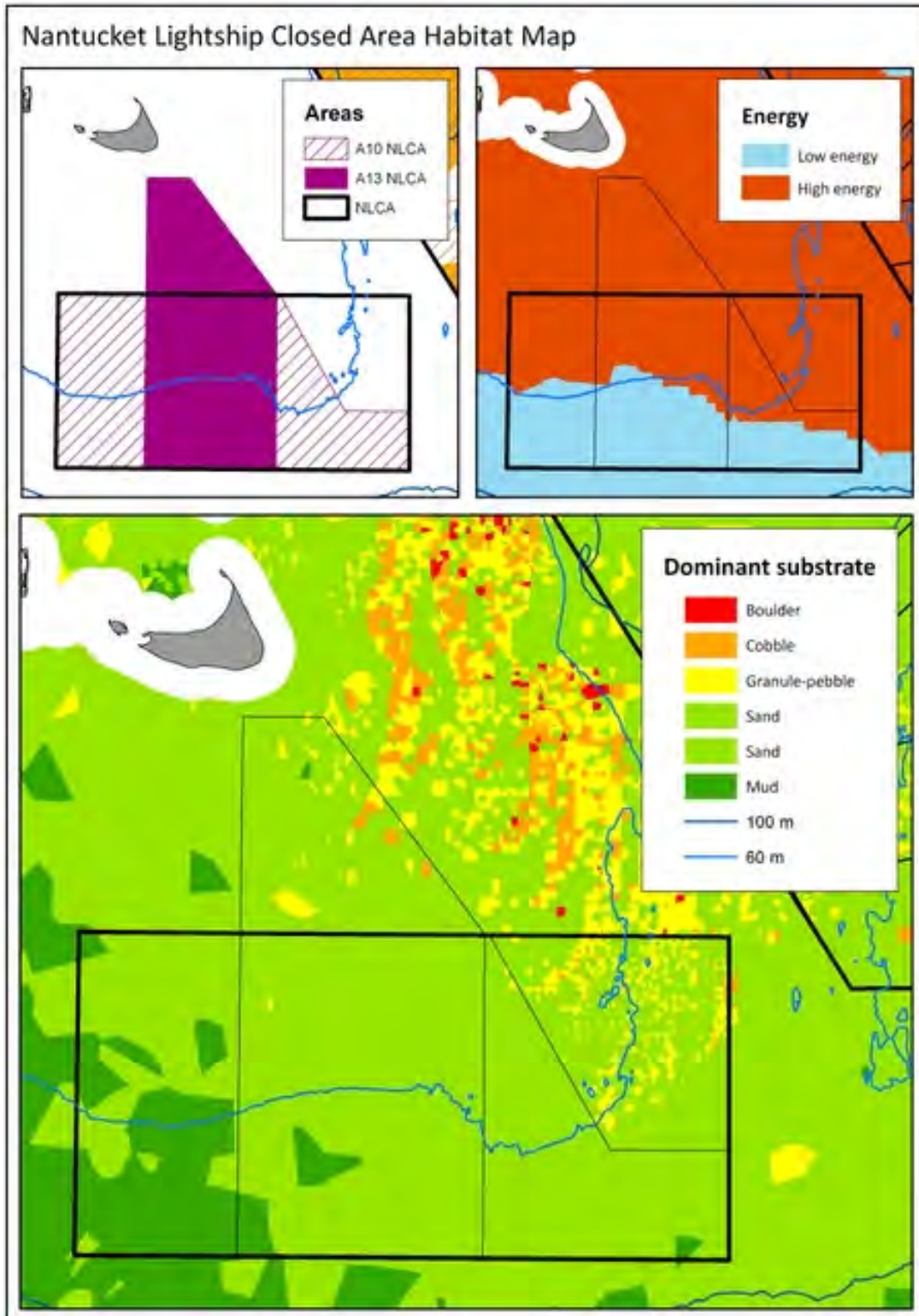


This action involves alternatives related to the Nantucket Lightship Sea Scallop Access Area, which is located in the northeastern corner of the Nantucket Lightship Closed Area (NLCA) and is defined by straight lines connecting the following points in the order stated:

| <b>Point</b> | <b>Latitude</b> | <b>Longitude</b> |
|--------------|-----------------|------------------|
| NLAA1        | 40°50' N.       | 69°00' W.        |
| NLAA2        | 40°30' N.       | 69°00' W.        |
| NLAA3        | 40°30' N.       | 69°14.5' W.      |
| NLAA4        | 40°50' N.       | 69°29.5' W.      |
| NLAA1        | 40°50' N.       | 69°00' W.        |

The following map (Figure 5) describes aspects of the seabed environment in the Nantucket Lightship Closed Area (NLCA) including the dominant substrate and energy regime. The NLCA is predominantly sand, with some mud in the southwest corner and some granule-pebble substrate in the northeast corner where the scallop access area (i.e., NLS) is located. The access area is an area of high energy due to the action of strong bottom currents and periodic wave action from storms, both of which re-suspend finer sediments (mud and sand) and expose underlying coarser gravel substrates.

Figure 5 – Substrate composition and environmental energy in Nantucket Lightship Closed Area



Source: NEFMC 2011. The swept area seabed impact (SASI) model: a tool for analyzing the effects of fishing on essential fish habitat. Draft prepared by NEFMC Habitat Plan Development Team for the EFH Omnibus Amendment 2, January 2011.

#### 4.4 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 proposed action.

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***

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

##### ***Pinnipeds***

|  |           |
|--|-----------|
| Harbor seal ( <i>Phoca vitulina</i> )      | Protected |
| Gray seal ( <i>Halichoerus grypus</i> )    | Protected |
| Harp seal ( <i>Phoca groenlandica</i> )    | Protected |
| Hooded seal ( <i>Cystophora cristata</i> ) | Protected |

##### ***Sea Turtles***

|   |            |
|---|------------|
| Leatherback sea turtle ( <i>Dermochelys coriacea</i> )  | Endangered |
| Kemp's ridley sea turtle ( <i>Lepidochelys kempii</i> ) | Endangered |

|  |                         |
|--|-------------------------|
| Green sea turtle ( <i>Chelonia mydas</i> )       | Endangered <sup>1</sup> |
| Loggerhead sea turtle ( <i>Caretta caretta</i> ) | Endangered <sup>2</sup> |

**Fish**

|  |                                    |
|--|------------------------------------|
| Shortnose sturgeon ( <i>Acipenser brevirostrum</i> )         | Endangered                         |
| Atlantic salmon ( <i>Salmo salar</i> )                       | Endangered                         |
| Atlantic sturgeon ( <i>Acipenser oxyrinchus oxyrinchus</i> ) | Endangered/Threatened <sup>3</sup> |

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

According to the most recent Biological Opinion (Opinion) provided by NMFS dated March 14, 2008 (and amended February 5, 2009), the agency has previously determined that species not likely to be affected by the Scallop Fishery Management Plan or by the operation of the fishery include the shortnose sturgeon, the Gulf of Maine distinct population segment 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 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).

Atlantic sturgeon are known to be captured in sink gillnet, drift gillnet, and otter trawl gear (Stein et al. 2004, ASMFC TC 2007). Of these gear types, sink gillnet gear poses the greatest known risk of mortality for bycatch sturgeon (ASMFC TC 2007). Scallop dredge gear is not known to pose a bycatch risk for Atlantic sturgeon despite many hours of observer coverage for this gear type. In fact, there are no reports of Atlantic sturgeon captures in scallop dredge gear in the NMFS Observer database (based on Stein et al. 2004a and ASMFC TC 2007). Because the scallop fishery predominantly uses dredge gear, this species is not likely to be affected by the operation of the scallop fishery. Final determination on the proposed listing of Atlantic sturgeon is expected by October 6, 2011.

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<sup>1</sup> Green 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 turtles are considered endangered wherever they occur in U.S. waters.

<sup>2</sup> Proposed up-listing from threatened, which is the current status under ESA.

<sup>3</sup> Atlantic sturgeon is proposed for ESA listing. Currently, it is not listed under the ESA.

## **Threatened and Endangered Species Potentially Affected Adversely by the Alternatives under Consideration**

In the 2008 Opinion, NMFS determined that the action being considered in the Opinion may adversely affect the following ESA-listed sea turtle species: loggerhead, leatherback, Kemp's ridley, and green sea turtles. Loggerheads are the most commonly observed taken species of sea turtle in the scallop fishery. The distribution and behavior of other species of turtles makes interactions with this fishery unlikely. To reduce capture of loggerheads and leatherbacks, NMFS has put measures in place for turtle conservation under the Scallop FMP and outside of the Scallop FMP. The reader is referred to Sections 4.3.2.1 through 4.3.2.5 of the scallop Amendment 15 EIS for a complete description of turtle background information, impacts, and conservation measures.

It is noted that on March 16, 2010, NMFS and the US Fish and Wildlife Service announced 12-month findings on the petitions to list the North Pacific populations and the Northwest Atlantic populations of the loggerhead sea turtle as Distinct Population Segments (DPSs) with endangered status. On March 22, 2011, the timeline for the final determination was extended for six months until September 16, 2011 (76 FR 15932). The 2008 Biological Opinion concluded that the scallop fishery may affect, but is not likely to jeopardize, loggerhead sea turtles. Since the 2008 Biological Opinion considered effects at the nesting beach aggregation level first and then aggregated up to consider effects at the species level, an analysis considering effects at the DPS rather than species level and on an endangered rather than threatened species would not likely change the conclusion of that Biological Opinion. Regardless of the proposed up-listing of the Northwest Atlantic DPS, the Council and NMFS must still adhere to the current reasonable and prudent measures and terms and conditions of the most recent Biological Opinion.

### **4.5 Human Communities (Economic and Social Trends)**

This section of the document describes the economic and social trends of the scallop fishery, specifically trends in landings, revenues, prices, producer surplus, and profits for the sea scallop fishery since 1994. As such, it provides a background for the economic analyses that are conducted for the alternatives of this action. In addition, this section describes background information about the scallop fishery in various ports and coastal communities in the Northeast. The reader is referred to the Scallop Amendment 15 FEIS (Section 4.4) and draft Framework 22 EA (Section 4.4) for more information regarding economic and social trends.

In the fishing years 2002-2009, the landings from the Northeast sea scallop fishery stayed above 50 million pounds, surpassing the levels observed historically (Figure 6). The recovery of the scallop resource and consequent increase in landings and revenues was 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. The increase in the abundance of scallops coupled with higher scallop prices increased the profitability of fishing for scallops by the general category vessels. As a result, general category landings increased from less than 0.4 million pounds during the 1994-1998 fishing years to more than 4 million pounds during the last five fishing years (2005-2009), peaking at 7 million pounds in 2005 or 13.5% of the total scallop landings.

