OMNIBUS AMENDMENT

**AMENDMENT 13 TO THE
ATLANTIC MACKEREL, SQUIDS, AND BUTTERFISH FISHERY
MANAGEMENT PLAN**

**AMENDMENT 3 TO THE
BLUEFISH FISHERY MANAGEMENT PLAN**

**AMENDMENT 2 TO THE
SPINY DOGFISH FISHERY MANAGEMENT PLAN**

**AMENDMENT 15 TO THE
SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS
FISHERY MANAGEMENT PLAN**

**AMENDMENT 16 TO THE
SURFCLAM AND OCEAN QUAHOG FISHERY MANAGEMENT PLAN**

**AMENDMENT 3 TO THE
TILEFISH FISHERY MANAGEMENT PLAN**

(Includes Environmental Assessment and Essential Fish Habitat Assessment)

April 2011

**Mid-Atlantic Fishery Management Council
in cooperation with
the National Marine Fisheries Service**

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1.0 EXECUTIVE SUMMARY

The Omnibus Amendment and environmental assessment (EA) will present and evaluate management alternatives that specify mechanisms to set acceptable biological catch (ABC), annual catch limits (ACLs), and accountability measures (AMs) for Atlantic mackerel, butterfish, Atlantic bluefish, spiny dogfish, summer flounder, scup, black sea bass, Atlantic surfclam, ocean quahog, and tilefish (hereafter referred to collectively as "the managed resources"), contained within six Mid-Atlantic Fishery Management Council (Council) Fishery Management Plans (FMP) (section 4.0). Specifically, this Omnibus document would amend the Atlantic Mackerel, Squid, and Butterfish FMP, Bluefish FMP, Spiny Dogfish FMP, Summer Flounder, Scup, and Black Sea Bass FMP, Surfclam and Ocean Quahog FMP and Tilefish FMP.

The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA) was signed into law by President George W. Bush on January 12, 2007, following its 2006 passage by the U.S. Congress. This reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) includes new requirements for ACLs and AMs and other provisions designed to prevent and end overfishing (16 U.S.C. §1853(a)(15)). As a result, NOAA's National Marine Fisheries Service (NMFS) revised guidance for implementing National Standard 1 (74 FR 3178; January 16, 2009; NS1 guidelines) which became effective February 17, 2009. To address the MSA[1] requirements and the revised National Standard 1 guidance, the Council has prepared this document in consultation with NMFS. This Omnibus Amendment is being developed in accordance with the MSA, and the National Environmental Policy Act (NEPA), the former being the primary domestic legislation governing fisheries management in the U.S. Exclusive Economic Zone (EEZ).

Although this Omnibus Amendment is being prepared primarily in response to the new requirements under MSA and requirements of NEPA, it will also address the requirements of the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). When preparing an FMP or FMP amendment, the Council also must comply with the applicable requirements of the Regulatory Flexibility Act (RFA), the Administrative Procedure Act (APA), the Paperwork Reduction Act (PRA), the Coastal Zone Management Act (CZMA), the Information Quality Act (IQA), Regulatory Impact Review (RIR), and Executive Orders. These other applicable laws and executive orders help ensure that in developing an amendment, the Council considers the full range of alternatives and their expected impacts on the marine environment, living marine resources, and the affected human communities. This integrated document will contain all required elements of the FMP amendment as required by NEPA and information to ensure consistency with other applicable laws and executive orders.

The proposed action in this Omnibus Amendment would formalize the process of addressing scientific and management uncertainty when setting catch limits for the

[1] Magnuson-Stevens Fishery Conservation and Management Act (MSA), portions retained plus revisions made by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA).

upcoming fishing year(s) and to establish a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, for each of the managed resources subject to this requirement. Specifically, the action in this Omnibus Amendment will: (1) Establish ABC control rules, (2) Establish a Council risk policy, which is one variable needed for the ABC control rules, (3) Establish ACL(s), (4) Establish a system of comprehensive accountability, which addresses all components of the catch, (5) Describe the process by which the performance of the annual catch limit and comprehensive accountability system will be reviewed, (6) Describe the process to modify the measures above in 1-5 in the future.

The preferred alternatives within this Omnibus Amendment for the managed resources are the combined total of elements to establish ABC and address risk of overfishing along with varying combinations of both status quo/no action and new alternatives to address establishment of catch limits and to provide accountability. The totality of the combined preferred alternatives, in conjunction with those existing measures in the FMPs, provides a comprehensive framework for the catch limit and accountability system recommended in the revised NS1 guidelines provided by NMFS. An overview of the alternatives contained within this document along with a qualitative summary of the expected biological, habitat, protected resources, and socioeconomic impacts associated with the alternatives is given below. The Council identified its preferred alternatives at the August 2010 Council Meeting, which are identified as "Preferred" or "Council-preferred" within the tables and section headers.

Specification of ABC

The Council worked with their Scientific and Statistical Committee (SSC) to develop an approach to derive ABC through a set of four levels, which would be applied to each of the managed resources. The levels are based on the information available to assess the stock as well as other relevant information. In general, higher levels will contain assessments with greater detail and lower scientific uncertainty while lower levels have less robust assessments with higher associated scientific uncertainties. When a new stock assessment completes peer-review for any of the managed resources, the SSC would be responsible for determining to which level the assessment belongs. Then the processes described within each level are used to calculate ABC. For the upper levels, this applies a distribution of the overfishing limit (OFL) and a probability of overfishing based on a Council risk policy. For the lowest level, alternative types of approaches must be applied to derive ABC. In the NS1 Guidelines response to comment 42 (74 FR 3191; January 16, 2009), it is stated, “The SSC must recommend an ABC to the Council after the Council advises the SSC what would be the acceptable probability that a catch equal to the ABC would result in overfishing. This risk policy is part of the required ABC control rule.” As such, the Council is considering formal risk policy options which define the Council’s tolerance for overfishing for the managed resources. Box ES-1 provides a brief summary of all of the alternatives discussed in this document that address the issue of specifying ABC, and any associated indirect impacts. There are no direct impacts resulting from the proposed alternatives because the Omnibus Amendment only establishes a process for deriving ABC. The actual derivation of ABCs will occur in subsequent actions and be dependent on the information available at that time.

ACLs and AMs

The Council is considering alternatives to establish ACL(s) and a system of comprehensive accountability, which addresses all components of the catch, for each of the managed resources. There are three sets of alternatives for each managed resource, which address specifying annual catch limits, proactive accountability, and reactive accountability. These sets of alternatives were an outgrowth of the early discussion of the Council which considered first how to address specification of ACL, and second how to address the two types of accountability measures (i.e., proactive and reactive). For proactive accountability, the Council may identify more than one action alternative where multiple alternatives are presented. For reactive accountability, one action alternative is presented for each of the managed resources and comprised of one or more mechanisms designed to address all of the catch components of the ACL(s). The Boxes ES-2 through ES-11 provides a brief summary of all of the alternatives discussed in this document that address the issue of ACLs and AMs, for each of the managed resources, and any associated indirect impacts. There are no direct impacts resulting from the proposed alternatives.

Future Review and Modification of Actions

The Council is considering alternatives that would establish a performance review process for establishing ABCs, ACLs, and AMs. In addition, alternatives are being considered which would describe the process by which actions taken could be modified in the future. Box ES-12 provides a brief summary of all of the alternatives discussed in this document that address the issue of future review and modification of ACLs and AMs, and any associated indirect impacts. There are no direct impacts resulting from the proposed alternatives.

Cumulative Impacts

The biological, Essential Fish Habitat (EFH), protected resources, social, and economic impacts of the alternatives contained within this document were analyzed. When the Council proposed action is considered in conjunction with all the other pressures placed on fisheries by past, present, and reasonably foreseeable future actions, it is not expected to result in any significant impacts, positive or negative; therefore, there are no significant cumulative effects associated with the action proposed in this document (see section 7.4).

Conclusions

A detailed description and discussion of the expected environmental impacts resulting from each of the alternatives, as well as any cumulative impacts, considered in this document are provided in section 7.0. None of the action alternatives are associated with significant impacts to the biological, social or economic, or physical environment individually or in conjunction with other actions under NEPA.

Box ES-1. Brief description of the alternatives included in this Omnibus Amendment that address specification of an ABC, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.2 for more detail)					Impact of the Alternatives[a] (see section 7.1 for more detail)			
Issue	**Sub-Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Acceptable Biological Catch (ABC)	*ABC Alternatives*	ABC-A	Status quo/no action	No action to establish ABC control rule methods in FMP	0	0	0	0
		ABC-B (Council-Preferred)	Proposed	Council establishes ABC control rule methods in FMP	0	0	0	0
	Council Risk Policy	RISK-A	Status quo/no action	No action to establish formal risk policy in FMP	0	0	0	0
		RISK-B	Proposed	Constant probability of overfishing = 25 Percent	0/sl+	0/sl+	0/sl+	0/(-S /+L)
		RISK-C	Proposed	Stock Status, Replenishment Threshold, with Inflection at $B/B_{MSY} = 1.0$	0/sl+	0/sl+	0/sl+	0/(-S /+L)
		RISK-D	Proposed	Stock Status/Assessment Level Offset, Replenishment Threshold, with Inflection at $B/B_{MSY} = 1.5$	0/sl+	0/sl+	0/sl+	0/(-S /+L)
		RISK-E	Proposed	Stock Status/Assessment Level Offset, Replenishment Threshold, with 2 Inflection Points at $B/B_{MSY} = 1.0$ and $B/B_{MSY} = 2.0$	0/sl+	0/sl+	0/sl+	0/(-S /+L)
		RISK-F	Proposed	Categorical (4 x 4) with stock history, life history, and assessment level	0/sl+	0/sl+	0/sl+	0/(-S /+L)
		RISK-G (Council-Preferred)	Proposed	Stock Status/Life History, Inflection at B/BMSY = 1.0	0/sl+	0/sl+	0/sl+	0/(-S /+L)

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Box ES-2. Brief description of the alternatives included in this Omnibus Amendment that address Atlantic mackerel ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.1 for more detail)					Impact of the Alternatives[a] (see section 7.2.1 for more detail)			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Atlantic Mackerel	*Annual Catch Limit*	ATM-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		ATM-B (Council-Preferred)	Proposed	Establish ACL = domestic ABC	0	0	0	0
	Proactive Accountability	ATM-C	Status quo/no action	No additional proactive measures established	0	0	0	0
		ATM-D (Council-Preferred)	Proposed	Use of ACTs; rec. harvest limit established	0/+	0/+	0/+	0/(-S/+L)
		ATM-E (Council-Preferred)	Proposed	General inseason closure authority - recreational	0/+	0	0	0/(-S/+L)
		ATM-F	Proposed	Use of ACT; No rec. harvest limit established	0/+	0/+	0/+	0/(-S/+L)
		ATM-G	Proposed	General inseason closure authority - recreational	0/+	0	0	0/(-S/+L)
	Reactive Accountability	ATM-H	Status quo/no action	No reactive AMs established	0	0	0	0
		ATM-I (Council-Preferred)	Proposed	3 mechanisms accountability for catch	0/+	0/+	0/+	0/(-S/+L)
		ATM-J	Proposed	1 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)

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Box ES-3. Brief description of the alternatives included in this Omnibus Amendment that address butterfish ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.2 for more detail)					**Impact of the Alternatives[a] (see section 7.2.2 for more detail)**			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Butterfish	*Annual Catch Limit*	BUTTER-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		BUTTER-B (Council-Preferred)	Proposed	Establish ACL = ABC	0	0	0	0
	Proactive Accountability	BUTTER-C	Status quo/no action	No additional proactive measures established	0	0	0	0
		BUTTER-D (Council-Preferred)	Proposed	Use of ACT	0/+	0/+	0/+	0/(-S/+L)
	Reactive Accountability	BUTTER-E	Status quo/no action	No reactive AMs established	0	0	0	0
		BUTTER-F (Council-Preferred)	Proposed	1 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)

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Box ES-4. Brief description of the alternatives included in this Omnibus amendment that address bluefish ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.3 for more detail)					Impact of the Alternatives[a] (see section 7.2.3 for more detail)			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Bluefish	*Annual Catch Limit*	BLUE-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		BLUE-B (Council-Preferred)	Proposed	Establish ACL = ABC	0	0	0	0
	Proactive Accountability	BLUE-C	Status quo/no action	No additional proactive measures established	0	0	0	0
		BLUE-D (Council-Preferred)	Proposed	Use of ACTs	0/+	0/+	0/+	0/(-S/+L)
		BLUE-E (Council-Preferred)	Proposed	General inseason closure authority - recreational	0/+	0	0	0/(-S/+L)
	Reactive Accountability	BLUE-F	Status quo/no action	No additional reactive AMs established	0	0	0	0
		BLUE-G (Council-Preferred)	Proposed	3 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)
	Joint Action Accountability	BLUE-H	Status quo/no action	No joint action beyond that which already occurs	0	0	0	0
		BLUE-I (Council-Preferred)	Proposed	Joint action to revisit disconnects in quotas	0	0	0	0

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Box ES-5. Brief description of the alternatives included in this Omnibus Amendment that address spiny dogfish ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.4 for more detail)					**Impact of the Alternatives[a] (see section 7.2.4 for more detail)**			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Spiny Dogfish	*Annual Catch Limit*	DOG-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		DOG-B (Council-Preferred)	Proposed	Establish ACL = domestic ABC	0	0	0	0
	Proactive Accountability	DOG-C	Status quo/no action	No additional proactive measures established	0	0	0	0
		DOG-D (Council-Preferred)	Proposed	Use of ACT	0/+	0/+	0/+	0/(-S/+L)
	Reactive Accountability	DOG-E	Status quo/no action	No reactive AMs established	0	0	0	0
		DOG-F (Council-Preferred)	Proposed	1 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)

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Box ES-6. Brief description of the alternatives included in this Omnibus Amendment that address summer flounder ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.5 for more detail)					**Impact of the Alternatives[a] (see section 7.2.5 for more detail)**			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Summer Flounder	*Annual Catch Limit*	FLUKE-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		FLUKE-B	Proposed	Establish sector ACLs = ABC, with 1 yr. recreational catch avg.	0	0	0	0
		FLUKE-C (Council-Preferred)	Proposed	Establish sector ACLs = ABC, with 3 yr. recreational catch avg.	0	0	0	0
	Proactive Accountability	FLUKE-D	Status quo/no action	No additional proactive measures established	0	0	0	0
		FLUKE-E (Council-Preferred)	Proposed	Use of ACTs	0/+	0/+	0/+	0/(-S/+L)
		FLUKE-F (Council-Preferred)	Proposed	General inseason closure authority - recreational	0/+	0	0	0/(-S/+L)
	Reactive Accountability	FLUKE-G	Status quo/no action	No additional reactive AMs established	0	0	0	0
		FLUKE-H (Council-Preferred)	Proposed	3 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)
	Joint Action Accountability	FLUKE-I	Status quo/no action	No joint action beyond that which already occurs	0	0	0	0
		FLUKE-J (Council-Preferred)	Proposed	Joint action to revisit disconnects in quotas	0	0	0	0

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Box ES-7. Brief description of the alternatives included in this Omnibus Amendment that address scup ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.6 for more detail)					Impact of the Alternatives[a] (see section 7.2.6 for more detail)			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Scup	*Annual Catch Limit*	SCUP-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		SCUP-B	Proposed	Establish sector ACLs = ABC, with 1 yr. recreational catch avg.	0	0	0	0
		SCUP-C (Council-Preferred)	Proposed	Establish sector ACLs = ABC, with 3 yr. recreational catch avg.	0	0	0	0
	Proactive Accountability	SCUP-D	Status quo/no action	No additional proactive measures established	0	0	0	0
		SCUP-E (Council-Preferred)	Proposed	Use of ACTs	0/+	0/+	0/+	0/(-S/+L)
		SCUP-F (Council-Preferred)	Proposed	General inseason closure authority - recreational	0/+	0	0	0/(-S/+L)
	Reactive Accountability	SCUP-G	Status quo/no action	No additional reactive AMs established	0	0	0	0
		SCUP-H (Council-Preferred)	Proposed	3 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)
	Joint Action Accountability	SCUP-I	Status quo/no action	No joint action beyond that which already occurs	0	0	0	0
		SCUP-J (Council-Preferred)	Proposed	Joint action to revisit disconnects in quotas	0	0	0	0

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Box ES-8. Brief description of the alternatives included in this Omnibus Amendment that address black sea bass ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.7 for more detail)					Impact of the Alternatives[a] (see section 7.2.7 for more detail)			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Black Sea Bass	*Annual Catch Limit*	BSB-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		BSB-B	Proposed	Establish sector ACLs = ABC, with 1 yr. recreational catch avg.	0	0	0	0
		BSB-C (Council-Preferred)	Proposed	Establish sector ACLs = ABC, with 3 yr. recreational catch avg.	0	0	0	0
	Proactive Accountability	BSB-D	Status quo/no action	No additional proactive measures established	0	0	0	0
		BSB-E (Council-Preferred)	Proposed	Use of ACTs	0/+	0/+	0/+	0/(-S/+L)
		BSB-F Council-(Preferred)	Proposed	General inseason closure authority - recreational	0/+	0	0	0/(-S/+L)
	Reactive Accountability	BSB-G	Status quo/no action	No additional reactive AMs established	0	0	0	0
		BSB-H (Council-Preferred)	Proposed	3 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)
	Joint Action Accountability	BSB-I	Status quo/no action	No joint action beyond that which already occurs	0	0	0	0
		BSB-J (Council-Preferred)	Proposed	Joint action to revisit disconnects in quotas	0	0	0	0

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Box ES-9. Brief description of the alternatives included in this Omnibus Amendment that address Atlantic surfclam ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.8 for more detail)					**Impact of the Alternatives[a] (see section 7.2.8 for more detail)**			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Atlantic Surfclam	*Annual Catch Limit*	SURF-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		SURF-B (Council-Preferred)	Proposed	Establish ACL = ABC	0	0	0	0
	Proactive Accountability	SURF-C	Status quo/no action	No additional proactive measures established	0	0	0	0
		SURF-D (Council-Preferred)	Proposed	Use of ACT	0/+	0/+	0/+	0/(-S/+L)
	Reactive Accountability	SURF-E	Status quo/no action	No reactive AMs established	0	0	0	0
		SURF-F (Council-Preferred)	Proposed	1 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)

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Box ES-10. Brief description of the alternatives included in this Omnibus Amendment that address Ocean quahog ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.9 for more detail)					Impact of the Alternatives[a] (see section 7.2.9 for more detail)			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Ocean quahog	*Annual Catch Limit*	QUAHOG-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		QUAHOG-B (Council-Preferred)	Proposed	Establish ACL = ABC	0	0	0	0
	Proactive Accountability	QUAHOG-C	Status quo/no action	No additional proactive measures established	0	0	0	0
		QUAHOG-D (Council-Preferred)	Proposed	Use of ACTs	0/+	0/+	0/+	0/(-S/+L)
	Reactive Accountability	QUAHOG-E	Status quo/no action	No reactive AMs established	0	0	0	0
		QUAHOG-F (Council-Preferred)	Proposed	1 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)

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Box ES-11. Brief description of the alternatives included in this Omnibus Amendment that address tilefish ACLs and AMs, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see section 5.3.10 for more detail)					Impact of the Alternatives[a] (see section 7.2.10 for more detail)			
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Tilefish	*Annual Catch Limit*	TILE-A	Status quo/no action	No established ACL in FMP	0	0	0	0
		TILE-B (Council-Preferred)	Proposed	Establish ACL = ABC	0	0	0	0
	Proactive Accountability	TILE-C	Status quo/no action	No additional proactive measures established	0	0	0	0
		TILE-D (Council-Preferred)	Proposed	Use of ACT	0/+	0/+	0/+	0/(-S/+L)
		TILE-E (Council-Preferred)	Proposed	Incidental fishery closure authority	0/+	0/+	0/+	0/(-S/+L)
		TILE-F (Council-Preferred)	Proposed	Trip limit increase to 500 lb	0	0	0	0/sl+
	Reactive Accountability	TILE-G	Status quo/no action	No additional reactive AMs established	0	0	0	0
		TILE-H (Council-Preferred)	Proposed	3 mechanism accountability for catch	0/+	0/+	0/+	0/(-S/+L)

[a]A minus sign (-) signifies an expected negative impact, a plus sign (+) signifies a positive impact, and zero indicates null impact. A "sl" in front of a sign conveys a minor effect, such as slight positive (sl+). An 'S' indicates short-term, an 'L' is indicates long-term impacts. A (u) is used when there is uncertainty whether the impact will be null or as specified (+or-).

Box ES-12. Brief description of the alternatives included in this Omnibus Amendment that address review and modification of actions, including an overall qualitative summary of the expected indirect impacts of each alternative.

Description of Alternatives (see sections 5.4.1 and 5.4.2 for more detail)					Impact of the Alternatives[a] (see sections 7.3.1 and 7.3.2 for more detail)			
Issue	**Sub-issue**	**Alternative**	**Status**	**Description of Action**	**Biological**	**EFH**	**Protected Resources**	**Social and Economic**
Future Review and Modification of Actions	*Performance Review of Alternatives*	REVIEW-A	Status quo/no action	No formalized review process	0	0	0	0
		REVIEW-B (Council-Preferred)	Proposed	Review of ABC control rules	0	0	0	0
		REVIEW-C (Council-Preferred)	Proposed	Review of ACLs and AMs	0	0	0	0
	Description of Process of Modify Actions	MODIFY-A	Status quo/no action	No description of process to modify actions	0	0	0	0
		MODIFY-B (Council-Preferred)	Proposed	Description of process to modify actions in future	0	0	0	0

[a]A minus sign (-) signifies an expected negative impact, a plus sign (+) signifies a positive impact, and zero indicates null impact. A "sl" in front of a sign conveys a minor effect, such as slight positive (sl+). An 'S' indicates short-term, an 'L' is indicates long-term impacts. A (u) is used when there is uncertainty whether the impact will be null or as specified (+or-).

2.0 LIST OF ACRONYMS

ABC	Acceptable Biological Catch
ACL	Annual Catch Limit
ACT	Annual Catch Target
AM	Accountability Measure
APA	Administrative Procedures Act
ASMFC	Atlantic States Marine Fisheries Commission or Commission
B	Biomass
CEQ	Council on Environmental Quality
CZMA	Coastal Zone Management Act
DAH	Domestic Annual Harvest
DAP	Domestic Annual Processing
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EIS	Environmental Impact Statement
ESA	Endangered Species Act of 1973
F	Fishing Mortality Rate
FR	Federal Register
FMP	Fishery Management Plan
FONSI	Finding of No Significant Impact
IOY	Initial Optimum Yield
IQA	Information Quality Act
JVP	Joint Venture Processor/Processing
M	Natural Mortality Rate
MAFMC	Mid-Atlantic Fishery Management Council
MRFSS	Marine Recreational Fisheries Statistical Survey
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSY	Maximum Sustainable Yield
mt	metric tons
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NERO	Northeast Regional Office
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NS1	National Standard 1
MMPA	Marine Mammal Protection Act
MSA	Magnuson-Stevens Act (portions retained plus revisions)
MSRA	Magnuson-Stevens Fishery Conservation and Management Reauthorization Act
OFL	Overfishing limit
OY	Optimal Yield
PRA	Paperwork Reduction Act
RFA	Regulatory Flexibility Act
RHL	Recreational Harvest Limit
RIR	Regulatory Impact Review
RQ	Research Quota
RSA	Research Set-Aside
SSB	Spawning Stock Biomass
SSC	Scientific and Statistical Committee
TAC	Total Allowable Catch
TAL	Total Allowable Landings
TALFF	Total Allowable Level of Foreign Fishing
VECs	Valued Ecosystem Components

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ENVIRONMENTAL ASSESSMENT

4.0 INTRODUCTION AND PURPOSE AND NEED

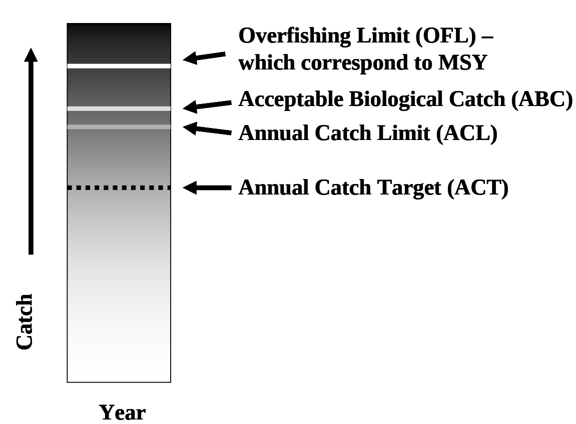
4.1 Introduction

The MSRA was signed into law by President George W. Bush on January 12, 2007, following its 2006 passage by the U.S. Congress. This reauthorization of the MSA includes new requirements for ACLs and AMs and other provisions regarding preventing and ending overfishing (16 U.S.C. §1853(a)(15)). As a result, NOAA's NMFS revised guidance for implementing National Standard 1 (74 FR 3178; January 16, 2009; NS1) which became effective February 17, 2009.

The NS1 guidelines establish advisory guidelines for setting catch limits for the upcoming fishing year(s) which address both scientific and management uncertainty. The action contained within this document has been developed by the Council to be consistent, to the extent practicable, with these guidelines. Scientific uncertainty is less than perfect knowledge about the likely outcome of an event, based on estimates derived from scientific information (models and data). Scientific uncertainty enters into the process to set catch limits in several ways; data input into the stock assessment, the assessment modeling, and the projections to determine what upcoming fishing year catches should be. Management uncertainty relates to the ability (or inability) of managers to constrain catch to a target and the uncertainty in quantifying the true catch. Management uncertainty can occur because of a lack of sufficient information about the catch (e.g., due to late reporting, underreporting, and misreporting of landings or bycatch), or because of a lack of management precision in many fisheries (e.g., due to limited or unavailable data, untimely data, or lack of inseason closure authority).

The NS1 guidelines suggest certain provisions are required to be components of a FMP to address scientific and management uncertainty when setting upcoming year(s) catch limits, while other components are discretionary. As a whole, the system outlined by NS1 guidelines is designed to prevent overfishing on the managed resources, rebuild overfished stocks, and achieve optimum yield (OY). Of the catch terms introduced and defined for consideration, OFL, ABC, and ACL are considered required components.

