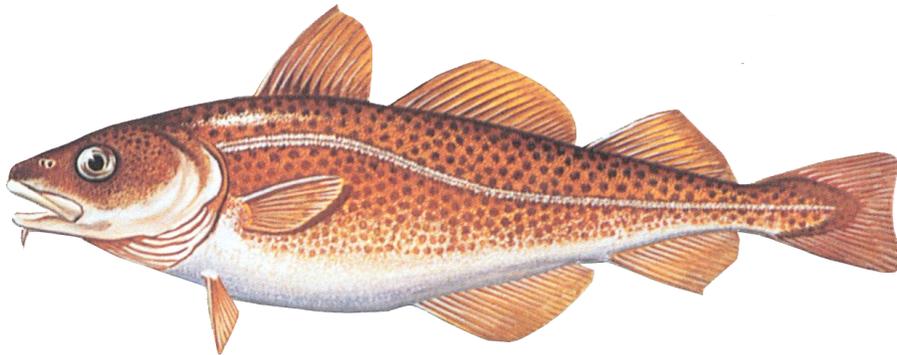


A Final Supplemental Environmental Assessment
Secretarial Interim Action to Revise Recreational Gulf of Maine Cod Fishery
Measures for Fishing Year 2012

*Supplements the Final Environmental Assessment for Framework Adjustment 47 to
the Northeast Multispecies Fishery Management Plan*

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1.0 INTRODUCTION

The National Marine Fisheries Service (NMFS) has prepared this supplemental analysis to evaluate potential impacts that would result from the proposed action to revise measures for fishing year (FY) 2012 to control Gulf of Maine (GOM) cod mortality resulting from the recreational Northeast (NE) multispecies fishery. In accordance with the National Environmental Policy Act (NEPA), NMFS evaluated the potential impacts of a range of GOM cod catch limits, and associated management measures, for FY 2012 in Framework Adjustment (Framework) 47 to the NE Multispecies Fishery Management Plan (FMP) in an Environmental Assessment (EA) submitted to NMFS by the New England Fishery Management Council (Council), on February 6, 2012. Framework 47 analyzed the impacts of a range of FY 2012 annual catch limits (ACLs) approved by the Council for GOM cod, hinging on the completion of a new benchmark assessment of this stock in December 2011. However, the Council did not anticipate having to revise recreational fishery measures based on the decreased recreational sub-ACLs in the range considered by Framework 47, and so did not include any analysis of recreational measures in that action. Based on the results of the benchmark assessment, the Secretary of Commerce (Secretary) is taking interim action to implement an interim FY 2012 GOM cod ACL and ACL sub-components, within the range analyzed by the final Framework 47 EA, and revised recreational fishery management measures to be consistent with the interim sub-ACL for this component of the fishery. The conclusion reached in the EA completed for Framework 47 was that the action of approving the preferred measures, including a range of GOM cod ACLs encompassing the interim FY 2012 ACL, would not significantly impact the quality of the human environment. All beneficial and adverse impacts of the proposed interim catch limits were evaluated in the final Framework 47 EA, resulting in the conclusion of no significant impacts. This supplemental EA presents impact information on the physical, biological, habitat, and socio-economic ecosystem components that would result from revising measures for the FY 2012 GOM cod recreational fishery as described herein to be consistent with the interim FY 2012 GOM cod sub-ACL for this fishery. This document is not a stand-alone document, but rather a supplemental EA, intended to be utilized in conjunction with the attached final Framework 47 EA.

2.0 BACKGROUND

Framework 47 to the NE Multispecies FMP developed updated specifications for FY 2012-2014 for several NE multispecies stocks targeted for implementation with the start of FY 2012 (May 1, 2012). Knowing that a new externally peer-reviewed comprehensive benchmark assessment was

to be completed for GOM cod in December 2011 (SARC 53), the Council developed a range of alternatives for GOM cod specifications in Framework 47 designed to utilize the new stock assessment information to set the GOM cod ACL and sub-ACLs for FY 2012. The Council anticipated that the stock biomass may change as a result of the assessment and, as such, analyzed a full range of catch levels within Framework 47 (NEFSC, 2012). Based on a stock projection, the previous assessment conducted in 2008 (GARM III) indicated that the GOM cod stock would likely rebuild by 2014 even with fishing mortality rates slightly greater than the F_{msy} proxy of 0.237 (NEFSC, 2008). The new assessment, however, indicates that the stock is in an overfished condition, subject to overfishing, and would not rebuild, even in the absence of fishing, by the terminal rebuilding year of 2014 (NEFSC, 2012). If overfishing were ended in FY 2012 through Framework 47, the resulting catch allowance would be in the range of 1,500 mt; a substantial reduction from the FY 2011 fishery-level ACL of 8,545 mt.

Based on the final assessment results, NMFS notified the Council in a January 26, 2012, letter that the NE Multispecies FMP had not made adequate progress toward ending overfishing and rebuilding GOM cod and, as a result, that Section 304(e)(3) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires that the Council prepare and submit to the Secretary an action that will end overfishing immediately and revise the GOM cod rebuilding program. Although the Council had intended to recommend a final FY 2012 GOM cod ACL for Framework 47 at their February 1, 2012, meeting, the Council instead elected not to recommend final measures for GOM cod at this time, in light of this new information. Rather, the Council requested that NMFS, acting on behalf of the Secretary, use interim authority provided under section 305(c) of the Magnuson-Stevens Act to implement measures designed to reduce but not end overfishing in FY 2012, while the Council develops an action to end overfishing beginning in FY 2013.

In response to the Council's request, NMFS is taking interim action to implement measures designed to reduce overfishing on GOM cod in FY 2012. If the Secretary finds that overfishing exists or that interim measures are needed to reduce overfishing, Section 305(c) of the Magnuson-Stevens Act authorizes him to promulgate interim measures necessary to address the overfishing for any fishery. Measures implemented through this interim authority can only be effective for up to one year (first for 180 days, followed by an optional extension for an additional 186 days). The Council has up to two years following notification of insufficient progress under Section 304(e)(7)(B) to implement a revised rebuilding program for GOM cod. However, since any measures implemented through an interim action by the Secretary to reduce overfishing in FY 2012 would only be effective for up to a year, the Council must implement measures to end overfishing on the GOM cod stock by May 1, 2013.

Consistent with interpretation of section 304(e)(6) of the Magnuson-Stevens Act, NMFS believes it has the authority and sufficient rationale to take interim action to reduce overfishing on GOM cod in FY 2012, including revising FY 2012 GOM cod catch limits, to prevent further damage to the stock, and to bring the FMP into compliance with the Magnuson-Stevens Act. The SARC 53

assessment results show that GOM cod is undergoing continued overfishing and that the Framework 44 specifications for this stock for FY 2012 that would take effect in absence of Council or Secretarial action, would continue or further exacerbate this overfishing. NMFS is proposing in an interim action to set FY 2012 GOM cod catch limits within the range analyzed in the final Framework 47 EA, and as such this supplemental EA does not include an analysis of that action.

The interim action would set an overall FY 2012 ACL, as well as interim sub-ACLs for the recreational and commercial fisheries, including a revised common pool sub-ACL and sector sub-ACL. In the NE Multispecies FMP, annual allowable catches of managed stocks by the fishery, including catches of these stocks by other fisheries, are restricted by an annual ACL, a hard quota. This ACL is made up of smaller components, referred to either as a sub-ACL or ACL sub-component. These smaller components are defined for different sectors of the fishery in order to better account for the different approaches used to manage these sectors and to allow for more tailored accountability measures and management uncertainty buffers. In the case of GOM cod, the overall ACL is comprised of a recreational sub-ACL (about 34%), and a commercial sub-ACL (about 66%). The commercial sub-ACL consists of a commercial groundfish fishery sub-ACL (composed of the common pool sub-ACL and sector sub-ACL), as well as a state waters component, and an “other” sub-component that includes other sources of fishery mortality such as bycatch in other fisheries (see Appendix III of Framework 47).

Based on the FY 2012 recreational fishery sub-ACL that would be derived from the interim FY 2012 GOM cod ACL under consideration, NMFS has determined that the current recreational measures need to be revised to ensure that recreational catch will not exceed the interim FY 2012 recreational sub-ACL. The interim FY 2012 recreational GOM cod sub-ACL that would result from a 6,700 mt overall ACL, which is under consideration in the interim action, would be 2,215 mt. This represents a 14.8% reduction from the 2,600 mt the recreational fishery is projected to catch under the existing recreational measures in 2011. Unlike the commercial NE multispecies fisheries, which either fish under cooperative allocations that are formulaically based on the commercial fishery sub-ACL or fish under an effort-control program which the Regional Administrator has the authority to manage inseason, measures to control catch in the recreational fishery are typically revised through Council action. Framework 47 considered a range of possible catch levels for GOM cod, including reductions from recent catch levels that would likely require adjustments to recreational management measures; however, sufficient information was not available to the Council in time to develop a range of recreational management measures to include in Framework 47. The benchmark assessment peer review was not completed until December 2011, after the November 2011 Council meeting when the Council was scheduled to take final action and vote on the framework. Recreational measures require extensive analysis, including information from the most recent assessment, to identify the combination of measures that would achieve catches consistent with a given recreational sub-ACL. Thus, a range of recreational measures based on such a wide range of possible specifications as was considered in Framework 47 could not be devised before results were available from the benchmark

assessment, and therefore was not included in that action. As a result, the Council requested that NMFS include revisions to recreational measures, if necessary, in an interim action for FY 2012. Because recreational measures were not considered in Framework 47, necessary adjustments to recreational measures to ensure that the interim FY 2012 recreational sub-ACL is not exceeded are analyzed in this supplemental EA.

3.0 PURPOSE AND NEED

The purpose of this action is to implement revised measures for the GOM cod recreational fishery for FY 2012 to reduce mortality resulting from the recreational fishery and to be consistent with the revised FY 2012 GOM cod catch limits under consideration by NMFS in an emergency interim action and analyzed in Framework 47. This action is needed in order to reduce overfishing on this stock, pursuant to section 304(e)(6) of the Magnuson-Stevens Act, and to ensure the recreational fishery remains below its FY 2012 interim GOM cod sub-ACL, which represents a reduction from default FY 2012 catch limits, due to recent information from a new benchmark assessment which indicates GOM cod is overfished and undergoing overfishing. The scope of this action is limited to FY 2012, and would implement a short-term change in the recreational fishery measures to achieve interim catch targets until such time that long-term revisions to this stock's rebuilding program and associated management measures, to incorporate the results of the latest assessment, can be considered and implemented through the normal Council and rulemaking process.

4.0 PROPOSED ACTION AND ALTERNATIVE

The proposed action and other alternatives considered in this supplemental EA are described in the following sections and summarized in the subsequent tables. Only one alternative is proposed due to the narrow purpose and need for this action and the limited circumstances under which the Secretary can take interim action under section 304(e)(6) of the Magnuson-Stevens Act; any interim action taken by the Secretary must reduce overfishing and, at a minimum, not further deteriorate the condition of the stock. Furthermore, consideration of a broader suite of alternatives at this time would undermine NMFS's ability to analyze and implement revised management measures in a timely manner.

4.1 NO ACTION ALTERNATIVE

The no action alternative would maintain the existing GOM cod measures for the recreational fishery, which consists of a minimum fish size of 24" in the GOM Regulated Mesh Area and a 10 cod possession limit. A possession limit of 10 cod was implemented for the recreational and charter/party fishery through Amendment 13 in 2004 to reduce recreational harvest of GOM cod, which was previously unlimited, to be consistent with the rebuilding plan for this stock (NEFMC, 2003). In 2006, Framework 42 to the NE Multispecies FMP increased the minimum size limit for private recreational and charter/party vessels fishing in the GOM from 22" to 24",

in concert with a prohibition on catching cod from November 1 through March 31, to achieve additional reductions in recreational fishing mortality needed for this stock (NEFMC, 2006).

4.2 PROPOSED ACTION (PREFERRED ALTERNATIVE) REVISED RECREATIONAL FISHERY MEASURES

The proposed action would reduce the minimum fish size for cod caught by recreational and charter party vessels in the GOM Regulated Mesh Area from 24” to 19”, and would reduce the associated possession limits for both private recreational and charter/party vessels to 9 fish per angler per day. The proposed action makes no revision to the existing seasonal GOM cod possession prohibition.

5.0 AFFECTED ENVIRONMENT

The geographic area and human component of the environment most affected by the proposed alternatives are the Gulf of Maine (GOM) and vessels fishing in the GOM. The attached final Framework 47 EA includes detailed descriptions of the valued ecosystem components (VECs) which comprise the affected environment, including the GOM. Discussion of physical environment/habitat/EFH is included in Section 6.1 of the attached EA and describes the primary geographic areas affected by the alternatives (Gulf of Maine), habitat, EFH and gear types. Target species are addressed in Section 6.2, which includes species and stock status descriptions, assemblages of fish species, stock status trends, areas closed to fishing in the northeast region, and gear interactions. A discussion of non-target species and bycatch, including spiny dogfish, skates and monkfish as well as gear interactions with these species, is included in Section 6.3. Protected resources are addressed in Section 6.4. This section discusses protected resources present in the area, protected species potentially affected, species not likely to be affected, and the interactions between gear and protected resources. Human communities within the affected environment are addressed in Section 6.5, and include an overview of the New England groundfish fishery. The overview of the New England groundfish fishery in Framework 47 did not provide detailed information about the recreational charter/party fishery, so updated information of recreational fishing activity for the primary recreational groundfish stocks, GOM cod and haddock, is provided in Section 5.1 of this supplemental EA. A more detailed description of the entire New England charter/party fishery can be found in Section 6.2.5 of the Amendment 16 FEIS (NEFMC 2009).

5.1 HUMAN COMMUNITIES AND THE FISHERY

Overview of the GOM Charter/Party Fishery

Harvest of GOM Cod

During 2007 to 2009 the total number of cod caught in the Northeast region ranged from 1.3 to 1.6 million (Table 1). Although cod are caught in Gulf of Maine and Georges Bank stock areas,

the proportion caught in the Gulf of Maine exceeded 95% during 2007 to 2009. Catches of Georges Bank cod averaged about 33,000 fish annually during 2007 to 2009, with the highest estimated annual catch occurring in 2009 (42,200).