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

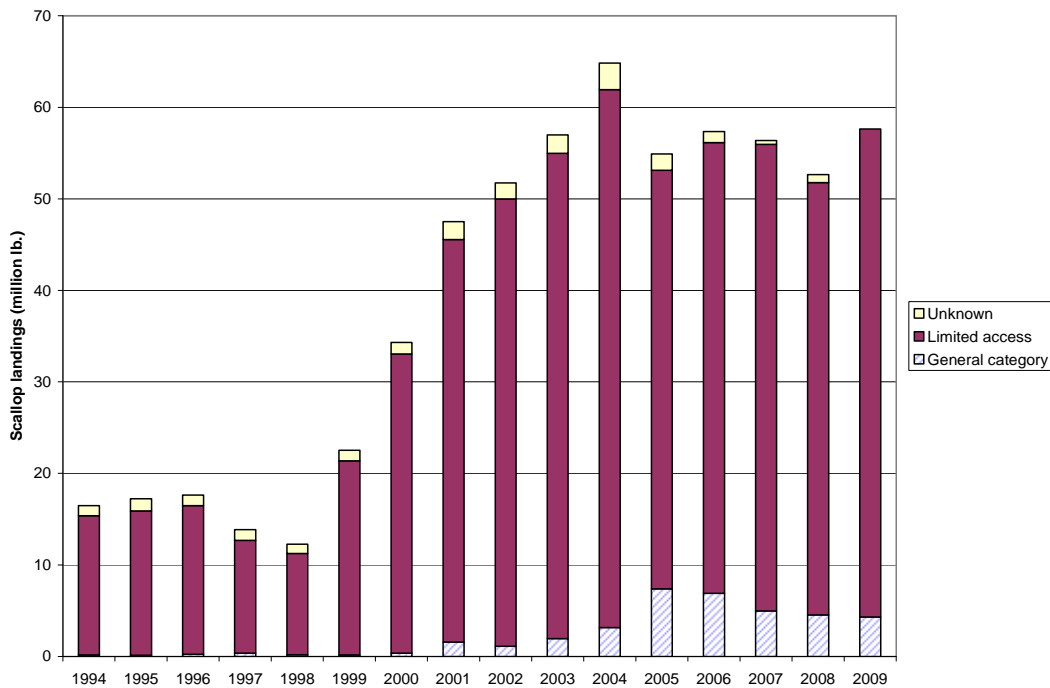
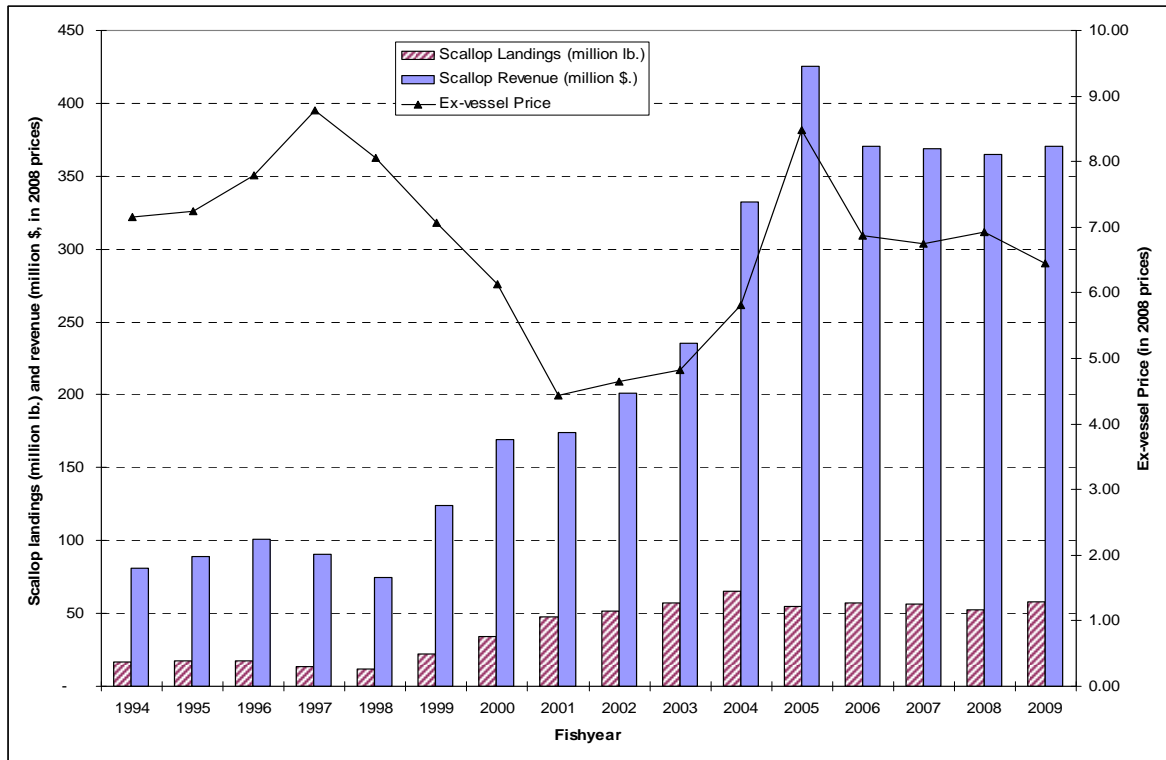


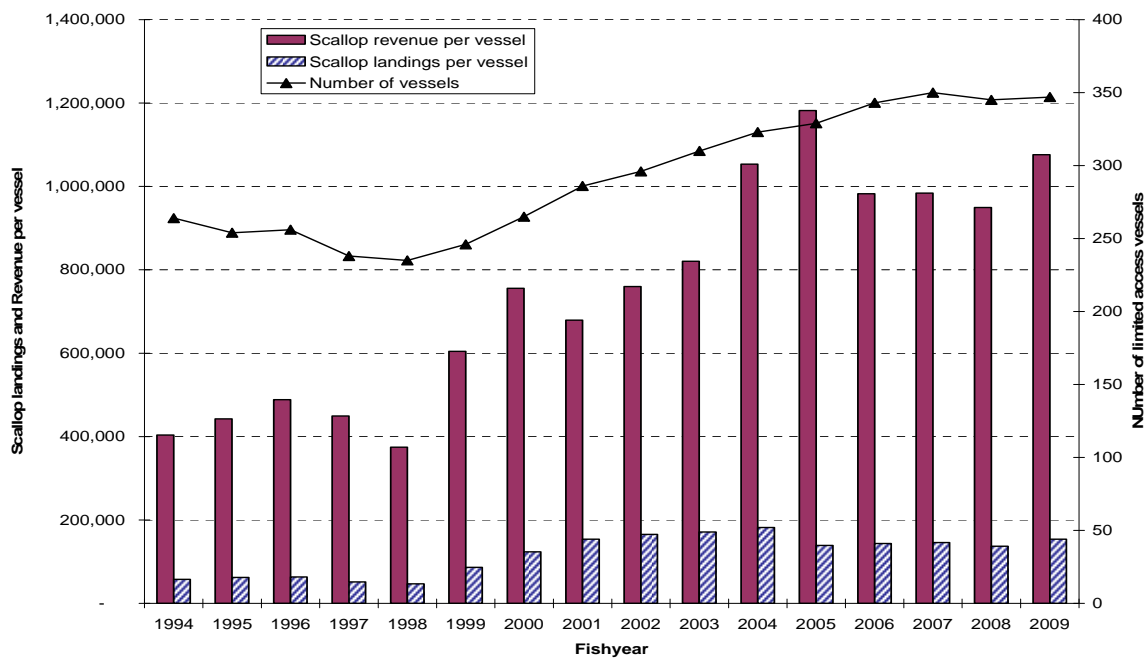
Figure 7 shows that total fleet revenues tripled from about \$100 million in 1994 to about \$370 million in 2009 (in inflation-adjusted 2008 dollars). Scallop ex-vessel prices increased after 2001 as the composition of landings changed to larger scallops that in general command a higher price than smaller scallops. However, the rise in prices was not the main factor that led to the increase in revenue in the recent years compared to 1994-1998. In fact, inflation adjusted ex-vessel prices in 2008-2009 were lower than prices in 1994 (Figure 7). 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. Figure 8 shows that average landings and revenue per limited access vessel more than doubled in recent years compared to the period 1994-1998. The number of active limited access vessels increased by 50% (from about 220 in 1994 to 347 in fishing year 2009), resulting in tripling of total fleet scallop landings and revenue in 2009 compared to 1994 (Figure 8).



**Figure 7 - Trends in total scallop landings, revenue, and ex-vessel price by fishing year (including limited access and general category fisheries, revenues are expressed in 2008 constant prices)**



**Figure 8 - Trends in average scallop landings and revenue per full-time vessel and number of active vessels (including full-time, part-time and occasional vessels)**



The trends in revenue per full-time vessel were similar to the trends for the fleet as a whole. Figure 8 shows that average scallop revenue per limited access vessel more than doubled from about \$400,000 in 1994 to over \$1,000,000 despite the fact that inflation-adjusted ex-vessel price per pound of scallops was slightly higher in 1994 (\$7.15 per pound) compared to the ex-vessel price in 2009 (\$6.46 per pound). In other words, the doubling of revenue was the result of the doubling of the average scallop landings per vessel in 2009 (over 153,000 pounds) from its level in 1994 (over 57,000 pounds). The total fleet revenue for all the limited access vessels more than tripled during the same years as new vessels became active. Average scallop revenue per full-time vessel peaked in the 2005 fishing year to over \$1.1 million as a result of greater landings combined with an increase in ex-vessel price to about \$8.50 per pound of scallops (in terms inflation adjusted 2008 prices) Since the start of FY 2011, scallop prices are at an average of \$9.48/lb (Table 7).

**Table 7. 2011 Fishing Year Summary (March – April 2011)**

| <b>Market Category</b> | <b>Scallop Landings (lb.)</b> | <b>Scallop Revenue (\$)</b> | <b>Price (\$)</b> |
|------------------------|-------------------------------|-----------------------------|-------------------|
| UNDER 10 COUNT         | 970,882                       | 9,987,152                   | 10.29             |
| 11-20 COUNT            | 9,458,915                     | 88,994,497                  | 9.41              |
| 21-30 COUNT            | 568,714                       | 5,351,522                   | 9.41              |
| 31-40 COUNT            | 165,595                       | 1,517,778                   | 9.17              |
| 41-50 COUNT            | 701                           | 5,608                       | 8.00              |
| <b>Grand Total</b>     | <b>11,164,807</b>             | <b>105,856,557</b>          | <b>9.48</b>       |

Table 8 describes the fraction of total landings by area for all limited access vessels from 2004-2009. In general, more and more of the total catch for the fishery is coming from access areas, open area catch has declined from 60% to 71% of total catch in 2004-2005 to just under 40% in 2007 and 2008 and to under 53% in 2009.

**Table 8. Percent of total limited access scallop catch by area and calendar year (Dealer and DAS data).**

| <b>Access Area</b> | <b>2004</b> | <b>2005</b> | <b>2006</b> | <b>2007</b> | <b>2008</b> | <b>2009</b> |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Closed Area 1      | 0.00%       | 14.51%      | 0.00%       | 9.83%       | 0.00%       | 0.00%       |
| Closed Area 2      | 7.19%       | 13.87%      | 27.26%      | 0.00%       | 0.00%       | 6.31%       |
| Delmarva           | 0.00%       | 0.00%       | 0.00%       | 0.00%       | 0.00%       | 10.32%      |
| Elephant Trunk     | 0.00%       | 0.00%       | 0.00%       | 31.04%      | 49.91%      | 30.77%      |
| Hudson Canyon      | 29.24%      | 0.00%       | 0.00%       | 10.02%      | 0.00%       | 0.00%       |
| Nantucket          |             |             |             |             |             |             |
| Lightship          | 3.69%       | 0.00%       | 16.49%      | 10.39%      | 9.84%       | 0.00%       |
| OPEN               | 59.87%      | 71.62%      | 56.25%      | 38.71%      | 40.24%      | 52.60%      |

### **Trends in scallop landings by port communities**

The landed value of scallops by port landing fluctuated from 1994 through 1998 for many ports. During the past six years, six ports brought in the most landed value: New Bedford, MA; Cape May, NJ; Newport News, VA; Barnegat Light/Long Beach, NJ; Seaford, VA; and Hampton, VA.

In addition to bringing in the most landed value, in 1994 scallop landings represented more than 30% of the total landed value for New Bedford, MA and Cape May, NJ, and more than 65% of the total landed value for Newport News and Hampton, VA. This increased in 2008 to 74% and 84% for New Bedford, MA and Cape May, NJ, respectively, and 93% and 84% for Newport News and Hampton, VA, respectively.

Landed value has increased steadily from 1999-2009; but, some leveling off is apparent in recent years. In the most recent two years of data (2007-2008), 43% of ports saw a decrease in the percentage of landed scallop value to total landed value. However, many of these decreases are very small, on the order of 1-3%. Between 2003 and 2005, 10 ports increased their landed value for scallops, potentially from an increase in general category landings. The average landed value has increased from \$2 million in 1994 to a peak of \$12 million in 2005. In 2006-2008, the average landed value has hovered between \$9 and \$10 million.

The largest numbers of permitted limited access scallop vessels currently are in the ports of New Bedford, MA and Cape May, NJ, which represent 37% and 19% of the total, respectively. Of the 348 permitted limited access vessels in 2009, 203 originate from New Bedford, MA and Cape May, NJ. Although the number of permitted limited access vessels has only increased from 308 in 1994 to a peak of 380 in 2005 and New Bedford has always had the largest number of permitted limited access vessels, the port with the next greatest number of contributors shifted from Norfolk, VA (18% in 1994 to 3% in 2009) to Cape May, NJ (9% in 1994 to 19% in 2009).

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. Cape May, NJ, Barnegat Light, NJ, and Gloucester, MA also have large numbers of general category scallop vessels. Generally, ports that had a greater number of general category scallop vessels from 1994-2004, such as New Bedford, Gloucester, and Chatham, have seen a large decrease in these vessels in recent years.

Although the largest increases in general category vessels have been from ports in NC, they have increased from one or no permitted general category scallop vessels to only about six or seven, which results in a 600-700% increase. Regardless of this increase, these ports only had a landed value for scallops of \$311,000 or less. Other ports that saw an increase of 300% in general category vessels, such as Chincoteague, VA and Barnegat Light, NJ, had a landed value of \$7.3 million and \$16.9 million, respectively. Although some ports such as New Bedford and Gloucester have experienced a decline in the number of general category scallop vessels, the simultaneous increase in permitted limited access boats has aided to increase the landed value of scallops in those ports to \$202.5 million and \$812,000 respectively. The general category fleet is not homogeneous, but varies over space and time, with some ports showing a general category fleet that mirrors limited access vessels in size (for example Atlantic City NJ), and others showing a fleet of smaller-scale vessels (such as Fairhaven, MA). Thus impacts to the general category fishery as a whole can be experienced differently in different ports.

## **5.0 Environmental Consequences – Impacts of the Proposed Action and Alternative**

### **5.1 Alternative 1: No Action Alternative**

This section describes the expected impacts of the No Action alternative on the Atlantic sea scallop resource, non-target species, physical environment and EFH, protected species, and human communities.