Definition Framework: OFL ≥ ABC ≥ ACL



The annual catch target (ACT) is described in the NS1 guidelines as a type of proactive accountability measure and something that may be applied at Council discretion. Because the action considered by the Council would set ACL=ABC, the ACT becomes a necessary component of a catch limit system to address management uncertainty. The implications of exceeding an ACT are less significant, and enable the ACT to function as a soft target for the fisheries without all the accountability measures connected with exceeding an ACL. It should be noted that all these new terms are expressed as catch, which includes both landings and discards.

4.1.1 ABC, ACL, and AMs

Acceptable Biological Catch and Risk

To meet the requirement for ABC control rules, the Council has worked with its Scientific and Statistical Committee (SSC) to develop an alternative to address an ABC control rule rules for all the managed resources subject to this requirement. The action considered in section 5.2.1, which resulted from extensive deliberation by the SSC, presents a pre-agreed process the SSC would use to derive ABC recommendations for the Council. One required variable in this ABC alternative is the Council tolerance for overfishing of stocks (i.e., probability of overfishing) as expressed through a Council risk policy. Therefore, the Council has developed alternatives (section 5.2.2) which can be used to establish a formal Council risk policy.

Annual Catch Limit

Under the NS1 guidelines, it is recommended that the ACL should be reduced from the ABC, based on the amount of management uncertainty (i.e., implementation uncertainty) associated with managing the fishery. Alternatively, the ACL may also be set equal to ABC, which was the Council preferred approach, and management uncertainty can be addressed using another measure, called an ACT (described as a proactive accountability measure later in this section). Management uncertainty can occur because of a lack of sufficient information about the catch (e.g., due to late reporting, underreporting, and misreporting of landings or bycatch), or because of a lack of management precision in many fisheries (e.g., due to limited or unavailable data, untimely data, or lack of inseason closure authority).

Through this action, the Council is considering a process by which management uncertainty could be identified, and if appropriate, accommodated by reducing catch levels to prevent any ACLs from being exceeded and accountability measures enacted. Reducing catch limits to account for management uncertainty has both associated costs and benefits. Reduction in catch levels to address management uncertainty should be only the amount necessary to achieve the results mandated by the MSA, which are intended to prevent overfishing and, when applicable, rebuild overfished stocks. These adjustments should be considered in the general context of the entire catch framework and its performance relative to MSA.

For each of the managed resources, the Council's preference is that ACL(s) are to be established at the fishery level or sector level (i.e., recreational and commercial), depending on the structure of the current fishery allocations and the preferences of the Council for structuring the system of catch and accountability. The ACLs may be specified annually or annually for multiple years.

Accountability

Under the NS1 guidelines, it is outlined that any time an ACL is determined to have been exceeded, automatic AM measures must be enacted. To meet these requirements, the Council considered two types of accountability measures: proactive and reactive. Proactive AMs are intended to prevent as much as is practicable the ACL from being exceeded. Reactive AMs are in response to an ACL overage and are designed to mitigate that overage and/or prevent it from occurring in the subsequent year. AMs are required for each ACL established by the Council. There are AM-like authorities utilized for many stocks contained within the FMPs and those authorities would continue and may fulfill aspects of accountability for the managed resource. For example, many of the managed resource fisheries already implement landings overage deduction mechanisms (paybacks), trip limits, and other management measures. More detailed descriptions of measures already applied to these fisheries are given in section 5.0, under the status quo/no action alternatives. Accountability measures that are fully consistent with the new requirements must be automatic and cannot require Council deliberation, modification through an existing process (e.g., modification through specifications setting), or be left to the NMFS Northeast Regional Administrator (Regional Administrator) discretion. For example, the current process of adjusting recreational management measures (i.e., fish size, season, and possession limit) each year would not, in and of itself, be a fully consistent accountability measure because the process requires analysis and Council deliberation.

ACTs are a type of proactive accountability. The action contemplated in this document, proposes ACTs for all of the managed resources fisheries (except Atlantic surfclam which proposes a TAL) to be applied in a manner which formalizes the process of accounting for management uncertainty when setting catch limits for the upcoming fishing year(s). The Council recognizes that by establishing ACL=ABC (or ACL=domestic ABC), this precludes the use of the ACL to account for management uncertainty. Therefore, utilizing an ACT is analytically desirable in cases where the control rule for ACL specifies ACL=ABC, to ensure a mechanism is available to address management uncertainty. The implications of exceeding an ACT are less significant, and enable the ACT to function as a soft target for the fisheries without all the automatic reactive accountability measures associated with exceeding an ACL. Therefore, the use of ACT(s) to address management uncertainty provided the Council with greater flexibility. Sector-specific ACTs allow management uncertainty to be considered and addressed by sector. The Council also recognized the interannual and intrannual variability in the sources of management uncertainty, and therefore will rely on the groups most knowledgeable about each fishery (i.e., monitoring committees and staff) and changing circumstances that could give rise to different levels of management uncertainty from year to year to provide them with recommendations for ACT(s). The dynamic and complex nature of these fisheries means that while some sources of management uncertainty may be easily quantified, other may not be fully-quantifiable. Therefore, the ACT could be derived from purely quantitative approaches such as relying on history of fishery performance as a means to quantify the uncertainty or imprecision around estimates of catch; however, to adequately address uncertainty it may also need to incorporate semi-quantitative or qualitative information.

4.1.2 Optimum Yield

Optimum yield (OY) was not redefined by the MSRA. However, OY is an important consideration when specifying catch limits for the upcoming fishing year and it is therefore important to highlight where OY may fall within the proposed catch frameworks. Optimum yield is defined as the long-term average desired yield from a fishery which provides the greatest overall benefit to the nation particularly with respect to food production and recreational opportunity, and takes into account the protection of the marine ecosystems. OY yield is based on the maximum sustainable yield from the fishery as reduced by any relevant economic, social, or ecological factors, as those terms are described in the NS1 guidelines at §600.310. In the NS1 Guidelines, under the response to comments, NMFS states,

> "NMFS believes that fisheries managers cannot consistently meet the requirements of the MSA to prevent overfishing and achieve, on a continuing basis, OY [optimum yield] unless they address scientific and management uncertainty. The reduction in fishing levels that may be necessary in order to prevent overfishing should be only the amount necessary to achieve the results mandated by the MSA".

The system for specifying annual catch limits (i.e., OFL-ABC-ACL-ACT) allows for the consideration of all relevant factors including scientific and management uncertainty. For all of the ACL and AM frameworks described in the following alternatives for each of the stocks, the Council has specified ACL=ABC. Therefore, OY will be the long term average catch, which is designed not to exceed the ACL, and will fall between ACL and ACT. Because both scientific and management uncertainty levels are expected to vary over time, as will the Council’s approach to addressing each, the OY level in any given year will also vary. Thus, it is not practicable to definitively assign an OY level within the OFL-ABC-ACL-ACT framework. The Council could reduce catch limits at the ACL or ACT to address scientific and management uncertainty as well as other factors relating to optimum yield for the managed resources. This system of catch limits is designed to prevent overfishing, rebuild stocks that are overfished, and to maintain stocks that are not overfished at a level that produces the maximum sustainable yield over time. Achieving these objectives will provide the greatest social and economic benefits to fishery participants and allow managers to set catch levels that provide the greatest overall benefit to the nation.

4.1.3 Stocks in the Fishery

The Council acknowledges that all target stocks currently contained within FMPs under its jurisdiction, are “stocks in their respective fisheries”, which include Atlantic mackerel, *Loligo* and *Illex* squids[2], butterfish, Atlantic bluefish, spiny dogfish, summer flounder, scup, black sea bass, Atlantic surfclam, ocean quahog, tilefish, and monkfish[2]. Therefore, the action taken within this document addresses the MSA requirements for these managed resources. Catch of the managed resources, from both directed and non-directed fisheries, are accounted as total catch to be compared to the respective ACL(s). In the NS1 Guidelines, under the section major components of the proposed action, NMFS states,

> “NMFS wants to encourage ecosystem approaches to management, thus it propose the EC [ecosystem component] species as a possible classification a Council or the Secretary

[2] *Loligo* and *Illex* squids are exempt from ACL and AM requirements and the New England Fishery Management Council will develop measures for monkfish (see section 4.2).

> could, but is not required to, consider. The final NS1 guidelines do not require a Council or the Secretary to include all target and non-target species as ‘‘stocks in the fishery,’’ do not mandate use of the EC species category, and do not require inclusion of particular species in an FMP. The decision of whether conservation and management is needed for a fishery and how that fishery should be defined remains within the authority and discretion of the relevant Council or the Secretary, as appropriate. NMFS presumes that stocks or stock complexes currently listed in an FMP are ‘‘stocks in the fishery,’’ unless the FMP is amended to explicitly indicate that the EC species category is being used. ‘‘Stocks in the fishery’’ need status determination criteria, other reference points, ACL mechanisms and AMs; EC species would not need them."

The Council could consider inclusion of other target and non-target species in need of conservation and management, or ecosystem component species, in the FMPs in the future.

4.2 Purpose and Need for Action

The purpose of this Omnibus Amendment is to formalize the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and to establish a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, for Atlantic mackerel, butterfish, Atlantic bluefish, spiny dogfish, summer flounder, scup, black sea bass, Atlantic surfclam, ocean quahog, and tilefish (hereafter referred to collectively as "the managed resources"), which are all subject to this requirement. For bluefish, the action would also extend the ability to propose specifications for up to 3 years, to allow for additional management flexibility and consistency with other Council FMPs. As such, the Council is proposing action for each of the managed resources subject to these requirements which will:

1) Establish ABC control rules.
2) Establish a Council risk policy, which is one variable needed for the ABC control rules utilized to inform the SSC of the Council's preferred tolerance for the risk of overfishing a stock
3) Establish ACL(s).
4) Establish a system of comprehensive accountability, which addresses all components of the catch.
5) Describe the process by which the performance of the annual catch limit and comprehensive accountability system will be reviewed.
6) Describe the process to modify the measures above in 1-5 in the future.

In order to prevent and end overfishing, rebuild overfished stocks, and achieve optimum yield, as prescribed by the MSA, this Omnibus Amendment is needed to ensure that all FMPs of the MAFMC are consistent with the MSA. To address the MSA[3] requirements and develop measures consistent with the National Standard 1 guidance, the Council has prepared this document in consultation with NMFS, which will amend the Atlantic Mackerel, Squid, and Butterfish FMP, Bluefish FMP, Spiny Dogfish FMP, Summer Flounder, Scup, and Black Sea Bass FMP, Surfclam and Ocean Quahog FMP and Tilefish FMP. The MSA requirements exempt annual life cycle species not subject to overfishing (i.e., *Loligo* and *Illex* squids), and the New England Fishery Management Council will develop measures for monkfish, as it has the lead for the FMP.

[3] Magnuson-Stevens Fishery Conservation and Management Act (MSA), portions retained plus revisions made by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA).

4.3 Management Unit, Management Objectives, and History of FMP Development

4.3.1 Atlantic Mackerel, Squids, and Butterfish FMP

The management unit is all northwest Atlantic mackerel (*Scomber scombrus*), *Loligo pealei*, *Illex illecebrosus*, and butterfish (*Peprilus tricanthus*) under U.S. jurisdiction. The management regime is detailed in the FMP. A summary of the management actions taken since the establishment of the FMP, through FMP amendments and FMP framework adjustments is given in Table 1. The management objectives of the Atlantic Mackerel, Squids, and Butterfish FMP are as follows:

1) Enhance the probability of successful (i.e., the historical average) recruitment to the fisheries.
2) Promote the growth of the U.S. commercial fishery, including the fishery for export.
3) Provide the greatest degree of freedom and flexibility to all harvesters of these resources consistent with the attainment of the other objectives of this FMP.
4) Provide marine recreational fishing opportunities, recognizing the contribution of recreational fishing to the national economy.
5) Increase understanding of the conditions of the stocks and fisheries.
6) Minimize harvesting conflicts among U.S. commercial, U.S. recreational, and foreign fishermen.

Table 1. Summary of the history of the Atlantic Mackerel, Squids, and Butterfish FMP.

Year Approved	Document	Plan Species	Management Action(s)
1978-1980	Original FMPs (3) and individual amendments	Atlantic mackerel, squids, butterfish	- Established and continued management of Atlantic mackerel, squid, and butterfish fisheries
1983	Merged FMP	Atlantic mackerel, squids, butterfish	- Consolidated management of Atlantic mackerel, squid, and butterfish fisheries under a single FMP
1984	Amendment 1	Atlantic mackerel and squids	- Implemented squid OY adjustment mechanism - Revised Atlantic mackerel mortality rate
1986	Amendment 2	Atlantic mackerel, squids, butterfish	- Equated fishing year with calendar year - Revised squid bycatch TALFF allowances - Implemented framework adjustment process - Converted expiration of fishing permits from indefinite to annual
1991	Amendment 3	Atlantic mackerel, squids, butterfish	- Established overfishing definitions for all four species
1991	Amendment 4	Atlantic mackerel, squids, butterfish	- Limited the activity of directed foreign fishing and joint venture transfers to foreign vessels - Allowed for specification of OY for Atlantic mackerel for up to three years
1996	Amendment 5	Atlantic mackerel, squids, butterfish	- Adjusted *Loligo* MSY; established 1 7/8" minimum mesh size - Eliminated directed foreign fisheries for *Loligo, Illex*, and butterfish - Instituted a dealer and vessel reporting system; instituted operator permitting - Implemented a limited access system for *Loligo, Illex* and butterfish - Expanded management unit to include all Atlantic mackerel, *Loligo*, *Illex*, and butterfish under U.S. jur.

Table 1. Continued. Summary of the history of the Atlantic Mackerel, Squids, and Butterfish FMP.

Year Approved	Document	Plan Species	Management Action(s)
1997	Amendment 6	squids and butterfish	- Established directed fishery closure at 95% of DAH for *Loligo, Illex* and butterfish with post-closure trip limits for each species - Established a mechanism for seasonal management of the *Illex* fishery to improve the yield-per recruit - Revised the overfishing definitions for *Loligo, Illex* and butterfish
1997	Amendment 7	Atlantic mackerel, squids, butterfish	- Established consistency among FMPs in the NE region of the U.S. relative to vessel permitting, replacement and upgrade criteria
1998	Amendment 8	Atlantic mackerel, squids, butterfish	- Brought the FMP into compliance with new and revised National Standards and other required provisions of the Sustainable Fisheries Act. - Added a framework adjustment procedure.
2001	Framework 1	Atlantic mackerel, squids, butterfish	- Established research set-asides (RSAs).
2002	Framework 2	Atlantic mackerel, squids, butterfish	- Established that previous year specifications apply when specifications for the management unit are not published prior to the start of the fishing year (excluding TALFF specifications) - Extended the *Illex* moratorium for one year; Established *Illex* seasonal exemption from *Loligo* minimum mesh; - Specified the *Loligo* control rule; Allowed *Loligo* specs to be set for up to 3 years
2003	Framework 3	*Illex* squid	- Extended the moratorium on entry to the *Illex* fishery for an additional year
2004	Framework 4	*Illex* squid	- Extended the moratorium on entry to the *Illex* fishery for an additional 5 years
2007	Amendment 12	Atlantic mackerel, squids, butterfish	- Standardized bycatch reporting methodology
2009	Amendment 9	Atlantic mackerel, squids, butterfish	- Extended the moratorium on entry into the *Illex* fishery, without a sunset provision - Adopted biological reference points for *Loligo* recommended by the stock assessment review committee (SARC). - Designated EFH for Loligo eggs based on available information - Prohibited bottom trawling by MSB-permitted vessels in Lydonia and Oceanographer Canyons Authorized specifications to be set for all four MSB species for up to 3 years
2010	Amendment 10	*Loligo* squid and butterfish	- Implemented a butterfish rebuilding program. - Increased the Loligo minimum mesh in Trimesters 1 and 3. - Implemented a 72-hour trip notification requirement for the Loligo fishery.

4.3.2 Atlantic Bluefish FMP

The management unit is bluefish (*Pomatomus saltatrix*) in U.S. waters of the western Atlantic Ocean. The management regime is detailed in the FMP. A summary of the management actions taken since the establishment of the FMP, through FMP amendments and FMP framework adjustments is given in Table 2. The management objectives of the Atlantic Bluefish FMP are as follows:

1) Increase understanding of the stock and of the fishery.
2) Provide the highest availability of bluefish to U.S. fishermen while maintaining, within limits, traditional uses of bluefish.
3) Provide for cooperation among the coastal states, the various regional marine fishery management councils, and federal agencies involved along the coast to enhance the management of bluefish throughout its range.
4) Prevent recruitment overfishing.
5) Reduce the waste in both the commercial and recreational fisheries.

Table 2. Summary of the history of the Atlantic Bluefish FMP.

Year Approved	Document	Management Action(s)
1990	Original FMP	- Established management of Atlantic bluefish fisheries
2000	Amendment 1	- Brought the FMP into compliance with new and revised National Standards and other required provisions of the Sustainable Fisheries Act - Implemented rebuilding plan. - Required that a commercial quota and recreational harvest limit be based on projected stock size estimates as derived from the latest stock assessment information.
2001	Framework 1	- Created a quota set-aside for the purpose of conducting research
2007	Amendment 2	- Standardized bycatch reporting methodology

4.3.3 Spiny Dogfish FMP

The management unit is the entire spiny dogfish (*Squalus acanthias*) population along the Atlantic coast of the United States. The management regime is detailed in the FMP. A summary of the management actions taken since the establishment of the FMP, through FMP amendments and FMP framework adjustments is given in Table 3. The management objectives of the Spiny Dogfish FMP are as follows:

1) Reduce fishing mortality to ensure that overfishing does not occur.
2) Promote compatible management regulations between state and Council jurisdictions and the U.S. and Canada.
3) Promote uniform and effective enforcement of regulations.
4) Minimize regulations while achieving the management objectives stated above.
5) Manage the spiny dogfish fishery so as to minimize the impact of the regulations on the prosecution of other fisheries, to the extent practicable.
6) Contribute to the protection of biodiversity and ecosystem structure and function.

Table 3. Summary of the history of the Spiny Dogfish FMP.

Year Approved	Document	Management Action(s)
2000	Original FMP	- Established management of Atlantic spiny dogfish fisheries - Initiated stock rebuilding plan
2006	Framework 1	- Created mechanism for specification of multi-year management measures
2007	Amendment 1	- Standardized bycatch reporting methodology
2009	Framework 2	- Built flexibility into process to define and update status determination criteria

4.3.4 Summer Flounder, Scup, Black Sea Bass FMP

The management unit for summer flounder (*Paralichthys dentatus*) is the U.S. waters in the western Atlantic Ocean from the southern border of North Carolina northward to the U.S.-Canadian border. The management unit for both scup (*Stenotomus chrysops*) and black sea bass (*Centropristis striata*) is the U.S. waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the U.S.-Canadian border. The management regime is detailed in the FMP, including any subsequent amendments. A summary of the management actions taken since the establishment of the FMP, through FMP amendments and FMP framework adjustments is given in Table 4. The management objectives of the Summer Flounder, Scup, Black Sea Bass FMP are as follows:

1) reduce fishing mortality in the summer flounder, scup and black sea bass fisheries to ensure that overfishing does not occur;
2) reduce fishing mortality on immature summer flounder, scup, and black sea bass to increase spawning stock biomass;
3) improve the yield from the fishery;
4) promote compatible management regulations between state and federal jurisdictions;
5) promote uniform and effective enforcement of regulations; and
6) minimize regulations to achieve the management objectives stated above.

Table 4. Summary of the history of the Summer Flounder, Scup, and Black Sea Bass FMP.

Year Approved	Document	Plan Species	Management Action(s)
1988	Original FMP	summer flounder	- Established management plan for summer flounder
1991	Amendment 1	summer flounder	- Established an overfishing definition for summer flounder
1993	Amendment 2	summer flounder	- Established rebuilding schedule, commercial quotas, recreational harvest limits, size limits, gear restrictions, permit and reporting requirements for summer flounder - Created the Summer Flounder Monitoring Committee
1993	Amendment 3	summer flounder	- Revised exempted fishery line - Increased large mesh net threshold - Otter trawl retentions requirements for large mesh use

Table 4. Continued. Summary of the history of the Summer Flounder, Scup, and Black Sea Bass FMP.

Year Approved	Document	Plan Species	Management Action(s)
1993	Amendment 4	summer flounder	- Revised state-specific shares for summer flounder quota allocation
1993	Amendment 5	summer flounder	- Allowed states to combine or transfer summer flounder quota
1994	Amendment 6	summer flounder	- Set criteria for allowance of multiple nets on board commercial vessels for summer flounder - Established deadline for publishing catch limits, commercial mgmt. measures for summer flounder
1995	Amendment 7	summer flounder	- Revised the F reduction schedule for summer flounder
1996	Amendment 8	summer flounder and scup	- Incorporated Scup FMP into Summer Flounder FMP and established scup measures including commercial quotas, recreational harvest limits, size limits, gear restrictions, permits, and reporting requirements
1996	Amendment 9	summer flounder and black sea bass	- Incorporated Black Sea Bass FMP into Summer Flounder FMP and established black sea bass measures including commercial quotas, recreational harvest limits, size limits, gear restrictions, permits, and reporting requirements
1997	Amendment 10	summer flounder, scup, and black sea bass	- Modified commercial minimum mesh requirements, continued commercial vessel moratorium, prohibited transfer of fish at sea, established special permit for party/charter sector for summer flounder
1998	Amendment 11	summer flounder, scup, and black sea bass	- Modified certain provisions related to vessel replacement and upgrading, permit history transfer, splitting, and permit renewal regulations
1999	Amendment 12	summer flounder, scup, and black sea bass	- Revised FMP to comply with the SFA and established framework adjustment process
2001	Framework 1	summer flounder, scup, and black sea bass	-Established quota set-aside for research for all three species
2001	Framework 2	summer flounder	- Established state-specific conservation equivalency measures for summer flounder
2003	Framework 3	scup	- Allowed the rollover of scup quota - Revised start date for summer quota period for scup fishery
2003	Framework 4	scup	- Established system to transfer scup at sea
2003	Amendment 13	summer flounder, scup, and black sea bass	- Addressed disapproved sections of Amendment 12 and included new EIS
2004	Framework 5	summer flounder, scup, and black sea bass	- Established multi-year specification setting of quota for all three species
2006	Framework 6	summer flounder	- Established region-specific conservation equivalency measures for summer flounder

Table 4. Continued. Summary of the history of the Summer Flounder, Scup, and Black Sea Bass FMP.

Year Approved	Document	Plan Species	Management Action(s)
2007	Amendment 14	scup	- Established rebuilding schedule for scup
2007	Framework 7	summer flounder, scup, and black sea bass	- Built flexibility into process to define and update status determination criteria for each plan species - Scup GRAs made modifiable through framework adjustment process
2007	Amendment 16	summer flounder, scup, and black sea bass	- Standardized bycatch reporting methodology

4.3.5 Atlantic Surfclam and Ocean Quahog FMP

The management unit is all Atlantic surfclams (*Spisula solidissima*) and ocean quahogs (*Arctica islandica*) in the Atlantic EEZ. The ocean quahogs managed in this FMP include a small-scale fishery in eastern Maine that harvests small ocean quahogs which are generally sold for the half-shell market. Locally these small ocean quahogs off the coast of Maine are known as "mahogany quahogs" and have been under Council management since implementation of Amendment 10 (MAFMC 1998). There is no scientific question that the small scale Maine fishery occurs on *Arctica islandica*. The management regime is detailed in the FMP, including any subsequent amendments. A summary of the management actions taken since the establishment of the FMP, through FMP amendments and FMP framework adjustments is given in Table 5. The management objectives of the Atlantic Surfclam and Ocean Quahog FMP are as follows:

1) Conserve and rebuild Atlantic surfclam and ocean quahog resources by stabilizing annual harvest rates throughout the management unit in a way that minimizes short term economic dislocations.
2) Simplify to the maximum extent the regulatory requirement of surfclam and ocean quahog management to minimize the government and private cost of administering and complying with regulatory, reporting, enforcement, and research requirements of surfclam and ocean quahog management.
3) Provide the opportunity for industry to operate efficiently, consistent with the conservation of surfclam and ocean quahog resources, which will bring harvesting capacity in balance with processing and biological capacity and allow industry participants to achieve economic efficiency including efficient utilization of capital resources by the industry.
4) Provide a management regime and regulatory framework which is flexible and adaptive to unanticipated short term events or circumstances and consistent with overall plan objectives and long term industry planning and investment needs.

Table 5.Summary of the history of the Atlantic Surfclam and Ocean Quahog FMP.

Year Approved	Document	Plan Species	Management Action(s)
1977	Original FMP	Atlantic surfclam and ocean quahog	- Established management of surfclam and ocean quahog fisheries through September 1979 - Established quarterly quotas for surfclams - Established annual quotas for ocean quahogs - Established effort limitation, permit, and logbook provisions - Instituted a moratorium on entry into the surfclam fishery for one year to allow time for the development of an alternative limited entry system such as a "stock certificate" program
1979	Amendment 1	Atlantic surfclam and ocean quahog	- Extended management authority through December 31, 1979 - Maintained the moratorium
1979	Amendment 2	Atlantic surfclam and ocean quahog	- Extended the FMP through the end of 1981 - Divided the surfclam portion of the management unit into the New England and Mid-Atlantic Area - Introduced a "bad weather make up day" - Maintained the moratorium in the Mid-Atlantic Area
1981	Amendment 3	Atlantic surfclam and ocean quahog	- Extended the FMP indefinitely - Imposed a 5.5" surfclam minimum size limit in the Mid-Atlantic Area - Expanded the surfclam fishing week in the Mid-Atlantic Area to Sunday - Thursday from Monday – Thursday - Established a framework basis for quota setting - Proposed a permit limitation system to replace the moratorium which was disapproved by NMFS - NMFS extended the moratorium
1984	Amendment 4 - Not approved		
1985	Amendment 5	Atlantic surfclam and ocean quahog	- Allowed for revision of the surfclam minimum size limit provision - Extended the size limit throughout the entire fishery - Instituted a requirement that cages be tagged
1986	Amendment 6	Atlantic surfclam and ocean quahog	- Divided the New England Area into the Nantucket Shoals and Georges Bank Areas, the dividing line being 69° N Longitude - Combined the provisions of Amendment 4 with the Mid-Atlantic Council's Amendment 6 into one document - Replaced the bimonthly quotas with quarterly quotas - Eliminate the weekly landing limits for the Nantucket Shoals Area - Clarified the quota adjustment provisions for the Nantucket Shoals and Georges Bank Areas - Established one landing per trip provision
1987	Amendment 7	Atlantic surfclam and ocean quahog	- Changed the quota distribution on Georges Bank to equal quarterly quotas - Revised the roll over provisions
1988	Amendment 8	Atlantic surfclam and ocean quahog	- Replaced the regulated fishing time system in the surfclam and ocean quahog fisheries with an individual transferable quota (ITQ) system

Table 5. Continued. Summary of the history of the Atlantic Surfclam and Ocean Quahog FMP.