The number of cod harvested by marine anglers in the Gulf of Maine increased each year from 307,000 in 2007 to 475,600 in 2008 and 477,700 in 2009. In contrast, the proportion of Gulf of Maine cod released alive each year increased slightly from 2007 to 2008, but has remained relatively stable from 2007 to 2009. Georges Bank harvest of cod increased from the record low of about 4,000 fish in 2007 to over 23,000 in 2008 before declining to about 18,000 in 2009. The number of Georges Bank cod released alive by anglers moved in the opposite direction: Georges Bank cod released alive declined from 20,300 fish in 2007 to a record low of 9,600 in 2008, and then increased to 23,800 thousand in 2009.

Table 1. Number of Cod by Catch Disposition and Stock Area (in thousands)

Year	Gulf of Maine			Georges Bank		
	Catch (A+B1+B2)	Harvested (A+B1)	Released Alive (B2)	Catch (A+B1+B2)	Harvested (A+B1)	Released Alive (B2)
2007	1,293.7	307.0	987.1	24.2	3.9	20.3
2008	1,587.8	475.6	1,112.2	33.1	23.5	9.6
2009	1,461.6	477.7	983.9	42.2	18.4	23.8

Private boat anglers harvested more cod than party/charter anglers during 2007 to 2009 in the Gulf of Maine and during 2008 on Georges Bank (Table 2). Private boat anglers averaged 58% of harvested Gulf of Maine cod and 60% of Georges Bank cod during 2007 to 2009. However, party/charter anglers fishing on Georges Bank harvested more cod than their private boat counterparts in 2007 and 2009.

Table 2. Number of Harvested Cod (A+B1) by Stock and Mode (in thousands)

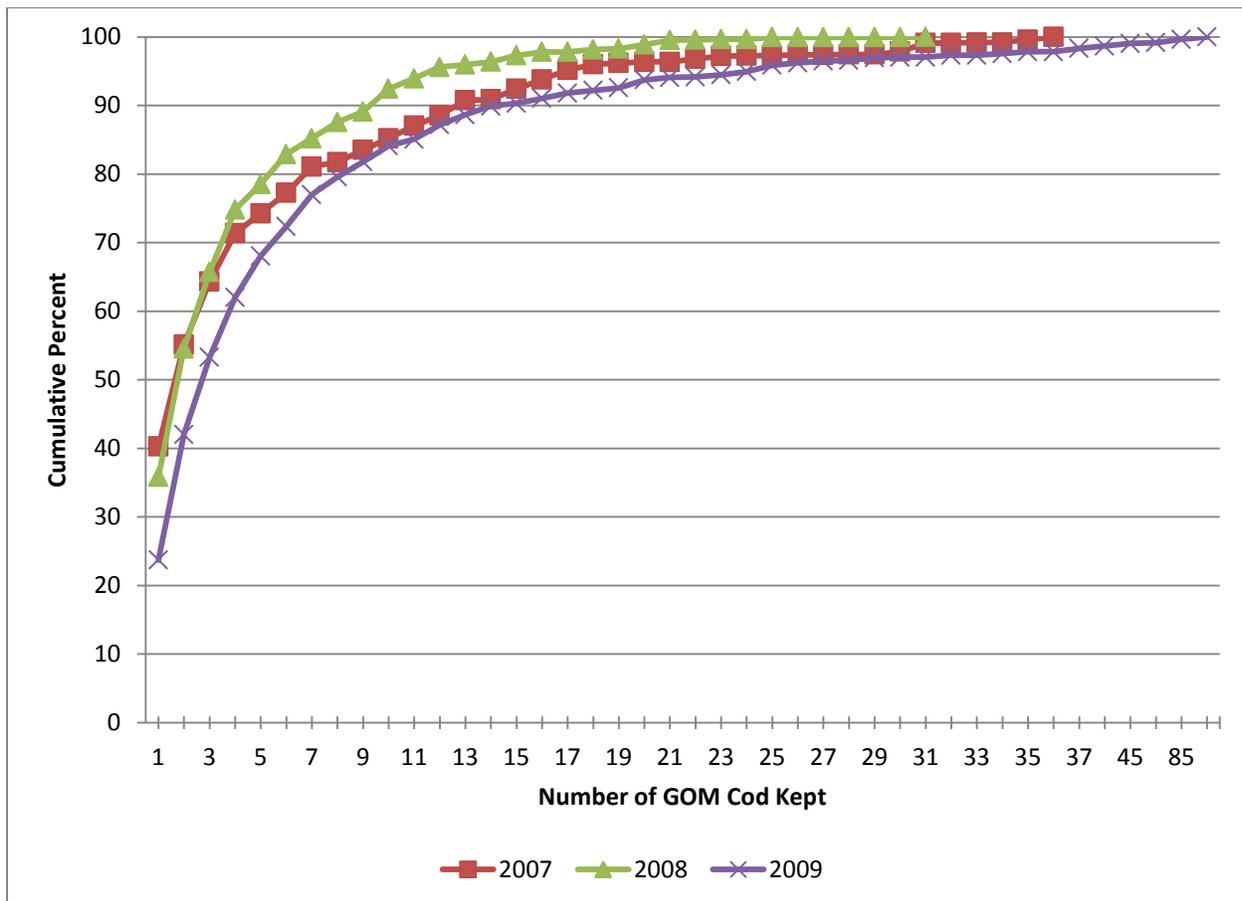
Year	Gulf of Maine		Georges Bank	
	Party/Charter	Private Boat	Party/Charter	Private Boat
2007	131.0	175.6	3.0	0.9
2008	172.8	302.8	5.9	17.6

2009	221.3	256.4	9.4	9.0
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Approximately 84 to 90% of total angler trips that kept Gulf of Maine cod, kept 10 or fewer fish (Figure 1). At least since 2004 the possession limit on Gulf of Maine cod has been 10 cod per person. This indicates that about 10 to 16% of the cod kept on party/charter angler trips may not have been in compliance with the Federal possession limit. Note that these occasions represent a small percent (about 1%) of total trips that retained Gulf of Maine cod and may be associated with overnight trips. If the latter, then possessing up to 20 cod would be legal since the bag limit is a daily limit.

Due to very low numbers of Georges Bank cod caught during 2007 to 2009 it was not possible to estimate the distribution of numbers of kept cod per angler trip.

Figure 1. Cumulative Percent of Party/Charter Angler Trips that Retained Gulf of Maine Cod



The Gulf of Maine cod size limit has been 24-inches since 2006. During 2007 to 2009 the percentage of cod harvested by Gulf of Maine party/charter anglers that was less than 24-inches approximated 12 to 18% (Figure 2). Nearly all Gulf of Maine legal-sized cod caught by party-boat anglers are kept, as less than 0.5% of the released catch was above the minimum size (Figure 3). The size distribution for 2008 and 2009 is suggestive of a shift toward proportionally more released cod at higher sizes. For example, about 30% of the released Gulf of Maine cod were less than 16-inches during 2007. This also means that 70% of the released catch was greater than 16-inches. During 2008 and 2009, more than 80% of the released Gulf of Maine cod were more than 16-inches. Similarly, about 20% of the released Gulf of Maine cod harvest was above 20-inches during 2007 but was 32% of the released catch during 2008 and 2009.

The size distribution of harvested cod in the private boat mode could not be estimated due to low numbers of measured cod in the Gulf of Maine. Similarly, a size distribution for Georges Bank cod could not be constructed for both the party-boat and private anglers due to low numbers of measured fish.

Figure 2. Cumulative Distribution of Gulf of Maine Cod Party/Charter Mode Harvest by Length

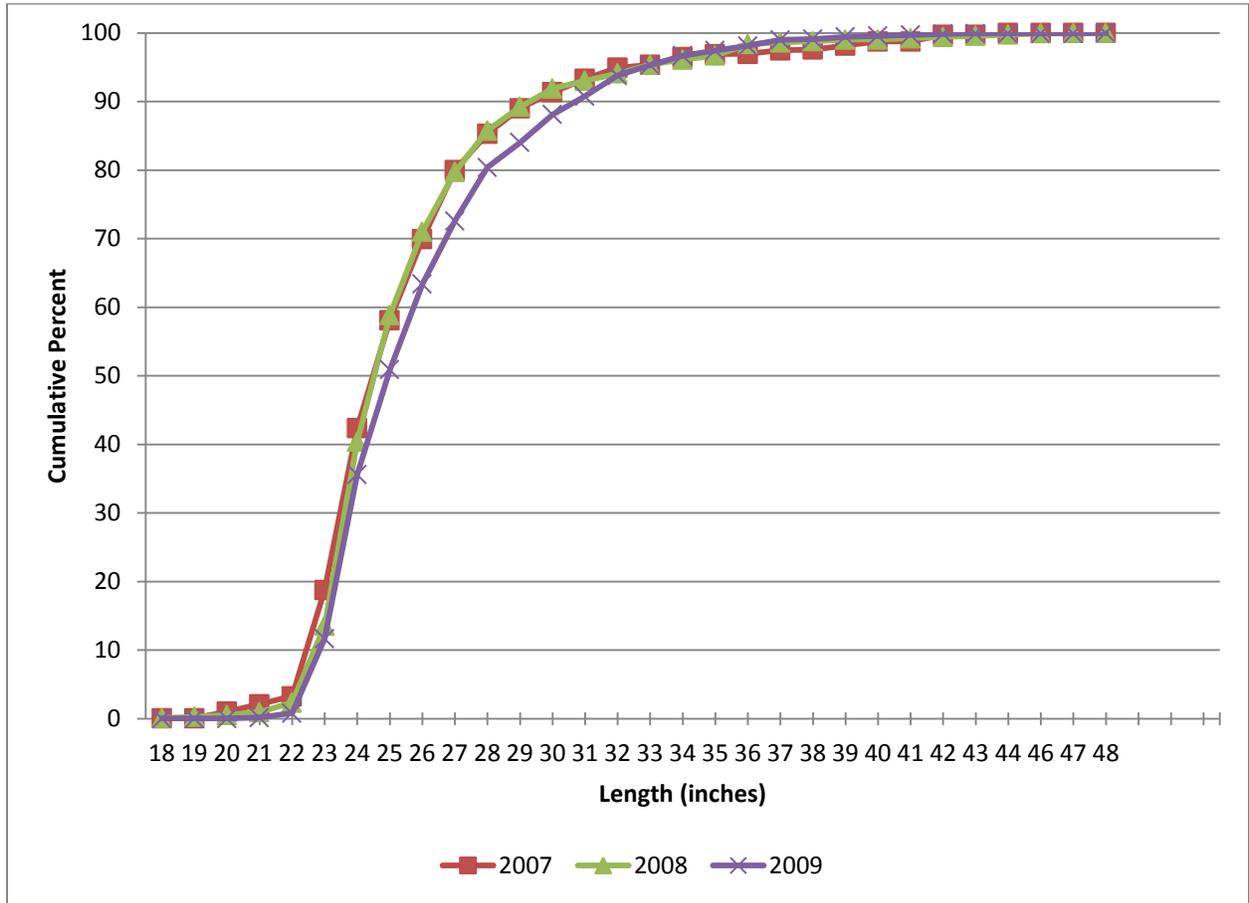
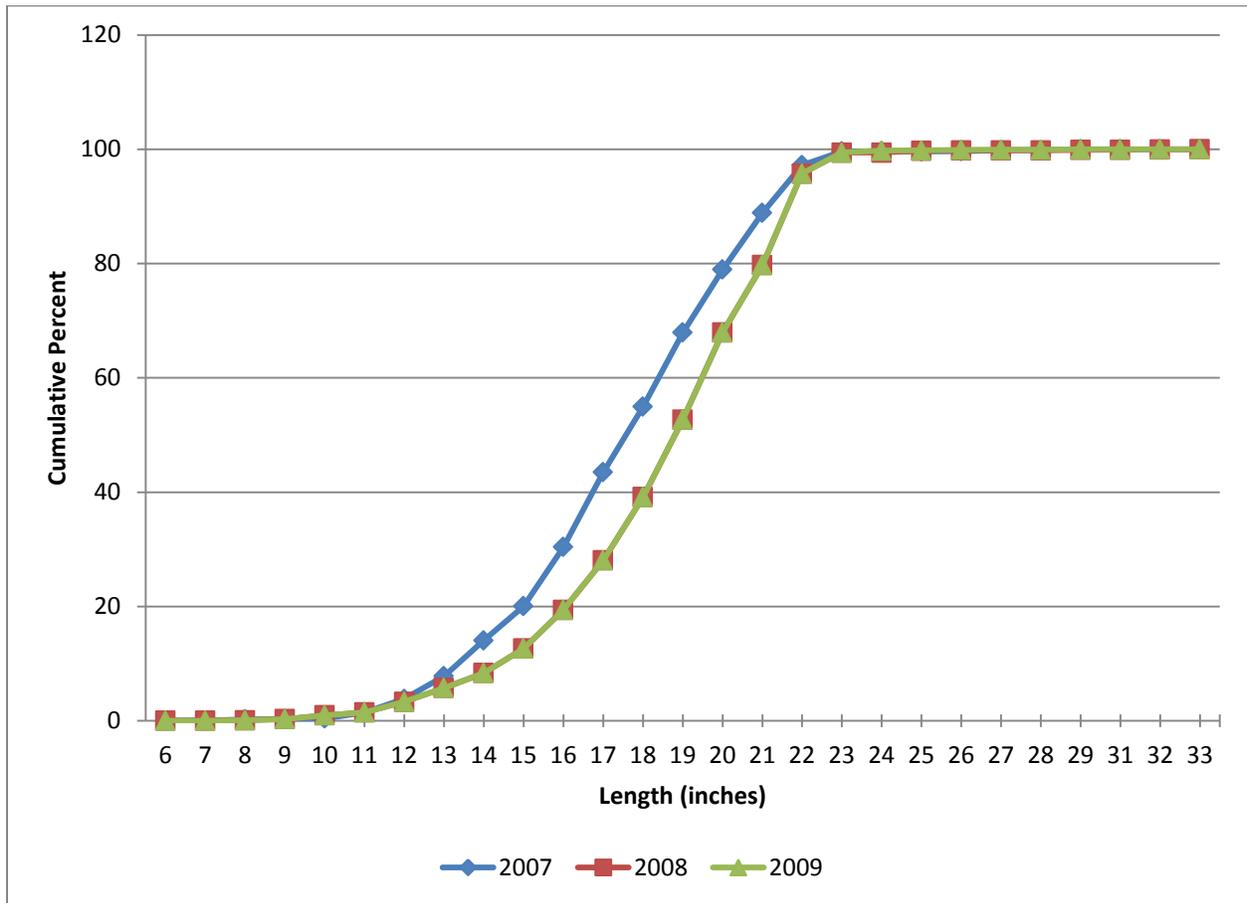


Figure 3. Cumulative Distribution of Gulf of Maine Cod Party/Charter Mode Released Catch by Length



The seasonal distribution of the party/charter harvest of Gulf of Maine cod differs somewhat between party/charter anglers and private boat anglers. The party/charter season begins in April peaks in May or June, but remains reasonably steady through the summer months before tapering off in October. Note that party/charter harvest of Gulf of Maine cod is prohibited during the first three months and the last two months of the calendar year since implementation of Framework 42.