#### **5.1.1 Impacts to the Atlantic Sea Scallop Resource**

If the NLS opens on June 15, 2011, under the No Action Alternative, vessels will likely fish their trips in a very short period of time. When NLS opened in 2010, 80 percent of the total landings for the year were harvested in the first two weeks (See shaded two boxes in Table 9) and by the third week, this increased to 91.5 percent. Based on the economic benefits of vessels taking these trips this year, and the added assumption by vessel operators that they would need to take these trips quickly because Framework 22 may be approved soon, it is expected that all full-time vessels would likely take their NLS trips within the first two weeks of the open period (through June 28, 2011). This would result in up to 5.6 M lb harvested from the area (313 vessels x 18,000 lb/trip). If all 34 part-time vessels took their trips, this would be an additional 489,600 lb. In sum, the No Action alternative could result in total landings of over 6 M lb that would not have been landed if the NLS was closed under the Proposed Action. In the short-term, the No Action Alternative would greatly increase the likelihood that the limited access scallop fishery would exceed its ACL in FY 2011, should Amendment 15 and Framework 22 be approved, resulting in a DAS reduction in FY 2012 (i.e., the AM applicable to the limited access fishery). Assuming the fleet went 6 M lb over their ACL under the No Action Alternative, this would result in a DAS reduction in FY 2012 of 6.9 DAS (6 M lb/327 full-time equivalent vessels/2,662 lb/DAS (LPUE estimate for FY 2012)) to account for those 6 M lb in the subsequent FY, if Amendment 15 and Framework 22 are approved and implemented. If the ACL is exceeded and results in an AM imposed in FY 2012, the No Action Alternative would result in 6 M lb of increased resource-wide landings in 2011 and close to the same amount (depending on if actual LPUE in FY 2012 is the same as what was estimated in Framework 22) of decreased landings in 2012.

**Table 9. Landings by week from NLS in FY 2010 (opened June 28, 2010).**

| <b>Week Ending Date (NLS 2010)</b> | <b>Meat lbs</b>  | <b>Trips</b> |
|------------------------------------|------------------|--------------|
| 4-Jul-10                           | 1,946,850        | 125          |
| 11-Jul-10                          | 2,772,196        | 172          |
| 18-Jul-10                          | 706,818          | 54           |
| 25-Jul-10                          | 167,978          | 14           |
| 1-Aug-10                           | 109,519          | 12           |
| 8-Aug-10                           | 31,516           | 4            |
| 15-Aug-10                          | 27,241           | 3            |
| 22-Aug-10                          | 33,070           | 2            |
| 29-Aug-10                          | 0                | 0            |
| 5-Sep-10                           | 0                | 0            |
| 12-Sep-10                          | 5,460            | 2            |
| 19-Sep-10                          | 19,002           | 1            |
| 26-Sep-10                          | 0                | 0            |
| 3-Oct-10                           | 0                | 0            |
| 10-Oct-10                          | 0                | 0            |
| 17-Oct-10                          | 738              | 1            |
| 24-Oct-10                          | 3,542            | 1            |
| 31-Oct-10                          | 0                | 0            |
| 7-Nov-10                           | 0                | 0            |
| 14-Nov-10                          | 0                | 0            |
| 21-Nov-10                          | 0                | 1            |
| 28-Nov-10                          | 0                | 0            |
| 5-Dec-10                           | 927              | 1            |
| 12-Dec-10                          | 26,724           | 3            |
| 19-Dec-10                          | 60,534           | 7            |
| 26-Dec-10                          | 11,877           | 1            |
| <b>Total</b>                       | <b>5,923,992</b> | <b>404</b>   |

Under the No Action Alternative, LAGC vessels would be able to land up to 285,600 lb of scallops (714 trips x 400). Based on FY 2010 NLS trip information (See NMFS' LAGC NLS FY 2010 NLS Monitoring Page at [http://www.nero.noaa.gov/ro/fso/Reports/SCallopProgram/nlsa\\_trip\\_2010\\_20110303.pdf](http://www.nero.noaa.gov/ro/fso/Reports/SCallopProgram/nlsa_trip_2010_20110303.pdf)), only 71.3 percent of the trips were taken (509 trips) during the entire period the access area was open, with 134 trips taken the first month it was open. If the same number of trips were taken in FY 2011, an additional 53,600 lb would be landed from NLS. It is unlikely that every LAGC vessel would take its NLS trip in FY 2011 under the No Action Alternative because the landings are applied to their IFQ allocations. These vessels may instead be fishing in DMV or open areas, if prices are similarly high to what is expected. The potential impacts to the scallop resource by LAGC vessels are negligible in comparing the two alternatives under consideration. The major differences of impacts on the scallop resource are seen for the limited access scallop fleet, which have much higher possession limits and allocations.

In addition, the SAFE report assessed that NLS should not be harvested in FY 2011 and instead be subjected to limited fishing effort in FY 2012. The 2007 scallop year class, which is now large enough to be vulnerable to commercial fishing gear, is the only substantial recent year class in NLS. The closure of NLS in FY 2011 under Framework 22 was, in part, to protect this year class from harvesting and/or discarding until it grows to a larger size. With the NLS closed in FY 2011, Framework 22 projected sufficient biomass in NLS to provide access into the area in FY 2012 for half of the full-time scallop vessels and for a trip for all full-time scallop vessels in FY 2013. These projections did not account for any fishing effort in FY 2011 in NLS and, unlike the Proposed Action Alternative that was based upon the most up-to-date scientific information provided in the SAFE report, the No Action Alternative would compromise future yield and access to this area, resulting in reduced overall yield. Therefore, impacts to the Atlantic sea scallop resource are expected to be slightly negative relative to the proposed action.

### **5.1.2 Impacts to Non-Target Species**

As previously mentioned, the SNE stock of yellowtail was one of the primary intended beneficiaries of the NLCA, with most of the stock occurring in the portions of this area that have been closed to scallop fishing. Under proposed Amendment 15 measures, the scallop fishery is allocated an annual yellowtail sub-ACL in SNE/MA yellowtail broad stock area. This sub-ACL is based on what the fishery is projected to need for a given FY. Estimated yellowtail catch from all areas of SNE/MA, including NLS, are incorporated into setting this sub-ACL, based on projections for what the allocations are proposed to be under Framework 22. Because Framework 22 proposed that NLS be closed in FY 2011, the sub-ACL was based on what the fishery would have landed in two access areas in the Mid-Atlantic (HC and DMV), areas not expected to have yellowtail catch associated with them. NLS is an area with a relatively high level of yellowtail. In Framework 22, the scallop fishery is projected to catch 58 mt of yellowtail under Framework 22 allocations for the entire SNE/MA area. The Council allocated the scallop fishery 82 mt based on earlier projections used in Framework 44 to the Groundfish FMP, and the Council decided not to reduce those allocations Framework 45 to the Groundfish FMP. The automatic 10% bycatch TAC for NLS would be 64 mt, which is 10% of the overall yellowtail ACL.

Under the No Action Alternative, vessels could land up to 6 M lb in the NLS, resulting in catching more yellowtail than expected, which would be applied to the scallop fishery's sub-ACL in SNE/MA. If the scallop fleet catches all 64 mt in the NLS after June 15 but before Framework 22 is implemented, there will be very little yellowtail left (i.e., 18 mt for all open areas in SNE/MA (82 mt-64 mt = 18 mt.)). Even if the vessels that fish in NLS successfully avoid yellowtail, more yellowtail would be caught than expected because no effort was projected to occur in that area at all in FY 2011. If both LAGC and limited access vessels catch the same amount of yellowtail flounder estimated from FY 2010, it would result in a catch of 30,924 lb from the NLS. It is possible that the SNE/MA sub-ACL could be exceeded by this amount, since it was not accounted for in setting the sub-ACL for FY 2011, which could result in negative short-term impacts to the yellowtail resource that would not happen under the Proposed Action. If the No Action Alternative compromised the sub-ACL to the scallop fleet, AMs would be triggered in FY 2012 that could close portions of Southern New England to limited access vessels in an attempt to reduce yellowtail catch in FY 2012 to account for the overage.

Although it is possible that regardless of the selected alternative, the sub-ACL could be exceeded in FY 2011, the negative impacts on the yellowtail resource would be greater under the No Action Alternative than under the Proposed Action since the increased fishing activity under the No Action Alternative would be occurring in NLS, which is an area with much higher yellowtail catch rates.

Over the long-term, the impacts of the No Action Alternative could be slightly greater than under the Proposed Action because it is possible there is greater risk under the No Action Alternative that the FY 2012 SNE/MA YT sub-ACL will be exceeded because scallop catch rates in NLS will be lower than expected if vessels fish in that area in FY 2011 instead of FY 2012; lower scallop catch rates result in more yellowtail bycatch. Thus, this may result consistently in overharvest of the yellowtail sub-ACL in the future.

Overall, the impacts of area rotation on other fisheries have been analyzed in Amendment 10, the action that formally implemented area rotation. This action only slightly modifies the current allocations as they pertain to whether or not to open a single access area, so no additional impacts on other fisheries are expected from the proposed action or range of measures considered in this action. Despite the fact that most full-time vessels have various permits in other fisheries, less than 1% of total revenue is derived from landings in other fisheries. On the other hand, other fisheries are an important part of total income for part-time scallop vessels, as well as some LAGC vessels. Other important sources of revenue for part-time vessels were summer flounder (7% to 15% of total in 2005-2009), shrimp, menhaden, and squid in FY 2009 (See Table 64 in Framework 22).

The NLS boundaries may limit the amount of other bycatch for species whose distributions do not largely overlap the distribution of scallops. The SBRM 2010 report (NEFSC 2010) provides a summary of observed bycatch data for June 2008 through July 2009, the last full year of bycatch data available during a year when NLS was open. Although these data are not discard estimations, they do provide a comparison of catch in the NLS compared to the open areas within the same statistical area (525). For most species with a relatively high level of catch in the scallop fishery (i.e., little skate, winter skate, windowpane flounder, and winter flounder), catch from the NLS is a small percentage of the overall catch from all areas. In addition, most observed discards within statistical area 525 of these species occurs in the open area portions, rather than in NLS.

Monkfish discards from these observed trips were twice as much as the observed monkfish discards in open areas of statistical area 525, but still represent a small proportion of total observed catch overall in the scallop fishery. Impacts under the No Action Alternative on skates, monkfish, windowpane flounder, and winter flounder would be slightly negative within NLS itself, since there would be increased pressure in this area. However, this amount would be negligible overall because many vessels are also fishing longer trips in open areas under DAS. The impacts on different species would vary, depending on the distributions of the non-target species relative to NLS during the short period of time the area would be fished. However, it is not expected that the No Action Alternative would have significant impacts, given this short time frame when these trips would occur (i.e., last two weeks of June) and the restricted boundaries of

this access area. Compared to the preferred alternative to close NLS, the No Action Alternative could be slightly positive for species other than yellowtail because there would be less fishing of open area DAS (and likely less catch of non-target species) during the two-week timeframe vessels would likely harvest their trips. However, once NLS is fully harvested, vessels will continue to fish their open area DAS during the rest of the year, making the short-term positive benefits negligible.

In summary, by considering the combined impacts on yellowtail and other non-target species, the expected impacts of the No Action Alternative on non-target species are slightly negative and would not be significant.

### **5.1.3 Impacts to the Physical Environment and EFH**

As previously mentioned in the Affected Environment section, the NLS access area is a high energy area with strong bottom currents, which is also periodically affected by wave action from storms. Bottom substrates are sand and gravel (granule-pebble).

The NLS access area was last open to scallop fishing from June 28, 2010, to January 31, 2011. Since the access area was closed from February 1, 2011, to the present, there has likely been recruitment of benthic invertebrates and settling of these organisms throughout the spring season when natural disturbance of bottom habitats caused by storms, which are more severe in the winter or during the summer-fall hurricane season, would be minimized. Thus, in the short-term, a brief period of intense scallop dredging activity (No Action Alternative) potentially would adversely impact EFH by increasing disturbance to benthic habitat resources in the access area, including recently-settled benthic invertebrates which provide food for a variety of federally-managed benthic fish species and therefore, are a component of EFH for these species.

The length of time that fishing effort would occur in the NLS under the No Action Alternative is suggested to be short based on previous data supporting that up to 91.5% of the total landings for the year occurred within the first three weeks of NLS being open to scallop fishing. Over the course of the year, however, it is very likely that several weeks of intense scallop dredging in the NLS access area would alter the epibenthic community less than natural dynamic environmental conditions (see before and after study of limited scallop dredging on Georges Bank by Stokesbury and Harris 2006). Therefore, it is expected that the No Action Alternative will have slightly negative impacts on the physical environment and EFH but that these impacts are expected to be minimal.

### **5.1.4 Impacts to Protected Resources**

As previously mentioned in the Affected Environment section, the scallop fishery is known to interact with sea turtles, specifically loggerhead and Kemp's ridley species. Since the NLS is a Georges Bank access area, rather than a Mid-Atlantic access area, the interaction rate between turtles and the scallop fishery is expected to be much lower than in areas such as Delmarva, Hudson Canyon, and Elephant Trunk. Sea turtles are present in Georges Bank during the summer months, specifically from July to September, the three months that greater densities of sea turtles have been observed (Dept. of Navy 2005, Mitchell et al. 2003). However, it is noted



that two Kemp's ridley takes in scallop dredge gear occurred in Georges Bank farther to the east of NLS; one in August and the other in September. From 2001 to 2008, no sea turtles have been observed in NLS (Murray 2011), and no sea turtles have been observed in Georges Bank in the months of June and July, which is when the majority of available trips to NLS are expected to occur. Thus, it is unlikely that sea turtle interactions would occur under the No Action Alternative.