Year Approved	Document	Plan Species	Management Action(s)
1996	Amendment 9	Atlantic surfclam and ocean quahog	- Revised the overfishing definitions for surfclams and ocean quahogs in response to a scientific review by NMFS
1998	Amendment 10	Ocean quahog	- Provided management measures for the small artisanal fishery for ocean quahogs (mahogany clams) off the northeast coast of Maine
1998	Amendment 11	Atlantic surfclam and ocean quahog	- Achieved consistency among Mid-Atlantic and New England FMPs on vessel replacement and upgrade provisions, permit history transfer and splitting and renewal regulations for fishing vessels issued Northeast Limited Access Federal Fishery permits
1998	Amendment 12	Atlantic surfclam and ocean quahog	- Brought the FMP into compliance with the new and revised National Standards and other requirements of the 1996 Sustainable Fisheries Act - Established a framework adjustment process - Implemented an Operator Permit requirement for fishermen that did not already have them for other fisheries - The Regional Administrator partially approved Amendment 12 with the exceptions of the proposed surfclam overfishing definition and the fishing gear impacts to EFH section.
2003	Amendment 13	Atlantic surfclam and ocean quahog	- Addressed various disapproved sections of Amendment 12
2007	Amendment 14	Atlantic surfclam and ocean quahog	- Standardized bycatch reporting methodology

4.3.6 Tilefish FMP

The management unit is defined as all golden tilefish under United States jurisdiction in the Atlantic Ocean north of the Virginia/North Carolina border. Tilefish south of the Virginia/North Carolina border are currently managed as part of the Fishery Management Plan for the Snapper-Grouper Fishery managed by the South Atlantic Fishery Management Council. The management regime is detailed in the FMP, including any subsequent amendments. A summary of the management actions taken since the establishment of the FMP, through FMP amendments and FMP framework adjustments is given in Table 6. The management objectives of the Tilefish FMP are as follows:

1) Prevent overfishing and rebuild the resource to the biomass that would support MSY.
2) Prevent overcapitalization and limit new entrants.
3) Identify and describe essential tilefish habitat.
4) Collect necessary data to develop, monitor, and assess biological, economic, and social impacts of management measures designed to prevent overfishing and to reduce bycatch of tilefish in all fisheries.

Table 6. Summary of the history of the Tilefish FMP.

Year Approved	Document	Management Action(s)
2001	Original FMP	- Established management of the Golden Tilefish fishery - Limited entry into the commercial fishery - Implemented system for dividing Total Allowable Landings (TAL) among three fishing categories
2001	Framework 1	- Created quota set-aside for the purposes of conducting research
2007	Amendment 2	- Standardized bycatch reporting methodology
2009	Amendment 1	- Implemented an individual fishing quota (IFQ) program for the commercial fishery - Established new reporting requirements - Imposed gear modifications - Addressed recreational fishing issues - Reviewed the EFH components of the FMP

4.4 Structure of the Document

This document amends the following FMPs: Atlantic Mackerel, Squid, and Butterfish; Bluefish; Spiny Dogfish; Summer Flounder, Scup, and Black Sea Bass; Surfclam and Ocean Quahog; and Tilefish for all the managed resources, except *Loligo* and *Illex* squids. In order to present the information contained in the Omnibus Amendment in as clear a manner as possible the document is organized as follows:

Section 5.0 identifies the management alternatives, including no action/status quo alternatives, the Council-preferred alternatives and any non-preferred alternatives that were considered by the Council. Structurally, the alternatives are presented as sets, where the Council will need to select between either one or more action alternatives which would implement new measures and the status quo/no action alternative for each set. The selection of the preferred alternatives within section 5.0, taken in conjunction with those existing measures in the FMPs, will provide a comprehensive framework for the catch limit and accountability system recommended in the revised NS1 guidelines provided by NMFS. In some cases, more than one preferred alternative may be identified for a set of measures. Section 5.1 includes a description of the no action and describes why the no action and status quo are the same. Section 5.2 provides alternatives which address the specification of ABC, which includes two parts: (1) the ABC control rule methods and (2) Council risk policy. Section 5.3 provides alternatives which address ACLs and AMs for the managed resources, and are ordered by FMP and managed resources. There are three sub-sections for each managed resource, which address specifying annual catch limits, proactive accountability, and reactive accountability. These three sub-sections were an outgrowth of the early discussion of the Council which considered first how to address specification of the ACL, and second how to address the two types of accountability measures. Each suite of options is composed of a status quo/no action alternative, and one or more action alternatives that are under Council consideration. In the case of proactive accountability and performance review alternatives, the Council may identify more than one action alternative as preferred. Section 5.4 provides alternatives that address any future review and modification of actions taken in this document. Section 5.0 follows this general organization, and Boxes ES-1 through ES-12 in section 1.0, more fully describe the organization of the alternatives in each subsection.

- 5.1 No action
- 5.2 Specifying ABC
    - 5.2.1 ABC Control Rule Methods
    - 5.2.2 Council Risk Policy
- 5.3 ACLs and AMs (sub-section for each of the managed resources)
    - Managed resource ACL
    - Managed resource Proactive AMs
    - Managed resource Reactive AMs
    - Other AM measures (if applicable for a managed resource)
- 5.4 Future Review and Modification of Actions
    - Performance review
    - Modification of actions

Those alternatives/measures that the Council considered but rejected from further analysis in the document are described under Appendix A.

Section 6.0 provides the description of the affected environment for each of the managed resources.

Section 7.0 presents the expected environmental consequences of the alternatives under consideration. This chapter evaluates the impacts associated with the preferred alternative relative to the Status quo/no action alternatives, and the expected cumulative effects associated with the action.

Section 8.0 describes the relationship of this action to all other applicable laws and directives, including NEPA, RFA, CZMA, ESA, and MMPA. This chapter documents compliance with these other laws and directives, and includes a Finding of No Significant Impact (FONSI) statement, an assessment under the RFA, and a RIR.

Section 9.0 presents the essential fish habitat (EFH) assessment. Section 10 provides the literature cited throughout this document, while Section 11 and 12 provide lists of preparers and agency persons consulted in the preparation of this EA.

Four appendices are provided with the Omnibus Amendment. Appendix A presents those measures that were considered but rejected from further analysis by the Council during the amendment development process. Appendix B provides a description of the new terminology for each FMP relative to existing FMP terminology. Appendix C described the species that are listed as endangered and threatened within the management units for the managed resources. Appendix D provides the comments that were received during the public hearing process.

This structure was selected in order to avoid the duplication and redundancy that would result from maintaining an FMP-based structure throughout the entire Omnibus Amendment. Some degree of duplication is unavoidable in a document such as this, given the many subject FMPs and the multiple legal requirements that apply to its development.

4.5 Selection of the Council-Preferred Alternatives

The selection of Council-preferred alternatives in this Omnibus ACL/AM Amendment are the culmination of over three years of Council discussion at Council meetings, Council workshops, and Committee meetings, following the MSRA being signed into law on January 12, 2007. Prior to NMFS producing revised guidance for implementing National Standard 1 on January 16, 2009, the Council formed an ACL/AM Committee to begin discussions of how the new law would affect the fisheries for the managed resources.

In light of the complex new guidelines and the need to comprehensively evaluate and modify all of the Council FMPs, the Council decided to address the MSA requirements and NS1 guidelines through an Omnibus ACL/AM Amendment. This Omnibus approach enabled the Council to take a consistent approach to determining what new measures were needed to address scientific and management uncertainty and establish a comprehensive system of catch accountability. Maintaining consistency across the various resource FMPs would have posed a greater challenge had the Council amended each FMP independently on differing time schedules.

The Council took the practical approach of first reviewing each of its managed resources FMPs relative to the NS1 guidelines. The Council then sought to develop new measures, which taken in conjunction with existing measures, bring the plans into consistency and further promote the objectives of preventing overfishing and enabling these fisheries to achieve optimum yield. While the Council considered approaches to addressing the NS1 guidelines that were under development by other regional Council's, ultimately the Council selected an approach in this Omnibus ACL/AM Amendment that is responsive to the unique aspects of the fisheries managed in the Mid-Atlantic and complements the current FMP infrastructure (i.e., utilizes established FMP allocations, fishing sectors, and unique aspects of the plans).

The Council recognized that the MSA provided the SSC with the responsibility of recommending an ABC for each of the managed resources to the Council. As such, the Council sought the SSC's advice in developing a framework of ABC control rule methods (Council-preferred alternative ABC-B); which is essentially a pre-agreed process the SSC would use to derive ABC recommendations for the Council. The control rule methods under this preferred alternative correspond to the level of stock assessment information available. This framework of methods was the result of extensive deliberation on the part of the SSC and the Council and provides the flexibility to apply the best available information when it becomes available. The Council developed a risk policy, which will be used to inform the SSC of what the Council perception of an acceptable risk of overfishing for a given stock. The Council selected alternative RISK-G as its preferred risk policy alternative on the basis that it provided a simple formula which reflected a decreasing Council tolerance for overfishing with decreasing stock size, and allowed for consideration of fish life history (i.e., typical versus atypical) which the Council considered to be an important cofactor when identifying their risk tolerance.

In July 2009, the Council held a one-day special meeting session specifically to discuss what mechanism to use to establish ACLs. Ultimately, the Council determined that the use of ACTs was the preferred approach to address management uncertainty for the managed resources and therefore set ACL=ABC for all the managed resources. The implications of exceeding an ACT are less significant, and enable the ACT to function as a soft target for the fisheries without all the automatic reactive accountability measures associated with exceeding an ACL. The use of ACT(s) to address management uncertainty provided the Council with greater flexibility as a proactive AM. Each ACT can be crafted in response to the specific levels of uncertainty in each of the fisheries or fishing sectors. The Council sought to use the group most knowledgeable about the fisheries and management uncertainty, the Monitoring Committee's and staff in the case of surfclam and ocean quahog, to provide advice on specifying ACT(s). The ACT(s) are a particularly important proactive management measure for recreational fisheries, where the Council was limited in its ability to develop proactive measures due to data timing and availability that prevented the development of inseason management measures beyond applying general recreational fishery closure authority. The Council acknowledged that establishing an ACT(s) is an important proactive measure to prevent the ACL from being exceeded for the managed resources, and for some of its fisheries it is the primary measure to prevent the ACL from being exceeded.

For some of the commercial fisheries for the managed resources, reactive accountability measures (i.e., overage deduction mechanisms) already existed. The Council chose to extend the existing quota-based FMP infrastructure and measures, such that reactive accountability has been applied to all of the resource fisheries catch components (i.e., landings, discards, etc.) consistent with the existing allocation formulas. The new reactive measures developed are specifically anchored to whether the ACL is exceeded. The overage deduction mechanisms in place prior to this Omnibus ACL/AM Amendment occur irrespective of whether the ACL was or was not exceeded, and those measures have not been modified. The Council acknowledges that overage deduction mechanisms serve the dual function of both mitigating an overage if it occurs preventing any potential biological harm, as well as maintaining the integrity of the Council established allocations which were previously determined to be consistent with the national standards.

The Council selection of preferred alternatives considered was based on a broad consideration of all the issues and extensive public input. The Council considered the numerous comments provided by members of the public during scoping, through letters and emails, and during public hearings (Appendix D) and Council meetings. Those alternatives/measures that the Council considered but rejected from further analysis in the document are described under Appendix A. It should be noted, however, that Council discussion and consideration was not limited to only the measures contained in Appendix A; those measures are only those that were included in the June 2010 draft and rejected.

5.0 MANAGEMENT ALTERNATIVES

The selection of the preferred alternatives within section 5.0, taken in conjunction with those existing measures in the FMPs, will provide a comprehensive framework for the catch limit and accountability system recommended in the revised NS1 guidelines provided by NMFS. Each suite of potential options is composed of a status quo/no action alternative, and one or more action alternatives that the Council considered when identify preferred alternatives. In the case of proactive accountability and performance review alternatives, the Council may identify more than one action alternative as preferred.

5.1 No Action

Section 5.03(b) of NOAA Administrative Order (NAO) 216-6, "Environmental review procedures for implementing the National Environmental Policy Act," states that "an EA must consider all reasonable alternatives, including the preferred action and the no action alternative." Consideration of the "no action" alternative is important because it shows what would happen if the proposed action is not taken. Defining exactly what is meant by the "no action" alternative is often difficult. The President's Council on Environmental Quality (CEQ) has explained that there are two distinct interpretations of the "no action:" One interpretation is essentially the *status quo*, i.e., no change from the current management; and the other interpretation is when a proposed project, such as building a railroad facility, does not take place. In the case of the proposed action alternatives contained within this document to specify mechanisms to set ABC, ACLs, and AMs, and future review and modification of those actions for the managed resources of this Omnibus Amendment, it is slightly more complicated than either of these interpretations suggest. There is no analogue for these fisheries to the railroad project described above, where no action means nothing happens. The management regimes and associated management measures within the FMPs (section 4.2) for the managed resources have been refined over time and codified in regulation. The *status quo* management measures for the managed resources, therefore, each involve a set of indefinite (i.e., in force until otherwise changed) measures that have been established. These measures will continue as they are even if the actions contained within this document are not taken (i.e., no action). The no action alternative for these managed resources is therefore equivalent to *status quo*. On that basis, the status quo and no action are presented in conjunction (i.e., Status quo/no action alternative) for comparative impact analysis relative to the action alternatives.

5.2 Specifying Acceptable Biological Catch

This section is comprised of two subsections which address the establishment of ABC controls rule methods in the FMP and a Council risk policy. Box 5.2 provides a brief overview of the alternatives contained within this section.

Box 5.2. Brief description of the alternatives included in section 5.2.				
Issue	**Sub-Issue**	**Alternative**	**Status**	**Description of Action**
Acceptable Biological Catch (ABC) (Section 5.2)	*ABC Alternatives (Section 5.2.1)*	ABC-A	Status quo/no action	No action to establish ABC control rule methods in FMP
		ABC-B (Council-Preferred)	Proposed	Council establishes ABC control rule methods in FMP
	Council Risk Policy (Section 5.2.2)	RISK-A	Status quo/no action	No action to establish formal risk policy in FMP
		RISK-B	Proposed	Constant probability of overfishing = 25 Percent
		RISK-C	Proposed	Stock Status, Replenishment Threshold, with Inflection at B/B_{MSY} = 1.0
		RISK-D	Proposed	Stock Status/Assessment Level Offset, Replenishment Threshold, with Inflection at B/B_{MSY} = 1.5
		RISK-E	Proposed	Stock Status/Assessment Level Offset, Replenishment Threshold, with 2 Inflection Points at B/B_{MSY} = 1.0 and B/B_{MSY} = 2.0
		RISK-F	Proposed	Categorical (4 x 4) with stock history, life history, and assessment level
		RISK-G (Council-Preferred)	Proposed	Stock Status/Life History, Inflection at B/BMSY = 1.0

5.2.1 Acceptable Biological Catch Alternatives

Alternative ABC-A: Status quo/no action

Under this status quo alternative, the process used by the SSC for developing ABC recommendations for the Council would continue. There would be no formalization of the process to address scientific uncertainty and the SSC would continue to apply ad hoc methods to develop ABC recommendations. ABC would continue to be specified for up to three years for each of the managed resources, except spiny dogfish which may be specified up to five years and bluefish specified annually. This ad hoc process would not establish ABC control rules in the FMP for the managed resources consistent with NS1 guidelines (§ 600.310(f)(4)).

Alternative ABC-B (Council-Preferred): ABC Control Rule Methods – Four Assessment Levels

A multi-level approach will be used for setting an ABC for each Mid-Atlantic stock, based on the overall level of scientific uncertainty associated with its assessment. The stock assessment will be required to provide estimates of the maximum fishing mortality threshold (MFMT) and future biomass, the probability distributions of these estimates, the probability distribution of the overfishing limit (OFL; level of catch that would achieve MFMT given the current or future biomass), and a description of factors considered and methods used to estimate their distributions. The multi-level approach defines four levels of overall assessment uncertainty defined by characteristics of the stock assessment and determination by the SSC that the uncertainty in the probability distribution of OFL adequately represents best available science. The procedure used to determine ABCs is different in each level of the methods framework. The SSC will determine to which level the assessment for a particular stock belongs when setting single or multi-year ABC specifications and a description of the justification for assignment to a level will be provided with the ABC recommendation. The ABC recommendations should be more precautionary as an assessment moves from level 1 to level 4. Recommendations for ABC may be made for up to 3 years for all of the managed resources except spiny dogfish which may be specified for up to 5 years. The rationale for assigning an assessment to a level will be reviewed each time an ABC determination is made.

The levels of stock assessments, their characteristics, and procedures for determining ABCs are defined as follows:

Level 1: Level 1 represents the highest level to which an assessment can be assigned. Assignment of a stock to this level implies that all important sources of uncertainty are fully and formally captured in the stock assessment model and the probability distribution of the OFL calculated within the assessment provides an adequate description of uncertainty of OFL. Accordingly, the OFL distribution will be estimated directly from the stock assessment. In addition, for a stock assessment to be assigned to Level 1, the SSC must determine that the OFL probability distribution represents best available science. Examples of attributes of the stock assessment that would lead to inclusion in Level 1 are:

- Assessment model structure and any treatment of the data prior to inclusion in the model includes appropriate and necessary details of the biology of the stock, the fisheries that exploit the stock, and the data collection methods;
- Estimation of stock status and reference points integrated in the same framework such that the OFL calculations promulgate all uncertainties (stock status and reference points) throughout estimation and forecasting;
- Assessment estimates relevant quantities including F_{MSY}[4], OFL, biomass reference points, stock status, and their respective uncertainties; and
- No substantial retrospective patterns in the estimates of fishing mortality (F), biomass (B), and recruitment (R) are present in the stock assessment estimates.

The important part of Level 1 is that the precision estimated using a purely statistical routine will define the OFL probability distribution. Thus, all of the important sources of uncertainty are formally captured in the stock assessment model. When a Level 1 assessment is achieved, the assessment results are likely unbiased and fully consider uncertainty in the precision of estimates. Under Level 1, the ABC will be determined solely on the basis of an acceptable probability of overfishing (P*), determined by the Council's risk policy (see alternatives in section 5.2.2), and the probability distribution of the OFL.

Level 2: Level 2 indicates that an assessment has greater uncertainty than Level 1. Specifically, the estimation of the probability distribution of the OFL directly from the stock assessment model fails to include some important sources of uncertainty, necessitating expert

[4] With justification, F_{MSY} may be replaced with an alternative maximum fishing mortality threshold to define the OFL.

judgment during the preparation of the stock assessment, and the OFL probability distribution is deemed best available science by the SSC. Examples of attributes of the stock assessment that would lead to inclusion in Level 2 are:

- Key features of the biology of the stock, the fisheries that exploit it, or the data collection methods are missing from the stock assessment;
- Assessment estimates relevant quantities, including reference points (which may be proxies) and stock status, together with their respective uncertainties, but the uncertainty is not fully promulgated through the model or some important sources may be lacking;
- Estimates of the precision of biomass, fishing mortality rates, and their respective reference points are provided in the stock assessment; and
- Accuracy of the MFMT and future biomass is estimated in the stock assessment by using *ad hoc* methods.

In this level, ABC will be determined by using the Council's risk policy (see alternatives in section 5.2.2), as with a Level 1 assessment, but with the OFL probability distribution based on the specified distribution in the stock assessment.

Level 3: Attributes of a stock assessment that would lead to inclusion in Level 3 are the same as Level 2, except that

- The assessment does not contain estimates of the probability distribution of the OFL or the probability distribution provided does not, in the opinion of the SSC, adequately reflect uncertainty in the OFL estimate.

Assessments in this level are judged to over- or underestimate the accuracy of the OFL. The SSC will adjust the distribution of the OFL and develop an ABC recommendation by applying the Council's risk policy (see alternatives in section 5.2.2) to the modified OFL probability distribution. The SSC will develop a set of default levels of uncertainty in the OFL probability distribution for this level based on literature review and a planned evaluation of ABC control rules. A control rule of 75 percent of F_{MSY} may be applied as a default if an OFL distribution cannot be developed.

Level 4: Stock assessments in Level 4 are deemed to have reliable estimates of trends in abundance and catch, but absolute abundance, fishing mortality rates, and reference points are suspect or absent. Additionally, there are limited circumstances that may not fit the standard approaches to specification of reference points and management measures set forth in these guidelines (i.e., ABC determination). In these circumstances, the SSC may propose alternative approaches for satisfying the NS1 requirements of the MSA than those set forth in the NS1 guidelines. In particular, stocks in this level do not have point estimates of the OFL or probability distributions of the OFL that are considered best available science. In most cases, stock assessments that fail peer review or are deemed highly uncertain by the SSC will be assigned to this level. Examples of potential attributes for inclusion in this category are:

- Assessment approach is missing essential features of the biology of the stock, characteristics of data collection, and the fisheries that exploit it;
- Stock status and reference points are estimated, but are not considered reliable;

- Assessment may estimate some relevant quantities including biomass, fishing mortality or relative abundance, but only trends are deemed reliable;
- Large retrospective patterns usually present; and
- Uncertainty may or may not be considered, but estimates of uncertainty are probably substantially underestimated.

In this level, a simple control rule will be used based on biomass and catch history and the Council's risk policy.

The SSC will determine, based on the assessment level to which a stock is classified, the specifics of the control rule to specify ABC that would be expected to attain the probability of overfishing specified in the Council's risk policy. The SSC may deviate from the above control rule methods framework or level criteria and recommend an ABC that differs from the result of the ABC control rule calculation, but must provide justification for doing so.

5.2.2 Risk Policy Alternatives

The Council risk policy alternatives given below would be applied all to the managed resources under MAFMC management jurisdiction. Under any of the action risk alternatives selected below, which excludes alternative RISK-A, the following would also apply.

For managed resources that are under rebuilding plans, the upper limit on the probability of exceeding $F_{REBUILD}$ would be 50 percent unless modified to a lesser value (i.e., higher probability of not exceeding $F_{REBUILD}$) through a rebuilding plan amendment. For example, the Council may conclude through a rebuilding plan Amendment that setting catch limits at the 25th percentile of catch associated with $F_{REBUILD}$ would rebuild the stock more quickly (i.e., provide for 75 percent probability of not exceeding $F_{REBUILD}$). In instances where the SSC derives a more restrictive ABC recommendation, based on the application of the ABC control rule methods framework and risk policy, than the ABC derived from the use of $F_{REBUILD}$ at the MAFMC-specified overfishing risk level, the SSC shall recommend to the MAFMC the lower of the ABC values.

In addition, if no OFL is available (i.e., No F_{MSY} or F_{MSY} proxy provided through the stock assessment to identify it) and no OFL proxy is provided by the SSC at the time of ABC recommendations, then an upper limit (cap) on allowable increases in ABC will be established. ABC may not be increased until an OFL has been identified. This policy is designed to prevent catch limits from being increased when there are no criteria available to determine if overfishing will be occurring for the upcoming fishing year. To reduce the risk of overfishing, the Council policy would be to not increase ABC in the absence of an OFL.

It should be noted in the alternatives below that if the ratio of biomass (B) to biomass at maximum sustainable yield (B_{MSY}) is less than 1.0, then the current stock biomass is less than B_{MSY}; if the ratio of B to B_{MSY} is greater than or equal to B, then the current stock biomass is B_{MSY} or greater.

Alternative Risk-A: Status quo/no action

Under this status quo alternative, there would be no formalization of a Council risk policy which expresses the Council tolerance for overfishing. Under this alternative, no policy would not be established and provided to the SSC prior to ABC recommendations being developed for the Council. The ad hoc Council process to address risk guided by past precedent would continue. Past precedent from *NRDC et al. versus Daley* (USDC, 1999) identifies catch levels must have at least a 50 percent probability of not overfishing. A 50 percent probability of overfishing is, therefore, the upper limit on the risk of overfishing and serves as the precedent-based default in the absence of any Council action to establish a risk policy. Consistent with the status quo, the Council could recommend catch be reduced to achieve a lower probability of overfishing on an ad hoc basis after ABC recommendation have been provided by the SSC to the Council.

Alternative Risk-B: Constant Probability of Overfishing = 25 Percent

Under this alternative, the probability of overfishing will be 25 percent under all circumstances (i.e., irrespective of stock condition, rebuilding status, life history, etc.).

Alternative Risk-C: Stock Status, Inflection at B/B_{MSY} = 1.0

Under this alternative, a stock replenishment threshold defined as the ratio of B/B_{MSY} = 0.10, will be utilized to ensure the stock does not reach low levels from which it cannot recover. The probability of overfishing will be 0 percent if the ratio of B/B_{MSY} is less than or equal to 0.10. Probability of overfishing increases linearly as the ratio of B/B_{MSY} increases, until the inflection point of B/B_{MSY} = 1.0 is reached and a 40 percent probability of overfishing is utilized for ratios equal to or greater than 1.0.

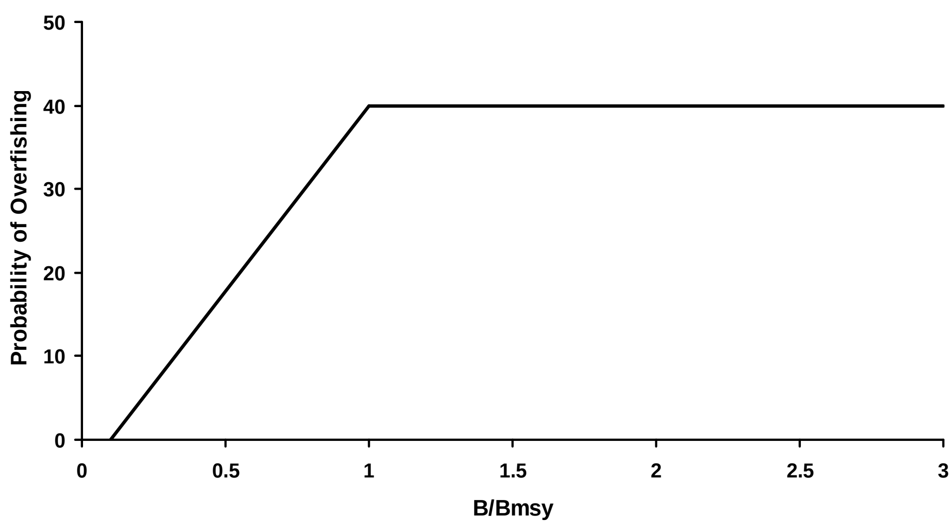


Figure 1. Risk Policy C.