Over 50% of party/charter landings of Gulf of Maine cod occurred during May and June from 2007 to 2009 (Table 3). May and June were also the largest months in terms of landings for private boat anglers in 2008 and 2009. The seasonal distribution of private boat mode harvest varied more than that of the party/charter mode. In 2008 and 2009 harvest peaked during spring and early summer while in 2007, harvest peaked during the fall. This results in somewhat of a

bimodal season with highs during the spring and fall with lulls occurring during summer and winter.

Table 3. Bi-monthly Distribution of Gulf of Maine Cod Harvest by Mode

	2007	2008	2009
	Party/Charter Mode		
March-April (wave 2)	19.4	16.7	9.2
May-June (wave 3)	53.7	56.6	65.5
July-August (wave 4)	16.5	14.3	8.1
Sept.-Oct. (wave 5)	10.5	12.4	17.2
Nov.-Dec. (wave 6)	0.0	0.0	0.0
	Private Boat Mode		
March-April (wave 2)	23.1	13.1	9.5
May-June (wave 3)	16.1	52.8	50.3
July-August (wave 4)	16.8	17.7	16.6
Sept.-Oct. (wave 5)	30.5	15.4	8.2
Nov.-Dec. (wave 6)	13.5	1.1	15.4

Harvest of GOM Haddock

During 2007 to 2009 the total number of haddock caught in the Northeast region ranged from 381,000 to 497,000 (Table 4). Haddock were all caught in the Gulf of Maine, except for 94,000 fish estimated to have been landed on Georges Bank in 2008. No catches of Georges Bank haddock occurred in 2007 or 2009.

The number of haddock harvested by marine anglers in the Gulf of Maine decreased each year from 398,200 in 2007 to 358,500 in 2008 and 311.6 thousand in 2009. In contrast, the proportion of Gulf of Maine haddock released alive each year increased from 2007 to 2008, but then declined to the lowest level of the three-year time series in 2009. There was no estimated

harvest of Georges Bank haddock in 2007 or 2009. In 2008, 94,000 haddock were harvested in Georges Bank. There were no haddock released alive on Georges Bank according to MRFSS data.

Table 4. Number of Haddock by Catch Disposition and Stock Area (in thousands)

Year	Gulf of Maine			Georges Bank		
	Catch (A+B1+B2)	Harvested (A+B1)	Released Alive (B2)	Catch (A+B1+B2)	Harvested (A+B1)	Released Alive (B2)
2007	496.7	398.2	98.5	0	0	0
2008	480.0	358.5	121.4	94	94	0
2009	380.8	311.6	69.2	0	0	0

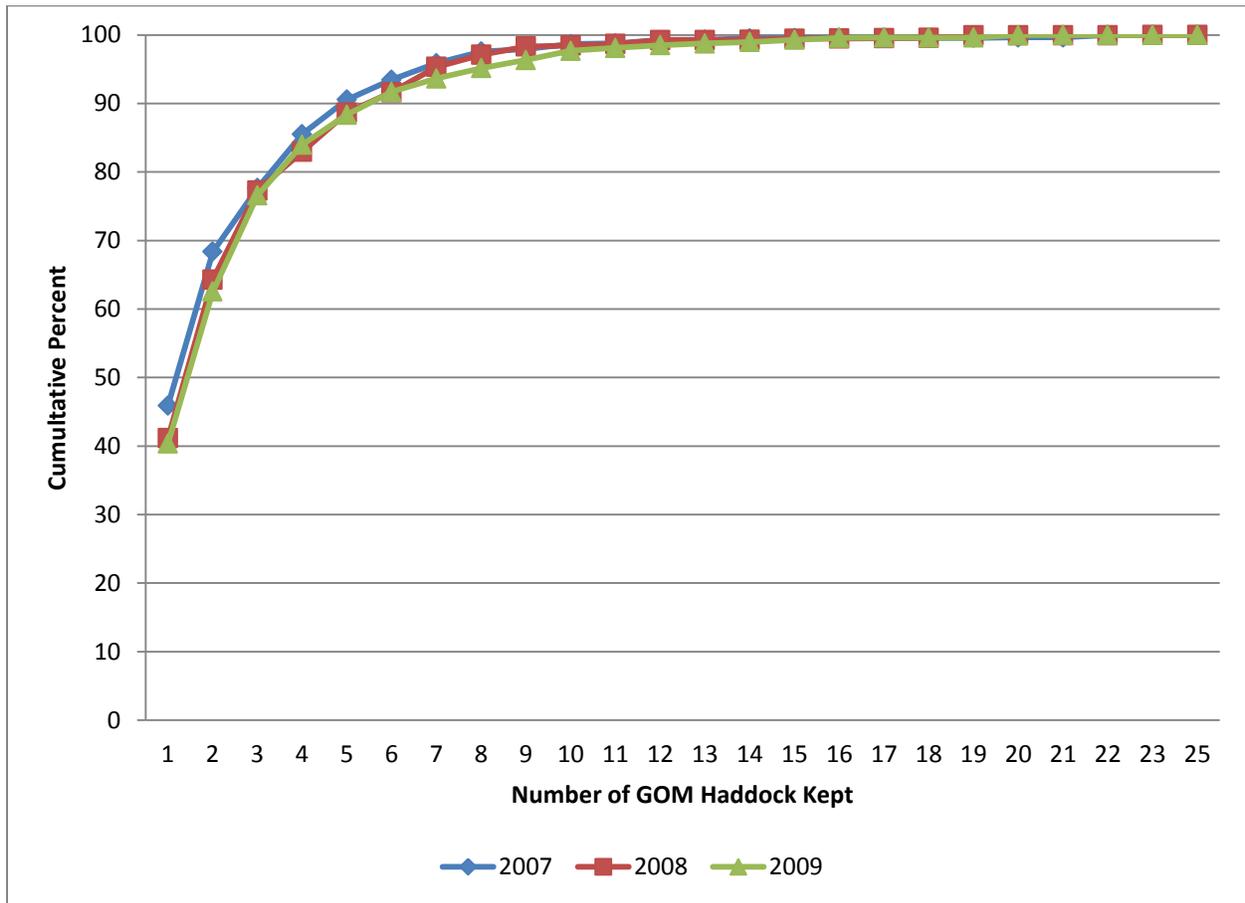
Private boat anglers harvested more haddock during 2007 to 2009 in the Gulf of Maine than party/charter anglers (Table 5). Private boat anglers averaged 58% of harvested Gulf of Maine haddock during 2007 to 2009. Private boat anglers fishing on Georges Bank did not harvest any haddock during 2007 to 2009. Only 94,000 haddock were estimated to be harvested by party/charter anglers fishing on Georges Bank in 2008.

Table 5. Number of Harvested Haddock (A+B1) by Stock and Mode (in thousands)

Year	Gulf of Maine		Georges Bank	
	Party/Charter	Private Boat	Party/Charter	Private Boat
2007	160.2	238.0	0	0
2008	141.7	216.8	94	0
2009	148.8	162.8	0	0

Approximately 95% of total angler trips that kept Gulf of Maine haddock, kept 7 or fewer fish and about 98% of total angler trips that kept Gulf of Maine haddock kept 10 or fewer fish (Figure 4). Due to very low numbers of Georges Bank haddock caught during 2007 to 2009 it was not possible to estimate the distribution of numbers of kept haddock per angler trip.

Figure 4. Cumulative Percent of Party/Charter Angler Trips that Retained Gulf of Maine Haddock



The Gulf of Maine haddock size limit is 18-inches. During 2007 to 2009 the percentage of haddock harvested by Gulf of Maine party/charter anglers that was less than 18-inches approximated 2 to 6% (Figure 5). In contrast to Gulf of Maine cod where nearly all the legal-sized cod caught by party-boat anglers was kept, approximately 50% of legal-sized haddock was released by party/charter anglers from 2007 to 2009 (Figure 6). The size distribution for 2009 is suggestive of a shift toward proportionally more released haddock at higher sizes. For example, about 40% of the released Gulf of Maine haddock were less than 17-inches during 2007 and 2008. This also means that 60% of the released catch was greater than 17-inches. During 2009, more than 70% of the released Gulf of Maine haddock were more than 17-inches.

The size distribution of harvested haddock in the private boat mode could not be estimated due to low numbers of measured haddock in the Gulf of Maine. Similarly, a size distribution for

Georges Bank haddock caught by party/charter anglers could not be constructed for the same reason.

Figure 5. Cumulative Distribution of Gulf of Maine Haddock Party/Charter Mode Harvest by Length

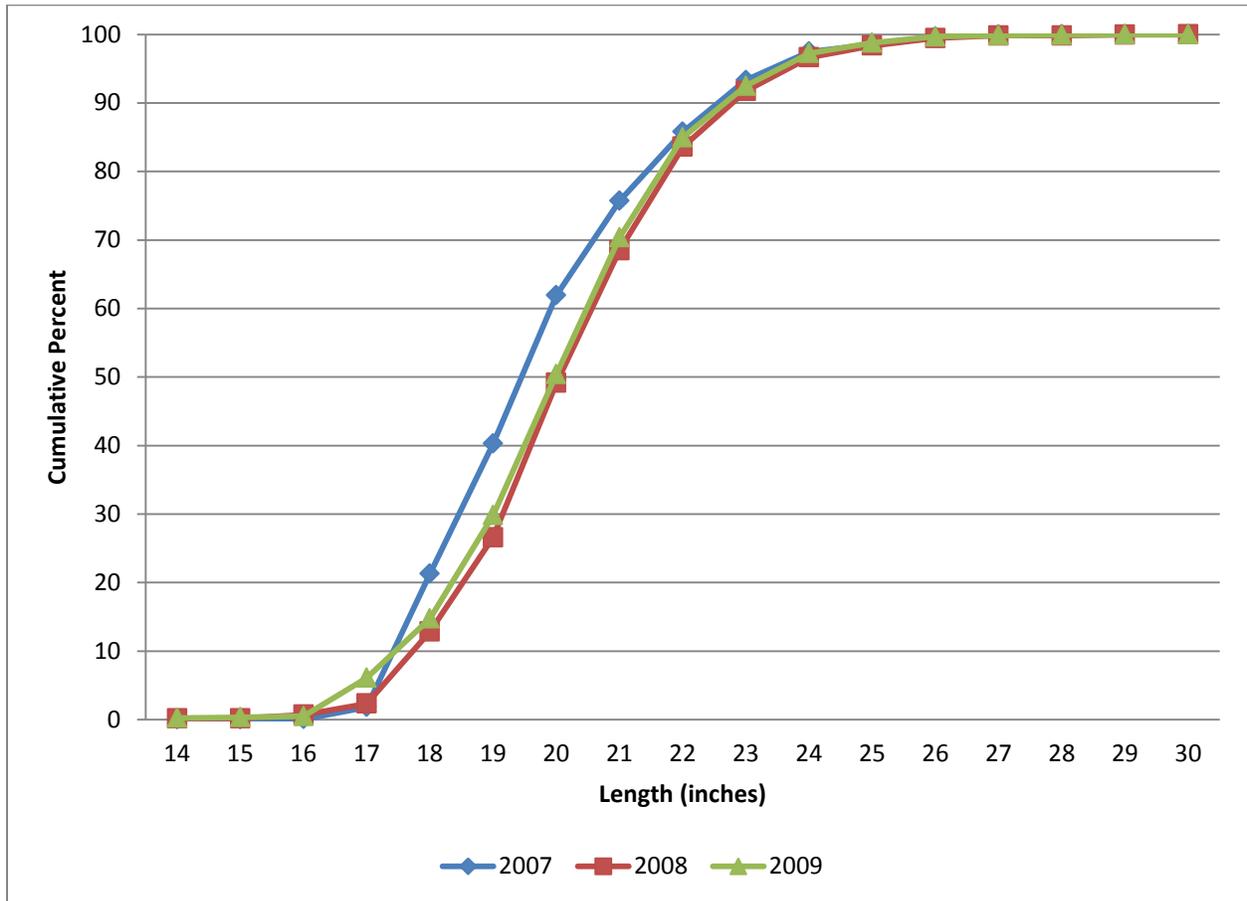
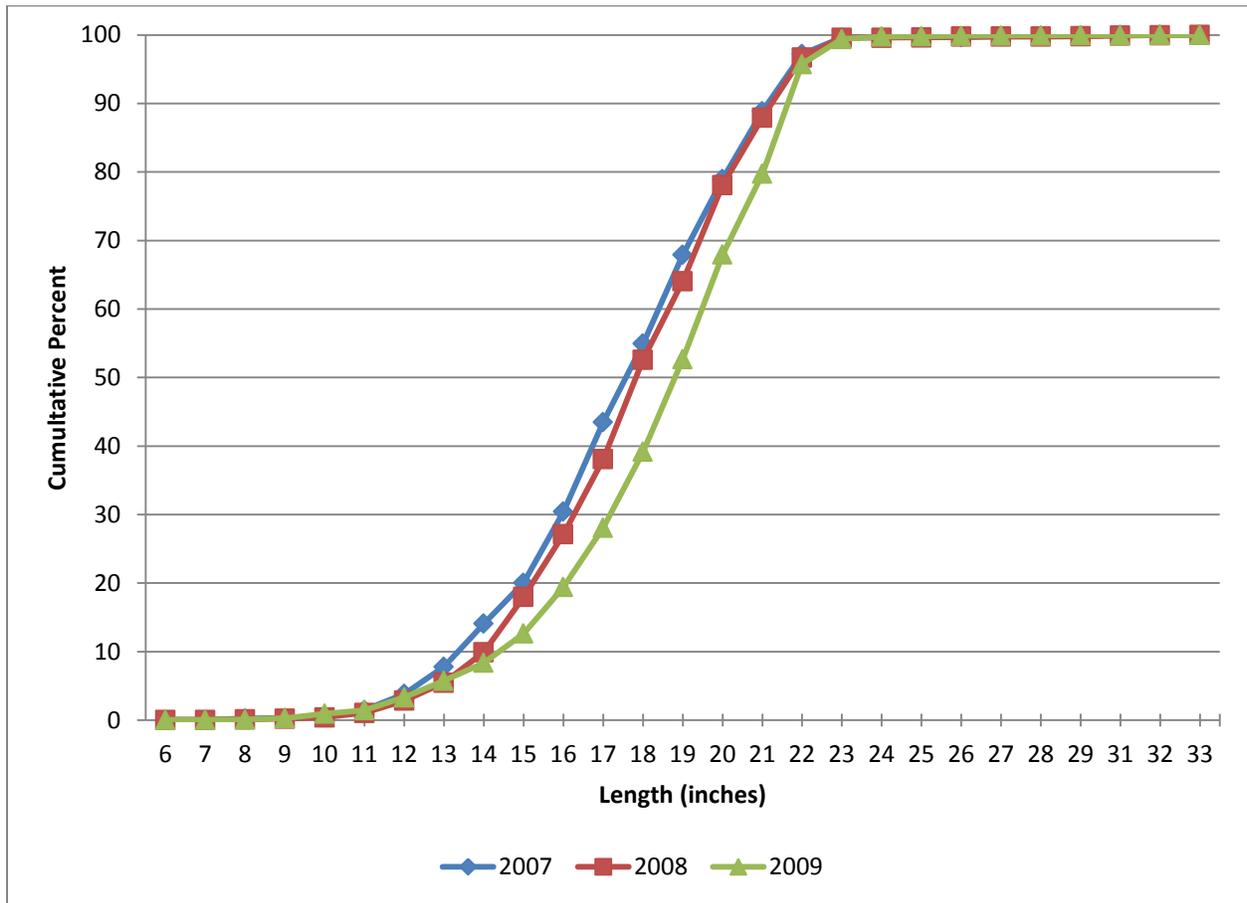