Having NLS open to scallop fishing on June 15 may relieve fishing pressure from these Mid-Atlantic access areas and from Mid-Atlantic open areas, which may result in a slightly positive impact to protected resources. This is coupled with the expectation that the length of time that fishing effort would occur in NLS under the No Action Alternative would be short based on previous years' activity (e.g., two or three weeks). It is noted that not every LAGC vessel likely would take its NLS trip in FY 2011 under the No Action Alternative because the landings are applied to their IFQ allocations. As previously mentioned in the short-term, the No Action Alternative would greatly increase the likelihood that the limited access scallop fishery would exceed its ACL in FY 2011, should Amendment 15 and Framework 22 be approved, resulting in a DAS reduction in FY 2012 (i.e., the AM applicable to the limited access fishery). Assuming the fleet went 6 M lb over their ACL under the No Action Alternative, this would result in a DAS reduction in FY 2012 of 6.9 DAS (6 M lb/327 full-time equivalent vessels/2,662 lb/DAS (LPUE estimate for FY 2012)) to account for those 6 M lb in the subsequent FY, if Amendment 15 and Framework 22 are approved and implemented. If the ACL is exceeded and results in an AM imposed in FY 2012, the No Action Alternative would result in 6 M lb of increased resource-wide landings in 2011 and close to the same amount (depending on if actual LPUE in FY 2012 is the same as what was estimated in Framework 22) of decreased landings in 2012. Thus, there would be 6.9 DAS less available for fishing in open areas in FY 2012, which may potentially be a benefit to protected resources in FY 2012. In summary, it is expected that the No Action Alternative will have slightly positive to neutral impacts on protected resources and that these impacts are not expected to be significant.

### **5.1.5 Impacts to Human Communities**

Under the No Action Alternative, vessels will likely fish their trips in NLS and in a very short period of time. As previously stated, when NLS opened in 2010, 80 percent of the total landings for the year were harvested in the first two weeks and by the third week, this increased to 91.5 percent. The scallop industry reported at the April 2011 Council meeting that many industry members would prefer to fish an NLS trip in FY 2011 and accept the consequences in FY 2012. Several speakers commented that while the industry overall understands that there are long-term risks and costs associated with fishing in NLS this year, not fishing in that area could be a very difficult and costly decision for individual vessel owners. These vessel owners believe that there are more benefits this year since current scallop prices are unexpectedly high. Based on the economic benefits of vessels taking these trips this year, and the added assumption by vessel operators that they would need to take these trips quickly because Framework 22 may be approved soon, it is expected that all full-time vessels would likely take their NLS trips within the first two weeks of the open period (through June 28, 2011). It was pointed out that these are very lucrative trips, about \$180,000 for a trip under a week long (not accounting for trip costs), and that will be a major driving force affecting fishing behavior. The scallop industry has

warned that if some vessels fish in the NLS, it is likely that majority of vessels will follow suit so that they remain competitive with scallop landings of other vessels. As a result, similar to FY 2010, a very high level of scallop fishing effort could occur in the NLS within the first 2 or 3 weeks it is open.

This activity would result in up to 5.6 M lb harvested from the area (313 vessels x 18,000 lb/trip). If all 34 part-time vessels took their trips, there would be an additional 489,600 lb. In sum, the No Action Alternative could result in total landings of over 6 M lb that would not have been landed if the NLS was closed under the Proposed Action. Data suggest that 6 M lb is roughly 10% of the total scallop amount available for landing in 2011 (See Table 3 in Framework 22). In the short-term, the No Action Alternative would greatly increase the likelihood that the limited access scallop fishery would exceed its ACL in FY 2011, should Amendment 15 and Framework 22 be approved, resulting in a DAS reduction in FY 2012 (i.e., the AM applicable to the limited access fishery). Assuming the fleet went 6 M lb over their ACL under the No Action Alternative, this would result in a DAS reduction in FY 2012 of 6.9 DAS (6 M lb/327 full-time equivalent vessels/2,662 lb/DAS (LPUE estimate for FY 2012)). If the ACL is exceeded and results in an AM imposed in FY 2012, the No Action Alternative would result in 6 M lb of increased resource-wide landings in 2011 and close to the same amount (depending on if actual LPUE in FY 2012 is the same as what was estimated in Framework 22) of decreased landings in 2012.

Under the No Action Alternative, LAGC vessels would be able to land up to 285,600 lb of scallops (714 trips x 400). Based on FY 2010 NLS trip information (See NMFS' LAGC NLS FY 2010 NLS Monitoring Page at [http://www.nero.noaa.gov/ro/fso/Reports/SCallopProgram/nlsa\\_trip\\_2010\\_20110303.pdf](http://www.nero.noaa.gov/ro/fso/Reports/SCallopProgram/nlsa_trip_2010_20110303.pdf)), only 71.3 percent of the trips were taken (509 trips) during the entire period the access area was open, with 134 trips taken the first month it was open. If the same number of trips were taken in FY 2011, an additional 53,600 lb would be landed from NLS. It is unlikely that every LAGC vessel would take its NLS trip in FY 2011 under the No Action Alternative because the landings are applied to their IFQ allocations. These vessels may instead be fishing in DMV or open areas, if prices are similarly high to what is expected. The potential impacts to the scallop resource by LAGC vessels are negligible in comparing the two alternatives under consideration. The major differences of impacts on the scallop resource are seen for the limited access scallop fleet, which have much higher possession limits and allocations.

Based on this information, it is likely that there will be short-term positive impacts to individual vessel owners who decide to fish in NLS under the No Action Alternative. However, it is noted that there would likely be long-term negative economic impacts based on this potential behavior for the entire scallop fleet.

## **5.2 Alternative 2: Proposed Action (Preferred)**

This section describes the expected impacts of the Proposed Action alternative on the Atlantic sea scallop resource, non-target species, physical environment and EFH, protected species, and human communities.

### **5.2.1 Impacts to the Atlantic Sea Scallop Resource**

If the NLS is closed for FY 2011 under the Proposed Action, vessels will be unable to fish in this area. In sum, the Proposed Action would result in a loss of 6 M lb being harvested from NLS in FY 2011 as compared to the No Action Alternative. Under the Proposed Action Alternative, the limited access scallop fishery would not exceed its ACL in FY 2011; therefore, avoiding a DAS reduction in FY 2012 (i.e., the AM applicable to the limited access fishery).

The Stock Assessment and Fishery Evaluation (SAFE) report assessed that NLS should not be harvested in FY 2011 and instead should be subjected to limited fishing effort in FY 2012. The 2007 scallop year class, which is now large enough to be vulnerable to commercial fishing gear, is the only substantial recent year class in NLS. The closure of NLS in FY 2011 under Framework 22 was, in part, to protect this year class from harvesting and/or discarding until it grows to a larger size. With the NLS closed in FY 2011, Framework 22 projected sufficient biomass in NLS to provide access into the area in FY 2012 for half of the full-time scallop vessels and a trip for all full-time scallop vessels in FY 2013. These projections did not account for any fishing effort in FY 2011 in NLS, and the Proposed Action would allow for the future access to this area, resulting in increased overall yield (e.g., increased LPUE) compared with the No Action Alternative. Therefore, impacts to the Atlantic sea scallop resource are expected to be slightly positive relative to the No Action Alternative and are not expected to be significant.

### **5.2.2 Impacts to Non-Target Species**

Under the Proposed Action, the 30,924 lb of estimated yellowtail catch from NLS would not occur because NLS would be closed. However, the Proposed Action may also result in the sub-ACL being exceeded in FY 2011 since fishermen may focus their fishing effort beginning June 15 in open areas where there is bycatch of non-target species, including yellowtail. This may result in the same in-season closure as a result of yellowtail, but the length of time for the closure would likely be shorter, because the length of the closure depends on the overage, and the overage would be greater under the No Action Alternative.

As previously mentioned, for most species with a relatively high level of catch in the scallop fishery (i.e., little skate, winter skate, windowpane flounder, and winter flounder), catch from the NLS is a small percentage of the overall catch from all areas. In addition, most observed discards within statistical area 525 of these species occurs in the open area portions, rather than in NLS. Monkfish discards from these observed trips were twice as much as the observed monkfish discards in open areas of statistical area 525, but still represent a small proportion of total observed catch overall in the scallop fishery. If the NLS closes under the preferred alternative, many vessels will continue fishing in the open areas under DAS. Because these trips generally involve more fishing effort (i.e., higher LPUE, more time with gear in the water), the impacts on skates, monkfish, windowpane flounder, and winter flounder would be slightly negative compared to the No Action Alternative, but this amount would be negligible overall because vessels can fish these DAS at any time during the fishing year, regardless of whether NLS is open or not. The impacts on various species would vary, depending on the distributions of the non-target species relative to NLS during the short period of time the area would be fished.

However, it is not expected that the preferred alternative would have significant impacts to non-target species.

In summary, considering the combined impacts on yellowtail and other non-target species, the expected impacts of the Proposed Action on non-target species are slightly positive compared to the No Action Alternative and are not expected to be significant.

### **5.2.3 Impacts to the Physical Environment and EFH**

As previously mentioned in the Affected Environment section, the NLS access area is a high energy area with strong bottom currents, which is also periodically affected by wave action from storms. Bottom substrates are sand and gravel (granule-pebble).

The NLS access area was last open to scallop fishing from June 28, 2010, to January 31, 2011. Since the access area was closed from February 1, 2011, to the present, there has likely been recruitment of benthic invertebrates and settling of these organisms throughout the spring season when natural disturbance of bottom habitats caused by storms, which are more severe in the winter or during the summer-fall hurricane season, would be minimized. Maintaining the closure of the NLS access area during FY 2011 will allow the ecosystem to recover more fully from the effects of scallop dredging that ended in January, which would result in positive impacts on the physical environment and EFH in the NLS access area. Although overall habitat impacts throughout the range of the fishery may increase slightly in other areas as a result of displaced fishing effort, total fishing effort will be limited based on ACLs and AMs. Therefore, overall impacts of the Proposed Action are likely to be negligible.

### **5.2.4 Impacts to Protected Resources**

As previously mentioned in the Affected Environment section, the scallop fishery is known to interact with sea turtles, specifically loggerhead and Kemp's ridley species. Since the NLS is proposed to be closed under this alternative, scallop fishermen may increase their fishing effort in other areas, including those areas in the Mid-Atlantic. As previously stated, the Mid-Atlantic is an area with greater densities of sea turtles having been observed (Dept. of Navy 2005, Mitchell et al. 2003). It is noted that not every LAGC vessel likely would take its NLS trip in FY 2011 under the No Action Alternative because the landings are applied to their IFQ allocations and thus, there is likely little additional impact to protected resources from LAGC vessels under the Proposed Action Alternative in relation to the No Action Alternative.

Although overall protected resources impacts may increase in other areas as a result of displaced fishing effort, such fishing effort will be limited based on ACLs and AMs. Therefore, it is expected that the Proposed Action Alternative will have slightly negative to neutral impacts on protected resources and that these impacts are not expected to be significant.

### **5.2.5 Impacts to Human Communities**

Under the Proposed Action Alternative, vessel owners would not be able to benefit from the unexpectedly high scallop prices and lucrative trips to NLS in comparison to the No Action

Alternative. Due to NLS being closed under this alternative, vessels would lose the opportunity to earn \$180,000 in gross revenue for a trip under a week long. Note that net revenue would be less than this amount, after accounting for trip costs. Data suggest the compared to the No Action alternative, scallop fishermen would be denied the opportunity to harvest approximately 10% of the total scallop amount available from NLS. This would require vessel crew to fish in other areas, which may require more steam time (i.e., increased fuel costs) as well as more time away from family and friends. However, under the Proposed Action Alternative, there is less likelihood that the limited access scallop fishery would exceed its ACL in FY 2011, should Amendment 15 and Framework 22 be approved, resulting in no DAS reduction in FY 2012 (i.e., the AM applicable to the limited access fishery), in comparison with the No Action.

Since, it is unlikely that every LAGC vessel would have taken its NLS trip in FY 2011 under the No Action Alternative because the landings are applied to their IFQ allocations, they are less affected by the Proposed Action Alternative. In general, the potential impacts to the scallop resource by LAGC vessels are negligible in comparing the two alternatives under consideration. The major differences of impacts on the scallop resource are seen for the limited access scallop fleet, which have much higher possession limits and allocations.

Furthermore, by not fishing in NLS in 2011, it is likely that there will be sufficient biomass available for more efficient, and more economical, fishing in NLS in FY 2012 and FY 2013.

Based on this information, it is likely that there will be short-term negative impacts to individual vessel owners under the Proposed Action Alternative. However, it is noted that there would likely be long-term positive economic impacts based on this potential behavior for the entire scallop fleet. These short-term and long-term impacts are not expected to be significant.

## **6.0 Cumulative Effects Assessment**

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 emergency action together with past, present, and reasonably foreseeable future actions that affect the sea scallop environment. It should also be noted that the predictions of potential synergistic effects from multiple actions, past, present and/or future will generally be qualitative in nature.