Alternative Risk-D: Stock Status/Assessment Level, Inflection at B/B_{MSY} = 1.5

Under this alternative, a stock replenishment threshold defined as the ratio of B/B_{MSY} = 0.10, will be utilized to ensure the stock does not reach low levels from which it cannot recover. The probability of overfishing will be 0 percent if the ratio of B/B_{MSY} is less than or equal to

0.10. Probability of overfishing increases linearly at similar rates as the ratio of B/B_{MSY} increases; until the inflection point of $B/B_{MSY} = 1.5$ is reached and a 50 percent probability of overfishing is utilized for assessment level 1 (see section 5.2.1), 45 percent for level 2, 40 percent for level 3, and 35 percent for level 4.

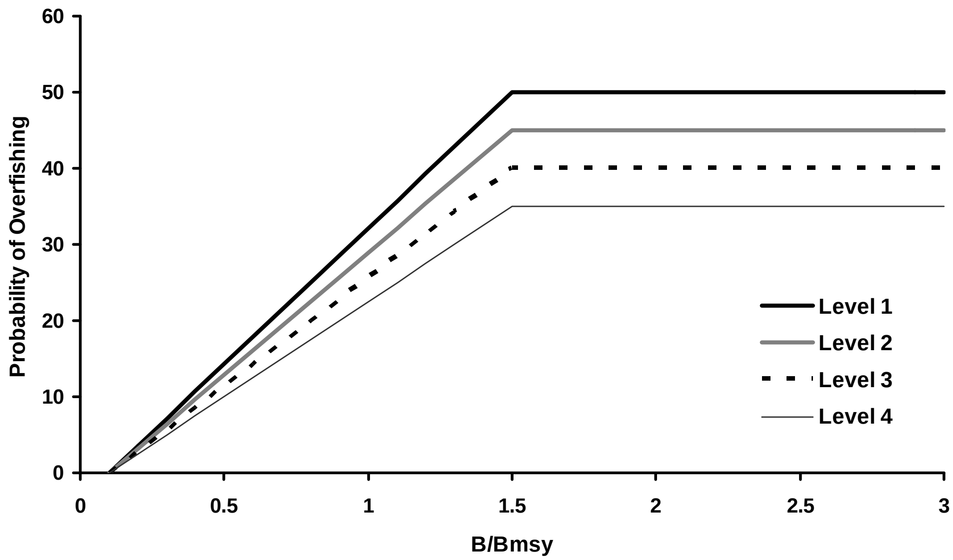


Figure 2. Risk Policy D.

Alternative Risk-E: Stock Status/Assessment Level, 2 Inflection Points at $B/B_{MSY} = 1.0$ and $B/B_{MSY} = 2.0$

Under this alternative, a stock replenishment threshold defined as the ratio of $B/B_{MSY} = 0.10$, will be utilized to ensure the stock does not reach low levels from which it cannot recover. The probability of overfishing will be 0 percent if the ratio of B/B_{MSY} is less than or equal to 0.10. Probability of overfishing increases linearly at similar rates as the ratio of B/B_{MSY} increases; until the inflection point of $B/B_{MSY} = 1.0$ is reached and a 45 percent probability of overfishing is utilized for assessment level 1 (see section 5.2.1), 40 percent for level 2, 35 percent for level 3, and 30 percent for level 4. Probability of overfishing then continues to increase to the inflection point of $B/B_{MSY} = 2.0$, where the probability of overfishing is for level 1 is 50 percent, 45 percent for level 2, 40 percent for level 3, and 35 percent for level 4, for all B/B_{MSY} ratios equal to or greater than 2.0.

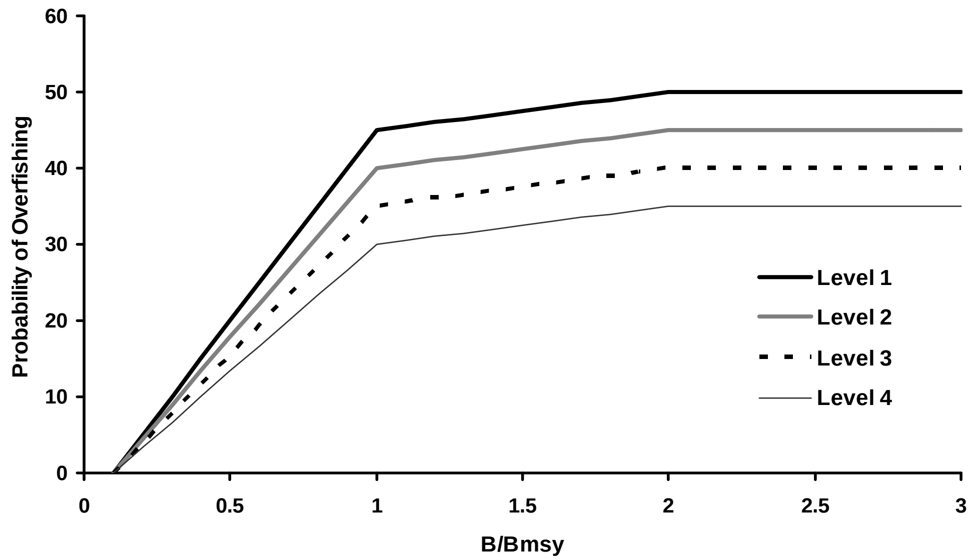


Figure 3. Risk Policy E.

Alternative Risk-F: Categorical, Range from 10 - 50 percent

Under this alternative, specification of the probability of overfishing incorporates assessment level (see section 5.2.1), stock history, and life history patterns. Probability of overfishing is higher for stocks which have not been overfished (either currently or previously based on best available scientific information). Probability of overfishing is also higher for stocks which have typical life history patterns, when compared to atypical life history patterns (e.g., spiny dogfish and black sea bass). In addition, as the assessment level decreases, the probability of overfishing decreases. The SSC will determine whether a stock is typical or atypical each time an ABC is recommended. Generally speaking, an atypical stock has a life history strategy that results in greater vulnerability to exploitation, and whose life history has not been fully addressed through the stock assessment and biological reference point development process.

Table 7. Risk Policy F.

Probability of Overfishing				
Assessment Level	**Stock History (Previously Overfished?)**			
	Has Never Been Overfished		***Has Been Overfished***	
	Life History Pattern		***Life History Pattern***	
	Typical	**Atypical**	**Typical**	**Atypical**
1	50	45	45	40
2	40	35	35	30
3	30	25	25	20
4	20	15	15	10

Alternative Risk-G (Council-Preferred): Stock Status/Life History, Inflection at B/B_{MSY} = 1.0

Under this alternative, a stock replenishment threshold defined as the ratio of B/B_{MSY} = 0.10, will be utilized to ensure the stock does not reach low levels from which it cannot recover. The probability of overfishing will be 0 percent if the ratio of B/B_{MSY} is less than or equal to 0.10. Probability of overfishing increases linearly for stock defined as typical as the ratio of B/B_{MSY} increases, until the inflection point of B/B_{MSY} = 1.0 is reached and a 40 percent probability of overfishing is utilized for ratios equal to or greater than 1.0. Probability of overfishing increases linearly for stock defined as atypical as the ratio of B/B_{MSY} increases, until the inflection point of B/B_{MSY} = 1.0 is reached and a 35 percent probability of overfishing is utilized for ratios equal to or greater than 1.0. The SSC will determine whether a stock is typical or atypical each time an ABC is recommended. Generally speaking, an atypical stock has a life history strategy that results in greater vulnerability to exploitation, and whose life history has not been fully addressed through the stock assessment and biological reference point development process.

In addition, under this alternative for managed resources that are under rebuilding plans, the upper limit on the probability of exceeding $F_{REBUILD}$ would be 50 percent unless modified to a lesser value (i.e., higher probability of not exceeding $F_{REBUILD}$) through a rebuilding plan amendment. In instances where the SSC derives a more restrictive ABC recommendation, based on the application of the ABC control rule methods framework and risk policy, than the ABC derived from the use of $F_{REBUILD}$ at the MAFMC-specified overfishing risk level, the SSC shall recommend to the MAFMC the lower of the ABC values.

In addition, if no OFL is available (i.e., No F_{MSY} or F_{MSY} proxy provided through the stock assessment to identify it) and no OFL proxy is provided by the SSC at the time of ABC recommendations, then an upper limit (cap) on allowable increases in ABC will be established. ABC may not be increased until an OFL has been identified.

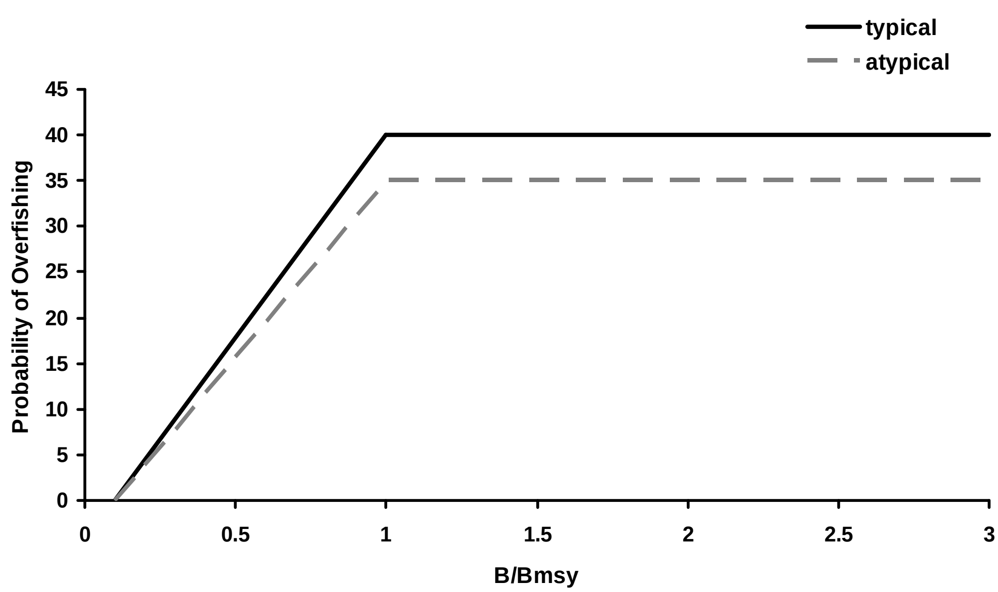


Figure 4. Risk Policy G.

5.3 Annual Catch Limits (ACLs) and Accountability Measures (AMs)

Those measures for ACLs and AMs that were considered but rejected from further analysis by the Council during the preparation of this document are provided in Appendix A, ordered by managed resource.

Atlantic Mackerel, Squids, and Butterfish FMP

5.3.1 Atlantic Mackerel

Amendment 11 to the Atlantic Mackerel, Squids, and Butterfish FMP is developing a recreational harvest limit allocation (i.e., landings-based sector allocation) for the recreational fishery. Regardless of whether this allocation is established, the alternative to specify an ACL for Atlantic Mackerel would remain the same. However, in the event the recreational allocation is either not established by the Council, or is not established before this Omnibus Amendment is effective, two sets of action alternatives for proactive and reactive accountability are provided to enable response to whether a landings-based sector allocation has been established for the recreational fishery. Box 5.2 provides a brief overview of the alternatives contained within this section.

Box 5.3.1. Brief description of the alternatives included in section 5.3.1.

Managed Resource	Issue	Alternative	Status	Description of Action
Atlantic Mackerel (Section 5.3.1)	*Annual Catch Limit (Section 5.3.1.1)*	ATM-A	Status quo/no action	No established ACL in FMP
		ATM-B (Council-Preferred)	Proposed	Establish ACL = domestic ABC
	Proactive Accountability (Section 5.3.1.2)	ATM-C	Status quo/no action	No additional proactive measures established
		ATM-D (Council-Preferred)	Proposed	Use of ACTs; rec. harvest limit established
		ATM-E (Council-Preferred)	Proposed	General inseason closure authority - recreational harvest limit established
		ATM-F	Proposed	Use of ACT; No rec. harvest limit established
		ATM-G	Proposed	General inseason closure authority - No rec. harvest limit established
	Reactive Accountability (Section 5.3.1.3)	ATM-H	Status quo/no action	No reactive AMs established
		ATM-I (Council-Preferred)	Proposed	3 mechanisms accountability for catch
		ATM-J	Proposed	1 mechanism accountability for catch

5.3.1.1 Atlantic Mackerel Annual Catch Limit

Alternative ATM-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process for allowable biological catch that is then apportioned into landing levels termed initial optimum yield (IOY), domestic annual harvest (DAH), domestic annual processing (DAP), and research quota (RQ) as given in Appendix B and outlined in the FMP. While this process could be used to address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council has is considering additional measures, designed to work in concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative ATM-B (Council-Preferred): Specify ACL=Domestic ABC

ACL: Under this alternative, the Council would establish an annual catch limit derived from the ABC recommendation of the SSC, reduced by any scientific uncertainty. Fishery removals (i.e., total catch) are comprised of both U.S. and Canadian catches, and U.S. accountability measures cannot be applied or enforced on the Canadian fishery. Therefore, under this alternative, the fishery-level ACL would be set equal to the domestic ABC for Atlantic mackerel stock. Figures 5 and 6 provided later in this section highlight the ACL structure if this alternative is selected. The ABC is reduced from the overfishing limit (OFL) based on an adjustment for scientific uncertainty and the domestic ABC is defined as the ABC for the stock minus the Canadian catch.

ABC = OFL - Scientific Uncertainty Adjustment

Domestic ABC = ABC – Canadian Catch

Under this alternative, the fishery-level ACL would be set equal to the domestic ABC for Atlantic mackerel.

ACL = Domestic ABC

ACL Evaluation: The ACL is exceeded when the catch from all domestic sources exceeds this value. This comparison of observed catch to ACL is based on a single-year comparison.

5.3.1.2 Atlantic Mackerel Proactive Accountability Measures

Alternative ATM-C: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the Atlantic mackerel fishery. Those AM-like authorities linked to landings which already exist within the FMP for Atlantic mackerel will continue to function as described in the FMP.

The commercial fishery landings component already has inseason closure authority when landings under the DAH are projected to be reached. Specifically, if 100 percent of the DAH is projected to be reached within the fishing season or year, then the fishery could be closed for the remainder of the fishing season or year (§ 648.22(a)(1)).

To slow the approach of observed landings to attaining the DAH, the directed fishery closes when 90 percent of the DAH is reached (§ 648.22(a)(1)) and an incidental 20,000 lb trip limit is implemented if the closure occurs before June 1 and a 50,000 lb trip limit if a closure occurs thereafter (§ 648.25(a)). Vessels may not fish for, possess, or land more than the applicable incidental trip limits at any time and may only land Atlantic Mackerel once per calendar day (defined as 0001 to 2400 hours).

5.3.1.2.1 Recreational Harvest Limit Established

Alternative ATM-D (Council-Preferred): Use of ACTs

Use of ACTs: Under this alternative, existing allocations already defined in the FMP would be used to partition the ACL into sector-specific ACTs (i.e., recreational ACT and commercial ACT). The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 5 provided later in this section highlights the ACT structure if this alternative is selected.

The Atlantic Mackerel Monitoring Committee will be responsible for recommending ACTs to the Council which consider and address management uncertainty as defined under NS1 guidelines, as part of the specifications process for fishery management measures. The Monitoring Committee may provide other recommendations relevant to setting catch limits consistent with the MSA. The Monitoring Committee will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including any formulaic control rules if applied, for any reduction in catch when recommending an ACT for each sector. The ACTs, technical basis, and sources of management uncertainty would be described and provided to the Council at the time Monitoring Committee recommendations are made for fishery management measures for a single year or up to 3 years.

Alternative ATM-E (Council-Preferred): General Inseason Closure Authority

General Recreational Closure Authority: Under this alternative, the Regional Administrator will monitor the recreational fishery, and shall determine if the recreational landings have exceeded the recreational harvest limit (RHL). This determination will be based on observed landings (i.e., data-in-hand) and will not be based upon projections of the data. The Regional Administrator shall publish notification in the *Federal Register* advising that, effective upon a specific date, the Atlantic mackerel recreational fishery in the EEZ will be closed for the remainder of the fishing year. This proactive AM is designed to reduce the magnitude of potential recreational overages by halting the accrual of additional landings, thus reducing the magnitude of overage mitigation necessary if reactive AMs are triggered (i.e., lb-for-lb repayment of overages).

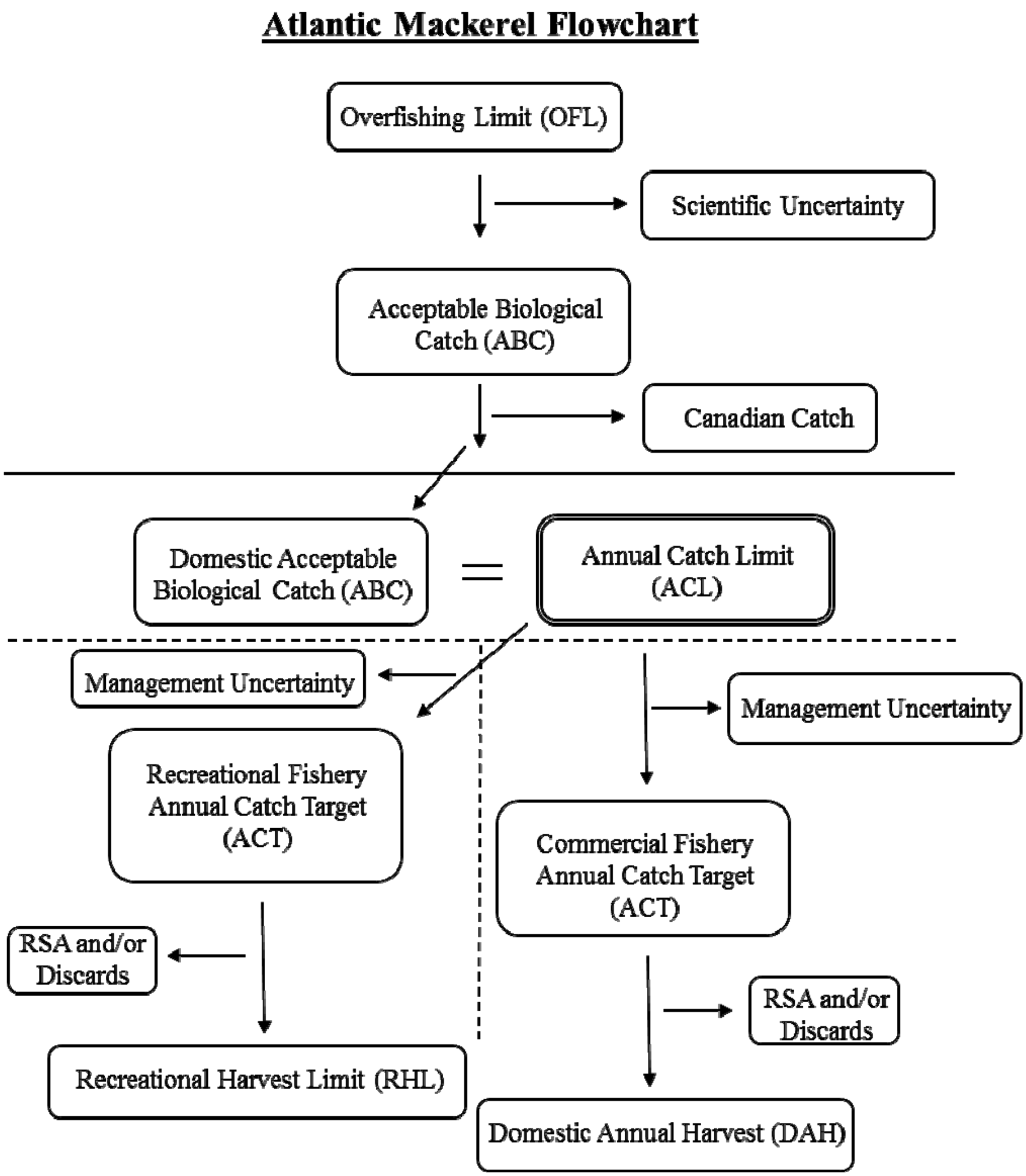


Figure 5. Atlantic mackerel catch limit structure if recreational and commercial ACTs are utilized.

5.3.1.2.2 No Recreational Harvest Limit Established

Alternative ATM-F: Use of ACT

Use of ACT: Under this alternative, a fishery-level ACT would be specified and serve as a buffer from the ACL. Figure 6 provided later in this section highlights the ACT structure if this alternative is selected.

The Atlantic Mackerel Monitoring Committee will be responsible for recommending an ACT to the Council which considers and addresses management uncertainty as defined under NS1 guidelines, as part of the specifications process for fishery management measures. The Monitoring Committee may provide other recommendations relevant to setting catch limits consistent with the MSA. The Monitoring Committee will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including any formulaic control rules if applied, for any reduction in catch when recommending an ACT for Atlantic mackerel. The ACT, technical basis, and sources of management uncertainty would be described and provided to the Council at the time Monitoring Committee recommendations are made for fishery management measures for a single year or up to 3 years.

Alternative ATM-G: General Inseason Closure Authority

General Recreational Closure Authority: Under this alternative, the Regional Administrator will monitor the recreational fishery, and shall determine if the recreational landings have exceeded the RHL. This determination will be based on observed landings (i.e., data-in-hand) and will not be based upon projections of the data. The Regional Administrator shall publish notification in the *Federal Register* advising that, effective upon a specific date, the Atlantic mackerel recreational fishery in the EEZ will be closed for the remainder of the fishing year. This proactive AM is designed to reduce the magnitude of potential recreational overages by halting the accrual of additional landings, thus reducing the magnitude of overage mitigation necessary if reactive AMs are triggered (i.e., lb-for-lb repayment of overages).

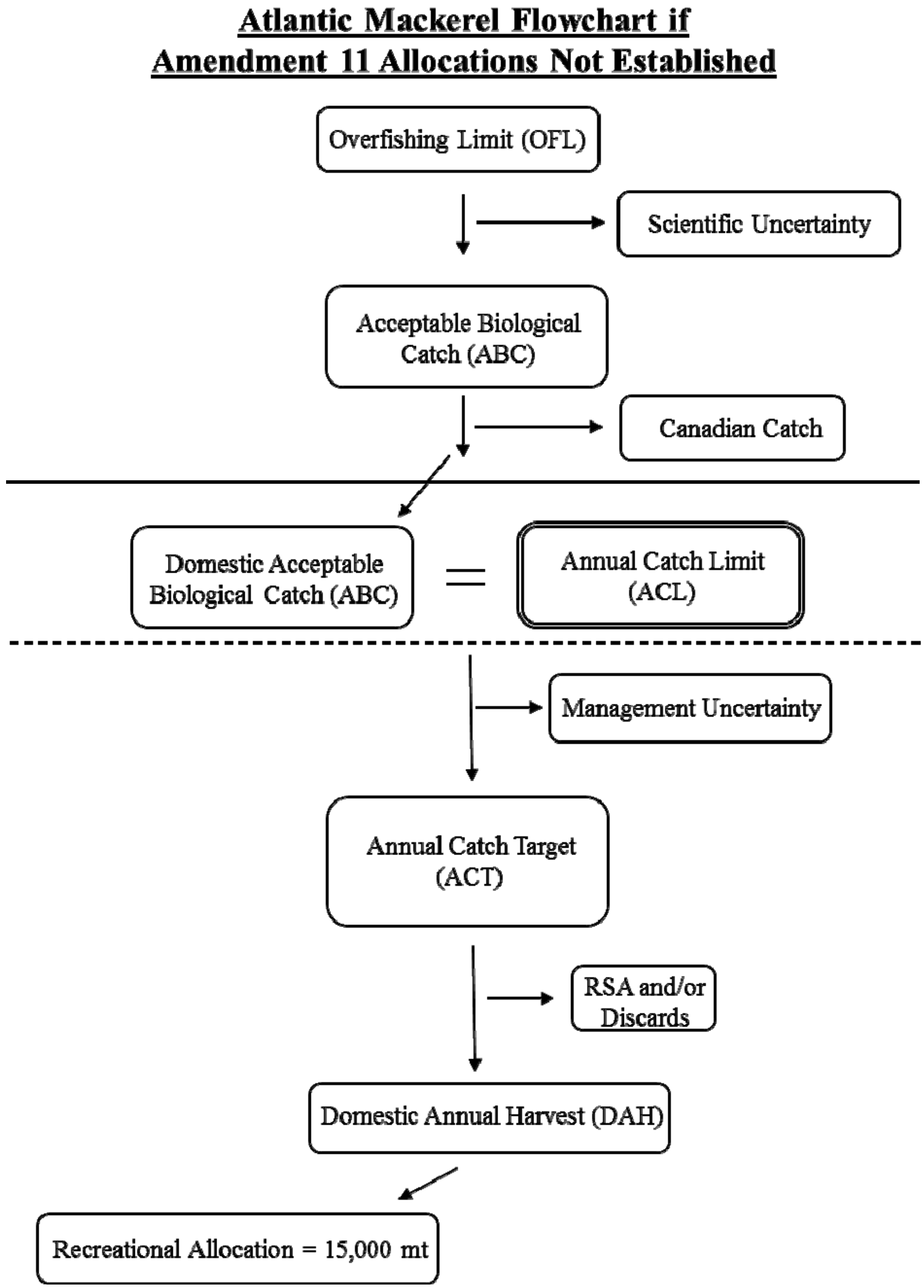


Figure 6. Atlantic mackerel catch limit structure if a single ACT is utilized.

5.3.1.3 Atlantic Mackerel Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

Alternative ATM-H: Status quo/no action

Under this alternative, the status quo would continue and there would be no mechanisms in the FMP for Atlantic mackerel that function as reactive accountability measures and address accountability for all catch components of the ACL. Therefore, this alternative is inconsistent with the NS1 guidelines.