Figure 6. Cumulative Distribution of Gulf of Maine Haddock Party/Charter Mode Released Catch by Length



The seasonal distribution of the party/charter harvest of Gulf of Maine haddock is somewhat similar between party/charter anglers and private boat anglers. The majority of the party/charter and private boat haddock harvest occurs in the spring and summer. Over 60% of party/charter and private boat landings in the Gulf of Maine occurred from May to August during 2007 to 2009 (Table 6).

Table 6. Bi-monthly Distribution of Gulf of Maine Haddock Harvest by Mode

	2007	2008	2009
	Party/Charter Mode		
March-April (wave 2)	11.7	12.7	19.3
May-June (wave 3)	34.9	47.5	30.4
July-August (wave 4)	32.9	24.2	32.9
Sept.-Oct. (wave 5)	20.5	15.4	16.2
Nov.-Dec. (wave 6)	0.0	0.3	1.1
	Private Boat Mode		
March-April (wave 2)	13.2	0.8	14.2
May-June (wave 3)	20.3	35.4	24.1
July-August (wave 4)	36.5	36.5	37.5
Sept.-Oct. (wave 5)	30.0	26.9	7.3
Nov.-Dec. (wave 6)	0.0	0.3	17.0

Party/Charter Activity

The number of vessels reporting retaining groundfish on a charter/party trip through the VTR ranged from 155 to 169 during FY 2007-2010 (Table 7). These vessels include individuals that hold an open access multispecies charter/party permit as well as limited access vessels that carry passengers for hire. The number of participating vessels has increased over the years from 155 operators during FY 2007 to 169 operators during FY 2010. The number of trips retaining groundfish and number of passengers carried on those trips has fluctuated over the years, but were highest during FY 2010. The average number of the number of trips taken per vessel declined over the time series to its lowest level in FY 2009, but then increased again in FY 2010. Similarly, the average number of passengers per trip was at its lowest in FY 2009 and then increased in FY 2010, but did not vary much overall, remaining at around 18 passengers per trip.

Table 7. Summary of GOM Party/Charter Operations

Fishing Year	Number of Reporting Vessels	Number of Groundfish Trips	Total Number of Anglers	Average Number of Anglers per Trip	Average Number of Trips per Vessel
2007	155	4,940	94,769	19.18	31.87
2008	155	4,537	84,006	18.52	29.27
2009	164	4,414	79,091	17.92	26.91
2010	169	5,166	96,047	18.59	30.57

6.0 DIRECT AND INDIRECT IMPACTS OF THE PROPOSED ACTION AND NO-ACTION ALTERNATIVE

This supplemental EA evaluates the potential impacts using the criteria outlined in Table 8. Impacts from all alternatives are judged relative to the baseline conditions, as described in Section 4.0 and Section 6.0 of Framework 47, and compared to each other.

Table 8. Criteria used to evaluate the direct and indirect impacts of the proposed and no-action alternatives

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

negative)	
High (H; as in high positive or high negative)	To a substantial degree
Likely	Some degree of uncertainty associated with the impact

6.1 BIOLOGICAL IMPACTS

Target and Non-target Species Impacts

No Action

Under the no action alternative, there would be no change to the recreational minimum fish size or possession limit for GOM cod. The no action alternative would not result in the mortality reductions necessary to reduce overfishing in FY 2012 and to reduce fishing mortality on GOM cod from the recreational fishery. The interim FY 2012 recreational GOM cod sub-ACL of 2,215 mt represents a 14.8% reduction from the 2,600 mt the recreational fishery is projected to catch under the existing recreational measures in 2011. Under the no action alternative, the recreational fishery would be expected to achieve catches similar to previous fishing years, increasing the likelihood that the recreational fishery would exceed its interim FY 2012 sub-ACL, further exacerbating overfishing. Therefore, the no action alternative would be expected to result in low negative impacts to the GOM cod resource.

Proposed Action (Preferred Alternative)

Under the proposed action, the GOM cod recreational minimum fish size would be decreased to 19” and the possession limit would be decreased to 9 fish per angler per day.

A bioeconomic simulation model developed by the NEFSC was used to predict the expected number of GOM cod that would be kept and discarded from alternative possession and size limits. The model combines economic information derived from an angler choice experiment survey with biological information about the current stock structure for GOM cod and haddock stocks with historical catchability data from recreational anglers to project recreational catches. The choice experiment survey was administered in conjunction with NMFS’ Marine Recreational Fisheries Statistics Survey (MRFSS) in New England during calendar year 2009. Anglers intercepted in Maine, New Hampshire, and Massachusetts for the MRFSS were asked to participate in a voluntary follow-up mail survey. Anglers that agreed to participate in the follow-

up were sent mail questionnaires using a modified Dillman Tailored Design (Dillman, 2000), in which anglers were asked to simultaneously compare features (e.g., size and possession limits) of different hypothetical fishing trips and then to choose the trip they liked best or to choose not to fish at all. A total of 2,039 surveys were mailed out in New England and 775 completed mail surveys were returned for a response rate of 38%. The collection of choice responses from the various choice scenarios were used to examine tradeoffs and behavioral responses to various biological and regulatory changes.

A Random Utility Model (RUM) estimated using a conditional logic model was used as the behavioral model for anglers. In this model, the angler faces a choice among alternative saltwater fishing trips and opting out of saltwater fishing. The utility function is specified so that regulations affect an angler's utility (e.g., trip duration, kept fish) indirectly by altering an angler's expected distribution of kept and released fish. The model also attempts to adjust potential catch projections based on anglers' willingness to pay for fishing trips in relation to the number and size of fish that may be kept. The effects of changes in kept or released fish on both angler welfare and probability of trip occurrence were evaluated using simulation methods, which attempt to replicate actual fishing behavior under different regulatory scenarios. The most recent assessment of GOM cod assumes that all recreationally caught and discarded GOM cod (known as class "B2") die. To be consistent with the new assessment, this model also assumes all discard GOM cod die.

The model predicted the proposed action would result in a 13.3% reduction in cod recreational mortality in FY 2012, relative to FY 2011. The reduced possession limit would be expected to result in reduced catch, but a reduction in the minimum fish size may seem, at first, counterintuitive in also reducing catch. The model predicted that anglers would have to potentially encounter and discard fewer cod at the 19" minimum fish size to obtain the daily 9 fish possession limit. Under the current 24" minimum size limit, few anglers catch their full 10 fish possession limit and as much as 20% of GOM cod released are between 20" and the 24" minimum size (see Section 5.1). At a 19" minimum size limit, anglers may be expected to turn more of those discards into landings and catch their possession limit sooner, resulting in an overall reduction in mortality. Thus, a reduction in the minimum size limit impacts total mortality by reducing the total amount of discards. If anglers are not fishing as long to catch as many cod, there may be similar benefits to other recreationally caught fish, such as GOM haddock, if this results in fewer discards of those stocks.

The model also showed that these measures may also result in a slight increase in effort. While anglers may be expected to catch their possession limit sooner, the recreational fishery overall may see an increase in effort if the reduced minimum size influences more anglers to take trips or to take more trips relative to the no action alternative. As noted above, under the 24" minimum size restrictions an angler was not likely to catch his full possession limit of GOM cod, which may affect some anglers' likelihood of taking a trip. Alternately, under a 19" minimum size limit an angler may be expected to have a greater likelihood of bringing home the full

possession limit on a given trip, which may attract additional effort from the private recreational and charter/party fisheries relative to the no action alternative. An increase in effort in the recreational fishery for GOM cod could also result in increased catch of other stocks caught recreationally, like GOM haddock. However, any increase in effort would be expected to be minimal. Furthermore, other recreationally-caught groundfish are also managed under ACLs and, in the case of haddock, a recreational sub-ACL, and AMs that would be triggered if an ACL is exceeded.

Given that there is some uncertainty in the actual changes in recreational catch and effort that may be expected as a result of the proposed action, the proposed action would be more likely to achieve the needed mortality reduction in the recreational fishery to reduce overfishing in FY 2012, relative to the no action alternative. The proposed action would reduce the likelihood that this component will exceed its interim FY 2012 sub-ACL and cause further damage to the resource. Although the proposed action may increase recreational fishing effort, which may increase catches of other species caught recreationally, any increased effort would be expected to be minimal and would be mitigated by mortality controls in place for other species. Thus, the proposed action would be expected to have low positive biological impacts compared to the no action alternative.

6.2 IMPACTS ON ENDANGERED AND OTHER PROTECTED SPECIES

No Action

Under the no action alternative, there would be no change to the recreational minimum fish size or possession limit for GOM cod. The commercial Northeast/Mid-Atlantic bottom longline/hook-and-line fishery is classified in the 2011 List of Fisheries as a Category III gear, which has a remote likelihood of, or no known incidental mortality and serious injury of marine mammals. There were no observed reports of interactions between longline gear and marine mammals in FY 2009 and FY 2010 (see section 6.4.4 of the Framework 47 EA). Similarly, documented interactions of sea turtles and Atlantic sturgeon described in section 6.4.4 of the Framework 47 EA do not involve hook and line gear. As this available information indicates, interactions between the recreational hook and line fishery and protected resources are rare. Given that recreational fishery effort would not be expected to change under the no action alternative, impacts to protected resources would be expected to be negligible.

Proposed Action (Preferred Alternative)

Under the proposed action, the GOM cod recreational minimum fish size would be decreased to 19” and the possession limit would be decreased to 9 fish per angler per day. The combination of these two measures would be expected to result in an overall reduction in mortality of GOM cod resulting from the recreational fishery, because it would result in fewer recreational discards. These measures may also result in a slight increase in effort, however, when compared to the no action alternative, if more anglers are inclined to take a trip because of the reduced minimum

size restriction and the ability to turn more of their discards into landings. However, interactions between the recreational fishery and protected resources are rare. Therefore, a slight increase in effort that may result from the proposed action would be expected to have negligible impacts to protected resources.

6.3 PHYSICAL ENVIRONMENT/HABITAT/EFH IMPACTS

No Action

Under the no action alternative, there would be no change to the recreational minimum fish size or possession limit for GOM cod. Hook and line gear, in this case with rod and reels, does not impact EFH to the same degree as other gear used to harvest groundfish. Hook and line gear would be expected to have less impact than other fixed gear (such as bottom longline) which have medium to low impacts, because hook and line gear does not use anchors or lead lines (see section 6.1.4.6 of Framework 47). Under the no action alternative, recreational fishing effort would not be expected to change and, consequently, associated impacts to EFH would be expected to be negligible.

Propose Action (Preferred Alternative)

Under the proposed action, the GOM cod recreational minimum fish size would be decreased to 19” and the possession limit would be decreased to 9 fish per angler per day. The combination of these two measures would be expected to result in an overall reduction in mortality of GOM cod resulting from the recreational fishery, because it would result in fewer recreational discards. These measures may also result in a slight increase in effort, however, when compared to the no action alternative, if more anglers are attracted to the GOM cod fishery by the 19” minimum size restriction and the ability to turn more of their discards into landings. Because rod and reel gear has minimal interaction with habitat, however, impacts to EFH resulting from the proposed action would be expected to be negligible.