### Valued Ecosystem Components (VEC)

As noted in Section 4.0 (Description of the Affected Environment), the VECs that exist within the Atlantic sea scallop fishery are identified and the basis for their selection is established. Those VECs were identified as follows:

1. Managed Resource - Atlantic sea scallop;

2. Non-target species (incidental catch and bycatch);
3. Physical Environment and EFH;
4. Protected Resources; 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 sea scallops, non-target species, habitat, and human communities is primarily focused on actions that have taken place since the Atlantic sea scallop FMP was implemented in 1982, and particularly since 1994 when Amendment 4 to the FMP implemented the general category scallop permit. 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. 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 a one-year period between implementation of this amendment (approximately June 2011 through June 2012), the maximum amount of time an emergency action can be effective under provisions of the Magnuson-Stevens Act.

#### Geographic Scope of the VECs

The geographic scope of the analysis of impacts to regulated sea scallops, non-target species and habitat for this action is the total range of these VECs in the Western Atlantic Ocean, as described in the Affected Environment Section 4.0 of Amendment 15. However, the analyses of impacts presented in this action focuses primarily on actions related to the harvest of the managed resources. The result is a more limited geographic area used to define the core geographic scope within which the majority of harvest effort for the managed resources occurs. For endangered and protected species, the geographic range is the total range of each species (See Section 4.4.1.7 in Amendment 15).

Because the potential exists for far-reaching sociological or economic impacts on U.S. citizens who may not be directly involved in fishing for the managed resources, the overall geographic scope for human communities is defined as all U.S. human communities. Limitations on the availability of information needed to measure sociological and economic impacts at such a broad level necessitate the delineation of core boundaries for the human communities. Therefore, the geographic range for human communities is defined as those primary and secondary ports bordering the range of the scallop fishery (See Section 4.4.1.7 in Amendment 15) from the U.S.-Canada border to, and including, North Carolina.

#### Analysis of Total Cumulative Effects

A cumulative effects assessment ideally makes effect determinations based on the culmination of the following: (1) impacts from past, present and reasonably foreseeable future actions; PLUS (2) the baseline condition for resources and human communities; PLUS (3) impacts from the Proposed Action compared with the No Action Alternative/cumulative effects baseline.

A description of past, present and reasonably foreseeable future actions is summarized immediately below in Table 10 and more thoroughly in Framework 22 to the FMP. The baseline conditions of the resources and human communities are subsequently summarized, although it is important to note that beyond managed fisheries and protected species, quantitative metrics for the baseline conditions are not available. Finally, a brief summary of the incremental impacts from the alternatives contained in this EA is included. The culmination of all these factors is considered when making the cumulative effects assessment.

### **Past, Present and Reasonably Foreseeable Future Actions**

Table 10 below and to a greater extent the draft EA prepared for Framework 22 to the FMP (available on the Council's web site at <http://www.nefmc.org/scallops/index.html>), summarize the combined effects of past, present, and reasonably foreseeable future actions that affect the VECs, i.e., actions other than those alternatives under development in this document.

#### Fishery-related Actions

Most of the actions effecting this action and considered in Table 10 come from fishery-related activities (e.g., Federal fishery management actions in the scallop and groundfish fisheries). As expected, these activities have fairly straightforward effects on environmental conditions, and were, are, or will be taken, in large part, to improve those conditions. The reason for this is the statutory basis for Federal fisheries management - the re-authorized Magnuson-Stevens Act. This legislation was enacted to promote long-term positive impacts on the environment in the context of fisheries activities. More specifically, the act stipulates that fisheries 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. This emergency action mirrors, in part, proposed FW 22 measures.

#### Non-fishing Actions

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 salinity, dissolved oxygen, and suspended sediment into the marine environment. There is also increasing evidence that impacts resulting from climate change, such as ocean acidification and increased water temperature, could pose a substantial risk. These activities pose a threat to all of the identified VECs in the long-term. Other human induced non-fishing activities that affect the VECs under consideration in this document are those that tend to be concentrated in nearshore 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. In addition, the introduction of invasive species, such as the tunicate observed growing over large portions of Georges Bank, may lead to negative impacts if

it spreads to areas critical for the fishery. Wherever any of these activities co-occur, they are likely to work additively or synergistically to decrease habitat quality and, as such, may indirectly constrain the sustainability of the 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.

**Table 10. Summary effects of past, present, and reasonably foreseeable future actions on the VECs identified for this emergency action (based on actions listed in Framework 22 to the FMP).**

| VEC                          | Past Actions  | Present Actions  | Reasonably Foreseeable Future Actions  | Combined Effects of Past, Present, Future Actions   |
|------------------------------|---|--|--|---|
| Managed Resource             | <b>Positive</b><br>Combined effects of past actions have decreased effort to sustainable levels   | <b>Positive</b><br>Current regulations continue to manage for sustainable stocks   | <b>Positive</b><br>Future actions are anticipated to continue to maintain sustainable stocks   | <b>Positive</b><br>Stocks are being managed to maintain a rebuilt status  |
| Non-target Species           | <b>Positive</b><br>The combination of past actions that decreased effort and gear/area restrictions have reduced impacts  | <b>Positive</b><br>Current regulations continue to manage for sustainable stocks and maintain gear/area restrictions; thus, controlling effort on direct and incidental catch/bycatch species          | <b>Positive</b><br>Future actions are anticipated to continue management for sustainable stocks  | <b>Positive</b><br>Continued management of directed stocks in combination with gear/area restrictions controls incidental catch/bycatch   |
| Physical Environment and EFH | <b>Mixed</b><br>Combined effects of effort reductions and better control of non-fishing activities have been positive, but fishing activities and non-fishing activities continue to reduce habitat quality | <b>Mixed</b><br>Effort reductions and better control of non-fishing activities have been positive, but fishing activities and non-fishing activities continue to reduce habitat quality                | <b>Mixed</b><br>Future regulations will likely control effort and thus habitat impacts, but as stocks improve, effort will likely increase along with additional non-fishing activities                      | <b>Mixed</b><br>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     |
| Protected Resources          | <b>Mixed</b><br>Combined effects of past fishery actions have reduced effort and implemented a gear modification to reduce turtle takes. However, interactions with turtles remain a concern                | <b>Positive</b><br>Current regulations continue to control effort and maintain gear modifications. Proposed measures would also limit trips to areas at the time turtles are most likely to be present | <b>Mixed</b><br>Future regulations will likely control effort and maintain gear and area restrictions. However, if the scallop resource increases, effort will likely rise, possibly increasing interactions | <b>Mixed</b><br>Continued effort controls along with gear and area restrictions will likely stabilize protected species interactions, but over the long-term, interactions may increase if scallop effort rises |
| Human Communities            | <b>Positive</b><br>Although initial management of the scallop resource had  | <b>Mixed</b><br>Fishery resources continue to support communities in the long-term, but vessels may  | <b>Positive</b><br>Continued sustainable management of the stock should support  | <b>Positive</b><br>Sustainable resources should support viable communities and economies  |



|  |  |   |                                       |  |
|--|--|---|---------------------------------------|--|
|  | negative impacts, long-term sustainable management has supported profitable industries and communities | forgo some yield as a result of this emergency action | profitable industries and communities |  |
|--|--|---|---------------------------------------|--|

**Impact Definitions:**

- Atlantic sea scallop, Non-target species, and 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  
negative=actions that decrease revenue and well-being of fishermen and/or associated businesses

**Baseline Conditions for Resources and Human Communities**

For the purposes of a cumulative effects assessment, the baseline conditions for resources and human communities are considered the present condition of the VECs plus the combined effects of the past, present, and reasonably foreseeable future actions. The following table (Table 11) summarizes the added effects of the condition of the VECs (i.e., status/trends from Section 4.4 of Amendment 15) and the sum effect of the past, present, and reasonably foreseeable future actions (from Table 10 above). The resulting CEA baseline for each VEC is exhibited in the last column (shaded). In general, straight-forward quantitative metrics of the baseline conditions are only available for managed resources, non-target species, and protected resources. The conditions of the habitat and human communities VECS are complex and varied. As such, the reader should refer to the characterizations given in Section 4.4 of Amendment 15. As mentioned above, this cumulative effects baseline is then used to assess cumulative effects of the proposed management actions below in Table 11.

**Impact Definitions for Table 11 below:**

|  |   |
|--|---|
| Atlantic scallop resource, Non-target species, and Protected resources | Positive = actions that increase stock size   |
|  | Negative = actions that decrease stock size   |
| Physical environment and EFH   | Positive = actions that improve or reduce disturbance of habitat                                  |
|  | 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 |
|  | Negative = actions that decrease revenue and well-being of fishermen and/or associated businesses |
| All VECs   | Mixed=both positive and negative  |

**Table 11. Cumulative effects assessment baseline conditions of the VECs.**

| VEC   |                             | Status/Trends/Stresses  | Combined Effects of Past, Present, and Reasonably Foreseeable Future Actions  | Combined CEA Baseline Conditions  |
|---|-----------------------------|---|---|---|
| <b>Managed Resource</b>   | <b>Atlantic Sea Scallop</b> | Stock size above biomass target, overfishing not occurring but mortality has been above $F_{target}$ in recent years; landings expected to be between 55-56 million lbs in FY 2010.   | <b>Positive</b><br>Stocks are being managed to maintain a rebuilt status  | <b>Positive</b> - Sustainable stock size  |
| <b>Non-target Species (principal species listed in Section 4.2)</b> | <b>Monkfish</b>             | Not overfished and overfishing is not occurring.  | <b>Long-term positive</b><br>Continued management of directed stocks in combination with gear/area restrictions control incidental catch/bycatch  | <b>Positive</b> – Long-term reduced bycatch, improved bycatch accounting, improved habitat quality  |
|   | <b>Skates</b>               | Winter, thorny and smooth skates are overfished, and thorny is also subject to overfishing. Barndoor skate is not overfished and is rebuilding towards biomass target. Little skate is not overfished, although it is close to the overfished biomass threshold. Clearnose and rosette skates are not overfished, and overfishing is not occurring. |   |   |
|   | <b>Windowpane Flounder</b>  | For northern windowpane, overfished and overfishing is occurring. For southern windowpane, not overfished but overfishing is occurring.   |   |   |
|   | <b>Yellowtail Flounder</b>  | For all stocks (GB, SNE/MA, and Cape Cod/GOM) overfished and overfishing is occurring.  |   |   |
| <b>Physical Environment and EFH</b>                                 |                             | Fishing impacts are complex and variable and typically adverse; Non-fishing activities have historically negative but site-specific effects on habitat quality  | <b>Mixed</b><br>Future regulations will likely control effort and thus, habitat impacts, but as stocks improve, effort will likely increase along with additional non-fishing activities                        | <b>Mixed</b> - Reduced habitat disturbance by fishing gear associated with effort reductions, but non-fishing actions may increase over time  |
| <b>Protected Resources</b>  | Loggerhead Sea Turtle       | Threatened (proposed for up-listing to endangered)  | <b>Mixed</b><br>Continued effort controls along with gear and area restrictions will likely stabilize protected species interactions, but over the long-term, interactions may increase if scallop effort rises | <b>Mixed</b> – Although takes are likely to continue to be a problem, reduced gear encounters through effort reductions, gear and area restrictions, and Sea Turtle Strategy should reduce interactions between the scallop fishery and turtles |
|   | Leatherback Sea Turtle      | Endangered  |   |   |
|   | Kemp's Ridley Sea Turtle    | Endangered  |   |   |
|   | Green Sea Turtle            | Endangered  |   |   |

**Table 11 (continued)**

| VEC                      | Status/Trends/Stresses   | Combined Effects of Past, Present Reasonably Foreseeable Future Actions                  | Combined CEA Baseline Conditions   |
|--------------------------|--|--|--|
| <b>Human Communities</b> | Complex and variable. Generally, economic trends have been positive in recent years. | <b>Positive</b><br>Sustainable resources should support viable communities and economies | <b>Long-term positive</b><br>Sustainable resources should support viable communities and economies |

### Summary Effects of the Proposed Action

As previously analyzed in Section 5.2, a summary of the direct and indirect impacts on each of the VECs expected is below. For the scallop resource, the impacts of closing NLS for FY 2011 are expected to be slightly positive relative to the No Action Alternative. This is mostly due to the fact that the SAFE report assessed that NLS should not be harvested in FY 2011 and instead should be subjected to limited fishing effort in FY 2012 based on levels of biomass.

Likewise, the expected impacts of the Proposed Action Alternative on non-target species are slightly positive compared with the No Action Alternative. The slightly positive impacts on non-target species are a direct effect of likely less estimated yellowtail bycatch. Impacts on the physical environment and EFH are expected to be negligible because overall habitat impacts throughout the range of the fishery may increase slightly in other areas as a result of displaced fishing effort; however, total fishing effort will be limited based on ACLs and AMs. Impacts on protected resources are expected to be slightly negative to neutral compared with the No Action Alternative. This expectation is based on the potential for displaced effort under the Proposed Action to occur in areas with potentially greater sea turtle densities. Finally, it is expected that there will be short-term negative impacts to individual vessel owners and likely long-term positive economic impacts based on this behavior for the entire scallop fleet.

None of the direct and indirect effects of the Proposed Action Alternative are expected to be significant.