5.3.1.3.1 Recreational Harvest Limit Established

Alternative ATM-I (Council-Preferred): Accountability for Catch Components

For Atlantic Mackerel, under this alternative the Council is proposing three reactive accountability mechanisms that respond to potential overages in the specific sectors or by non-landings, respectively.

Reactive Accountability for the Commercial Landings Component of the ACL: If the ACL is exceeded, and commercial fishery landings are responsible for the overage, then landings in excess of the domestic annual harvest (DAH) will be deducted from the DAH the following year (i.e., lb-for-lb repayment), as a single year adjustment.

Reactive Accountability for the Recreational Landings Component of the ACL: If the ACL is exceeded, and recreational fishery landings are responsible for the overage, then landings in excess of the recreational harvest limit will be deducted from the recreational harvest limit for the following year (i.e., lb-for-lb repayment), as a single year adjustment.

Reactive Accountability for Other Non-landings Components of the ACL: If the ACL is exceeded, and that overage has not been accommodated through other mechanisms in the FMP (i.e., discards and/or unlikely event RSA is exceeded), then the commercial fishery and/or recreational fishery ACT would be adjusted in response to the ACL being exceeded if other reactive AMs have not addressed the overage. Specifically, the amount by which the ACL was exceeded would be used to adjust the sector-specific ACTs the following year (i.e., lb-for-lb repayment), as a single-year adjustment.

5.3.1.3.2 No Recreational Harvest Limit Established

Alternative ATM-J: Accountability for Catch Components

For Atlantic Mackerel, under this alternative the Council is proposing a single reactive accountability mechanism that responds to potential overages for all catch components.

Reactive Accountability for All Catch Components of the ACL: If the ACL is exceeded, then accountability would occur at the fishery level and the ACL would be reduced. Specifically, the amount by which the ACL was exceeded would be used to adjust the ACL the following year (i.e., lb-for-lb repayment), as a single year adjustment.

5.3.2 Butterfish

A brief overview of the alternatives contained within this section is given in Box 5.3.2.

Box 5.3.2. Brief description of the alternatives included in section 5.3.2.

Managed Resource	Issue	Alternative	Status	Description of Action
Butterfish (Section 5.3.2)	*Annual Catch Limit (Section 5.3.2.1)*	BUTTER-A	Status quo/no action	No established ACL in FMP
		BUTTER-B (Council-Preferred)	Proposed	Establish ACL = ABC
	Proactive Accountability (Section 5.3.2.2)	BUTTER-C	Status quo/no action	No additional proactive measures established
		BUTTER-D (Council-Preferred)	Proposed	Use of ACT
	Reactive Accountability (Section 5.3.2.3)	BUTTER-E	Status quo/no action	No reactive AMs established
		BUTTER-F (Council-Preferred)	Proposed	1 mechanism accountability for catch

5.3.2.1 Butterfish Annual Catch Limit

Alternative BUTTER-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process of ABC, landing limits termed IOY, DAH, DAP, and RQ as given in Appendix B and outlined in the FMP. While this process could be used to address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council has is considering additional measures, designed to work in concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative BUTTER-B (Council-Preferred): Specify ACL= ABC

ACL: Under this alternative, the fishery-level ACL would be set equal to the ABC for butterfish. Figure 7 provided later in this section highlights the ACL structure if this alternative is selected.

ACL = ABC

ACL Examination: The ACL is exceeded when the catch from all sources exceeds this value. This comparison of observed catch to ACL is based on a single-year comparison.

5.3.2.2 Butterfish Proactive Accountability Measures

Alternative BUTTER-C: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the butterfish fishery. Those AM-like authorities linked to landings which already exist within the FMP for butterfish would function as described in the FMP.

The directed fishery already has inseason closure authority when 80 percent the Domestic Annual Harvest (DAH) is projected to be reached. The directed fishery closure remains effective for the remainder of the fishing period with incidental catch permitted, as outlined below. (§ 648.22(a)(4)).

During a directed fishery closure, an incidental trip limit of 250 lb is implemented if the closure occurs before October 1 and a 600 lb trip limit if closure occurs thereafter (§ 648.25(b)(1)). Vessels may not fish for, possess, or land more than the applicable incidental trip limits at any time and may only land butterfish once per calendar day (defined as 0001 to 2400 hours). Vessels issued an incidental catch permit for butterfish may not fish for, possess, or land more than 600 lb of butterfish at any time and may land only once per day unless the directed fishery closes before October 1. Then the incidental catch permit possession and landing limit becomes 250 lb (per calendar day).

Alternative BUTTER-D (Council-Preferred): Use of ACT

Use of ACT: Under this alternative, an ACT would be specified and serve as a buffer from the ACL. The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 7 provided later in this section highlights the ACT structure if this alternative is selected.

The Butterfish Monitoring Committee will be responsible for recommending an ACT to the Council which considers and addresses management uncertainty as defined under NS1 guidelines, as part of the specifications process for fishery management measures. The Monitoring Committee may provide other recommendations relevant to setting catch limits consistent with the MSA. The Monitoring Committee will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including any formulaic control rules if applied, for any reduction in catch when recommending an ACT. The ACTs, technical basis, and sources of management uncertainty would be described and provided to the Council at the time Monitoring Committee recommendations are made for fishery management measures for a single year or up to 3 years.

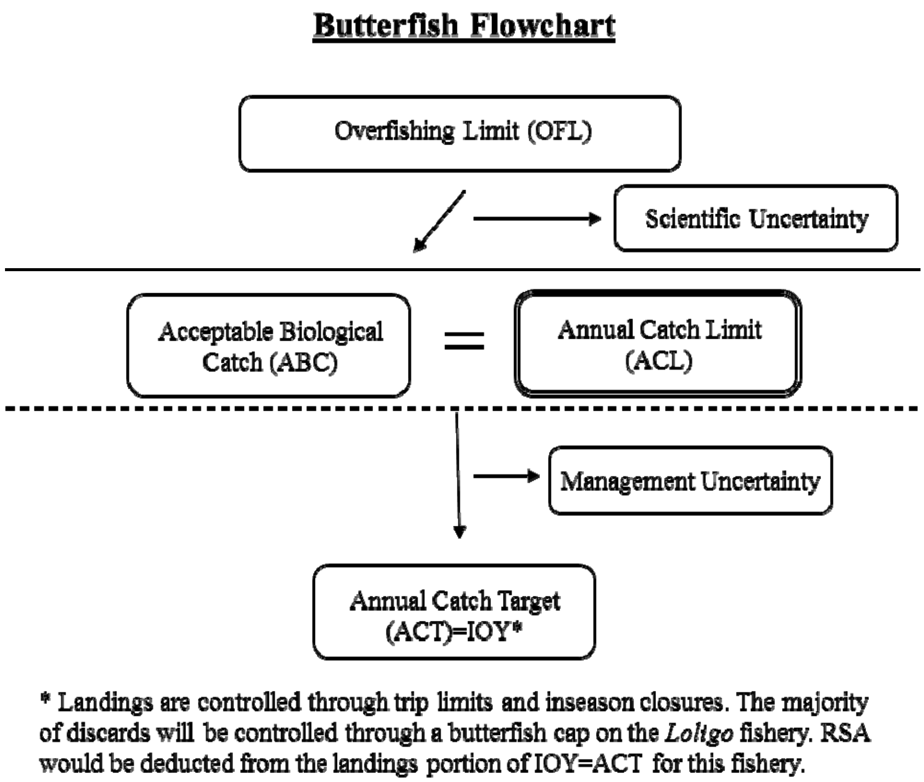


Figure 7. Butterfish catch limit structure if a single ACT is utilized.

5.3.2.3 Butterfish Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

Alternative BUTTER-E: Status quo/no action

Under this alternative, the status quo would continue and there would be no mechanisms in the FMP for butterfish that function as reactive accountability measures and address accountability for all catch components of the ACL. Therefore, this alternative is inconsistent with the NS1 guidelines.

Alternative BUTTER-F (Council-Preferred): Accountability for Catch Components

For butterfish, under this alternative the Council is proposing a single reactive accountability mechanism that responds to potential overages for all catch components.

Reactive Accountability for All Catch Components of the ACL: If the ACL is exceeded, then accountability would occur at the fishery level and the ACL would be reduced. Specifically, the amount by which the ACL was exceeded would be used to adjust the ACL the following year (i.e., lb-for-lb repayment), as a single year adjustment.

Atlantic Bluefish FMP

5.3.3 Bluefish

A brief overview of the alternatives contained within this section is given in Box 5.3.3.

Description of Alternatives (see section 5.3.3 for more detail)				
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**
Bluefish (Section 5.3.3)	*Annual Catch Limit (Section 5.3.3.1)*	BLUE-A	Status quo/no action	No established ACL in FMP
		BLUE-B (Council-Preferred)	Proposed	Establish ACL = ABC
	Proactive Accountability (Section 5.3.3.2)	BLUE-C	Status quo/no action	No additional proactive measures established
		BLUE-D (Council-Preferred)	Proposed	Use of ACTs
		BLUE-E (Council-Preferred)	Proposed	General inseason closure authority - recreational
	Reactive Accountability (Section 5.3.3.3)	BLUE-F	Status quo/no action	No additional reactive AMs established
		BLUE-G (Council-Preferred)	Proposed	3 mechanism accountability for catch
	Joint Action Accountability (Section 5.3.3.4)	BLUE-H	Status quo/no action	No joint action beyond that which already occurs
		BLUE-I (Council-Preferred)	Proposed	Joint action to revisit disconnects in quotas

5.3.3.1 Bluefish Annual Catch Limit

Alternative BLUE-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process of total allowable catch (TAC) and total allowable landings (TAL) divided into a commercial quota and recreational harvest limit, as given in Appendix B and outlined in the FMP. While this process could be used to address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council has is considering additional measures, designed to work in concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative BLUE-B (Council-Preferred): Specify ACL= ABC

ACL: Under this alternative, the fishery-level ACL would be set equal to the ABC for bluefish. Figure 8 provided later in this section highlights the ACL structure if this alternative is selected.

ACL = ABC

ACL Evaluation: The ACL is exceeded when the catch from all sources exceeds this value. This comparison of observed catch to ACL is based on a single-year comparison.

5.3.3.2 Bluefish Proactive Accountability Measures

Alternative BLUE-C: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the bluefish fishery. This includes the specification of management measures annually. Those AM-like authorities linked to landings which already exist within the FMP for bluefish will continue to function as described in the FMP.

When 100 percent of the commercial quota in a given state is projected to be reached within the fishing season or year, commercial landings are prohibited to the state in question (§ 648.161(b)). The EEZ may be closed to commercial fishing for the remainder of the year if all individual states have been closed or inaction by a state or states will cause the established F target to be exceeded during the fishing year (§ 648.161(a)).

There is a mechanism which allows for transfer between the recreational and commercial sectors ((§ 648.160(c)(2)) and to transfer commercial fishery quota allocated pounds between individual states (§ 648.161(f)).

Alternative BLUE-D (Council-Preferred): Use of ACTs

Use of ACTs: Under this alternative, existing allocations already defined in the FMP would be used to partition the ACL into sector-specific ACTs. Separate recreational ACT and commercial fishery ACTs would be specified. The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 8 provided later in this section highlights the ACT structure if this alternative is selected.

The Bluefish Monitoring Committee will be responsible for recommending ACTs to the Council which consider and address management uncertainty as defined under NS1 guidelines, as part of the specifications process for fishery management measures. The Monitoring Committee may provide other recommendations relevant to setting catch limits consistent with the MSA. The Monitoring Committee will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including any formulaic control rules if applied, for any reduction in catch when recommending an ACT. The ACTs, technical basis, and sources of management uncertainty would be described and provided to the Council at the time Monitoring Committee recommendations are made for fishery management measures for a single year or up to 3 years.

Alternative BLUE-E (Council-Preferred): General Inseason Closure Authority

General Recreational Closure Authority: Under this alternative, the Regional Administrator will monitor the recreational fishery, and shall determine if the recreational landings have exceeded the RHL. This determination will be based on observed landings (i.e., data-in-hand) and will not be based upon projections of the data. The Regional Administrator shall publish notification in the *Federal Register* advising that, effective upon a specific date, the bluefish recreational fishery in the EEZ will be closed for the remainder of the fishing year. This proactive AM is designed to reduce the magnitude of potential recreational overages by halting the accrual of additional landings, thus reducing the magnitude of overage mitigation necessary if reactive AMs are triggered (i.e., lb-for-lb repayment of overages).

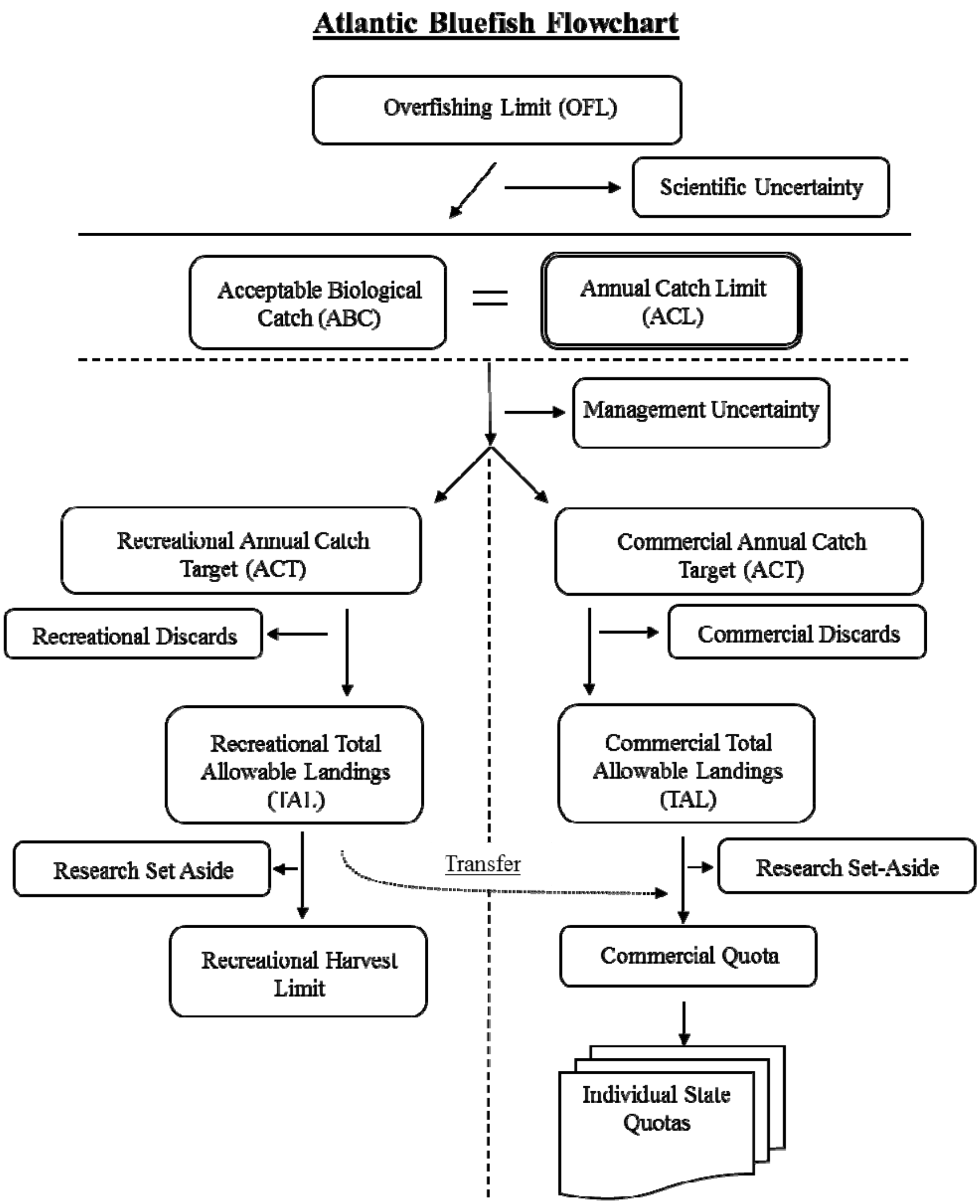


Figure 8. Bluefish catch limit structure if recreational and commercial ACTs are utilized.

5.3.3.3 Bluefish Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

Alternative BLUE-F: Status quo/no action

Under this alternative, the status quo would continue and a commercial landings based overage deduction in the FMP for bluefish would occur; specifically, there is an overage deduction mechanism (i.e., commercial landing repayment lb-for-lb) in place by which state-specific overages are deducted from their following year allocation (§ 648.160(e)(2)). While this measure could be used to address the requirement for commercial landings-based accountability, the status quo would lack accountability for all catch components for this stock (i.e., recreational landings and total discards). Because the measures contained in the FMP do not perform the full function of a comprehensive catch accountability system, it would be inconsistent with the NS1 guidelines.

Alternative BLUE-G (Council-Preferred): Accountability for Catch Components

For bluefish, under this alternative the Council is proposing three reactive accountability mechanisms that respond to potential overages in the specific sectors or by non-landings, respectively.

Reactive Accountability for the Commercial Landings Component of the ACL: Irrespective of whether the ACL is or is not exceeded, the mechanisms to address commercial landings overages already in the FMP described in (§ 648.160(e)(2)) will continue to be applied, as needed.

Reactive Accountability for the Recreational Landings Component of the ACL: If the ACL is exceeded, and recreational fishery landings are responsible for the overage in a year when no transfer has occurred from the recreational to commercial fishery, then the overage would be deducted from the following year's recreational harvest limit (i.e., recreational landings repayment lb-for-lb) which would reduce the recreational sector ACT the following year, as a single year adjustment.

If the ACL is exceeded, and recreational fishery landings are responsible for the overage in a year when a transfer has occurred from the recreational to commercial fishery, then accountability for the recreational overage would occur at the overall fishery level (i.e., combined recreational and commercial fishery). The ACL would be reduced by the overage amount (i.e., lb-for-lb repayment), and the amount to be transferred the following year would be reduced by at least the overage amount if it is determined that the overage resulted from too liberal a transfer from the recreational to the commercial sector.

Reactive Accountability for Other Non-landings Components of the ACL: Accountability for other catch components (other than commercial or recreational landings) that result in the ACL being exceeded must also be addressed. In the event the ACL is exceeded, and that overage has not been accommodated through other mechanisms in the FMP (i.e., discards and/or unlikely event RSA is exceeded), then accountability would occur at the fishery level and the ACL would be reduced. Specifically, the amount by which the ACL was exceeded would be used to adjust the ACL the following year (i.e., lb-for-lb repayment), as a single year adjustment.

5.3.3.4 Bluefish Joint Action Accountability Measures

Alternative BLUE-H: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to convene the ASMFC Bluefish Board and Council under joint rules beyond the routine specifications process with jointly convened meetings in August and December of each year.

Alternative BLUE-I (Council-Preferred): Joint Action to Address Disconnect in Catch Limits

The following would need to be jointly adopted under Council and ASMFC rules:
Action to Address State/Federal Disconnects in Catch Limits: If the ASMFC Bluefish Board approves different total catch or allowable landings, commercial quotas, and/or and recreational harvest limits for summer flounder that differ from recommendations made by the Council for Federal waters, administrative action will be taken to reconvene the Council and ASMFC Bluefish Board, at earliest convenience, to revisit their recommendations. The intent of such action is to try and achieve alignment of state and federal measures so potential differential effects on Federal permit holders resulting from different catch levels, is avoided.

Spiny Dogfish FMP

5.3.4 Spiny Dogfish

A brief overview of the alternatives contained within this section is given in Box 5.3.4.

Box 5.3.4. Brief description of the alternatives included in section 5.3.4.

Managed Resource	Issue	Alternative	Status	Description of Action
Spiny Dogfish (Section 5.3.4)	*Annual Catch Limit (Section 5.3.4.1)*	DOG-A	Status quo/no action	No established ACL in FMP
		DOG-B (Council-Preferred)	Proposed	Establish ACL = domestic ABC
	Proactive Accountability (Section 5.3.4.2)	DOG-C	Status quo/no action	No additional proactive measures established
		DOG-D (Council-Preferred)	Proposed	Use of ACT
	Reactive Accountability (Section 5.3.4.3)	DOG-E	Status quo/no action	No reactive AMs established
		DOG-F (Council-Preferred)	Proposed	1 mechanism accountability for catch

5.3.4.1 Spiny Dogfish Annual Catch Limit

Alternative DOG-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process of TAC, TAL/commercial quota, and two semi-annual quota periods as given in Appendix B and outlined in the FMP. While this process could be used to address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council has is considering additional measures, designed to work in concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative DOG-B (Council-Preferred): Specify ACL= Domestic ABC

<u>ACL:</u> Fishery removals are comprised of both U.S. and Canadian catches, and U.S. accountability measures cannot be applied or enforced on the Canadian fishery. Therefore

under this alternative, the ABC is reduced from the overfishing limit (OFL) based on an adjustment for scientific uncertainty and the domestic ABC is defined as the ABC for the stock minus the Canadian catch. The fishery-level ACL would be set equal to the domestic ABC for spiny dogfish.

ABC = OFL - Scientific Uncertainty Adjustment

Domestic ABC = ABC – Canadian Catch

Under this alternative, the fishery-level ACL would be set equal to the domestic ABC for this stock. Figure 9 provided later in this section highlights the ACL structure if this alternative is selected.

ACL= Domestic ABC

ACL Evaluation: The ACL is exceeded when the catch from all sources exceeds this value. This comparison of observed catch to ACL is based on a single-year comparison.

5.3.4.2 Spiny Dogfish Proactive Accountability Measures

Alternative DOG-C: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the spiny dogfish fishery. Those AM-like authorities linked to landings which already exist within the FMP for spiny dogfish will continue to function as described in the FMP.

Trip limits may be implemented through the specifications process for spiny dogfish (§ 648.230(b)(4)) and have been utilized at varying levels in recent years.

The semi-annual quota, a sub-derivative of the TAL, may be closed in the EEZ when projected landings indicate that the semi-annual quota will be attained (§ 648.231). Closures are effective for the remainder of the semi-annual quota period in question.

Alternative DOG-D (Council-Preferred): Use of ACT

Use of ACT: Under this alternative, an ACT would be specified and serve as a buffer from the ACL. The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 9 provided later in this section highlights the ACT structure if this alternative is selected.

The Spiny Dogfish Monitoring Committee will be responsible for recommending an ACT to the Council which considers and addresses management uncertainty as defined under NS1 guidelines, as part of the specifications process for fishery management measures. The Monitoring Committee may provide other recommendations relevant to setting catch limits consistent with the MSA. The Monitoring Committee will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including any formulaic control rules if applied, for any reduction in catch when recommending an ACT. The ACTs, technical basis, and sources of management uncertainty would be described and provided to the Council at the time Monitoring Committee recommendations are made for fishery management measures for a single year or up to 5 years.

5.3.4.3 Spiny Dogfish Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

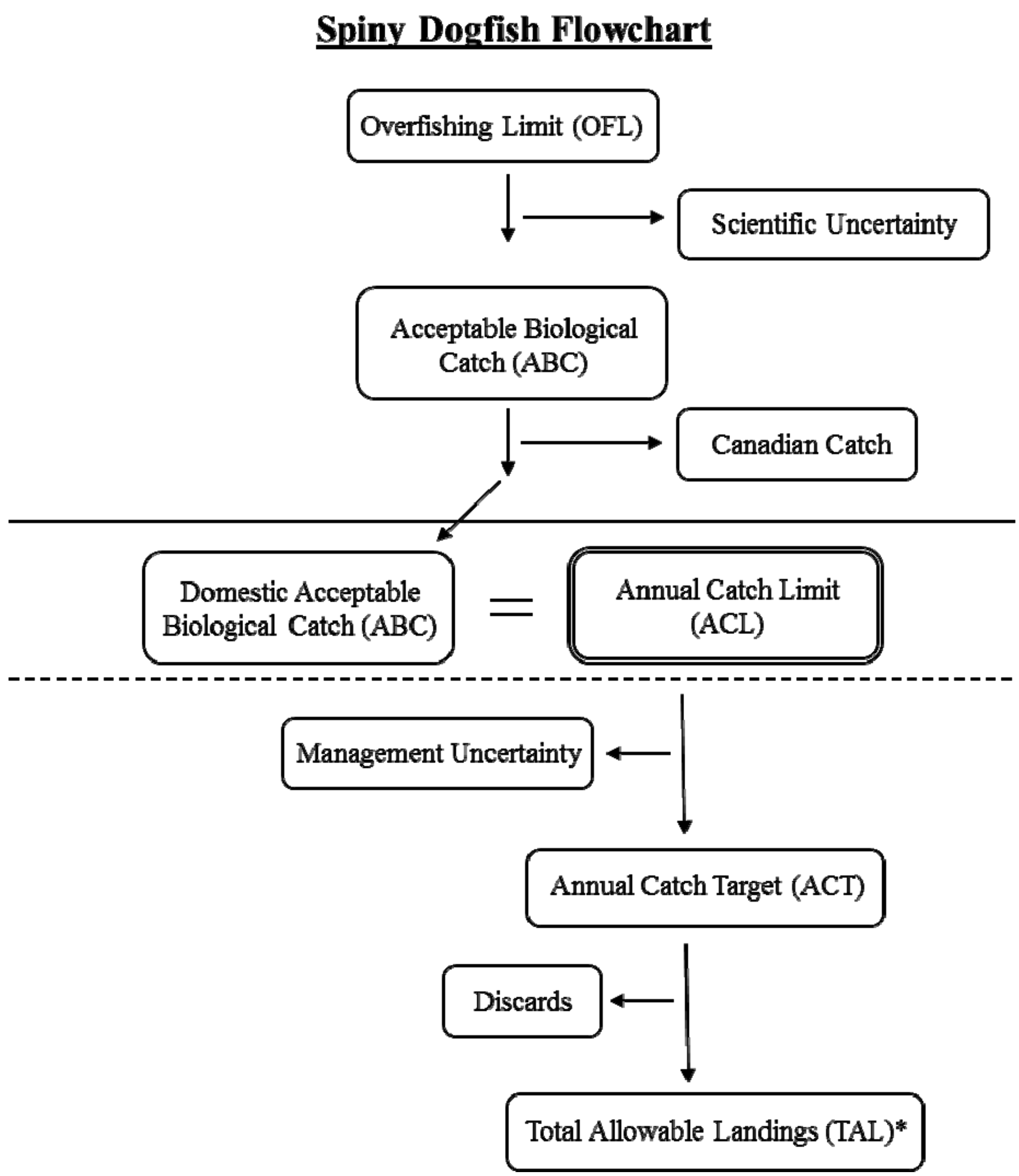
Alternative DOG-E: Status quo/no action

Under this alternative, the status quo would continue and there would be no mechanisms in the federal FMP for spiny dogfish that function as reactive accountability measures and address accountability for all catch components of the ACL. Although overage deduction mechanisms are in place in the Interstate Fisheries Management Program (ISFMP) for spiny dogfish, the lack of AMs in the federal FMP is inconsistent with the NS1 guidelines.