6.4 HUMAN COMMUNITIES/ECONOMIC/SOCIAL ENVIRONMENT IMPACTS

Economic Impacts

No Action

Under the no action alternative, there would be no change to the recreational minimum fish size or possession limit for GOM cod. Maintaining the current management measures may be expected to produce similar recreational effort and associated revenues as in previous fishing years. However, the interim FY 2012 recreational GOM cod sub-ACL of 2,215 mt represents a 14.8% reduction from the 2,600 mt the recreational fishery is projected to catch under the existing recreational measures in 2011. Under the no action alternative, the recreational fishery would be expected to achieve catches similar to previous fishing years, increasing the likelihood that the recreational fishery would exceed its interim FY 2012 sub-ACL and trigger restrictive

accountability measures in future fishing years, resulting in negative economic impacts over the long term. In addition, if maintaining the current management measures result in catch trajectories that indicate the recreational fishery will likely exceed its interim FY 2012 sub-ACL, even more restrictive management measures than those considered in the proposed action may be implemented when the interim action is renewed mid-season that may result in negative economic impacts in FY 2012 compared to the proposed action. Thus, the no action alternative would be expected to result in low negative economic impacts to fishery participants and their communities when compared to the proposed action.

Proposed Action (Preferred Alternative)

The proposed action would directly affect recreational anglers and have an indirect impact on charter/party operators through a potential change in passenger demand for charter/party fishing trips. It is possible that the 1 fish reduction in the possession limit could decrease satisfaction for some anglers, thereby reducing their likelihood of making a private recreational or charter/party trip. However, as noted previously, few anglers catch the full 10 cod allowable at the current 24" minimum size. With 20% of cod releases in recent years measuring between 20" and 24", a 19" minimum size may be expected to turn more of these discards into landings and allow more anglers to catch their full possession limit. Thus, as the NEFSC projection model showed, the proposed action is likely to result in an overall slight increase in effort by increasing angler satisfaction and adding value to recreational trips for private anglers and charter/party customers. This overall increase in effort may be expected to result in a slight increase in revenue for charter/party operators and businesses associated with both the private recreational and charter/party fishery, if increased angler satisfaction increases charter/party and private recreational trips. Furthermore, these measures reduce the likelihood that recreational catches will exceed the interim FY 2012 sub-ACL, triggering more restrictive measures in future years that may bring about negative economic impacts over the long term. Therefore, the proposed action would be expected to result in low positive economic impacts to fishery participants and their communities relative to the no action alternative.

Social Impacts

No Action

Under the no action alternative, there would be no change to the recreational minimum fish size or possession limit for GOM cod. Maintaining the current management measures would be unlikely to change perceptions of the management program. Even if the minimum fish size and possession limit remain unchanged, the recreational fishery would still be restricted to the reduced interim FY 2012 sub-ACL, if it is approved, and accountability measures if that interim sub-ACL is exceeded. Maintaining the current measures may alleviate concerns that some charter/party fishery participants may have that a reduced possession limit will lead to fewer customers. However, maintaining the current management measures would also increase the likelihood that the recreational fishery would exceed its interim FY 2012 sub-ACL and trigger

restrictive accountability measures in future fishing years. If the sub-ACL is exceeded and AMs are implemented, or more restrictive measures to prevent the sub-ACL from being exceeded are implemented when the interim action is renewed mid-season, the management program may be perceived to be ineffective and fishery participants may lose faith in the management process. Thus, the social impacts resulting from the no action alternative would be expected to be negligible when compared to the proposed action.

Proposed Action (Preferred Alternative)

The proposed action would directly affect recreational anglers and have an indirect impact on charter/party operators through a potential change in passenger demand for charter/party fishing trips. It is possible that the 1 fish reduction in the possession limit could decrease satisfaction for some anglers, thereby reducing their likelihood of making a private recreational or charter/party trip. However, as noted previously, few anglers catch the full 10 cod allowable at the current 24" minimum size. With 20% of cod releases in recent years being between 20" and 24", a 19" minimum size may be expected to turn more of these discards into landings and allow more anglers to catch their full possession limit. Thus, the proposed action is likely to result in an overall increase in effort by increasing angler satisfaction and adding value to recreational trips for private anglers and charter/party customers. Furthermore, this suite of measures has received the support of the Council's Recreational Advisory Panel over other measures that might have been considered to reduce recreational mortality and achieve the interim FY 2012 recreational sub-ACL. The proposed action may be expected to reduce the likelihood to the recreational fishery exceeding its interim FY 2012 sub-ACL and triggering AMs in future fishing years. If these management measures prove effective at achieving the interim FY 2012 sub-ACL, fishery participants may have a better view of the effectiveness of the management process relative to the no action alternative. Therefore, the social impacts resulting from the no action alternative would be expected to be low positive relative to the no action alternative.

7.0 CUMULATIVE EFFECTS ANALYSIS

7.1 INTRODUCTION

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

This CEA assesses the combined impact of the direct and indirect effects of the proposed recreational measures with the impact from the past, present, and reasonably foreseeable future fishing actions, as well as factors external to the multispecies fishery that affect the physical, biological, and socioeconomic resource components of the groundfish environment. This analysis is focused on the VECs (see below) and because this action is supplementing the final Framework 47 EA, it relies heavily on the analysis contained in the attached final Framework 47 EA.

Valued Ecosystem Components (VECs): As noted in section 4.0 (Affected Environment), the VECs that exist within the groundfish fishery are identified and include the following:

- Target species
- Other species (incidental catch and bycatch);
- Habitat, including non-fishing effects; and
- Endangered and other protected species;
- Human Communities (includes economic and social effects on the fishery and fishing communities).

Temporal and Geographic Scope of the Analysis: While the effects of historical fisheries are considered, the temporal scope of past and present actions for target species, other species, habitat/EFH and the human environment is primarily focused on actions that have taken place since implementation of the initial NE Multispecies FMP in 1977. An assessment using this timeframe demonstrates the changes to resources and the human environment that have resulted through management under the Council process and through U.S. prosecution of the fishery, rather than foreign fleets. For endangered and other protected species, the context is largely focused on the 1980s and 1990s, when NMFS began generating stock assessments for marine mammals and turtles that inhabit waters of the U.S. EEZ. The CEA examines future actions through April 30, 2013, the end of FY 2012 and the period of approval for this action. Therefore, the cumulative effects will need to be reassessed as part of the NEPA action taken for FY 2013 and beyond. While the effects of historical fisheries are considered, the temporal scope of past and present actions for target species, other species, habitat/EFH and the human environment is primarily focused on actions that have taken place since implementation of the initial NE Multispecies FMP in 1977. An assessment using this timeframe demonstrates the changes to resources and the human environment that have resulted through management under the Council process and through U.S. prosecution of the fishery, rather than foreign fleets. For endangered and other protected species, the context is largely focused on the 1980s and 1990s, when NMFS began generating stock assessments for marine mammals and turtles that inhabit waters of the U.S. EEZ.

The geographic scope of the analysis of impacts to habitat, target species and other species for this action is the total range of these VECs in the Western Atlantic Ocean, as described in the Affected Environment section of the final Framework 47 EA (Section 6.0) supplemented by Section 5.0 of this supplemental EA. However, the analyses of impacts presented in this supplemental EA focuses primarily on actions related to the recreational harvest of GOM cod and other managed groundfish 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.

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 the human environment is defined as those primary and secondary ports bordering the range of the groundfish fishery that operates, at least in part, within the GOM from the U.S.-Canada border to, and including, Cape Cod Massachusetts (Section 6.0 of Framework 47; NEFMC, 2012).

Evaluation Criteria: This EA evaluates the potential impacts of past, present, and reasonably foreseeable future actions using the criteria outlined in Table 8 on page 20. Impacts from all alternatives are judged relative to the baseline conditions, as described in Section 6.0 of Framework 47 and Section 5.0 of this supplemental EA and summarized again in Table 10, and compared to each other.

A CEA 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 (note – the baseline condition consists of the present condition of the VECs plus the combined effects of past, present and reasonably foreseeable future actions); PLUS (3) impacts from the proposed action.

7.2 PAST, PRESENT AND REASONABLY FORESEEABLE FUTURE ACTIONS

A summary of the effects of past, present and reasonably foreseeable future actions is presented immediately below. A thorough summary of the primary past, present, and reasonably foreseeable future actions effecting this interim action can be found in Section 7.6 and Appendix I of the Framework 47 EA (NEFMC 2012), including other previous actions taken in the NE Multispecies FMP. The baseline conditions of the resources and human community are also summarized here, although it is important to note that beyond the stocks managed under this FMP and protected species, quantitative metrics for the baseline conditions are not available. Finally, a brief summary of the impacts from the alternatives contained in this supplemental EA

is included. The culmination of all these factors is considered when making the cumulative effects assessment.

Most of the actions affecting this supplemental EA come from fishery-related activities (e.g., Federal fishery management actions). As expected, these activities have fairly straightforward effects on environmental conditions, and were, are, or will be taken, in large part, to improve those conditions. MSA stipulates that management comply with a set of National Standards that collectively serve to optimize the conditions of the human environment. Under this regulatory regime, the cumulative impacts of past, present, and future Federal fishery management actions on the VECs should be expected to result in positive long-term outcomes. Nevertheless, these actions are often associated with offsetting impacts. For example, constraining fishing effort frequently results in negative short-term socio-economic impacts for fishery participants. However, these impacts are usually necessary to bring about long-term sustainability of a given resource and as such, should, in the long-term, promote positive effects on human communities, especially those that are economically dependent upon the managed resource.

Non-fishing activities were also considered when determining the combined effects from past, present and reasonably foreseeable future actions. Activities that have meaningful effects on the VECs include the introduction of chemical pollutants, sewage, changes in water temperature, salinity, dissolved oxygen, and suspended sediment into the marine environment. These activities pose a risk to the all of the identified VECs in the long term. Human induced non-fishing activities that affect the VECs under consideration in this document are those that tend to be concentrated in near shore areas. Examples of these activities include, but are not limited to agriculture, port maintenance, beach nourishment, coastal development, marine transportation, marine mining, dredging and the disposal of dredged material. Wherever these activities 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 9. Summary effects of past, present and reasonably foreseeable future actions on the VECs (based on actions listed in Appendix I of Framework 47)

VEC	Past Actions	Present Actions	Reasonably Foreseeable Future Actions	Combined Effects of Past, Present, Future Actions
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Target Species	Mixed Combined effects of past actions have decreased effort and improved habitat protection however, some stocks remain overfished	Positive Current regulations continue to manage for sustainable stocks	Positive Future actions are anticipated to continue rebuilding and strive to maintain sustainable stocks	Short-term Negative Several stocks are currently overfished, have overfishing occurring, or both Positive Stocks are being managed to attain rebuilt status
Other Species	Positive Combined effects of past actions have decreased effort and improved habitat protection	Positive Current regulations continue to manage for sustainable stocks, thus controlling effort on direct and discard/bycatch species	Positive Future actions are anticipated to continue rebuilding and thus limit the take of discards/bycatch	Positive Continued management of directed stocks will also control incidental catch/bycatch
Endangered and Other Protected Species	Positive Combined effects of past fishery actions have reduced effort and thus interactions with protected resources	Positive Current regulations continue to control effort, thus reducing opportunities for interactions	Mixed Future regulations will likely control effort and thus protected species interactions, but as stocks improve, effort will likely increase, possibly increasing interactions	Positive Continued effort controls along with past regulations will likely help stabilize protected species interactions
Habitat	Mixed 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	Mixed Effort reductions and better control of non-fishing activities have been positive but fishing activities and non-fishing activities continue to reduce habitat quality	Mixed Future regulations will likely control effort and thus habitat impacts but as stocks improve, effort will likely increase along with additional non-fishing activities	Mixed Continued fisheries management will likely control effort and thus fishery related habitat impacts but fishery and non-fishery related activities will continue to reduce habitat quality
Human Communities	Mixed Fishery resources have supported	Mixed Fishery resources continue to support communities but	Short-term Negative As effort controls are maintained or	Short-term Negative Lower revenues would likely continue until stocks are fully

	profitable industries and communities but increasing effort controls have curtailed fishing opportunities	increasing effort controls combined with non-fishing impacts such as rising fuel costs have had a negative economic impact	strengthened, economic impacts will be negative Long-term Positive As stocks improve, effort will likely increase which would have a positive impact	rebuilt Long-term Positive Sustainable resources should support viable communities and economies
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Impact Definitions:

- Target species, other species, Endangered and Other Protected Species: positive=actions that increase stock size and negative=actions that decrease stock size
- Habitat: positive=actions that improve or reduce disturbance of habitat and negative=actions that degrade or increase disturbance of habitat
- Human Communities: positive=actions that increase revenue and well being of fishermen and/or associated businesses and negative=actions that decrease revenue and well being of fishermen and/or associated businesses

Baseline Conditions for Resources and Human Communities

For the purposes of a CEA, the baseline conditions for resources and human communities is considered the present condition of the VECs plus the combined effects of the past, present, and reasonably foreseeable future actions. Table 10 below illustrates the baseline conditions found as part of the final Framework 47 EA cumulative effects analysis. Please refer to the cumulative effects assessment in Section 7.6.3 of the final Framework 47EA (NEFMC 2012) to review a complete summary of the baseline conditions for each VEC.

Table 10. Summary of Baseline Conditions for each VEC

Valued Ecosystem Component	Cumulative Effects Assessment Baseline Condition
Target Species	Negative – Short term overharvesting in the past contributed to several stocks being overfished or where overfishing is occurring; Positive – Long term regulatory actions taken over time have reduced fishing effort and with the addition of Amendment 16, stocks are expected to rebuild in the future
Other Species	Positive – Although prior groundfish management measures likely contributed to redirecting effort onto non-groundfish species, as groundfish rebuild this pressure should lessen and all of these species are also managed through their own FMP.

Endangered and other protected species	Positive – Reduced gear encounters through effort reductions and additional management actions taken under the ESA and MMPA.
Habitat, including non-fishing effects	Mixed - Reduced habitat disturbance by fishing gear but impacts from non-fishing actions, such as global warming, could increase and have a negative impact.
Human Communities	Negative – Short term lower revenues would continue until stocks are sustainable. Positive – Long term sustainable resources should support viable communities and economies.