### Cumulative Effects Assessment

To determine the magnitude and extent of cumulative impacts of the proposed action, the incremental impacts of the direct and indirect impacts discussed herein should be considered, on a VEC-by-VEC basis, in addition to the effects of all actions (i.e., those effects identified and discussed relative to the past, present, and reasonably foreseeable future actions of both fishing and non-fishing actions).

### Managed Resource

In terms of past, present, and reasonably foreseeable future actions, such as FW 21, and Amendments 10 and 11, there have been positive impacts on the scallop resource, and this trend is expected to continue with future management actions. Due to its limited scope and duration,

the Proposed Action is expected to have slightly positive impacts on this resource relative to the No Action Alternative/baseline. Overall, when the direct and indirect effects of the Proposed Action Alternative are considered in combination with all other actions (i.e., past, present, and reasonably foreseeable future actions), the cumulative effects should not yield significant impacts on the scallop resource.

### **Non-Target Species**

In terms of past, present, and reasonably foreseeable future actions, such as the Council's Standardized Bycatch Reporting Methodology and ACLs, there have been positive impacts on non-target species. Further, the primary species taken as incidental catch in the scallop fishery are all being managed sustainably under the Magnuson-Stevens Act, and this is expected to continue into the future. Due to its limited scope and duration, the Proposed Action is expected to have slightly positive impacts on this resource relative to the No Action/baseline. Overall, when the direct and indirect effects of the Proposed Action Alternative are considered in combination with all other actions (i.e., past, present, and reasonably foreseeable future actions), the cumulative effects should not yield significant impacts on non-target species.

### **Physical Environment and EFH**

In terms of past, present, and reasonably foreseeable future actions, there have been positive and negative impacts on the physical environment and EFH. This is due to effort reductions and better control of non-fishing activities being positive; however, fishing activities and non-fishing activities continue to reduce habitat quality. Due to its limited scope and duration, the Proposed Action is expected to have negligible impacts on this resource relative to the No Action Alternative/baseline. Overall, when the direct and indirect effects of the Proposed Action Alternative are considered in combination with all other actions (i.e., past, present, and reasonably foreseeable future actions), the cumulative effects should not yield significant impacts on the physical environment and EFH.

### **Protected Resources**

In terms of past, present, and reasonably foreseeable future actions, there have been positive and negative impacts on protected resources. This is due to effort controls and gear modifications being positive; however, fishing gear interactions with protected species remain a concern. Due to its limited scope and duration, the Proposed Action is expected to have slightly negative to neutral impacts relative to the No Action Alternative/baseline. Overall, when the direct and indirect effects of the Proposed Action Alternative are considered in combination with all other actions (i.e., past, present, and reasonably foreseeable future actions), the cumulative effects should not yield significant impacts on protected resources.

### **Human Communities**

In terms of past, present, and reasonably foreseeable future actions, there have been positive impacts on human communities over the long-term, which is evident by fisheries management being able to support profitable industries and communities. Due to its limited scope and

duration, the Proposed Action is expected to have slightly negative short-term impacts and positive long-term impacts on this resource relative to the No Action Alternative/baseline. Overall, when the direct and indirect effects of the Proposed Action Alternative are considered in combination with all other actions (i.e., past, present, and reasonably foreseeable future actions), the cumulative effects should not yield significant impacts on human communities.

## **7.0 Compliance with Applicable Laws (including FONSI statement)**

This section describes NMFS' compliance with applicable laws and executive orders in regards to this emergency action.

### **7.1 Magnuson-Stevens Fishery Conservation and Management Act (MSA)**

#### **National Standards**

Section 301 of the Magnuson-Stevens Fishery Conservation and Management Act requires that fishery management plans (FMPs) contain conservation and management measures that are consistent with the ten National Standards:

*(1) 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.*

This emergency action would ensure that the fishing effort projected and proposed through Framework 22 would not be exceeded in FY 2011, while also achieving optimum yield by supporting maximum catch levels in access areas that were proposed through Framework 22 access area allocation scheme. This action ensures that fishing mortality on the scallop resource would not be higher than that estimated in Framework 22 for FYs 2011 through FY 2013 in order to increase the likelihood that scallop harvests stay below the ACLs proposed through Amendment 15. This action will assure optimum yield by allocating maximum scallop effort in areas with highest scallop concentrations reducing impacts on EFH and bycatch. In addition, this action ensures that the rotational area management program for 2012 and beyond is not undermined by harvesting scallops in NLS during FY 2011, thereby threatening the cornerstone of scallop fishery management.

*(2) Conservation and management measures shall be based upon the best scientific information available.*

This document uses information of known quality from sources acceptable to the relevant scientific and technical communities. Several sources of data were used in the development of this document. These data sources include, but are not limited to: Permit data, landings data from the dealer weigh-out purchase reports, and fishing effort information through VMS declarations and reports. Although there are some limitations to the data used in the analysis, these data are considered to be the best available.

Framework 22 includes a SAFE report which is an accepted source of information, regardless of whether Framework 22 is approved or not. The SAFE report identified that the NLS scallop

resource would better serve the industry if harvested at low levels in FY 2012 and higher levels in FY 2013, rather than at high levels in FY 2011.

*(3) 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.*

Under the Atlantic Sea Scallop FMP, the target fishing mortality rate and stock biomass are applied to the scallop resource from NC to the US/Canada boundary. This encompasses the entire range of scallop stocks under Federal jurisdiction.

*(4) 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 manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.*

The management measures in this action do not discriminate between residents of different states, as it would close an access area that has trips allocated (allocated equally within each permit category) to all scallop vessels from various states. Each permit category's trip allocation is identical.

*(5) 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 emergency action would promote efficiency in the utilization of fishery resources by closing an area that was not anticipated to be open under Framework 22 in order to avoid fleet-wide consequences of an administrative delay, should Framework 22 be implemented. In general, area rotation intends to maximize yield and reduce fishing impacts by allocating effort in areas with higher concentrations of scallops. This action supports the success of the scallop access area rotation program.

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

The emergency action takes into account variations among and contingencies in fisheries, fishery resources, and catches. This action enhances the ability of the FMP to adapt to changing resource conditions. This action has been proposed at the request of some industry participants and the Council to protect scallop resources in the NLS for future years so that the industry can maintain consistent landings from year to year. Variations in annual catch and allocations are still to be expected under the Scallop FMP's area rotation and this action ensures that these variations are not will be beyond the scope of management uncertainty, a system that is designed to optimize yield from variable recruitment patterns by area and year.

*(7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.*

NMFS considered the costs and benefits associated with the Proposed Action when developing this action. This emergency action would not introduce any new measures that duplicate measures already in place, but rather would support the access area rotation program to achieve the annual mortality targets and prevent the stock from becoming overfished. The increase in the average size of scallops landed in both open areas and access areas continues to be a major factor that minimizes harvesting costs. Although this action would remove an access area trip that would be available to the fleet due to an administrative loophole, there are no additional costs of this action when taken into context with proposed Framework 22 measures.

*(8) 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 by utilizing economic and social data that meet the requirements of paragraph (2), in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.*

The emergency action is not expected to threaten the sustained participation of fishing communities that have depended on the scallop resource and is at the request of some industry participants. The closure of the NLS is expected to continue to ensure a healthy resource that will be able to support historical levels of participation by fishing communities. Although this action would not enable vessels to fish in NLS in FY 2011, thus reducing the total FY 2011 scallops vessels would have been able to harvest due to delayed development and implementation of FY 2011 allocations, this action is consistent with those proposed allocations and associated landings and revenues, allowing for higher revenues in the long-term than could be possible under the No Action Alternative.

*(9) 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.*

The emergency action would minimize bycatch of yellowtail (a species vulnerable to capture by scallop dredges) in SNE/MA by closing an area with relatively high yellowtail catch rates and would minimize that likelihood that the yellowtail sub-ACL allocated to the scallop fishery would be exceeded, a value which was based on proposed Framework 22 fishing effort projections.

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

The emergency action would close an access area that is anticipated to be open on June 15, 2011, and scallop vessels generally fish their allocations in this area very quickly (i.e., within the first 2 weeks of the opening). This year, due to the uncertainty surrounding how long NLS would be open once Framework 22, if approved, is implemented, many vessels owners may want to fish their trips even earlier than under normal circumstances. By closing the NLS, this action would

promote the safety of human life at sea by ensuring that vessel operators would not race to fish into an area that would possibly close soon after its opening.

### **Other Required Provisions of the M-S Act**

Section 303 of the Magnuson-Stevens Fishery Conservation and Management Act contains 14 additional required provisions for FMPs, which are discussed below. Any FMP prepared by any Council, or by the Secretary, with respect to any fishery, shall:

*(1) contain the conservation and management measures, applicable to foreign fishing and fishing by vessels of the United States, which are-- (A) necessary and appropriate for the conservation and management of the fishery to prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of the fishery; (B) described in this subsection or subsection (b), or both; and (C) consistent with the National Standards, the other provisions of this Act, regulations implementing recommendations by international organizations in which the United States participates (including but not limited to closed areas, quotas, and size limits), and any other applicable law;*

Since the domestic scallop fishery is capable of catching and processing the allowable biological catch (ABC), there is no total allowable level of foreign fishing (TALFF) and foreign fishing on sea scallops is not permissible at this time.

*(2) contain a description of the fishery, including, but not limited to, the number of vessels involved, the type and quantity of fishing gear used, the species of fish involved and their location, the cost likely to be incurred in management, actual and potential revenues from the fishery, any recreational interest in the fishery, and the nature and extent of foreign fishing and Indian treaty fishing rights, if any;*

The fishery and fishery participants are described in detail in Section 4.4 of Amendment 15 to the Scallop FMP. Section 4.4 of Framework 22 describes the scallop permits by category as well as the active scallop vessels by permit type that could be affected by this action. Potential costs and revenues for the proposed Framework 22 FY 2011 specifications are outlined in Section 6.11 of that document. Similar information pertaining specifically to this emergency action is outlined in Section 4.5 of this document.

*(3) assess and specify the present and probable future condition of, and the maximum sustainable yield and optimum yield from, the fishery, and include a summary of the information utilized in making such specification;*

The present and probable future condition of the resource and estimates of MSY and OY are given in Section 8.2.2.2 of Amendment 10 to the Scallop FMP. The SSC reviewed the most recent work on assessing this resource during Framework 22 development and determined that acceptable biological catch be set at 31,288 mt in 2011 and 33,243 mt in 2012 (69.0 and 73.3 million pounds, respectively), including an approximate 4,100 mt (9 million pounds) for non-yield fishing mortality (discards and incidental mortality). Therefore, the overall ABC for the



fishery, excluding discards and incidental mortality is 27,276 mt in 2011 and 28,968 mt in 2012 (60.1 and 63.9 million pounds, respectively). Acceptable Biological Catch (ABC) is defined as the maximum catch that is recommended for harvest, consistent with meeting the biological objectives of the management plan (Section 5.6 of Framework 22).

This level was recommended by the Science and Statistical Committee (SSC) and various sources of scientific uncertainty were considered when setting this value. ABC calculations were based on the updated hybrid overfishing alternative proposed in Amendment 15. Under this OFD, the overfishing threshold would remain as status quo (spatially averaged  $F = 0.38$ ). The fishing mortality target in the open areas would be set at no higher than the overfishing threshold in the open areas (currently  $F = 0.38$ ). In access areas, it would be set no higher than that given by the time-averaging principle (so that  $F$  may be higher than the overfishing threshold in access areas that had been closed). The spatially combined target fishing mortality must be no higher than that which gives a 25% probability of exceeding the ABC fishing mortality. Target fishing mortalities can be set below these limits but not above them.

Current domestic landings and processing capabilities are around 50 million lbs. Total landings have been above that level in some years since 2004, and are expected to be close to 55 million pounds for 2010. Landings proposed under Framework 22 are expected to be in a similar range, 52-57 million pounds. This emergency action would support the landings estimates proposed under Framework 22.

*(4) assess and specify-- (A) the capacity and the extent to which fishing vessels of the United States, on an annual basis, will harvest the optimum yield specified under paragraph (3); (B) the portion of such optimum yield which, on an annual basis, will not be harvested by fishing vessels of the United States and can be made available for foreign fishing; and (C) the capacity and extent to which United States fish processors, on an annual basis, will process that portion of such optimum yield that will be harvested by fishing vessels of the United States;*

The US fishery is expected to harvest 100% of OY and domestic processors are expected to be able to process 100% of OY.

*(5) specify the pertinent data which shall be submitted to the Secretary with respect to commercial, recreational, charter fishing, and fish processing in the fishery, including, but not limited to, information regarding the type and quantity of fishing gear used, catch by species in numbers of fish or weight thereof, areas in which fishing was engaged in, time of fishing, number of hauls, economic information necessary to meet the requirement and the estimated processing capacity of, and the actual processing capacity utilized by, United States fish processors;*

The FMP and existing regulations specify the type of reports and information that scallop vessel owners and scallop dealers must submit to NMFS. These data include, but are not limited to, the weight of target species and incidental catch which is landed, characteristics about the vessel and gear in use, the number of crew aboard the vessel, when and where the vessel fished, and other pertinent information about a scallop fishing trip. Dealers must report the weight of species

landed by the vessel, the date of landing, and the ex-vessel price for each species and/or size grade. Important information about vessel characteristics, ownership, and location of operation is also required on scallop permit applications. Dealers are also surveyed for information about their processing capabilities.