Alternative DOG-F (Council-Preferred): Accountability for Catch Components

For spiny dogfish, under this alternative the Council is proposing a single reactive accountability mechanism that responds to potential overages for all catch components.

Reactive Accountability for All Catch Components of the ACL: If the ACL is exceeded, then accountability would occur at the fishery level and the ACL would be reduced. Specifically, the amount by which the ACL was exceeded would be used to adjust the ACL the following year (i.e., lb-for-lb repayment), as a single year adjustment.



*RSA for spiny dogfish is contemplated in proposed Amendment 3. RSA would be deducted from the TAL.

Figure 9. Spiny Dogfish catch limit structure if an ACT is utilized.

Summer Flounder, Scup, Black Sea Bass FMP

5.3.5 Summer Flounder

A brief overview of the alternatives contained within this section is given in Box 5.3.5.

Box 5.3.5. Brief description of the alternatives included in section 5.3.5.

Managed Resource	Issue	Alternative	Status	Description of Action
Summer Flounder (Section 5.3.5)	*Annual Catch Limit (Section 5.3.5.1)*	FLUKE-A	Status quo/no action	No established ACL in FMP
		FLUKE-B	Proposed	Establish sector ACLs = ABC, with 1 yr. recreational catch avg.
		FLUKE-C (Council-Preferred)	Proposed	Establish sector ACLs = ABC, with 3 yr. recreational catch avg.
	Proactive Accountability (Section 5.3.5.2)	FLUKE-D	Status quo/no action	No additional proactive measures established
		FLUKE-E (Council-Preferred)	Proposed (Preferred)	Use of ACTs
		FLUKE-F (Council-Preferred)	Proposed (Preferred)	General inseason closure authority - recreational
	Reactive Accountability (Section 5.3.5.3)	FLUKE-G	Status quo/no action	No additional reactive AMs established
		FLUKE-H (Council-Preferred)	Proposed (Preferred)	3 mechanism accountability for catch
	Joint Action Accountability (Section 5.3.5.4)	FLUKE-I	Status quo/no action	No joint action beyond that which already occurs
		FLUKE-J (Council-Preferred)	Proposed (Preferred)	Joint action to revisit disconnects in quotas

5.3.5.1 Summer Flounder Annual Catch Limit

Alternative FLUKE-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process of TAC and TAL divided into a commercial quota and recreational harvest limit, as given in Appendix B and outlined in the FMP. While this process could be used to address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council has is considering additional measures, designed to work in

concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative FLUKE-B: Specify ACL= ABC with 1-yr Recreational Catch Average

ACL: Under this alternative, the sum of the ACLs for each sector (i.e., commercial and recreational) would be set equal to the ABC for the summer flounder. The formula reads as the summation of all sector-specific ACL equals the ABC. The ABC would be allocated to each sector ACL according to the allocation guidelines of the FMP. Figure 10 provided later in this section highlights the ACL structure if this alternative is selected.

$$\Sigma(\mathrm{ACL}_{\mathrm{SECTOR}}) = \mathrm{ABC}$$

ACL Evaluation: The ACLs are exceeded when the recreational catch exceeds the recreational sector ACL or the commercial catch exceeds the commercial sector ACL. For both the recreational and commercial sector this is based on a single-year comparison.

Alternative FLUKE-C (Council-Preferred): Specify ACL= ABC with 3-yr Recreational Catch Average

ACL: Under this alternative, the sum of the ACLs for each sector (i.e., commercial and recreational) would be set equal to the ABC for the summer flounder stock. The formula reads as the summation of all sector-specific ACL equals the ABC. The ABC would be allocated to each sector ACL according to the allocation guidelines of the FMP. Figure 10 provided later in this section highlights the ACL structure if this alternative is selected.

$$\Sigma(\mathrm{ACL}_{\mathrm{SECTOR}}) = \mathrm{ABC}$$

ACL Evaluation: The ACLs are exceeded when the recreational catch exceeds the recreational sector ACL or the commercial catch exceeds the commercial sector ACL. For the commercial sector this is based on a single-year comparison, for the recreational sector this would be based on a 3-year moving average comparison of catch to the 3-year average of the recreational ACLs. This 3-year moving average would be phased in over the first three years of management under the implemented Omnibus Amendment measures: In year 1, observed catch would be compared to the recreational ACL for that year. In year 2, the average of year 1 and year 2 catch would be compared to the average of the recreational ACLs for year 1 and year 2. In year 3, the average of the catch from year 1, 2, and 3 would be compared to the average of the recreational ACLs for year 1, 2, and 3, and the comparison thereafter will be based on a prior three year moving average of catches and recreational ACLs.

5.3.5.2 Summer Flounder Proactive Accountability Measures

Alternative FLUKE-D: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the summer flounder fishery. Those AM-like authorities linked to landings which already exist within the FMP for summer flounder will continue to function as described in the FMP. If 100 percent of the commercial quota in a given state is projected to be reached within the fishing year, then the fishery could be closed for the remainder of the fishing year (§ 684.101(b)). The EEZ may also be closed for the remainder of the year if the commercial fishery in all states has been closed or if inaction by one or more states will cause the target F to be exceeded (§ 648.101(a)).

Alternative FLUKE-E (Council-Preferred): Use of ACTs

Use of ACTs: Under this alternative, existing sector allocations defined in the FMP would be used to partition the ABC into sector-specific ACLs. Separate recreational and commercial sector ACTs would be specified and may be reduced from the sector-specific ACLs (i.e., commercial ACL and recreational ACL) to address management uncertainty. The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 10 provided later in this section highlights the ACT structure if this alternative is selected.

The Summer Flounder Monitoring Committee will be responsible for recommending ACTs to the Council which consider and address management uncertainty as defined under NS1 guidelines, as part of the specifications process for fishery management measures. The Monitoring Committee may provide other recommendations relevant to setting catch limits consistent with the MSA. The Monitoring Committee will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including any formulaic control rules if applied, for any reduction in catch when recommending an ACT. The ACTs, technical basis, and sources of management uncertainty would be described and provided to the Council at the time Monitoring Committee recommendations are made for the sector-specific fishery management measures for a single year or up to 3 years.

Alternative FLUKE-F (Council-Preferred): General Inseason Closure Authority

General Recreational Closure Authority: Under this alternative, the Regional Administrator will monitor the recreational fishery, and shall determine if the recreational landings have exceeded the RHL. This determination will be based on observed landings (i.e., data-in-hand) and will not be based upon projections of the data. The Regional Administrator shall publish notification in the *Federal Register* advising that, effective upon a specific date, the summer flounder recreational fishery in the EEZ will be closed for the remainder of the fishing year. This proactive AM is designed to reduce the magnitude of potential recreational overages by halting the accrual of additional landings, thus reducing the magnitude of overage mitigation necessary if reactive AMs are triggered (i.e., lb-for-lb repayment of overages).

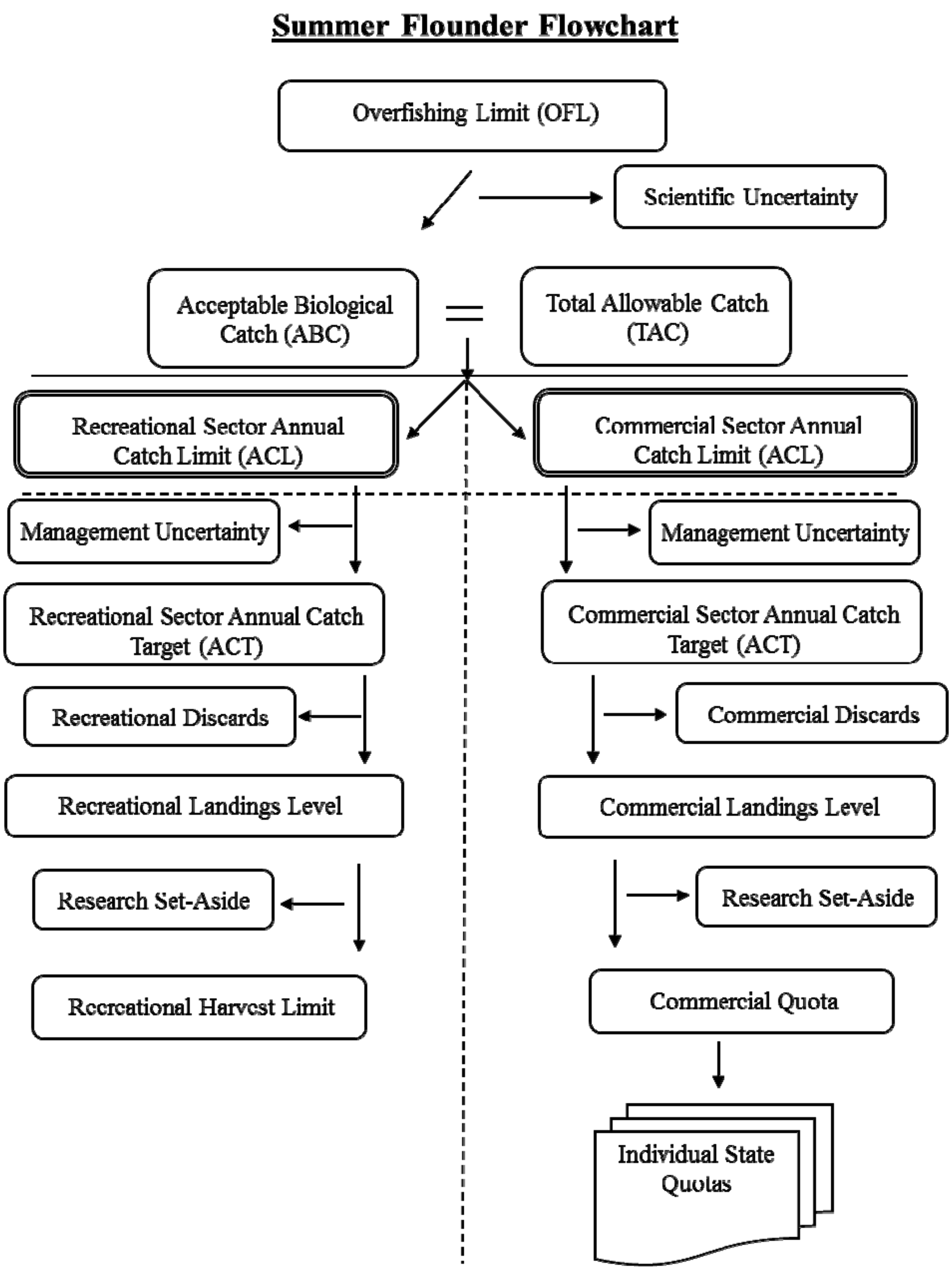


Figure 10. Summer flounder catch limit structure if a recreational and commercial ACTs are utilized.

5.3.5.3 Summer Flounder Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

Alternative FLUKE-G: Status quo/no action

Under this alternative, the status quo would continue and a commercial landings based overage deduction in the FMP for summer flounder would occur; specifically, there is an overage deduction mechanism (i.e., commercial landing repayment lb-for-lb) in place by which state-specific landings overages are deducted from their following year allocation (§ 648.100(d)(1)(ii)). While this measure could be used to address the requirement for commercial landings-based accountability, the status quo would lack accountability for all catch components for this stock (i.e., recreational landings and total discards). Because the measures contained in the FMP do not perform the full function of a comprehensive catch accountability system, it would be inconsistent with the NS1 guidelines.

Alternative FLUKE-H (Council-Preferred): Accountability for Catch Components

For summer flounder, under this alternative the Council is proposing three reactive accountability mechanisms that respond to potential overages in the specific sectors or by non-landings, respectively.

Reactive Accountability for the Commercial Landings Component of the ACL: Irrespective of whether the ACL is or is not exceeded, the mechanisms to address commercial landings overages already in the FMP described in 648.100(d)(1)(ii)) would be applied.

Reactive Accountability for the Recreational Landings Component of the ACL: If the recreational sector ACL is exceeded, the RHL overage would be deducted from the following year's recreational harvest limit (i.e., recreational landings repayment lb-for-lb) which would reduce the recreational sector ACT the following year, as a single year adjustment.

The Atlantic States Marine Fisheries Commission (ASMFC) may explore state-by-state accountability if conservation equivalency is utilized in the recreational fishery; however, the Federal FMP is not empowered to impose such repayment requirements in state waters.

Reactive Accountability for Other Non-landings Components of the ACL: Accountability for other catch components (other than commercial or recreational landings) that result in the ACL being exceeded must also be addressed. In the event the ACL is exceeded, and that overage has not been accommodated through other mechanisms in the FMP (i.e., discards and/or unlikely event RSA is exceeded), then accountability would occur at the sector-specific ACL. Specifically, the amount by which the commercial sector ACL and/or recreational sector ACL was exceeded would be used to adjust the ACL the following year (lb-for-lb repayment), as a single year adjustment.

5.3.5.4 Summer Flounder Joint Action Accountability Measures

Alternative FLUKE-I: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to convene the ASMFC Summer Flounder, Scup, Black Sea Bass Board and Council under joint rules beyond the routine specifications process with jointly convened meetings in August and December of each year.

Alternative FLUKE-J (Council-Preferred): Joint Action to Address Disconnect in Catch Limits

The following would need to be jointly adopted under Council and ASMFC rules:
Action to Address State/Federal Disconnects in Catch Limits: If the ASMFC Summer Flounder, Scup, Black Sea Bass Board approves different total catch or allowable landings, commercial quotas, and/or and recreational harvest limits for summer flounder that differ from recommendations made by the Council for Federal waters, administrative action will be taken to reconvene the Council and ASMFC Summer Flounder, Scup, Black Sea Bass Board, at earliest convenience, to revisit their recommendations. The intent of such action is to try and achieve alignment of state and federal measures so potential differential effects on Federal permit holders resulting from different catch levels, is avoided.

5.3.6 Scup

A brief overview of the alternatives contained within this section is given in Box 5.3.6.

Box 5.3.6. Brief description of the alternatives included in section 5.3.6.

Managed Resource	Issue	Alternative	Status	Description of Action
Scup (Section 5.3.6)	*Annual Catch Limit (Section 5.3.6.1)*	SCUP-A	Status quo/no action	No established ACL in FMP
		SCUP-B	Proposed	Establish sector ACLs = ABC, with 1 yr. recreational catch avg.
		SCUP-C (Council - Preferred)	Proposed	Establish sector ACLs = ABC, with 3 yr. recreational catch avg.
	Proactive Accountability (Section 5.3.6.2)	SCUP-D	Status quo/no action	No additional proactive measures established
		SCUP-E (Council - Preferred)	Proposed	Use of ACTs
		SCUP-F (Council - Preferred)	Proposed	General inseason closure authority - recreational
	Reactive Accountability (Section 5.3.6.3)	SCUP-G	Status quo/no action	No additional reactive AMs established
		SCUP-H (Council - Preferred)	Proposed	3 mechanism accountability for catch
	Joint Action Accountability (Section 5.3.6.4)	SCUP-I	Status quo/no action	No joint action beyond that which already occurs
		SCUP-J (Council - Preferred)	Proposed	Joint action to revisit disconnects in quotas

5.3.6.1 Scup Annual Catch Limit

Alternative SCUP-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process of TAC and TAL divided into a commercial quota and recreational harvest limit, as given in Appendix B and outlined in the FMP. While this process could be used to address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council has is considering additional measures, designed to work in

concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative SCUP-B: Specify ACL= ABC with 1-yr Recreational Catch Average

ACL: Under this alternative, the sum of the ACLs for each sector (commercial and recreational) would be set equal to the ABC for scup. The formula reads as the summation of all sector-specific ACL equals the ABC. The ABC would be allocated to each sector ACL according to the allocation guidelines of the FMP. Figure 11 provided later in this section highlights the ACL structure if this alternative is selected.

$$\mathbf{\Sigma(ACL_{SECTOR}) = ABC}$$

ACL Evaluation: The ACLs are exceeded when the recreational catch exceeds the recreational sector ACL or the commercial catch exceeds the commercial sector ACL. For both the recreational and commercial sector this is based on a single-year comparison.

Alternative SCUP-C (Council-Preferred): Specify ACL= ABC with 3-yr Recreational Catch Average

ACL: Under this alternative, the sum of the ACLs for each sector (i.e., commercial and recreational) would be set equal to the ABC for scup. The formula reads as the summation of all sector-specific ACL equals the ABC. The ABC would be allocated to each sector ACL according to the allocation guidelines of the FMP. Figure 11 provided later in this section highlights the ACL structure if this alternative is selected.

$$\mathbf{\Sigma(ACL_{SECTOR}) = ABC}$$

ACL Evaluation: The ACLs are exceeded when the recreational catch exceeds the recreational sector ACL or the commercial catch exceeds the commercial sector ACL. For the commercial sector this is based on a single-year comparison, for the recreational sector this would be based on a 3-year moving average comparison of catch to the 3-year average of the recreational ACLs. This 3-year moving average would be phased in over the first three years of management under the implemented Omnibus Amendment measures: In year 1, observed catch would be compared to the recreational ACL for that year. In year 2, the average of year 1 and year 2 catch would be compared to the average of the recreational ACLs for year 1 and year 2. In year 3, the average of the catch from year 1, 2, and 3 would be compared to the average of the recreational ACLs for year 1, 2, and 3, and the comparison thereafter will be based on a prior three year moving average of catches and recreational ACLs.

5.3.6.2 Scup Proactive Accountability Measures

Alternative SCUP-D: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the scup fishery. Those AM-like authorities linked to landings which already exist within the FMP for summer flounder will continue to function as described in the FMP. The specifications process permits possession limits to be established for the Winter I and II quota periods (§ 648.120(b)(3)) and the percent of landings attained at which the Winter I landing limit will be reduced ((§ 648.120(b)(4)). In recent years, the Winter I fishery has carried a 30,000 lb Federal landing limit that drops to 1,000 lb when 80 percent of the Winter I quota period has been attained. A variable trip limit scale has been used for Winter II dependent on the amount of unused Winter I quota rolled over to the Winter II period.

Alternative SCUP-E (Council-Preferred): Use of ACTs

Use of ACTs: Under this alternative, existing sector allocations defined in the FMP would be used to partition the ABC into sector-specific ACLs. Separate recreational and commercial sector ACTs would be specified and may be reduced from the sector-specific ACLs (i.e., commercial ACL and recreational ACL) to address management uncertainty. The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 11 provided later in this section highlights the ACT structure if this alternative is selected.

The Scup Monitoring Committee will be responsible for recommending ACTs to the Council which consider and address management uncertainty as defined under NS1 guidelines, as part of the specifications process for fishery management measures. The Monitoring Committee may provide other recommendations relevant to setting catch limits consistent with the MSA. The Monitoring Committee will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including any formulaic control rules if applied, for any reduction in catch when recommending an ACT. The ACTs, technical basis, and sources of management uncertainty would be described and provided to the Council at the time Monitoring Committee recommendations are made for the sector-specific fishery management measures for a single year or up to 3 years.

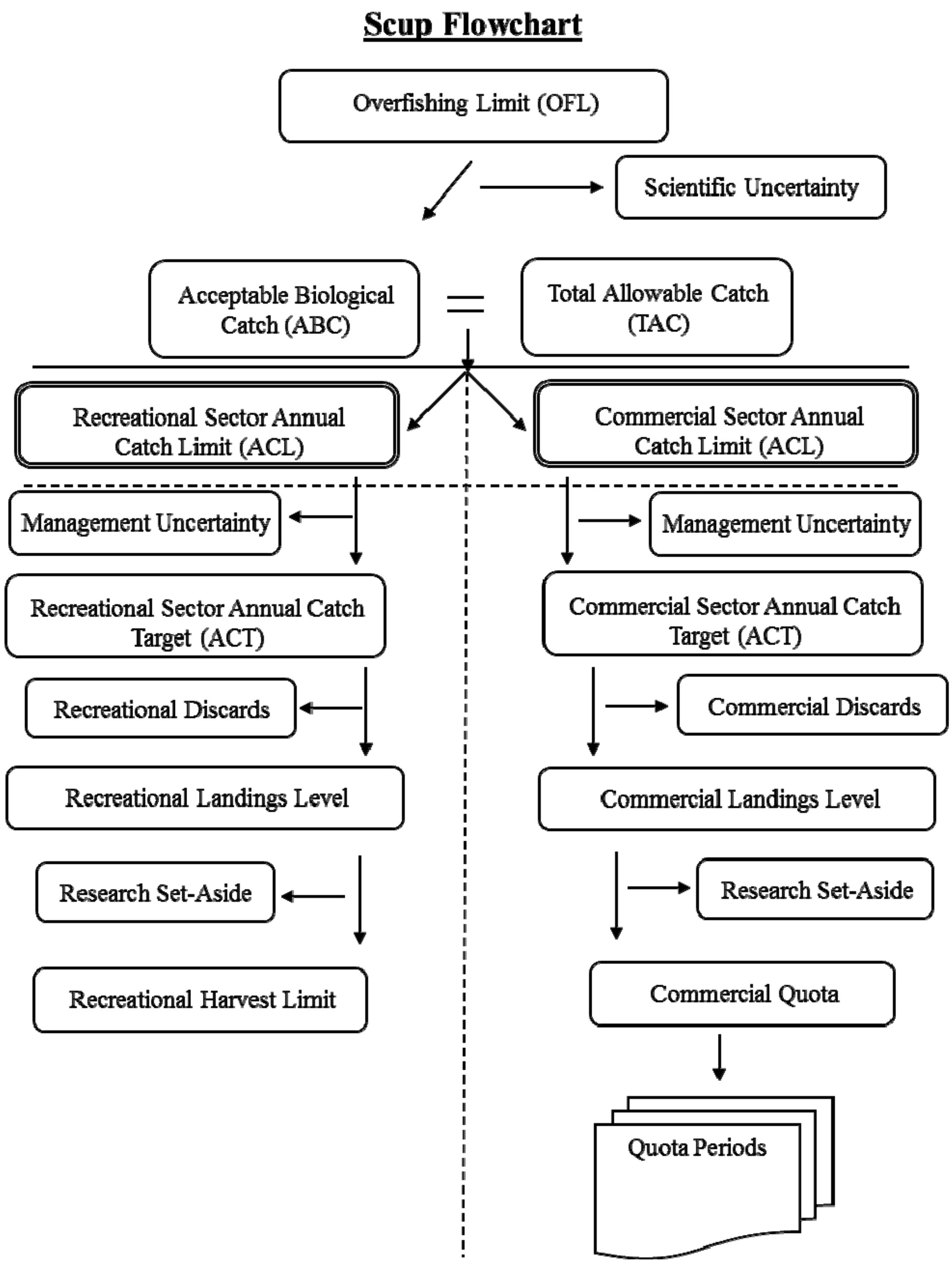


Figure 11. Scup catch limit structure if recreational and commercial ACTs are utilized.

Alternative SCUP-F (Council-Preferred): General Inseason Closure Authority

General Recreational Closure Authority: Under this alternative, the Regional Administrator will monitor the recreational fishery, and shall determine if the recreational landings have exceeded the RHL. This determination will be based on observed landings (i.e., data-in-hand) and will not be based upon projections of the data. The Regional Administrator shall publish notification in the *Federal Register* advising that, effective upon a specific date, the scup recreational fishery in the EEZ will be closed for the remainder of the fishing year. This proactive AM is designed to reduce the magnitude of potential recreational overages by halting the accrual of additional landings, thus reducing the magnitude of overage mitigation necessary if reactive AMs are triggered (i.e., lb-for-lb repayment of overages).

5.3.6.3 Scup Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

Alternative SCUP-G: Status quo/no action

Under this alternative, the status quo would continue and a commercial landings based overage deduction in the FMP for scup would occur; specifically, there is an overage deduction mechanism (i.e., commercial landing repayment lb-for-lb) in place by which quota period-specific landings overages are deducted from the same subsequent year quota period allocation (§ 648.120(d)(4)(i)and (ii)). While this measure could be used to address the requirement for commercial landings-based accountability, the status quo would lack accountability for all catch components for this stock (i.e., recreational landings and total discards). Because the measures contained in the FMP do not perform the full function of a comprehensive catch accountability system, it would be inconsistent with the NS1 guidelines.

Alternative SCUP-H (Council-Preferred): Accountability for Catch Components

For scup, under this alternative the Council is proposing three reactive accountability mechanisms that respond to potential overages in the specific sectors or by non-landings, respectively.

Reactive Accountability for the Commercial Landings Component of the ACL: Irrespective of whether the ACL is or is not exceeded, the mechanisms to address commercial landings overages already in the FMP described in (§ 648.120(d)(4)(i)and (ii)) would be applied.

Reactive Accountability for the Recreational Landings Component of the ACL: If the recreational sector ACL is exceeded, the RHL overage would be deducted from the following year's recreational harvest limit (i.e., recreational landings repayment lb-for-lb) which would reduce the recreational sector ACT the following year as a single year adjustment.

The Atlantic States Marine Fisheries Commission (ASMFC) may explore regional accountability if regional conservation equivalency is utilized; however, the Federal FMP is not empowered to impose such repayment requirements in state waters.

Reactive Accountability for Other Non-landings Components of the ACL: Accountability for other catch components (other than commercial or recreational landings) that result in the ACL being exceeded must also be addressed. In the event the ACL is exceeded, and that overage has not been accommodated through other mechanisms in the FMP (i.e., discards and/or unlikely event RSA is exceeded), then accountability would occur at the sector-specific ACL. Specifically, the amount by which the commercial sector ACL and/or recreational sector ACL was exceeded would be used to adjust the ACL the following year (i.e., lb-for-lb repayment), as a single year adjustment.

5.3.6.4 Scup Joint Action Accountability Measures

Alternative SCUP-I: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to convene the ASMFC Summer Flounder, Scup, Black Sea Bass Board and Council under joint rules beyond the routine specifications process with jointly convened meetings in August and December of each year.