7.3 SUMMARY OF THE IMPACTS FROM THE PROPOSED ACTION

The proposed action would revise the minimum size restriction and possession limit for GOM cod for the private recreational and charter/party fishery for FY 2012. The proposed reduction in the minimum size to 19” and reduction in the possession limit to 9 fish per angler per day would achieve recreational catch levels consistent with the requirement to reduce overfishing in FY 2012. The lower possession limit coupled with the lower minimum size restriction for GOM cod may result in lower GOM cod mortality, reducing overfishing. The lower minimum size may result in slightly greater fishing effort and greater catch of other stocks in addition to GOM cod that are caught concurrently. However, the proposed action would be expected to have net low positive biological impacts compared to the no action alternative. An increase in fishing effort would not be expected to increase interactions of recreational fishing gear with protected resources or habitat, because the recreational fishery does not interact with these VECs like other groundfish gear. Finally, the slight increase in effort may result in a slight increase in revenue for charter/party operators and associated businesses, if it results in an increase in private recreational and charter/party trips.

7.4 SUMMARY OF THE CUMULATIVE EFFECTS

The following analysis summarizes the cumulative effects on the VECs identified in this section through the consideration of past, present, and reasonably foreseeable future actions in combination with the baseline condition for resources and human communities and impacts from the proposed action.

Target and Other Species

As found in the cumulative effects analysis for the final Framework 47 EA (NEFMC 2012), the long-term trend in this fishery has been positive for cumulative impacts to target species. While several groundfish species remain overfished or overfishing is occurring, substantial effort reductions since implementation of the NE Multispecies FMP have allowed several stocks to rebuild and the rebuilding process for others is underway. In the case of GOM cod, effort reductions have yielded positive impacts in that this stock continues to grow, though more slowly than initially thought, as shown in the most recent benchmark assessment (NEFSC, 2012). Although that assessment also revealed that, contrary to previous thought, the exploitation rate for this stock in recent years has been above the overfishing threshold, the proposed action as part of the FY 2012 interim action would reduce overfishing on GOM cod in the Northeast multispecies fishery while the Council develops measures to eliminate the overfishing in future fishing years. Thus, the cumulative effect of this action is expected to continue to rebuild the GOM cod stock, with no anticipated significant impacts. Because GOM cod is caught recreationally along with other desirable groundfish species, the slight increase in effort that might result from the proposed action may also increase effort on other stocks, such as GOM haddock. However, most fish caught recreationally in the GOM are under management plans and are constrained through catch limits implemented through past actions. Therefore, the combination of past actions with the proposed action would continue the sustainable harvest of other regulated species and would not be expected to result in any significant cumulative effects.

Endangered and Other Protected Species

Historically, the implementation of FMPs has resulted in reductions in fishing effort and as a result, past fishery management actions are thought to have had a slightly positive impact on strategies to protect protected species. Gear entanglement continues to be a source of injury or mortality, resulting in some adverse effects on most protected species to varying degrees. As summarized in Section 7.6.5 of Framework 47, the current management measures, including those implemented through Amendment 16 and expected to continue to control effort and catch and, as a result, to reduce interactions with protected resources. The actions proposed in Framework 47 are expected to continue this trend. As stock rebuild to sustainable levels, future actions may lead to increased effort, which may increase potential interactions with protected resources in the fishery overall. However, interactions between the recreational fishery and protected resources are rare, so the cumulative result of these actions to meet mortality objectives, in combination with past, present, and reasonably foreseeable future actions, would not be expected to result in any significant cumulative effects.

Habitat Including Non-fishing Effects

While the impact analysis in this action is focused on direct and indirect impacts to habitat and EFH, there are a number of non-fishing impacts that must be considered when assessing

cumulative impacts. Many of these activities are concentrated near-shore and likely work either additively or synergistically to decrease habitat quality. Other non-fishing factors such as climate change and ocean acidification are also thought to play a role in the degradation of habitat. The effects of these actions, combined with impacts resulting from years of commercial fishing activity, have negatively affected habitat and EFH. However, the general trend in fisheries management toward effort reductions, particularly with the implementation of Amendment 16, has yielded positive impacts to habitat and EFH. Furthermore, gear used in the recreational fishery does not interact with habitat as other groundfish gears do and thus, impacts from the proposed action were found to be negligible. Based on this rationale, when considered with past, present and reasonably foreseeable future actions, the cumulative impacts from the proposed action would not be significant.

Human Communities

Past management actions have had significant negative impacts on communities that depend on the groundfish fishery, particularly as a result of decreases in revenue. Although special programs implemented through Amendment 13 and subsequent framework actions have provided the industry additional opportunities to target healthier groundfish stocks, substantial increases in landings and revenue will likely not take place until further stock rebuilding occurs under the Amendment 16 rebuilding plans. Current management measures will maintain effort and catch limit controls, which together with non-fishing impacts such as rising fuel costs have had significant negative short term economic impacts on human communities. The specifications proposed in Framework 47 are expected to have long-term positive impacts to human communities as they promote stock rebuilding, but in the short-term revenues are mixed compared to what would otherwise be expected. Slightly increased ACLs for some stocks could have positive social impacts, however, these will be tempered by reductions in ACLs for other stocks and overall greater fishing effort is not likely. Framework 47 is expected to result in slightly decreased revenue in the short term that will compound the significant negative economic impact on the fishing industry from past actions, though not beyond levels anticipated in Amendment 16. The proposed action analyzed in this supplemental EA would be expected to result in a slight increase in effort in the recreational fishery, which may result in a slight increase in revenue for associated businesses, including charter/party operators, and their communities. While helpful, this increase would not offset the substantial revenue reductions of the past, particularly as a result of Amendments 13 and 16. Therefore, the cumulative impact of this action in conjunction with other past, present and reasonably future actions would likely do little to offset the trend of significant negative impacts on communities until future stock rebuilding occurs.

8.0 LIST OF PREPARERS AND PERSONS/AGENCIES CONSULTED

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9.0 COMPLIANCE WITH APPLICABLE LAWS AND EXECUTIVE ORDERS

9.1 MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT (MAGNUSON-STEVENSONS ACT)

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

and the maximum benefits possible accrue to the ports and communities that depend on these fisheries and the Nation as a whole.

The proposed action would comply with all elements of the Magnuson-Stevens Act, including the National Standards, and the NE Multispecies FMP. This action is being taken in response to the decision by NMFS to take interim action to implement revised FY 2012 GOM cod catch limits. The final Framework 47 EA, completed prior to the development of a revised FY 2012 GOM cod catch limit and recreational management measures, and prior to the Framework 47 proposed rule, which is expected to be published in the Federal Register in March 2012, did not contain an analysis of the revised recreational fishery measures that would be necessary to meet the interim catch limits. Therefore, this supplemental EA analyzes the impacts of the revised recreational fishery measures for GOM cod, in compliance with applicable laws requiring an analysis of proposed measures.

The revised recreational fishery measures would be implemented based upon Secretarial interim authority specified in section 305(c) of the Magnuson-Stevens Act through an interim final rule that would implement interim FY 2012 GOM cod ACLs. If the Secretary finds that overfishing exists or that interim measures are needed to reduce overfishing, Section 305(c) of the Magnuson-Stevens Act authorizes him to promulgate interim measures necessary to address the overfishing for any fishery.

Consistent with interpretation of section 304(e)(6) of the Magnuson-Stevens Act, NMFS is taking interim action to reduce overfishing on GOM cod in FY 2012, including revising FY 2012 GOM cod catch limits and revising recreational fishery measures to be consistent with these catch limits, to prevent further damage to the stock and to bring the FMP into compliance with the Magnuson-Stevens Act. The SARC 53 assessment results show that GOM cod is undergoing continued overfishing and that the Framework 44 specifications for this stock for FY 2012 that would take effect in absence of Council or Secretarial action, would continue or further exacerbate this overfishing. The interim action would set an overall FY 2012 ACL, as well as interim sub-ACLs for the recreational and commercial fisheries, including a revised common pool sub-ACL and sector sub-ACL. Based on the FY 2012 sub-ACL for the recreational fishery that would result from the interim FY 2012 GOM cod ACL under consideration, NMFS is also revising the current measures in the recreational GOM cod fishery to restrict recreational catch at or below the interim FY 2012 recreational sub-ACL. The interim FY 2012 recreational GOM cod sub-ACL that would result from a 6,700 mt overall ACL, which is under consideration in the interim action, would be 2,215 mt. This represents a 14.8% reduction from the 2,600 mt the recreational fishery is projected to catch under the existing recreational measures in 2011.

Unlike the commercial NE multispecies fisheries, which fish under cooperative allocations that are formulaically based on the commercial fishery sub-ACL or which the Regional Administrator has the authority to manage inseason, measures to control catch in the recreational fishery are revised through Council action. Although Framework 47 considered a range of possible catch levels for GOM cod, including some that would be a reduction from recent catch levels and likely require adjustments to recreational management measures to reduce effort, sufficient information was not available to the Council in time to develop a range of recreational management measures to include in Framework 47. The benchmark assessment peer review was not completed until December 2011, after the November 2011 Council meeting when the Council was scheduled to take final action and vote on the framework. Recreational measures require extensive analysis, including information from the most recent assessment, to identify the combination of measures that will likely achieve the catches allowed by the recreational sub-ACL. Thus, a range of recreational measures based on such a wide range of possible specifications as was considered in Framework 47 could not be devised before results were available from the benchmark assessment, which was not completed until after the Council had to take final action in order for Framework 47 to be effective, if approved, in time for FY 2012. As a result, the Council requested that NMFS include revisions to recreational measures, if necessary, in an interim action for FY 2012. Because recreational measures were not considered in Framework 47, the adjustments to recreational measures under consideration in the interim action are analyzed in this supplemental EA.

There are no adverse impacts associated with this action, so no EFH assessment or EFH consultation is required, as determined by a Habitat Conservation Division Review (March 8, 2012).

9.2 ENDANGERED SPECIES ACT (ESA)

On February 3, 2012, NMFS published final rules listing the Gulf of Maine distinct population segment (DPS) of Atlantic sturgeon as threatened, and listing the New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon as endangered, effective April 6, 2012. Preliminary analysis indicates that multiple Atlantic sturgeon DPSs may be affected by the continued operation of the NE multispecies fishery and formal consultation under Section 7 of the ESA has been reinitiated and is ongoing for the NE multispecies fishery. The previous Biological Opinion for the NE multispecies fishery completed in October 2010 concluded that the actions considered would not jeopardize the continued existence of any listed species. This Biological Opinion will be updated and additional evaluation will be included to describe any impacts of the NE multispecies fishery on Atlantic sturgeon DPSs and define any measures

needed to mitigate those impacts, if necessary. It is anticipated that any measures, terms and conditions included in an updated Biological Opinion will further reduce impacts to the species. It is expected that the completion of the Biological Opinion will occur before the beginning of the 2012 NE multispecies fishing year on May 1, 2012. NMFS has determined that continued operation of the fishery during the consultation period is not likely to jeopardize the continued existence of listed species.

As described in Section 6.4.4 of Framework 47, Atlantic sturgeon are known to be captured in sink gillnet, drift gillnet, and otter trawl gear. As discussed in Section 6.2 in this supplemental EA, hook and line gear used in the recreational multispecies fishery rarely interacts with protected resources, if at all, and, as a result, impacts of the proposed action on protected resources are expected to be negligible. This supports the conclusion that the multispecies recreational fishery is not likely to interact with Atlantic sturgeon from now until the time when the Biological Opinion will be completed and, furthermore, the magnitude of that interaction during the timeframe of interest is not likely to cause an appreciable reduction in survival and recovery based on the current assessments of each DPS.

9.3 MARINE MAMMAL PROTECTION ACT (MMPA)

NMFS has reviewed the impacts of Framework 47 and the revised interim FY 2012 recreational management measures on marine mammals and concluded that the measures are consistent with the provisions of the MMPA and would not alter existing measures to protect the species likely to inhabit the management unit of the NE multispecies FMP. For further information on the potential impacts of the proposed management action on marine mammals, see Section 6.2.

9.4 NATIONAL ENVIRONMENTAL POLICY ACT

9.4.1 FONSI

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. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 states that the significance of an action should be analyzed both in terms of “context” and “intensity.” Each criterion listed below is relevant in making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ’s context and intensity criteria. These include:

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

Response: The proposed action described in the supplemental EA would not jeopardize the sustainability of the target species affected by the action (GOM cod), because the measures are designed to reduce mortality resulting from the recreational fishery and, thus, are expected to result low positive biological impacts, as discussed in Section 6.1.

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

Response: The proposed action described in the supplemental EA is not expected to jeopardize the sustainability of any non-target species. Any increased mortality of these stocks that might result from increased effort would be mitigated by mortality controls in place for these species and would be expected to be minimal. The biological impacts of the proposed action are analyzed in Section 6.1.

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

Response: The proposed action described in the supplemental EA is not expected to allow substantial damage to the ocean and coastal habitats and/or Essential Fish Habitat (EFH) as defined under the Magnuson-Stevens Act and identified in the FMP. Because rod and reel gear has minimal interaction with habitat, however, impacts to EFH resulting from the proposed action would be expected to be negligible. The physical environmental/habitat impacts of the proposed action are analyzed in Section 6.3.

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

Response: The proposed action described in the supplemental EA is not expected to have a substantial adverse impact on public health and safety. The ability for anglers to turn more of their discards into landings and catch their possession limit sooner under the proposed action may actually lead to shorter trips and enable additional flexibility regarding when fishing trips can be planned. Safety could be enhanced if such flexibility enables anglers to fish during more optimal weather conditions.

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

Response: As discussed in Section 6.2 in this supplemental EA, hook and line gear used in the recreational multispecies fishery rarely interacts with protected resources or habitat, if at all, and, as a result, impacts of the proposed action on protected resources are expected to be negligible.