All limited access scallop vessels and LAGC vessels are required to operate vessel monitoring system (VMS) equipment to record the location of the vessel for monitoring compliance with scallop regulations. An at-sea observer is also placed on scallop vessels at random to record more detailed information about the catch, including size frequency data, the quantity of discards by species, detailed gear data, and interactions with protected species.

There is no distinct recreational or charter sector of the scallop fishery since a limited access permit with associated reporting requirements is required to harvest any amount of scallops in Federal waters.

*(6) consider and provide for temporary adjustments, after consultation with the Coast Guard and persons utilizing the fishery, regarding access to the fishery for vessels otherwise prevented from harvesting because of weather or other ocean conditions affecting the safe conduct of the fishery; except that the adjustment shall not adversely affect conservation efforts in other fisheries or discriminate among participants in the affected fishery;*

This emergency action would not alter any adjustments made in the Scallop FMP that address opportunities for vessels that would otherwise be prevented from harvesting because of weather or other ocean conditions affecting the safe conduct of the fisheries. No consultation with the Coast Guard is required relative to this issue.

*(7) describe and identify essential fish habitat for the fishery based on the guidelines established by the Secretary under section 305(b)(1)(A), minimize to the extent practicable adverse effects on such habitat caused by fishing, and identify other actions to encourage the conservation and enhancement of such habitat;*

Essential fish habitat was defined in earlier scallop actions. This action would not further address or modify those EFH definitions. There would be no additional impacts to the physical environment or EFH expected from this emergency action.

*(8) in the case of a fishery management plan that, after January 1, 1991, is submitted to the Secretary for review under section 304(a) (including any plan for which an amendment is submitted to the Secretary for such review) or is prepared by the Secretary, assess and specify the nature and extent of scientific data which is needed for effective implementation of the plan;*

Data and research needs relative to the Atlantic sea scallop and its associated fisheries are described in Section 5.1.8 of Amendment 10 and Section 4.1 of Amendment 15. Other data already collected include fishery dependent data described in Section 6.2.4 of Amendment 10 and Section 4.4 of Amendment 15, and fishery-independent resource surveys that provide an index of scallop abundance and biomass.

*(9) include a fishery impact statement for the plan or amendment (in the case of a plan or amendment thereto submitted to or prepared by the Secretary after October 1, 1990) which shall assess, specify, and describe the likely effects, if any, of the conservation and management measures on-- (A) participants in the fisheries and fishing communities affected by the plan or amendment; (B) participants in the fisheries conducted in adjacent areas under the authority of another Council, after consultation with such Council and representatives of those participants; and (C) the safety of human life at sea, including weather and to what extent such measures may affect the safety of participants in the fishery;*

The impacts of the scallop management program in general have been analyzed in previous scallop actions (Amendment 10, Amendment 11, Amendment 15 (proposed), Framework 16, Framework 18, Framework 19, Framework 21, and Framework 22 (proposed)). Any additional impacts from the NLS closure proposed in this emergency action on fishery participants are summarized in Section 4.5. Safety in the scallop fishery was described in Section 8.1.5.6 of Amendment 10 and nothing proposed in this action will affect safety of human life at sea.

*(10) specify objective and measurable criteria for identifying when the fishery to which the plan applies is overfished (with an analysis of how the criteria were determined and the relationship of the criteria to the reproductive potential of stocks of fish in that fishery) and, in the case of a fishery which the Council or the Secretary has determined is approaching an overfished condition or is overfished, contain conservation and management measures to prevent overfishing or end overfishing and rebuild the fishery;*

Overfishing reference points describing targets and thresholds for biomass and fishing mortality were updated in 2010 and are presented and explained in Sections 4.1.1 and 4.1.3 of Amendment 15. Under this OFD, the overfishing threshold will remain as status quo (spatially averaged  $F = 0.38$ ). The specifications in Framework 22 are designed to meet the fishing mortality target that has a 25% chance of exceeding the OFL. This emergency action would reduce the chances of compromising Framework 22 specifications designed to stay within various catch limits designed to prevent overfishing.

*(11) establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery, and include conservation and management measures that, to the extent practicable and in the following priority-- (A) minimize bycatch; and (B) minimize the mortality of bycatch which cannot be avoided;*

This emergency action does not include changes to the current SBRM. This methodology is expected to assess the amount and type of bycatch in the scallop fishery and help identify ways the fishery can minimize bycatch and mortality of bycatch which cannot be avoided. The scallop fishery also has an industry funded observer set-aside program that provides additional funding (portion of total scallop catch set-aside) to put observers on scallop vessels. A summary of the extent of observer coverage in this fishery can be found in Section 4.5.3 of Framework 22.

*(12) assess the type and amount of fish caught and released alive during recreational fishing under catch and release fishery management programs and the mortality of such fish, and include conservation and management measures that, to the extent practicable, minimize mortality and ensure the extended survival of such fish;*

This emergency action does not address recreational fishing regulations. There are no substantial recreational or charter fishing sections in the scallop fishery. Any recreational scallop fishing is likely conducted by diving, and harvest is by hand, maximizing the survival of released scallops.

*(13) include a description of the commercial, recreational, and charter fishing sectors which participate in the fishery, including its economic impact, and, to the extent practicable, quantify trends in landings of the managed fishery resource by the commercial, recreational, and charter fishing sectors;*

A detailed description of the scallop fishery is included in Section 7.1 of Amendment 10, Section 4.4 in Amendment 11, Section 4.4 of Amendment 15, and Section 4.4 of Framework 22. These sections provide information relative to scallop vessels, processors, and dealers.

*(14) to the extent that rebuilding plans or other conservation and management measures which reduce the overall harvest in a fishery are necessary, allocate, taking into consideration the economic impact of the harvest restrictions or recovery benefits on the fishery participants in each sector, any harvest restrictions or recovery benefits fairly and equitably among the commercial, recreational, and charter fishing sectors in the fishery; and*

This emergency action does not propose a reduction in total catch in the scallop fishery compared to recent years. The NLS closure is expected to have long-term benefits for participating vessels, and the economic impacts on various sectors of the fishery have been considered. Section 5.2.5 is a detailed examination of the expected economic impacts of this action. Harvest from the Atlantic sea scallop fishery will continue to be reviewed, established, and analyzed through the biennial framework process. Recreational fishing for sea scallops is rare and does not affect the success of the FMP.

*(15) establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability.*

Amendment 15 proposes the mechanism for establishing ACLs and AMs to bring the Scallop FMP in compliance with new annual catch limits required under the reauthorized Magnuson-Stevens Act. Framework 22 proposes catch limits for certain sectors of the scallop fishery, as well as effort controls for the rest of the fishery that is not under a direct TAC or quota. Framework 22 covers 2011 and 2012 only, with default measures for 2013 which will be updated and superseded by a forthcoming action. Framework 22 uses the ACL process outlined in Amendment 15 and proposes catch limits for certain sectors of the scallop fishery, as well as effort controls for the rest of the fishery that is not under a direct TAC or quota for FYs 2011-2013, with default measures for 2013 which will be updated and superseded by a forthcoming action. This emergency action would ensure that those catch limits set forth in Framework 22 for FY 2011 are not compromised, should Framework 22 be approved, which could have implications for FY 2012 and 2013 specifications proposed in Framework 22.

## 7.2 National Environmental Policy Act (NEPA)

NEPA provides a mechanism for identifying and evaluating the full spectrum of 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. The Council on Environmental Quality (CEQ) has issued regulations specifying the requirements for NEPA documents (40 CFR 1500 – 1508). All of those requirements are addressed in this document, as referenced below.

### Environmental Assessment

The required elements of an Environmental Assessment (EA) are specified in 40 CFR 1508.9(b). They are included in this document as follows:

- The need for this action is described in Section 1.0;
- The alternatives that were considered are described in Section 3.0 (alternatives including the proposed action and No Action);
- The environmental impacts of the proposed action are described in Section 5.0;
- A determination of significance is in Section 7.2; and,
- The agencies and persons consulted on this action are listed in Section 8.0.

### Finding of No Significant Impact

National Oceanic and Atmospheric Administration (NOAA) Administrative Order 216-6 (NAO 216-6) (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. On July 22, 2005, NOAA published a Policy Directive with guidelines for the preparation of a Finding of No Significant Impact (FONSI). In addition, the Council on Environmental Quality (CEQ) regulations at 40 CFR 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 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, the recent Policy Directive from NOAA, 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?***

**Response:** No, the proposed action is not reasonably expected to jeopardize the sustainability of the sea scallop resource. The closure of Nantucket Lightship for up to one year would not cause increases in fishing mortality above the overfishing threshold that would jeopardize the sustainability of the scallop resource. Any fishing effort would be displaced to open areas, which are accounted for in previous analyses under the FMP. This action is designed to be consistent with the mortality targets adopted in previous amendments and/or frameworks. A general description of the target species is summarized in Section 4.1. Section 5.2.1 summarizes the overall impacts of this action on the scallop resource.

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

**Response:** No, the proposed action is not reasonably expected to jeopardize the sustainability of any non-target species. A general description of the non-target species is summarized in Section 4.2, and a complete bycatch analysis of the scallop fishery was completed in Amendment 15. Section 5.2.2 summarizes the overall impacts of this action on non-target species. In general, this action does not increase overall fishing effort above levels assessed in Amendment 15; thus, there is no indication that impacts on non-target species will be different.

**(3) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat (EFH) as defined under the Magnuson-Stevens Act and identified in FMPs?**

**Response:** No, the proposed action is not reasonably expected to cause substantial damage to the ocean and coastal habitats and/or EFH. A general description of the physical environment and EFH is summarized in Section 4.3. Section 5.2.3 summarizes the overall impacts of this action on habitat.

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

**Response:** No, the proposed action is not reasonably expected to have substantial adverse impacts on public health or safety. This action does not modify the primary measures used to manage the fishery and is not expected to change fishing behavior in any substantial way to adversely impact safety.

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

**Response:** No, the proposed action is not reasonably expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species. Section 4.4 describes the endangered or threatened species that are found in the affected area. Section 5.2.4 summarizes the impacts of the proposed action on endangered and threatened species.

**(6) Can the proposed action 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.)?**

**Response:** The proposed action is not expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area. Section 4.3 describes the physical environment of the affected area including the benthic environment and biological parameters of the scallop resource.

**(7) Are significant social or economic impacts interrelated with natural or physical environmental effects?**

**Response:** No, this action does not propose any significant social or economic impacts interrelated with significant natural or physical environmental effects. Because the proposed action closes Nantucket Lightship to fishing in FY 2011, which was not anticipated to have significant social or economic impacts interrelated with significant natural or physical environmental effects in FW 22, none are expected to result from the proposed action.

**(8) Are the effects on the quality of the human environment likely to be highly controversial?**

**Response:** No, the effects on the quality of the human environment are not likely to be highly controversial and the proposed action is based on the best available science. Section 5.2 assesses the expected impacts of the proposed action on the human environment, and Section 6.0 describes the potential cumulative effects of this action on the human environment.

**(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?**

**Response:** No, unique areas, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas are not located within the affected area; therefore, there are no impacts on these components of the environment from the proposed action.

**(10) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?**

**Response:** No, the effects on the human environment are not likely to be highly uncertain or involve unique or unknown risks. This action primarily proposes keeping the Nantucket Lightship area closed in FY 2011 as part of the existing rotational area management program. The risks and impacts of area rotation on the human environment have been discussed and analyzed in previous actions. Therefore, the likely effects on the human environment are well understood.

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

**Response:** No, the proposed action is not related to other actions with individually insignificant but cumulatively significant impacts. Section 6.0 describes fishing and non-fishing past, present and reasonably foreseeable future actions that occurred or are expected to occur in the affected area. In summary, the sea scallop resource, non-target species, EFH, protected species, and the human communities have been impacted by past and present actions in the area and are likely to continue to be impacted by these actions in the future, but no significant impacts are expected as a result of the proposed action.

**(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?**

**Response:** No districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places are located in the affected area; therefore, there are no impacts on these resources from the proposed action.

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

**Response:** No, the proposed action is not reasonably expected to result in the introduction or spread of a nonindigenous species. The only nonindigenous species known to occur in any significant amount within the fishery areas is the colonial sea squirt (*Didemnum* sp.). The tunicate occurs on pebble gravel habitat, and does not occur on moving sand. NMFS and the WHOI HabCam have surveyed the area and studies are underway to monitor *Didemnum*'s

growth and effect on scallops and their habitat. At this time, there is no evidence that fishing spreads this species more than it would spread naturally.

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

**Response:** No, the proposed action is not likely to establish a precedent for future action with significant effects, and it does not represent a decision in principle about future consideration. This action modifies an existing rotational area management program that is designed to be reviewed and adjusted every two years. Area rotation was established under Amendment 10, which was an EIS that assessed the long-term impacts of area rotation.

***(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?***

**Response:** No, the proposed action is not reasonably expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment. This action does not propose any changes that would provide incentive for environmental laws to be broken.