Alternative SCUP-J (Council-Preferred): Joint Action to Address Disconnect in Catch Limits

The following would need to be jointly adopted under Council and ASMFC rules:
Action to Address State/Federal Disconnects in Catch Limits: If the ASMFC Summer Flounder, Scup, Black Sea Bass Board approves different total catch or allowable landings, commercial quotas, and/or and recreational harvest limits for summer flounder that differ from recommendations made by the Council for Federal waters, administrative action will be taken to reconvene the Council and ASMFC Summer Flounder, Scup, Black Sea Bass Board, at earliest convenience, to revisit their recommendations. The intent of such action is to try and achieve alignment of state and federal measures so potential differential effects on Federal permit holders resulting from different catch levels, is avoided.

5.3.7 Black Sea Bass

A brief overview of the alternatives contained within this section is given in Box 5.3.7.

Box 5.3.7. Brief description of the alternatives included in section 5.3.7.

Managed Resource	Issue	Alternative	Status	Description of Action
Black Sea Bass (Section 5.3.7)	*Annual Catch Limit (Section 5.3.7.1)*	BSB-A	Status quo/no action	No established ACL in FMP
		BSB-B	Proposed	Establish sector ACLs = ABC, with 1 yr. recreational catch avg.
		BSB-C (Council - Preferred)	Proposed	Establish sector ACLs = ABC, with 3 yr. recreational catch avg.
	Proactive Accountability (Section 5.3.7.2)	BSB-D	Status quo/no action	No additional proactive measures established
		BSB-E (Council - Preferred)	Proposed	Use of ACTs
		BSB-F (Council - Preferred)	Proposed	General inseason closure authority - recreational
	Reactive Accountability (Section 5.3.7.3)	BSB-G	Status quo/no action	No additional reactive AMs established
		BSB-H (Council - Preferred)	Proposed	3 mechanism accountability for catch
	Joint Action Accountability (Section 5.3.7.4)	BSB-I	Status quo/no action	No joint action beyond that which already occurs
		BSB-J (Council - Preferred)	Proposed	Joint action to revisit disconnects in quotas

5.3.7.1 Black Sea Bass Annual Catch Limit

Alternative BSB-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process of TAC and TAL divided into a commercial quota and recreational harvest limit, as given in Appendix B and outlined in the FMP. While this process could be used to address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council has is considering additional measures, designed to work in

concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative BSB-B: Specify ACL= ABC with 1-yr Recreational Catch Average

<u>*ACL:*</u> Under this alternative, the sum of the ACLs for each sector (commercial and recreational) would be set equal to ABC for black sea bass. The formula reads as the summation of all sector-specific ACL equals the ABC. The ABC would be allocated to each sector ACL according to the allocation guidelines of the FMP. Figure 12 provided later in this section highlights the ACL structure if this alternative is selected.

$$\mathbf{\Sigma(ACL_{SECTOR}) = ABC}$$

<u>*ACL Evaluation:*</u> The ACLs are exceeded when the recreational catch exceeds the recreational sector ACL or the commercial catch exceeds the commercial sector ACL. For both the recreational and commercial sector this is based on a single-year comparison.

Alternative BSB-C (Council-Preferred): Specify ACL= ABC with 3-yr Recreational Catch Average

<u>*ACL:*</u> Under this alternative, the sum of the ACLs for each sector (i.e., commercial and recreational) would be set equal to ABC for black sea bass. The formula reads as the summation of all sector-specific ACL equals the ABC. The ABC would be allocated to each sector ACL according to the allocation guidelines of the FMP. Figure 12 provided later in this section highlights the ACL structure if this alternative is selected.

$$\mathbf{\Sigma(ACL_{SECTOR}) = ABC}$$

<u>*ACL Evaluation:*</u> The ACLs are exceeded when the recreational catch exceeds the recreational sector ACL or the commercial catch exceeds the commercial sector ACL. For the commercial sector this is based on a single-year comparison, for the recreational sector this would be based on a 3-year moving average comparison of catch to the 3-year average of the recreational ACLs. This 3-year moving average would be phased in over the first three years of management under the implemented Omnibus Amendment measures: In year 1, observed catch would be compared to the recreational ACL for that year. In year 2, the average of year 1 and year 2 catch would be compared to the average of the recreational ACLs for year 1 and year 2. In year 3, the average of the catch from year 1, 2, and 3 would be compared to the average of the recreational ACLs for year 1, 2, and 3, and the comparison thereafter will be based on a prior three year moving average of catches and recreational ACLs.

5.3.7.2 Black Sea Bass Proactive Accountability Measures

Alternative BSB-D: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the black sea bass fishery. Those AM-like authorities linked to landings which already exist within the FMP for summer flounder will continue to function as described in the FMP. If 100 percent of the coastwide commercial quota is projected to be reached within the fishing year, then the fishery could be closed for the remainder of the fishing year (§ 684.141). The EEZ may also be closed for the remainder of the year if inaction by one or more states will cause the target F to be exceeded (§ 648.141)

Alternative BSB-E (Council-Preferred): Use of ACTs

<u>*Use of ACTs:*</u> Under this alternative, existing sector allocations defined in the FMP would be used to partition the ABC into sector-specific ACLs. Separate recreational and commercial sector ACTs would be specified and may be reduced from the sector-specific ACLs (i.e., commercial ACL and recreational ACL) to address management uncertainty. The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 12 provided later in this section highlights the ACT structure if this alternative is selected.

The Black Sea Bass Monitoring Committee will be responsible for recommending ACTs to the Council which consider and address management uncertainty as defined under NS1 guidelines, as part of the specifications process for fishery management measures. The Monitoring Committee may provide other recommendations relevant to setting catch limits consistent with the MSA. The Monitoring Committee will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including any formulaic control rules if applied, for any reduction in catch when recommending an ACT. The ACTs, technical basis, and sources of management uncertainty would be described and provided to the Council at the time Monitoring Committee recommendations are made for the sector-specific fishery management measures for a single year or up to 3 years.

Alternative BSB-F (Council-Preferred): General Inseason Closure Authority

<u>*General Recreational Closure Authority:*</u> Under this alternative, the Regional Administrator will monitor the recreational fishery, and shall determine if the recreational landings have exceeded the RHL. This determination will be based on observed landings (i.e., data-in-hand) and will not be based upon projections of the data. The Regional Administrator shall publish notification in the *Federal Register* advising that, effective upon a specific date, the black sea bass recreational fishery in the EEZ will be closed for the remainder of the fishing year. This proactive AM is designed to reduce the magnitude of potential recreational overages by halting the accrual of additional landings, thus reducing the magnitude of overage mitigation necessary if reactive AMs are triggered (i.e., lb-for-lb repayment of overages).

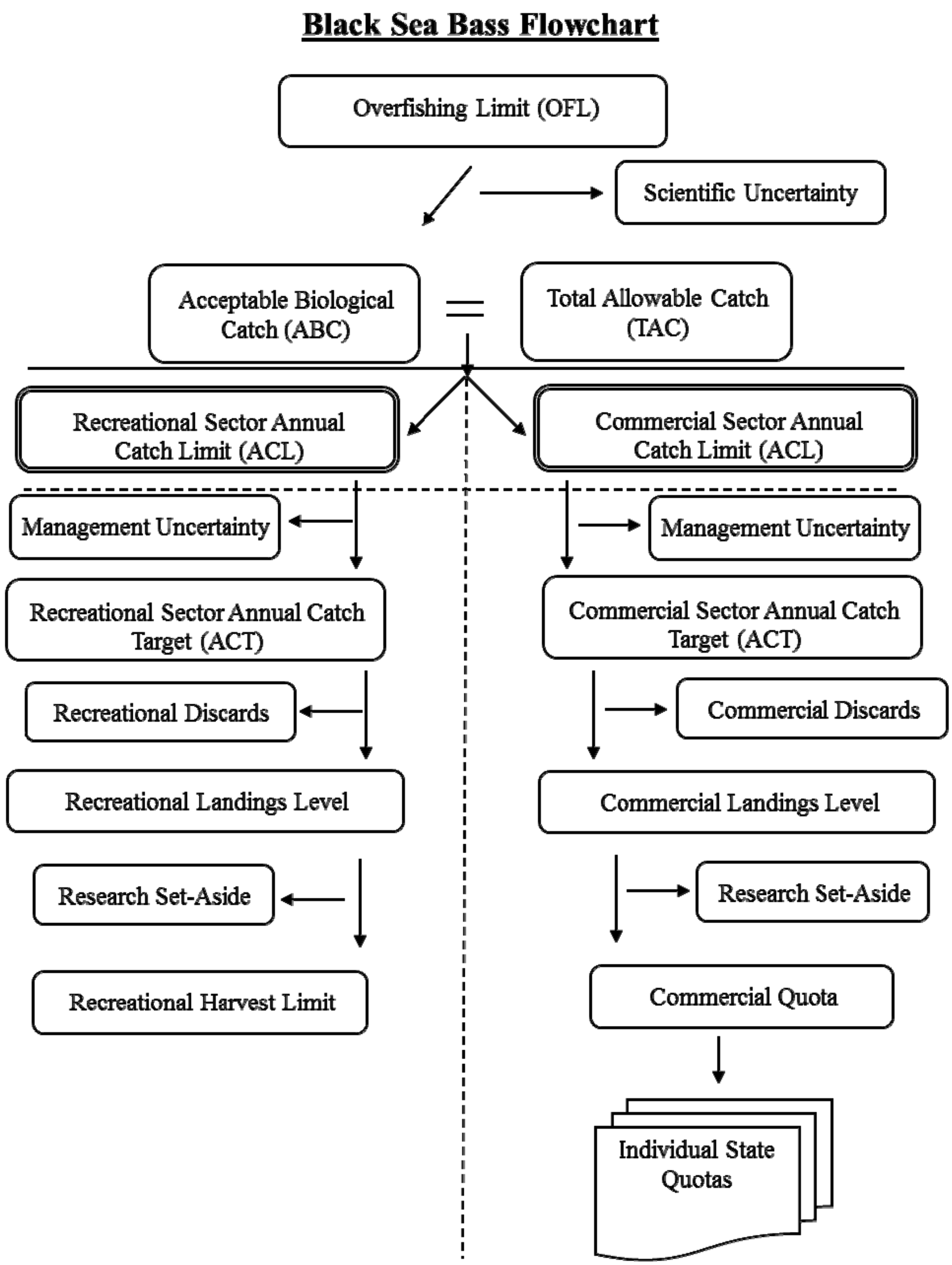


Figure 12. Black sea bass catch limit structure if recreational and commercial ACTs are utilized.

5.3.7.3 Black Sea Bass Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

Alternative BSB-G: Status quo/no action

Under this alternative, the status quo would continue and a commercial landings based overage deduction in the FMP for black sea bass would occur; specifically, there is an overage deduction mechanism (i.e., commercial landing repayment lb-for-lb) in place by which coastwide landing overages are deducted from their following year allocation (§ 648.140(d)(3)). While this measure could be used to address the requirement for commercial landings-based accountability, the status quo would lack accountability for all catch components for this stock (i.e., recreational landings and total discards). Because the measures contained in the FMP do not perform the full function of a comprehensive catch accountability system, it would be inconsistent with the NS1 guidelines.

Alternative BSB-H (Council-Preferred): Accountability for Catch Components

For black sea bass, under this alternative the Council is proposing three reactive accountability mechanisms that respond to potential overages in the specific sectors or by non-landings, respectively.

Reactive Accountability for the Commercial Landings Component of the ACL: Irrespective of whether the ACL is or is not exceeded, the mechanisms to address commercial landings overages already in the FMP described in (§ 648.140(d)(3)) would be applied.

Reactive Accountability for the Recreational Landings Component of the ACL: If the recreational sector ACL is exceeded, the RHL overage would be deducted from the following year's recreational harvest limit (i.e., recreational landings repayment lb-for-lb) which would reduce the recreational sector ACT the following year, as a single year adjustment.

Reactive Accountability for Other Non-landings Components of the ACL: Accountability for other catch components (other than commercial or recreational landings) that result in the ACL being exceeded must also be addressed. In the event the ACL is exceeded, and that overage has not been accommodated through other mechanisms in the FMP (i.e., discards and/or unlikely event RSA is exceeded), then accountability would occur at the sector-specific ACL. Specifically, the amount by which the commercial sector ACL and/or recreational sector ACL was exceeded would be used to adjust the ACL the following year (i.e., lb-for-lb repayment), as a single year adjustment.

5.3.7.4 Black Sea Bass Joint Action Accountability Measures

Alternative BSB-I: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to convene the ASMFC Summer Flounder, Scup, Black Sea Bass Board and Council under joint rules beyond the routine specifications process with jointly convened meetings in August and December of each year.

Alternative BSB-J (Council-Preferred): Joint Action to Address Disconnect in Catch Limits

The following would need to be jointly adopted under Council and ASMFC rules:
Action to Address State/Federal Disconnects in Catch Limits: If the ASMFC Summer Flounder, Scup, Black Sea Bass Board approves different total catch or allowable landings, commercial quotas, and/or and recreational harvest limits for summer flounder that differ from recommendations made by the Council for Federal waters, administrative action will be taken to reconvene the Council and ASMFC Summer Flounder, Scup, Black Sea Bass Board, at earliest convenience, to revisit their recommendations. The intent of such action is to try and achieve alignment of state and federal measures so potential differential effects on Federal permit holders resulting from different catch levels, is avoided.

Atlantic Surfclam and Ocean Quahog FMP

5.3.8 Atlantic Surfclam

A brief overview of the alternatives contained within this section is given in Box 5.3.8.

Box 5.3.8. Brief description of the alternatives included in section 5.3.8.

Managed Resource	Issue	Alternative	Status	Description of Action
Atlantic Surfclam (Section 5.3.8)	*Annual Catch Limit (Section 5.3.8.1)*	SURF-A	Status quo/no action	No established ACL in FMP
		SURF-B (Council - Preferred)	Proposed	Establish ACL = ABC
	Proactive Accountability (Section 5.3.8.2)	SURF-C	Status quo/no action	No additional proactive measures established
		SURF-D (Council - Preferred)	Proposed	Use of ACT
	Reactive Accountability (Section 5.3.8.3)	SURF-E	Status quo/no action	No reactive AMs established
		SURF-F (Council - Preferred)	Proposed	1 mechanism accountability for catch

5.3.8.1 Atlantic Surfclam Annual Catch Limit

Alternative SURF-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process of an ACT, as given in Appendix B and outlined in the FMP. While this process could be used to partially address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council is considering additional measures, designed to work in concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative SURF-B: (Council-Preferred): Specify ACL = ABC

ACL: Under this alternative, the fishery-level ACL would be set equal to the ABC for Atlantic surfclam. Figure 13 provided later in this section highlights the ACL structure if this alternative is selected.

ACL = ABC

ACL Evaluation: The ACL is exceeded when the catch from the total fishery exceeds this value. This comparison of observed catch to ACL is based on a single-year comparison.

After reducing catch levels from the ACL to address OY for this fishery, the allocation precepts of the FMP would be applied.

5.3.8.2 Atlantic Surfclam Proactive Accountability Measures

Alternative SURF-C: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the Atlantic surfclam fishery. Those AM-like authorities that already exist within the FMP for Atlantic surfclam will continue to function as described in the FMP. Fishing areas may be closed due to environmental degradation, small surfclams, and/or paralytic shellfish poisoning toxin (§ 648.73(a), (b), and (d)).

Alternative SURF-D (Council-Preferred): Use of ACT

Use of ACT: Under this alternative, an ACT would be specified and may be reduced from the ACL to address management uncertainty. The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of

ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 13 provided later in this section highlights the ACL and ACT relationship if this alternative is selected.

The Council staff will be responsible for recommending an ACT to the Council which considers and addresses management uncertainty as defined under NS1 guidelines, or other emerging issues including fishery discards, as part of the specifications process for fishery management measures. The staff may provide other recommendations relevant to setting catch limits consistent with the MSA. The staff will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including formulaic control rules if applied, for any reduction in catch when recommending ACT. The ACT, technical basis, and sources of management uncertainty would be described and provided to the Council as part of the surfclam annual quota recommendation paper to the SSC and the Council outlined in §648.71(1) at the time recommendations are made for fishery management measures for a single year or up to 3 years.

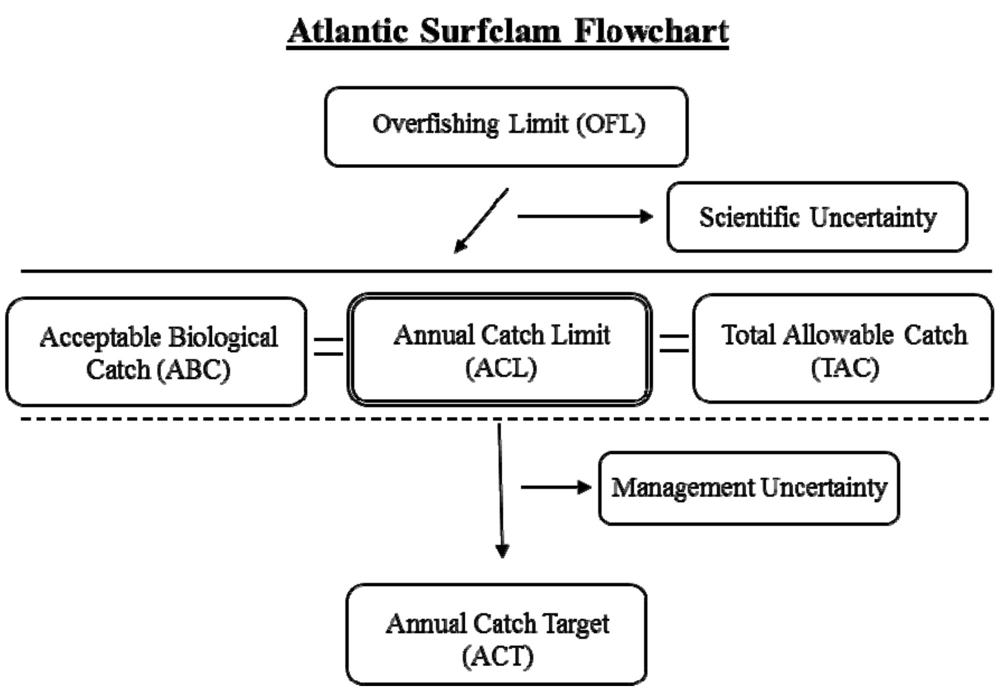


Figure 13. Atlantic surfclam catch limit structure if the ACT is utilized to address management uncertainty.

5.3.8.3 Atlantic Surfclam Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

Alternative SURF-E: Status quo/no action

Under this alternative, the status quo would continue and there would be no mechanisms in the FMP for Atlantic surfclam that function as reactive accountability measures and address accountability for all catch components of the ACL. Therefore, this alternative is inconsistent with the NS1 guidelines.

Alternative SURF-F (Council-Preferred): Accountability for Catch Components

For Atlantic surfclam, under this alternative the Council is proposing a single reactive accountability mechanism that responds to potential overages for all catch components.

Reactive Accountability for ITQ fishery: If the ACL is exceeded, and that overage can be attributed to an ITQ permit holder, then accountability for that overage would occur at the ITQ permit level. Specifically, individual ITQ permits would be reduced in the following year by 100 percent of the overage (i.e., bushel-for-bushel repayment), as a single-year adjustment only. Any amount of an ACL overage that cannot be otherwise attributed to an ITQ permit holder will be deducted from the ACL in the following fishing year.

5.3.9 Ocean Quahog

A brief overview of the alternatives contained within this section is given in Box 5.3.9.

Box 5.3.9. Brief description of the alternatives included in section 5.3.9.

Managed Resource	Issue	Alternative	Status	Description of Action
Ocean quahog (Section 5.3.9)	*Annual Catch Limit (Section 5.3.9.1)*	QUAHOG-A	Status quo/no action	No established ACL in FMP
		QUAHOG-B (Council - Preferred)	Proposed	Establish ACL = ABC
	Proactive Accountability (Section 5.3.9.2)	QUAHOG-C	Status quo/no action	No additional proactive measures established
		QUAHOG-D (Council - Preferred)	Proposed	Use of ACTs
	Reactive Accountability (Section 5.3.9.3)	QUAHOG-E	Status quo/no action	No reactive AMs established
		QUAHOG-F (Council - Preferred)	Proposed	1 mechanism accountability for catch

5.3.9.1 Ocean Quahog Annual Catch Limit

Alternative QUAHOG-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process of TAC and TAL, as given in Appendix B and outlined in the FMP. While this process could be used to address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council has is considering additional measures, designed to work in concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative QUAHOG-B (Council-Preferred): Specify ACL = ABC

<u>*ACL:*</u> Under this alternative, the fishery-level ACL would be set equal to the ABC for ocean quahog. Figure 14 provided later in this section highlights the ACL structure if this alternative is selected.

ACL = ABC

<u>*ACL Evaluation*</u>*:* The ACL is exceeded when the catch from the total fishery exceeds this value. This comparison of observed catch to ACL is based on a single-year comparison.

After reducing catch levels from the ACL to address OY for this fishery, the allocation precepts of the FMP would be applied to the Non-Maine fishery (all fishery components less Maine) and Maine fishery component.

5.3.9.2 Ocean Quahog Proactive Accountability Measures

Alternative QUAHOG-C: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the ocean quahog fishery. Those AM-like authorities that already exist within the FMP for ocean quahog will continue to function as described in the FMP. The Maine mahogany ocean quahog quota is monitored inseason and may be closed when the quota is projected to be taken (§ 648.76(b)(1)(i)-(iv)). All Maine mahogany ocean quahog permitted vessels landing quahogs while not utilizing an individual allocation of ocean quahogs are applied against the annual Maine mahogany ocean quahog quota. The Regional Administrator will close the Maine mahogany fishery for the remainder of the fishing year when dealer reports and other information indicate the Maine mahogany ocean quahog quota will be reached.

Alternative QUAHOG-D (Council-Preferred): Use of ACTs

Use of ACTs: Under this alternative, a Maine-fishery ACT and Non-Maine Fishery would be specified based on the allocation precepts of the FMP, and may be reduced from the ACL to address management uncertainty. In this case, proactive ACTs would be specified for the Non-Maine fishery (all fishery components less Maine) and Maine fishery component. The sum of the Non-Maine and Maine ACTs, would be less than ACL based on achieving the OY range in the FMP, and any additional reduction in catch to address management uncertainty. The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 14 provided later in this section highlights the ACT structure if this alternative is selected.

The Council staff will be responsible for recommending ACTs to the Council which consider and address management uncertainty as defined under NS1 guidelines, or other emerging issues including fishery discards, as part of the specifications process for fishery management measures. The staff may provide other recommendations relevant to setting catch limits consistent with the MSA. The staff will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including formulaic control rules if applied, for any reduction in catch when recommending ACTs. The ACTs, technical basis, and sources of management uncertainty would be described and provided to the Council as part of the Ocean quahog annual quota recommendation paper to the SSC and the Council outlined in §648.71(1) at the time recommendations are made for fishery management measures for a single year or up to 3 years.

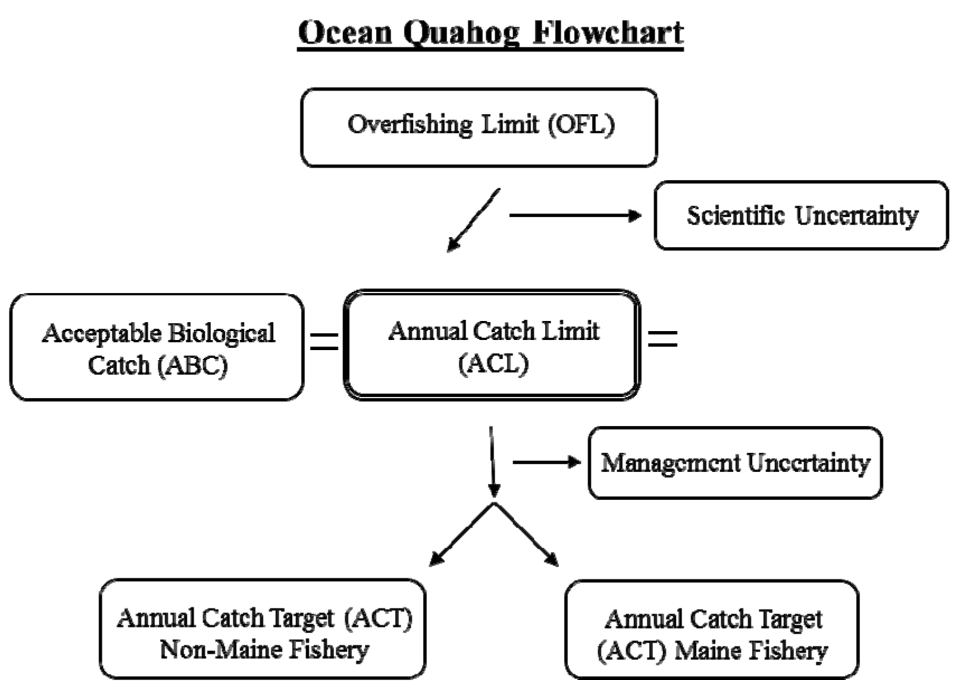


Figure 14. Ocean quahog catch limit structure if ACTs are utilized.

5.3.9.3 Ocean Quahog Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

Alternative QUAHOG-E: Status quo/no action

Under this alternative, the status quo would continue and there would be no mechanisms in the FMP for ocean quahog that function as reactive accountability measures and address accountability for all catch components of the ACL. Therefore, this alternative is inconsistent with the NS1 guidelines.

Alternative QUAHOG-F (Council-Preferred): Accountability for Catch Components

For ocean quahog, under this alternative the Council is proposing two reactive accountability mechanisms that respond to potential overages for all catch components.

Reactive Accountability for Non-Maine fishery: If the ACL is exceeded and the Non-Maine fishery is responsible for the overage, then the Non-Maine Fishery ACT is adjusted. Accountability for that overage would occur at the ITQ permit level. Specifically, if the overage can be attributed to an ITQ permit, then the individual ITQ permits would be reduced in the following year by 100 percent of the overage (i.e., bushel-for-bushel repayment), as a single-year adjustment. Any amount of an ACL overage that cannot be otherwise attributed to an ITQ permit holder will be deducted from the appropriate ACL in the following fishing year.

Reactive Accountability for Maine fishery: If the ACL is exceeded and the Maine fishery is responsible for the overage, then the Maine Fishery ACT is adjusted. The amount by which the ACL was exceeded would be used to adjust the Maine fishery ACT the following year (i.e., bushel-for-bushel repayment), as a single-year adjustment.