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 described in the supplemental EA is not expected to have a substantial impact on biodiversity and ecosystem function within the Gulf of Maine. The use of ACLs will tightly control catches of target and incidental regulated groundfish stocks. Catches of target and incidental catch species under this program will be consistent with the mortality targets for those stocks established by Amendment 16 and modified through Framework 44, Framework 45, and Framework 47, and thus will not have a substantial impact on predator-prey relationships or biodiversity. This action will have no

more than minimal adverse impacts to EFH, because recreational hook and line gear do not interact with habitat. It is, therefore, reasonable to expect that there will not be substantial impact on biodiversity or ecosystem function.

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

Response: The supplemental EA documents that no significant natural or physical effects will result from the implementation of the proposed action. The proposed action is designed to reduce recreational fishing mortality to be consistent with the interim FY 2012 recreational sub-ACL to reduce overfishing on GOM cod and allow continued rebuilding of this stock. As described in Section 6.1, the action is expected to result in a low positive biological impact by reducing overfishing on GOM cod and would not be expected to more than minimally increase mortality on other stocks caught recreationally. The action cannot be reasonably expected to have a substantial impact on protected species or habitat (see Sections 6.2 and 6.3), as the impacts are expected to fall within the range of those resulting from Amendment 16. The action's potential economic and social impacts are also addressed in the supplemental EA (see Section 6.4).

NMFS has determined that despite the potential socio-economic impacts resulting from this action, there is no need to prepare an EIS. The purpose of NEPA is to protect the environment by requiring federal agencies to consider the impacts of their proposed action on the human environment, defined as "the natural and physical environment and the relationship of the people with that environment." This supplemental EA describes and analyzes the proposed measures and alternatives and concludes there will be no significant impacts to the natural and physical environment. While some fishermen, shore-side businesses and others may experience impacts to their livelihood, these impacts in and of themselves do not require the preparation of an EIS, as supported by NEPA's implementing regulations at 40 C.F.R. 1508.14. Consequently, because the supplemental EA demonstrates that the action's potential natural and physical impacts are not significant, the execution of a FONSI remains appropriate under Criteria 7.

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

Response: The effects of the proposed action for the supplemental EA on the quality of human environment are not expected to be highly controversial. The public is aware of the revised interim FY 2012 measures under consideration for GOM cod, including the recreational measures contemplated in the proposed action for the supplemental EA, as they were openly discussed at public meetings held by NMFS and by the New England Fishery Management Council in December 2011 and February 2012. The proposed action would not modify any of the measures proposed by Framework 47. The proposed action is not expected to negatively impact habitat, target and non-target species, protected resources, or the human environment as described in Sections 6.1 through 6.4.

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

Response: The proposed action cannot be reasonably expected to result in substantial impacts to unique areas or ecological critical areas. There are no known parkland, prime farmlands, wetlands, or wild scenic rivers in the affected area. Vessel operations around the unique historical and cultural resources encompassed by the Stellwagen Bank National Marine Sanctuary would not likely be altered by this action. Although recreational vessels are allowed to fish inside HAPC with hook and line gear, impacts to habitat from recreational gear are minimal (see Section 6.3). As a result, no substantial impacts are expected from this action.

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

Response: The effects of the proposed action described in the supplemental EA on the human environment are not expected to be highly uncertain or involve unique or unknown risks. Anglers fishing for GOM cod will primarily use hook and line gear and maintain traditional fishing practices which will have no greater impact on habitat, protected species, and limit bycatch species as those conditions existing currently. The measures contemplated in this action are similar to those adopted in past management actions, and these prior actions have reduced fishing mortality on many stocks and initiated stock rebuilding. While there is a degree of uncertainty over how fishermen will react to the proposed measures, the analytic tools used to evaluate the measures attempt to take that uncertainty into account and reflect the likely results as a range of possible outcomes. Overall, the impacts of the proposed action can be, and are, described with a relative amount of certainty. Therefore, the effects on the human environment are not uncertain or involve unique or unknown risks.

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

Response: The cumulative effects analysis presented in Section 7.0 of this supplemental EA considers the impacts of the proposed action in combination with relevant past, present, and reasonably foreseeable future actions and concludes that no significant cumulative impacts are expected from the approval of the revised recreational fishery measures for GOM cod. Since none of the cumulative impacts of the preferred alternatives in the final Framework 47 EA or the supplemental proposed action in this supplemental EA are considered significant, and the measures under Amendment 16 are environmentally preferred, Section 7.0 of this document concluded there are no significant cumulative impacts among these related actions. Further, the proposed action would not have any significant impacts when considered individually or in conjunction with any of the other actions presented in Section 7.0 (fishing related and non-fishing related).

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: The fishing operations would take place on ocean waters and would not affect any human communities on the adjacent shorelines. There are no known districts, sites, or highways in the area of the proposed action. The proposed action is not likely to affect objects listed in the National Register of Historic Places or cause significant impact to scientific, cultural, or historical resources. The only objects in the fishery area that are listed in the National Register of Historic Places are various ship wrecks.

However, vessels typically avoid fishing near wrecks to avoid tangling gear on the wreck. Therefore, this action would not result in any adverse effects to the wrecks. Due to the minimal impact on the human environment, the effect of the approval of the revised recreational fishery measures would not be significant on scientific, cultural, or historical resources.

13. *Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?*

Response: No non-indigenous species would be introduced during the proposed action because the increase in catch affect the scope of current fishing practices, and does not introduce new methods. No non-indigenous species would be used or transported during fishing activities. Therefore, the proposed action would not be expected to result in the introduction or spread of a non-indigenous species.

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

Response: No, the proposed action is not likely to establish precedent for future actions with significant effects. The proposed action adopts measures that are designed to react to the necessity to reduce fishing mortality for GOM cod in order to achieve mortality targets adopted by the FY 2012 interim rule. As such, these measures are designed to address a specific problem and are not intended to represent a decision about future management actions that may adopt different measures.

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: The proposed action is not expected to threaten a violation of federal, state, or local law or requirements imposed for the protection of the environment. Vessels fishing in the GOM are required to comply with all local, regional, and national laws and permitting requirements.

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: The proposed action is not expected to result in cumulative adverse effects that could have a substantial effect on target or non-target species. As stated in Section 6.1, impacts on GOM cod are expected to be low positive and impacts to other stocks are expected to be minimal.

DETERMINATION

In view of the information presented in the Framework 47 EA and this document, the analysis contained in the supporting EA prepared for the approval of revised recreational measures for GOM cod, it is hereby determined that the approval of the revised GOM cod recreational minimum size restriction and possession limit will not significantly impact the quality of the human environment as described above and in the supporting EA. In addition, all beneficial and adverse impacts of the proposed action have

been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environmental Impact Statement (EIS) for this action is not necessary.


Daniel S. Morris

3/13/12
Date

Acting Regional Administrator Northeast Region, NMFS

9.5 ADMINISTRATIVE PROCEDURE ACT (APA)

Section 553 of the APA establishes procedural requirements applicable to rulemaking by Federal agencies. The purpose of these requirements is to ensure public access to the Federal rulemaking process and to give the public adequate notice and opportunity for comment. Pursuant to 5 U.S.C. 553(b)(B), the Assistant Administrator finds good cause to waive prior notice and an opportunity for public comment on this action, as notice and comment would be impracticable and contrary to the public interest. There has been insufficient time to conduct notice-and-comment rulemaking for this action, arising from recent, unforeseen events. These events have complicated the timing and process for setting catch levels and management measures that normally occurs. As a result of these changes, NMFS has had to quickly conduct substantial and complex analyses to develop measures for rulemaking. These timing complications were unavoidable. The immediate benefits of the interim measures implemented by this rule outweigh the value of formal advance notice and public comment.

Though formal notice-and-comment rulemaking is not being conducted, unprecedented outreach discussions have occurred with the Council, public, and interested parties to explore what measures should be included in this interim action. A great deal of information has been shared by NMFS with these groups and input on the interim measures has been received from a wide range of stakeholders and interested parties. In the interim rule to be published in the Federal Register NMFS requests formal comment on these interim measures in anticipation of extending the measures later this fall to ensure management measures are in place for the entire fishing year.

The normal process for establishing ACLs for GOM cod was substantially impacted for the 2012 fishing year. In a typical process, the Council receives new scientific information by October and decisions on ACLs and any necessary changes to management measures would be voted on by the Council in November. By late December/early January of the following year, the Council's recommendation would be forwarded to NMFS for rulemaking. The Council would typically forward with its recommendation the comprehensive analyses necessary to satisfy all applicable laws, including NEPA. Notice-and-comment rulemaking would be conducted by

NMFS through the spring months and measures would be implemented for the May 1 start of the fishing year.

For the cycle leading into fishing year 2012, the Council and public knew that a new stock assessment for GOM cod was to be conducted in December 2011. The Council acknowledged that the assessment could differ from previous management advice and result in a wide range of catch recommendations; thus, it recommended a range for NMFS to consider in Framework Adjustment 47 to the FMP for implementation beginning on May 1, 2012. The Council had intended to receive the new assessment results in January 2012, evaluate this new information quickly, and finalize its catch and management measures recommendations to NMFS for the 2012 fishing year at its February 1, 2012, meeting. This would allow the Council to utilize the most recent stock assessment information in its recommendation to NMFS.

As previously stated in Section 2.0 of this supplemental EA, the new assessment markedly changed the understanding of the GOM cod stock. It is overfished and subject to overfishing, the rebuilding plan is not making adequate progress, and the stock is at a much lower level than previously believed. The magnitude of change in our understanding of the GOM cod stock was unforeseen. The previous assessment, conducted in 2008, had indicated that the GOM cod stock was growing and was expected to be rebuilt by 2014.

The GOM cod catch levels that would result from using the new assessment information, if applied by the Council to end overfishing, would result in very low catch levels for the 2012 fishing year. In light of the substantially changed stock information, the magnitude of negative economic impacts associated with very low catch levels, and a number of assessment-related topics the Council would like to explore further, the Council elected not to formally recommend a specific catch level to NMFS for the 2012 GOM cod fishery. Instead, in understanding that NMFS could utilize some limited authority to reduce, but not end overfishing, in the interim while the Council revisits the GOM cod rebuilding program design, the Council recommended a range of catch and requested NMFS implement interim measures for the 2012 fishing year. This specific request to utilize provisions of section 305(c) of the Magnuson-Stevens Act is consistent with NMFS policy guidelines for the use of emergency rules issued August 21, 1997 (62 FR 44421), as it is a request from the Council to address an emergency situation. Had the Council not taken such action, it would have been compelled to recommend very low catch levels for the 2012 fishing year, which in turn would have substantial negative economic impacts to the fishery participants and coastal communities in New England that rely on fishing-related revenues. The emergency, in the context of the Council's request, is for NMFS to apply the interim rulemaking provisions of section 305(c) to avoid the significant negative economic impacts to fishery participants and communities that would result from ending overfishing in fishing year 2012.

NMFS received the Council's recommended catch range of 6,700 to 7,500 mt at the February 1, 2012 meeting. NMFS began analysis of this range for consistency with the requirement to reduce overfishing, as well as conducted analysis of recreational measures that would be

appropriate for fishing at catch levels within this range. NMFS, in conjunction with the Council, held a GOM Cod Working Group meeting on February 10, 2012, in Portsmouth, NH. This group was chaired by the Acting Assistant Administrator for Fisheries. At this meeting, NMFS indicated that fishing at a level higher than 6,700 mt would likely not reduce overfishing on the GOM cod stock. NMFS discussed potential sub-ACLs that would result from fishing at 6,700 mt for the year as well as providing potential changes to the recreational management measures for discussion, should this catch level eventually be implemented. Though no formal recommendations were sought or provided, a great deal of public input was received during this meeting and through correspondence after the meeting. This input was very helpful for NMFS as the interim measures were further developed.

The typical analytical process that is used to inform development of catch and recreational measures spans from late August through late December. Because of the introduction of new and substantially changed GOM cod stock information, these analyses had to be conducted by NMFS within a few weeks' time to ensure that rulemaking-related analyses and development could be conducted and concluded in sufficient time for the start of the fishing year (May 1). Though the work and discussion were conducted as quickly as possible, it was not possible to do so in a manner that provided sufficient time for notice-and-comment rulemaking. NMFS is relying on the collaborative development process for the measures within this interim rule to have provided a meaningful opportunity to engage with the affected public prior to issuing interim measures.

Had NMFS been unable to implement measures for the May 1, 2012, start of the fishing year, the default measures from Framework Adjustment 44 to the FMP would have become effective (i.e., ACL = 8,551 mt). These measures would have increased overfishing on the GOM cod stock and, as such, are inconsistent with the Magnuson-Stevens Act, the stated intent of the GOM cod rebuilding program, and the FMP.

Advance notice of the catch levels and recreational measures in this interim rule are necessary so that fishery participants may plan accordingly; therefore, NMFS has elected not to waive the "cooling off" period of 30 days. Even had NMFS sought a waiver from 5 U.S.C. 553(d)(3) to waive the 30-day delay in effective date, it would not have been practicable to conduct notice-and-comment rulemaking for the reasons previously stated.

9.6 PAPERWORK REDUCTION ACT (PRA)

The purpose of the PRA is to control and, to the extent possible, minimize the paperwork burden for individuals, small businesses, nonprofit institutions, and other persons resulting from the collection of information by, or for, the Federal Government. PRA for data collections relating to the FMP have been considered and evaluated under Amendment 16 to the FMP and approved by the Office of Management and Budget (OMB). This action relies upon the existing collections, including those approved by the OMB under Amendment 16, and does not propose

to modify any existing collections or to add any new collections. Therefore, no review under the PRA is necessary for this action.

9.7 COASTAL ZONE MANAGEMENT ACT (CZMA)

Section 307(c)(1) of the CZMA requires that all Federal activities which affect any coastal use or resource be consistent with approved state coastal zone management programs (CZMP) to the maximum extent practicable. NMFS has reviewed the relevant enforceable policies of each coastal state in the NE region for this action and has determined that this action is incremental and repetitive, without any cumulative effects, and is consistent to the maximum extent practicable with the enforceable policies of the CZMP of the following states: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, and North Carolina. NMFS finds this action to be consistent with the enforceable policies to manage, preserve, and protect the coastal natural resources, including fish and wildlife, and to provide recreational opportunities through public access to waters off the coastal areas. Pursuant to the general consistency determination provision codified at 15 CFR 930.36(c), NMFS sent a general consistency determination applying to the current NE Multispecies FMP, and all routine Federal actions carried out in accordance with the FMP, to the following states: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, and North Carolina on October 21, 2009. North Carolina, Rhode Island, Virginia, Connecticut, New Hampshire, New Jersey, Delaware, and Pennsylvania have concurred with the general consistency determination. Consistency was inferred for those states that did not respond.