***(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?***

**Response:** No, the proposed action is not reasonably expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species. Both target and non-target species have been identified and assessed in this document (sections 4.1, 4.2, 5.2.1, and 5.2.2). In general, this action will modify the rotational area management program, which will have positive impacts on both target and non-target species.

#### **FONSI DETERMINATION**

In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment prepared for the Nantucket Lightship Emergency Action, and in the FEIS for Amendment 15 and the EA for Framework 22 to the Sea Scallop Fishery Management Plan, it is hereby determined that this action will not significantly impact the quality of the human environment as described above and in the supporting Environmental Assessment. 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, NMFS

\_\_\_\_\_  
Date

### **7.3 Endangered Species Act (ESA)**

Section 5.2.4 of this action contains a description of threatened and endangered species potentially affected by the Scallop Fishery and sections 5.1.4 and 5.2.4 provide summaries of the impacts of the No Action and proposed action, respectively. A final determination of consistency with the ESA will be made by the agency when the action is implemented.



#### **7.4 Marine Mammal Protection Act (MMPA)**

Section 4.4 of this action contains a description of marine mammals potentially affected by the Scallop Fishery and sections 5.1.4 and 5.2.4 provide summaries of the impacts of the No Action and proposed action, respectively. 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). A final determination of consistency with the MMPA will be made by the agency when the action is implemented.

#### **7.5 Administrative Procedure Act (APA)**

There is good cause under Section 553(b)(B) of the Administrative Procedure Act (APA) that it is impracticable and contrary to the public interest to provide for prior notice and opportunity for the public to comment. The reasons justifying promulgation of this action on an emergency basis make solicitation of public comment contrary to the public interest. This action provides a benefit to the scallop fishery by not threatening the success of the access area program in future years and ensuring that the scallop fleet, including those that did not fish in NLS, would not be inequitably subjected to possible FY 2012 AMs. This action did not allow for prior public comment because the review process and determination could not have been completed any earlier, due to the inherent time constraints associated with the process and the fact that the information on which this action is based (i.e., much higher interest in fishing in the NLS than initially anticipated and the fleet-wide impacts that would result) became available very recently.

If this action were delayed to allow for notice and comment, vessels would be able to fish in the NLS beginning June 15, 2011. If this were to occur, it is likely that limited access vessels would harvest most, if not all, of their scallop allocations in NLS within the first two to three weeks of its opening. The time necessary to provide for prior notice, opportunity for public comment, and delayed effectiveness for this action could have resulted in the fishery incurring long-term negative impacts on scallop yield, as well as potentially triggering DAS deductions and seasonal closures in a future FY (i.e., the same impacts that this action itself is striving to avoid). In the interest of receiving public input on this action, this EA analyzing this action will be made available to the public, and the temporary final rule will solicit public comment.

The reasons above also constitute good cause under Section 553(d) of the APA to waive the 30-day delay in effectiveness.

#### **7.6 Paperwork Reduction Act (PRA)**

The purpose of the Paperwork Reduction Act is to minimize paperwork burden for individuals, small businesses, nonprofit institutions, and other persons resulting from the collection of information by or for the Federal Government. It also ensures that the Government is not overly

burdening the public with requests for information. This action does not have any new collection of information requirements subject to the PRA.

## **7.7 Information Quality Act (IQA)**

### ***Utility of Information Product***

The proposed document includes: A description of the management issues, a description of the alternatives considered, and the reasons for selecting the preferred management measures, to the extent that this has been done. These actions propose modifications to the existing FMP. These proposed modifications implement the FMP's conservation and management goals consistent with the Magnuson-Stevens Fishery Conservation and Management Act (MSA) as well as all other existing applicable laws.

The Federal Register notice that announces the emergency rule and the implementing regulations will be made available in printed publication and on the website of the Northeast Regional Office. The notice provides metric conversions for all measurements.

### ***Integrity of Information Product***

The information product meets the standards for integrity under the following types of documents:

Other/Discussion (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.)

### ***Objectivity of Information Product***

The category of information product that applies for this product is “Natural Resource Plans.”

NMFS must comply with the requirements of the Magnuson-Stevens Act, the National Environmental Policy Act, the Administrative Procedure Act, the Paperwork Reduction Act, the Coastal Zone Management Act, the Endangered Species Act, the Marine Mammal Protection Act, the Information Quality Act, and Executive Order 13132 (Federalism).

This framework is being developed to comply with all applicable National Standards, including National Standard 2. National Standard 2 states that the FMP's conservation and management measures shall be based upon the best scientific information available. Despite current data limitations, the conservation and management measures proposed to be implemented under this emergency action are based upon the best scientific information available.

The policy choices (i.e., management measures) proposed to be implemented by this document are supported by the available information. The management measures contained in the document are designed to meet the conservation goals and objectives of the FMP.

The supporting materials and analyses used to develop the measures in the document are contained in the document and to some degree in previous amendments, frameworks, and/or FMPs as specified in this document.

The review process for this document involves the Northeast Regional Office and NMFS headquarters. The document was prepared by staff of the Northeast Regional Office with expertise in scallop resource issues, habitat issues, economics, and social sciences. Review by staff at the Regional Office and NMFS headquarters is conducted by those with expertise in fisheries management and policy, habitat conservation, protected species, and compliance with the applicable law. Final approval of the document and clearance of the rule is conducted by staff at NOAA Fisheries Headquarters, the Department of Commerce, and the U.S. Office of Management and Budget.

### **7.8 Coastal Zone Management Act (CZMA)**

Section 307 of the Coastal Zone Management Act (CZMA) is known as the Federal consistency provision. Federal Consistency review requires that “federal actions, occurring inside or outside of a state's coastal zone, that have a reasonable potential to affect the coastal resources or uses of that state's coastal zone, to be consistent with that state's enforceable coastal policies, to the maximum extent practicable.” The Council previously made determinations that the FMP was consistent with each state’s coastal zone management plan and policies, and each coastal state concurred in these consistency determinations (in Scallop FMP). Since the proposed action does not propose any substantive changes from the FMP, NMFS has determined that this action is consistent with the coastal zone management plan and policies of the coastal states in this region. NMFS will notify CZM state agencies directly.

### **7.9 Executive Order 12866 (Regulatory Impact Review)**

#### **Introduction**

The Regulatory Impact Review (RIR) provides an assessment of the costs and benefits of proposed actions and other alternatives in accordance with the guidelines established by Executive Order 12866. The regulatory philosophy of Executive Order 12866 stresses that in deciding whether and how to regulate agencies should assess all costs and benefits of all regulatory alternatives and choose those approaches that maximize the net benefits to the society.

The RIR also serves as a basis for determining whether any proposed regulations are a “significant regulatory action” under the criteria provided in Executive Order 12866 and whether the proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Act of 2180 (RFA).

This RIR summarizes the effects of the NLS closure considered in this emergency action. The emergency action document contains all the elements of the RIR, and the relevant sections are identified by reference to the document.

The purpose of, and the need for, action are described in Section 1.0. The description of the proposed and no action alternatives is provided in Section 3.0.

## **Summary of Regulatory Impacts**

The economic impacts of the proposed action on scallop fishery are analyzed in sections 5.1.5 and 5.2.5 of this document.

### **Summary of the impacts of the proposed action alternative**

Due to NLS being closed under this alternative, vessels would lose the opportunity to land up to 6 M lb combined from NLS in FY 2011. The average price per lb of scallops from March 2011 through May 2011 is \$9.48/lb. Thus, it is estimated that the proposed action alternative would result in the scallop fishery not being able to potentially gain \$56.88 M in gross fleet revenues (6 M lb x \$9.48/lb), compared to No Action. This amount does not account for trip costs, so the profits earned from this harvest (i.e., a proxy for net revenue) would be expected to be lower. However, under the Proposed Action Alternative, there is less likelihood that the limited access scallop fishery would exceed its ACL in FY 2011, should Amendment 15 and Framework 22 be approved, resulting in no DAS reduction in FY 2012 (i.e., the AM applicable to the limited access fishery), in comparison with the No Action. Therefore, although the proposed action may result in short-term negative impacts compared to No Action in FY 2011, if AMs are triggered in FY 2012 under the No Action alternative to account for landings in excess of the FY 2011 ACL, the scallop fleet would incur a loss in revenues from a DAS deduction that could be similar to the gain in FY 2011. Additionally, if Framework 22 is approved, each vessel that fished in NLS in FY 2011 would have those landings deducted from an access area trip in FY 2012. Thus, it is likely that in FY 2012, gross revenues would be higher under the Proposed Action Alternative (potentially as much as \$56.88 M, not accounting for trip costs, if scallop prices were to remain as high as they currently are), because similar revenues earned from NLS landings under No Action in FY 2011 would have to be paid back in FY 2012 (i.e., those landings from FY 2011 would be deducted from FY 2012 allocations). Over the long-term, revenues of the proposed alternative would likely be slightly higher than under No Action because the fishery is less likely to exceed the scallop sub-ACLs proposed in Amendment 15, if approved, in FY 2011 and in future years under the proposed alternative, and would be more likely to receive higher revenues in NLS in FY 2012 and FY 2013 because scallop yield would be higher if no fishing occurs in that area in FY 2011.

This is also an equity issue because only half of the fleet would be allocated trips into NLS in FY 2012 under the proposed Framework 22 measures. As such, vessels that may not have fished in FY 2011 but were allocated trips in FY 2012 would be at a disadvantage if many vessels fished in NLS in FY 2011. Vessels with FY 2012 allocated NLS trips would likely have to fish longer trips in NLS because of the unanticipated high level of biomass harvested in FY 2011.

Since it is unlikely that every LAGC vessel would have taken their NLS trip in FY 2011 under No Action because the landings are applied to the IFQ allocation, they are less affected by the Proposed Action Alternative. In general, the potential impacts to the scallop resource by LAGC vessels are negligible in comparing the two alternatives under consideration. The major differences of impacts on the scallop resource are seen for the limited access scallop fleet, which have much higher possession limits and allocations.

## **Enforcement Costs**

The enforcement costs and benefits of the proposed action are within the range of impacts addressed in Section 8.9 of Amendment 10 FSEIS and Section 5.4.22 and Section 5.6.3 of Amendment 11. The proposed action is very similar to the existing measures in terms of the enforcement requirements, since it would entail enforcing a specific scallop access area closure. The costs of implementing and enforcing the proposed action are not expected to compromise the effectiveness of implementation and enforcement of this action. Furthermore, there are several mechanisms and systems, such as VMS monitoring and data processing, already in place that will aid in monitoring and enforcement of this action. Therefore, the overall enforcement costs are not expected to change significantly from the levels necessary to enforce measures under the no action regulations.

## **Determination of Significant Regulatory Action**

This action is not significant because it would not do any of the following: (1) Have an economic effect of \$100 million per year on a continuing basis; (2) represent novel policy issues that may generate an increased level of controversy; (3) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; or (4) materially alter the budgetary impact of entitlements, grants, user fees or loan programs or the rights and obligations of recipients thereof.

The proposed action would not allow access into NLS, which means that the fleet could not benefit from at most \$56.88 M in gross fleet revenues that could be received if all 6 M lb were landed from that area, as under No Action. This value does not account for trip costs and assumes constant prices of scallops and thus, is an overestimate. However, under No Action, each vessel's landings from the NLS would have to be paid back in FY 2012 by that vessel, if Framework 22 is approved, thus decreasing FY 2012 revenues under No Action to by similar amount that could be gained in FY 2011, assuming prices of scallops stay as high as they currently are. Over the long-term, revenues of the proposed alternative would likely be slightly higher than under No Action because the fishery is less likely to exceed the scallop sub-ACLs proposed in Amendment 15, in FY 2011, which would result in additional allocation reductions applicable to the entire limited access fleet in FY 2012, regardless of whether all vessels fished in NLS in FY 2011. Thus, the proposed action will not have either a short-term or a long-term negative annual impact on the economy by \$100 million or more compared to No Action.

Additionally, this action would not raise novel legal and policy issues, other than those that were already addressed and analyzed in Amendment 10, as well as addressed in Amendment 15 (proposed) and Framework 22 (proposed). The proposed action will not adversely affect in a material way the economy, productivity, competition, public health or safety, jobs or state, local, or tribal governments or communities in the long run. The proposed action also does not interfere with an action planned by another agency, since no other agency regulates the level of scallop harvest, nor does it materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients.

## **7.10 Executive Order 13132 (Federalism)**

The E.O. on federalism establishes nine fundamental federalism principles for Federal agencies to follow when developing and implementing actions with federalism implications. Previous scallop actions have already described how the management plan is in compliance with this E.O. Furthermore, this action does not contain policies with Federalism implications; thus, preparation of an assessment under E.O. 13132 is not warranted.

## **8.0 Persons and Agencies Consulted/How to Obtain a Copy of this Document**

This Environmental Assessment was prepared and evaluated by the National Marine Fisheries Service.

The following persons aided in the preparation of this document: Jennifer Anderson, Bill Barnhill, Peter Christopher, Emily Gilbert, Brian Hooper, and Sarah Thompson. No other agencies or persons were consulted in preparation of this EA.

Requests for additional copies and any questions concerning this document may be addressed to:

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