9.8 INFORMATION QUALITY ACT (IQA)

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

Utility

The information presented in this document is helpful to the intended users (the affected public) by presenting a clear description of the purpose and need of the proposed action, the measures proposed, and the impacts of those measures. A discussion of the reasons for selecting the proposed action is included so that intended users may have a full understanding of the proposed action and its implications.

The interim action, including the proposed actions in this document and the Framework 47 EA, establishes ACLs and recreational management measures for the fishing year 2012 (May 1, 2012-April 30, 2013) Atlantic cod fishery in the Gulf of Maine (GOM). The interim rule,

associated compliance guides, and other descriptive summaries of the rule, along with the comprehensive environmental assessment with this supplement are the information products in question. These products are all geared toward ensuring that the information, specifically the catch levels, recreational measures, and anticipated impacts environmental and economic impacts of both, are accessible, easily understood, and widely available in several formats. The aforementioned materials utilize plain language and utilize consistent naming conventions, terminology, and units of measures in an effort to maximize the helpfulness of the information for the intended users and interested parties. The interim rule provides detailed background of how the measures were derived by NOAA's National Marine Fisheries Service, working in close collaboration with the New England Fishery Management Council (Council), stakeholders, non-governmental organizations, and other interested parties.

The stock-level data used to inform the process for setting the ACLs are based on the most recent externally peer-reviewed assessment of the GOM cod stock. It is an improvement over previously available information; it is both more current and more detailed than the previous assessment conducted in 2008. The most recent assessment was developed through a rigorous process involving senior-level scientists from NMFS as well as experts in population dynamics and modeling from academia and industry-hired consultants. The Center for Independent Experts provided the rigorous peer review of the most recent assessment.

Unprecedented access to both the assessment information and the process used to decide on interim measures (ACLs and recreational management measures) was provided to the public and significant comment has been received and incorporated in the interim rule. The action contained within the interim rule was developed to be consistent with the FMP, the Magnuson-Stevens Fishery Conservation and Management Act (MSA), and other applicable laws, through a multi-stage process that was open to review and participation by affected members of the public and other interested parties.

The public had the opportunity to review and comment on the development of management measures during the a GOM cod working group meeting in Portsmouth, NH, on December 10, 2011, and again on February 10, 2012. In the interim between working group meetings, the Council, its Scientific and Statistical Committee, and Groundfish Oversight Committee met. The public was able to provide comment on potential measures for inclusion in the interim rule at all these meetings. In addition, the Council's Recreational Advisory Panel met in a public forum on February 10, 2012, and provided input on the interim measures as they were under development.

The public will have further opportunity to comment once NMFS publishes a request for comments on the interim rule measures in the Federal Register. The Federal Register notice will include a description of the measures and an abbreviated description of the agency's reasons for selecting the interim measures. The Federal Register notice that announces the interim rule, supporting analytical documents, and compliance guides will be made available in printed publication, on the website for the Northeast Regional Office (NERO), and on Regulations.gov.

These documents use consistent attribute naming and unit conventions. Technical jargon is avoided where possible, but when it must be included, it is familiar to the affected and interested public. The most recent stock assessment, including peer-review panel discussion papers, has been available for some time on NMFS's Northeast Fisheries Science Center's website.

Integrity

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

Objectivity

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

The catch levels established by the interim rule rely on the most recent, externally peer-reviewed stock assessment of GOM cod. The assessment itself was conducted by experts and specialists familiar with the core data sets, life history of the species, population dynamics, and statistical modeling as well as having extensive knowledge of the fishery. As such, the information used to develop the interim rule catch level represents the best available, most recent information for the GOM cod population.

Estimates of recreational data are in a transition period. NMFS is moving away from one survey type to another more robust, unbiased estimation survey design. This is the first year of the new methods availability. This has caused some complications, as in some instances, estimates of catch are different between the two survey types. This is the case for GOM cod. While there is little uncertainty that the newer survey represents a sizable advancement in recreational catch estimation and is the best available information, the full spectrum of data necessary for stock assessment and management needs is not yet complete as the new survey methods and data production is occurring in waves. This is necessary given the scope and scale of the changeover.

The interim rule uses some components of the older data system scaled to match the magnitude and directionality of change in the new estimates.

The analyses used to develop the recreational management alternatives are based on a newly developed, yet to be peer-reviewed modeling approach. The concept of this model has been vetted only through an academic dissertation review process. However, NMFS's authority for interim actions is limited to 180 days followed by one extension of up to 186 days. In the interim between the issuance of this interim and the extension necessary to provide a full-year of GOM cod measures, NMFS intends to conduct rigorous analysis of this new model, including some type of external peer review. Evaluation of this model will determine if it constitutes the best available approach for the full fishing year and if the measures implemented by the interim rule, including the proposed action in this document, are appropriate. Should either be found to be untrue, then NMFS will take action to implement alternative measures informed by an older, but previously tried method for the remainder of the fishing year to ensure the necessary reduction in catch is achieved. The public is well aware of the limitations, caveats, and concerns associated with the new modeling approach used to develop the interim rule measures. They are also aware that should the new approach be deemed as inappropriate or the model deemed inadequate for management advice, that changes in fishing measures for the second half of the fishing year may be necessary. In addition, work will continue on development and delivery of recreational estimates from the new survey design. NMFS will work to incorporate data that are available from this new survey method for development of the interim rule extension.

Clear distinctions have been drawn between policy choices and the supporting science upon which they are based. The biological reference points for the GOM cod stock are clearly articulated as are the outputs that result from conducting fishing at the levels permitted in the interim rule (i.e., the policy choice for catch). Supporting materials, information, data and analyses used within the interim rule are properly referenced. Many of these supporting documents are readily available on the Council or NERO web sites.

The policy choices are clearly articulated in Section 4.0 of this document, as the management alternatives considered in this supplemental EA. The supporting science and analyses, upon which the policy choices are based, are summarized and described, or incorporated by reference, in Sections 5 and 6 of this supplemental EA. All supporting materials, information, data, and analyses within this document have been, to the maximum extent practicable, properly referenced according to commonly accepted standards for scientific literature to ensure transparency.

Unprecedented communication and outreach efforts were conducted as part of the development of the interim rule and supporting documents. Presentations and discussions with the public clearly delineated the supporting science (i.e., the most recent stock assessment) and the policy choices developed to manage the fishing year 2012 GOM cod fishery. Extensive discussion

occurred with respect to flexibility under the Magnuson-Stevens Act for reducing but not immediately ending overfishing during the fishing year.

The review process for development of this action and associated documents involves staff from the Council, NMFS, Center, and NMFS headquarters. The Center's technical review is conducted by senior level scientists with specialties in fisheries ecology, population dynamics, and biology, as well as economics and social anthropology. Review by NERO is conducted by those with expertise in fisheries management and policy, habitat conservation, protected resources, and compliance with the applicable law. Final approval of the documents and clearance of the rule is conducted by staff at NMFS Headquarters, the Department of Commerce, and the U.S. Office of Management and Budget.

9.9 REGULATORY IMPACT REVIEW

9.9.1 Executive Order 12866

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

E.O. 12866 requires a review of proposed regulations to determine whether or not the expected effects would be significant, where a significant action is any regulatory action that may:

- Have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

The following discussion is limited to a determination of significance of the proposed action based solely on economic criteria. The proposed action will have measure economic impacts to permitted northeastern multispecies commercial fishing vessels resulting from an updated annual

catch level for the Gulf of Maine cod stock. Recreational fishing entities may also be affected, likely positively, but the economic impact of this is not measurable.

9.9.2 Summary of Impacts on Fishing Revenue

The proposed action affects only licensed party/charter recreational fishing businesses by lowering the minimum size limit for cod to 19 inches and lowers the bag limit from 10 fish to 9. Under the 19 inch minimum size, it is likely that more trips will achieve their bag limit than under the previous 24 inch minimum size. The model used for this analysis predicts that proposed action will result in roughly 14% of recreational trips catching their bag limit, vice only 1.5% estimated under current regulations (

Figure 7. Number of fish retained on individual fishing trips under Proposed Action (blue square) and baseline conditions (red diamond).

). If this leads to an increase in demand for recreational fishing opportunities, more anglers and/or angler trips should improve recreational fishing business profits. The model predicts roughly approximately a 5% increase in trips taken. The proposed action, therefore, is anticipated to have a positive impact on both recreational angler welfare and gross revenues from recreational fishing businesses.

Medium-term economic impacts are contingent upon the recreational fishery catch falling within the allocated sub-ACL. The analytic model predicts that the proposed action will achieve desired catch levels but it is sensitive to assumptions about the mortality of recreational fishing discards, specifically those in the B2 category in the Marine Recreational Information Program (MRIP). The current GOM cod assessment assumption of 100% discard mortality is used here. If this assumption were to change in future assessments, or if true discard mortality were to be substantially less than assumed discard mortality, then the proposed action may increase catch in the recreational fishery (

Figure 8. Model-predicted change in overall recreation fishing mortality under various MRIP B2 discard mortality assumptions.). Failure to keep catch within allocated sub-ACLs would lead to future regulatory changes that may adversely affect recreational fishing businesses.

Table 11. Party/charter fishing trips and participating vessels, 2007-2010 (source: NMFS VTR)

		2007	2008	2009	2010
	#trips	13,631	13,850	13,626	15,961
All party/charter	#vsls	283	306	313	332
Party/charter retaining at least 1 cod	#trips	5,009	5,039	5,068	6,315
	#vsls	225	242	250	285
At least 1 cod, fishing in the GOM cod stock area	#trips	4,488	4,270	4,184	4,441
	#vsls	159	150	154	148

Figure 7. Number of fish retained on individual fishing trips under Proposed Action (blue square) and baseline conditions (red diamond).

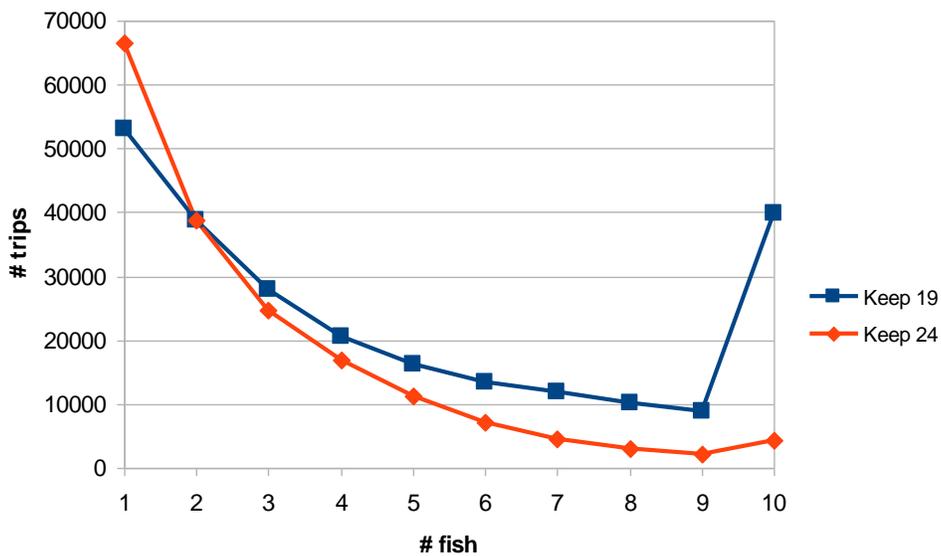
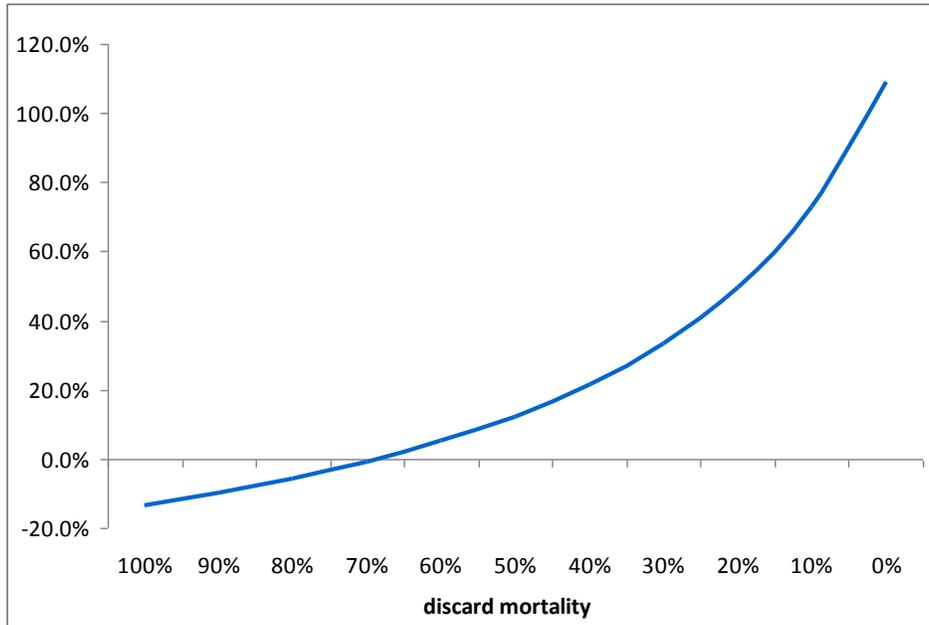


Figure 8. Model-predicted change in overall recreation fishing mortality under various MRIP B2 discard mortality assumptions.



9.9.3 Determination of Significance

The Proposed Action is not predicted to have an adverse impact on fishing vessels, purchasers of seafood products, ports, recreational anglers, and operators of party/charter businesses in excess of \$100 million. Adverse economic impacts resulting from this proposed action are estimated at approximately \$6 million throughout the range of the groundfish fishery.

10.0 LITERATURE CITED

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