Tilefish FMP

5.3.10 Tilefish

A brief overview of the alternatives contained within this section is given in Box 5.3.9.

Box 5.3.10. Brief description of the alternatives included in section 5.3.10.				
Managed Resource	**Issue**	**Alternative**	**Status**	**Description of Action**
Tilefish (Section 5.3.10)	*Annual Catch Limit (Section 5.3.10.1)*	TILE-A	Status quo/no action	No established ACL in FMP
		TILE-B (Council-Preferred)	Proposed	Establish ACL = ABC
	Proactive Accountability (Section 5.3.10.2)	TILE-C	Status quo/no action	No additional proactive measures established
		TILE-D (Council-Preferred)	Proposed	Use of ACT
		TILE-E (Council-Preferred)	Proposed	Incidental fishery closure authority
		TILE-F (Council-Preferred)	Proposed	Trip limit increase to 500 lb
	Reactive Accountability (Section 5.3.10.3)	TILE-G	Status quo/no action	No additional reactive AMs established
		TILE-H (Council-Preferred)	Proposed	3 mechanism accountability for catch

5.3.10.1 Tilefish Annual Catch Limit

Alternative TILE-A: Status quo/no action

Under this alternative, the status quo process contained within the FMP for establishing catch limits would be maintained. This includes specification through the Council process of TAL, as given in Appendix B and outlined in the FMP. While this process could be used to partially address the overarching requirement of an annual catch limit that considers both landings and discards, the status quo would lack an associated system of accountability for all catch components for this stock. Because the current catch limits in the FMP do not perform the full function of establishing both a catch limit and comprehensive catch accountability system, it would not be fully consistent with the NS1 guidelines. Therefore, the Council has is considering additional measures, designed to work in concert with status quo/no action measures and methods to fully address the NS1 guideline-recommended system for ACLs and AMs.

Alternative TILE-B (Council-Preferred): Specify ACL= ABC

ACL: Under this alternative, the fishery-level ACL would be set equal to the ABC for the tilefish stock. Figure 15 provided later in this section highlights the ACL structure if this alternative is selected.

ACL = ABC

ACL Evaluation: The ACL is exceeded when the catch from the total fishery exceeds this value. This comparison of observed catch to ACL is based on a single-year comparison.

5.3.10.2 Tilefish Proactive Accountability Measures

Alternative TILE-C: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to establish additional proactive accountability measures for the tilefish fishery. Those AM-like authorities linked to landings which already exist within the FMP for tilefish will continue to function as described in the FMP.

The tilefish fishery has a mechanism to adjust the tilefish incidental trip limit if the incidental category exceeds 5 percent of the TAL (§ 648.290(c)). A trip limit of 300 lb exists for the incidental category (§ 648.293). If the incidental catch exceeds 5 percent of the incidental trip limit of 300 lb may be reduced in the following fishing year.

Alternative TILE-D (Council-Preferred): Use of ACT

Use of ACT: Under this alternative, an ACT would be specified and serve as a buffer from the ACL. The Council has developed ACTs as they provide increased flexibility for dealing with management uncertainty and do not evoke automatic AMs if exceeded. Additional information on the use and function of ACTs as envisioned by the Council for managed resources can be found in section 4.1.1. Figure 15 provided later in this section highlights the ACT structure if this alternative is selected.

The Tilefish Monitoring Committee will be responsible for recommending an ACT to the Council which considers and addresses management uncertainty as defined under NS1 guidelines, as part of the specifications process for fishery management measures. The Monitoring Committee may provide other recommendations relevant to setting catch limits consistent with the MSA. The Monitoring Committee will consider all relevant sources of management uncertainty in this fishery and provide the technical basis, including any formulaic control rules if applied, for any reduction in catch when recommending an ACT. The ACTs, technical basis, and sources of management uncertainty would be described and provided to the Council at the time Monitoring Committee recommendations are made for the sector-specific fishery management measures for a single year or up to 3 years.

The recreational fishery for tilefish appears to be small (i.e., less than 1 metric ton annually from 48th SAW; NEFSC, 2009) based on the landings information available through the Marine Recreational Fisheries Statistics Survey (MRFSS); however, the recreational landings are highly imprecise because tilefish is a "rare event" in the sampling. Concerns have been raised about the potential emergence of a recreational tilefish fishery and the ability of the recreational landings survey (i.e., MRFSS) to accurately capture the magnitude of that fishery given the levels of sampling. Mortality from the recreational fishery is not presently accounted for through the stock assessment, which would be the appropriate place to address sources of fishing mortality. If not accommodated under scientific uncertainty, uncertainty associated with the imprecision of the recreational fishery (i.e., inability to accurately capture the true magnitude of that fishery) could be accommodated under management uncertainty.

Alternative TILE-E (Council-Preferred): Incidental Fishery Closure Authority

Incidental Fishery Inseason Closure Authority: Under this alternative, the Regional Administrator will monitor the incidental category fishery based on available information, and shall determine the date when the allocation will be harvested. The Regional Administrator shall publish notification in the *Federal Register* advising that, effective upon a specific date, the incidental category has been harvested will be closed for the remainder of the fishing year. This proactive AM is designed to prevent and/or significantly reduce the magnitude of potential overages.

Alternative TILE-F (Council-Preferred): Trip Limit increase to 500 lb

Under this alternative, a trip limit of 500 lb would be applied in lieu of the existing 300 lb limit for the incidental category (§ 648.293). If the incidental catch exceeds 5 percent of the incidental fishery allocation, then the incidental trip limit of 500 lb may be reduced in the following fishing year.

This is based on table 85 in the original FMP, which suggests that prior to the implementation of the current 300 lb trip limit in 1998, there were 23 trips that did not use longline gear and landed in excess of 300 lb. Nine of those trips landed between 2,001-3,000 lb per trip, which suggests those trips may have been directing on tilefish. No trips landed 600-2,000 lb, and 14 trips landed between 301-600 lb. The remainder of the total 2,766 trips landed 300 lb or less. Of those trips between 301-600 lb, the catch per trip averaged 534 lb. In addition, recent analysis and modeling of tilefish trip limits suggests that regardless of the trip limit (including 0 lb), fishermen would not change their behavior or abandon any trip (Eric Thunberg, NEFSC, personal communication).

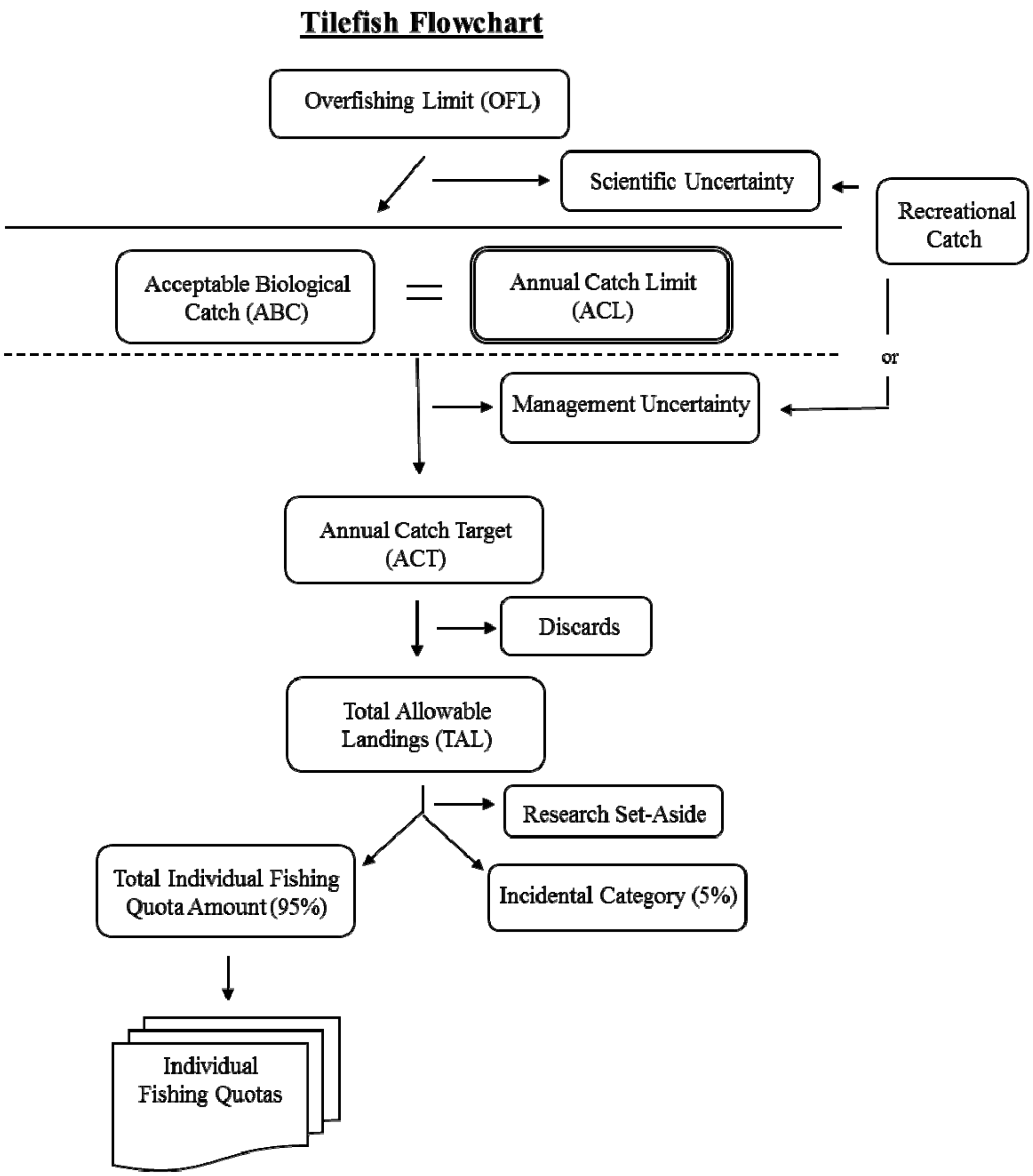


Figure 15. Tilefish catch limit structure if an ACT is utilized.

5.3.10.3 Tilefish Reactive Accountability Measures

To ensure maximum consistency with the NS1 guidelines, all FMPs should have, at a minimum, reactive accountability measures that seek to correct or mitigate overages of the ACL if they occur. These must be automatic functions of the FMP and cannot rely on analysis, deliberation, and recommendations for action by the Council or discretion of the Regional Administrator.

Alternative TILE-G: Status quo/no action

Under this alternative, the status quo would continue for tilefish and individual fishing quota (IFQ) overages, including amounts of tilefish landed by a lessee in excess of a temporary transfer of IFQ allocation would be deducted from the following fishing year allocation (§ 648.291(f)). While this measure could be used to address the requirement for ITQ landings-based accountability, the status quo would lack accountability for all catch components for this stock (i.e., incidental fishery landings and total discards). Because the measures contained in the FMP do not perform the full function of a comprehensive catch accountability system, it would be inconsistent with the NS1 guidelines.

Alternative TILE-H (Council-Preferred): Accountability for Catch Components

For tilefish, under this alternative the Council is proposing three reactive accountability mechanisms that respond to potential overages in the specific sectors or by non-landings, respectively.

Reactive Accountability for the Landings Components of the ACL: Irrespective of whether the ACL is or is not exceeded, the mechanisms to address ITQ overages already in the FMP described in (§ 648.140(d)(3)) would be applied. This is the status quo/no action.

If the ACL is exceeded and the incidental fishery landings are responsible for the overage, then accountability would occur at the fishery level and the ACL would be reduced. Specifically, the ACL would be reduced the following year by the overage amount (i.e., lb-for-lb repayment), as a single year adjustment.

Reactive Accountability for Other Non-landings Components of the ACL: Accountability for other catch components (other than ITQ and incidental fishery landings) that result in the ACL being exceeded must also be addressed. In the event the ACL is exceeded, and that overage has not been accommodated through other mechanisms in the FMP (i.e., discards and/or unlikely event RSA is exceeded), then accountability would occur at the fishery level and the ACL would be reduced. Specifically, the amount by which the ACL was exceeded would be used to adjust the ACL the following year (i.e., lb-for-lb repayment), as a single year adjustment.

5.4 Future Review and Modification of Actions

A brief overview of the alternatives contained within this section is given in Box 5.4.

Box 5.4. Brief description of the alternatives included in section 5.4.				
Issue	**Sub-issue**	**Alternative**	**Status**	**Description of Action**
Future Review and Modification of Actions (Section 5.4)	*Performance Review of Alternatives (Section 5.4.1)*	REVIEW-A	Status quo/no action	No formalized review process
		REVIEW-B (Council-Preferred)	Proposed	Review of ABC control rules
		REVIEW-C (Council-Preferred)	Proposed	Review of ACLs and AMs
	Description of Process of Modify Actions (Section 5.4.2)	MODIFY-A	Status quo/no action	No description of process to modify actions
		MODIFY-B (Council-Preferred)	Proposed	Description of process to modify actions in future

5.4.1 Performance Review of ABC, ACL, and AM Alternatives

Alternative REVIEW-A: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to prepare and review information on the performance of the ABC control rules, ACL control rules, and comprehensive system of accountability, beyond the materials prepared and SSC and Monitoring Committee (if applicable) review of materials, for the catch limit specification processes to set measures annually or for up to three years (5 for spiny dogfish).

Alternative REVIEW-B (Council-Preferred): SSC Review of ABC Control Rules

Under this alternative, ABC control rule performance will be reviewed in detail by the SSC five years after initial implementation of the Omnibus Amendment for the managed resources, and at least every five years thereafter. Council staff will prepare data on ABC control rule performance prior to the review in conjunction with the SSC managed resource lead. If it is determined that the ABC control rules are not performing as intended regarding preventing and ending overfishing, the SSC shall recommend modifications. Any recommended modifications would be addressed in a manner consistent with the magnitude and significance of the proposed changes (section 5.4.2).

The periodicity of the reviews could be less than five years, based on more frequent reviews required by the Council under rebuilding plans, Council initiated review due to poor control rule performance relative to overfishing, or other relevant factors.

These periodic reviews do not substitute for the specification setting review which updates catch level recommendations for the upcoming fishing year(s); however, these more detailed reviews may be scheduled to coincide with specification meetings.

Alternative REVIEW-C (Council-Preferred): Monitoring Committee Review of ACL Control Rules

Under this alternative, fishery performance relative to the ACL and ACT, ACT control rule performance if established or applicable, and the performance of AMs will be reviewed by the respective managed resource Monitoring Committee's (or staff for surfclam and ocean quahog) at least every 5 years. The periodicity of the reviews could be less than 5 years, based on more frequent reviews required by the Council under rebuilding plans, Council initiated review due to poor control rule performance relative to the ACL, or other relevant factors. Council staff will monitor the fishery performance relative to the ACL, and will notify the Council if the ACL for one of the managed resources is exceeded with a frequency greater than 25 percent (i.e., 1 in 4 years or 2 consecutive years). Council staff will prepare data on fishery performance relative to the ACL, ACT control rule performance, and performance of AMs, prior to the review. If it is determined that the measures implemented are not performing as intended to prevent the ACL from being exceeded, the managed resource Monitoring Committee's (or staff for surfclam and ocean quahog) shall recommend modifications.

These periodic reviews do not substitute for the specification setting review which updates catch level recommendations for the upcoming fishing year(s); however, these more detailed reviews may be scheduled to coincide with specification meetings.

5.4.2 Description of Process to Modify Actions

Alternative MODIFY-A: Status quo/no action

Under this alternative, the status quo would continue and no action would be taken to describe the process to review and modify measures addressed in this document. As such, a determination would need to be taken at the time of action development, which process would be most appropriate, specifications, FMP framework adjustment, or FMP Amendment.

Alternative MODIFY-B (Council-Preferred): Modification of Actions, including Framework Action List

Need for Adaptive Process
The actions taken in this Omnibus Amendment to establish catch limit frameworks for the purposes of specifying ABCs, ACLs, ACTs, and their associated AMs for each of the managed resources are intended to be dynamic to ensure these catch frameworks and associated system of accountability are flexible so that they do achieve the objectives of the FMP, prevent overfishing, and when required, rebuild fisheries. Flexibility is imperative and must allow for timely modifications given the dynamic nature of fisheries and the environment. This action, therefore, contemplates a process that allows for the timely modification of the action alternatives proposed in this document through the annual specifications or FMP framework adjustment. Undoubtedly, there will be modifications to the program as yet not contemplated that will have to go through an FMP amendment.

Modification of ABC Control Rules
The action proposed in this document would establish an ABC control rule methods framework comprised of four levels to which a stock could be classified. Each level would apply different ABC control rules. Those specific control rules, including the levels and criteria [including aspects of the risk policy which is part of the control rule], that are applied to derive ABC for the upcoming fishing year(s) would be conceptually expressed in the regulations implementing the Omnibus Amendment and given effect through specifications. Future modifications to these control rule methods would be based upon the best available scientific and other relevant information and could be recommended to the Council and implemented through subsequent specifications rulemaking. The introduction of an ABC control rule approach that is a major departure from the action taken in this document would need to go through either a FMP framework adjustment or FMP amendment. An FMP Amendment would be required for future measures that have not been previously contemplated in the FMP.

Modification of Risk Policy
The action proposed in this document would establish a formal Council risk policy, which expresses the Council's tolerance for risk of overfishing. The specific values associated with the risk policy that were applied by the SSC when deriving ABC for the upcoming fishing year(s) would be given effect through specifications. Future minor modifications to the risk policy, such as aspects of the policy (i.e., inflection points, intercepts, and range of probabilities), could be recommended by the Council and implemented through subsequent annual specifications rulemaking. The introduction of risk policy that is a major departure from the action taken in this document would need to go through either an FMP framework adjustment or FMP amendment. An FMP amendment would be required for future measures that have not been previously contemplated in the FMP.

Modification of ACT Control Rules

The action proposed in this document would establish a process for the development of ACT control rules to address management uncertainty. The ACT control rules that are applied to derive ACTs, for the upcoming fishing year(s) would be developed by the various species Monitoring Committees or staff for those stocks which lack these committees, given the dynamic nature of these fisheries and resulting variability in the sources of management uncertainty, within the specifications development process. Those specific control rules, that are applied to derive ACT for the upcoming fishing year(s) would be conceptually expressed in the regulations implementing the annual specifications. This process allows the development of rules that are specific to the fishing year and allows for an adaptive response to changes in the sources of management uncertainty inherent in the fisheries for the managed resources.

Modification of Existing AMs

The current specifications process already allows for modification of existing accountability measures through specifications for the managed resources on the basis that the dynamic nature of these fisheries requires the ability to respond to changing conditions in a timely fashion. Therefore, changes to the values associated with existing AMs (e.g., trip limits, trigger points for trip limit drops, etc.) can already be modified via specifications and that process would continue unmodified by this action.

Introduction of New AMs

In order for the system of catch limits and accountability proposed in this document to be effective for each of the managed resources, the introduction of new AMs is necessary to respond to the dynamic nature of these fisheries and prevent the ACL(s) from being exceeded. As such, it is contemplated that accountability measures may need to be introduced or strengthened in a timely manner to prevent, as much as is practicable, the ACL from being exceeded or to mitigate that overage and/or prevent it from occurring in the following year. For example, the introduction of sub-ACTs, a type of proactive AM may be necessary to address sub-components of the fishery which contribute to a lack of control in the total catch relative to the ACL and require the ability to manage that catch component independently. New or improved sources of data may allow for the development of more effective accountability measures in the future, such as annual or inseason accountability approaches for either the commercial or recreational fisheries, and the ability to responds to dynamic changes in the scientific and technical data available on which to base management measure is essential for preventing the ACL(s) from being exceeded.

The current list of FMP framework adjustment categories are given below. The Council shall develop and analyze appropriate management actions over the span of at least two Council meetings. The Council must provide the public with advance notice of the availability of the recommendation(s), appropriate justification(s) and economic and biological analyses, and the opportunity to comment on the proposed adjustment(s) at the first meeting, and prior to and at the second Council meeting. The Council's recommendations on adjustments or additions to management measures must come from one or more of the following categories:

Atlantic Mackerel and Butterfish - Minimum fish size, maximum fish size, gear restrictions, gear requirements or prohibitions, permitting restrictions, recreational possession limit, recreational seasons, closed areas, commercial seasons, commercial trip limits, commercial quota system including commercial quota allocation procedure and possible quota set asides to mitigate bycatch, recreational harvest limit, annual specification quota setting process, FMP Monitoring Committee composition and process, description and identification of EFH (and fishing gear management measures that impact EFH), description and identification of habitat areas of particular concern, overfishing definition and related thresholds and targets, regional gear restrictions, regional season restrictions (including option to split seasons), restrictions on vessel size (LOA and GRT) or shaft horsepower, changes to the Northeast Region SBRM (including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs), any other management measures currently included in the FMP, set aside quota for scientific research, regional management, and process for inseason adjustment to the annual specification.

Atlantic Bluefish - Minimum fish size, maximum fish size, gear restrictions, gear requirements or prohibitions, permitting restrictions, recreational possession limit, recreational season, closed areas, commercial season, description and identification of essential fish habitat (EFH), fishing gear management measures to protect EFH, designation of habitat areas of particular concern within EFH, changes to the Northeast Region SBRM (including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports and/or industry-funded observers or observer set-aside programs), and any other management measures currently included in the FMP.

Spiny Dogfish - Minimum fish size; maximum fish size; gear requirements, restrictions or prohibitions (including, but not limited to, mesh size restrictions and net limits); regional gear restrictions; permitting restrictions and reporting requirements; recreational fishery measures (including possession and size limits and season and area restrictions); commercial season and area restrictions; commercial trip or possession limits; fin weight to spiny dogfish landing weight restrictions; onboard observer requirements; commercial quota system (including commercial quota allocation procedures and possible quota set-asides to mitigate bycatch, conduct scientific research, or for other purposes); recreational harvest limit; annual quota specification process; FMP Monitoring Committee composition and process; description and identification of essential fish habitat; description and identification of habitat areas of particular concern; overfishing definition and related thresholds and targets; regional season restrictions (including option to split seasons); restrictions on vessel size (length and GRT) or shaft horsepower; target quotas; measures to mitigate marine mammal entanglements and interactions; regional management; changes to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside program; any other management measures currently included in the Spiny Dogfish FMP; and measures to regulate aquaculture projects.

Summer Flounder and Black Sea Bass - Minimum fish size, maximum fish size, gear restrictions, gear requirements or prohibitions, permitting restrictions, recreational possession limit, recreational seasons, closed areas, commercial seasons, commercial trip limits, commercial quota system including commercial quota allocation procedure and possible quota set asides to mitigate bycatch, recreational harvest limit, annual specification quota setting process, FMP Monitoring Committee composition and process, description and identification of essential fish habitat (and fishing gear management measures that impact EFH), description and identification of habitat areas of particular concern, overfishing definition and related thresholds and targets, regional gear restrictions, regional season restrictions (including option to split seasons), restrictions on vessel size (LOA and GRT) or shaft horsepower, operator permits, changes to the Northeast Region SBRM (including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs), any other commercial or recreational management measures, any other management measures currently included in the FMP, and set aside quota for scientific research.

Scup - Minimum fish size, maximum fish size, gear restrictions, gear restricted areas, gear requirements or prohibitions, permitting restrictions, recreational possession limit, recreational seasons, closed areas, commercial seasons, commercial trip limits, commercial quota system including commercial quota allocation procedure and possible quota set asides to mitigate bycatch, recreational harvest limit, annual specification quota setting process, FMP Monitoring Committee composition and process, description and identification of essential fish habitat (and fishing gear management measures that impact EFH), description and identification of habitat areas of particular concern, overfishing definition and related thresholds and targets, regional gear restrictions, regional season restrictions (including option to split seasons), restrictions on vessel size (LOA and GRT) or shaft horsepower, operator permits, any other commercial or recreational management measures, any other management measures currently included in the FMP, and set aside quota for scientific research.

Atlantic Surfclam and Ocean Quahog - The overfishing definition (both the threshold and target levels), description and identification of EFH (and fishing gear management measures that impact EFH), habitat areas of particular concern, set-aside quota for scientific research, VMS, OY range, suspension or adjustment of the surfclam minimum size limit, and changes to the Northeast Region SBRM (including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs).

Tilefish - Minimum fish size, minimum hook size, closed seasons, closed areas, gear restrictions or prohibitions, permitting restrictions, gear limits, trip limits, overfishing definition and related thresholds and targets, annual specification quota setting process, tilefish FMP Monitoring Committee composition and process, description and identification of EFH, fishing gear management measures that impact EFH, habitat areas of particular concern, set-aside quotas for scientific research, changes to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs, recreational management measures, including the bag-size limit, fish size limit, seasons, and gear restrictions or prohibitions, and IFQ program review components, including capacity reduction, safety at sea issues, transferability rules, ownership concentration caps, permit and reporting requirements, and fee and cost-recovery issues.

New Framework Categories
The framework process can be used to introduce new accountability measures in a timely manner; therefore, the following lists the categories of AMs that will be added to each of the framework list for the managed resources:

Sub-ACT(s)
Predefined inseason adjustment to commercial measures
Predefined inseason adjustment to recreational measures (if applicable)
Existing ABC control rule methods modification
Existing Council Risk policy modification
Frequency of ABC control rule, ACL and AM performance reviews

6.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT AND FISHERIES

This section serves to identify and describe the *valued ecosystem components* (VECs; Beanlands and Duinker 1984) that are likely to be directly or indirectly affected by the actions proposed in this document. These VECs comprise the affected environment within which the proposed actions will take place. Following the guidance provided by the Council on Environmental Quality (CEQ 1997), the VECs are identified and described here as a means of establishing a baseline for the impact analysis that will be presented in the subsequent document section (section 7.0 Analysis of Impacts). Impacts of the proposed actions on the VECs will also be determined from a cumulative effects perspective, which is in the context of other past, present, and reasonably foreseeable future actions.

Identification of the Selected Valued Ecosystem Components

As indicated in CEQ (1997), one of the fundamental principles of cumulative effects analysis is that "… the list of environmental effects must focus on those that are truly meaningful." As such, the range of VECs described in this section is limited to those for which a reasonable likelihood of meaningful impacts is expected. These VECs are listed below.

1) Managed resources
2) Non-target species
3) Habitat including EFH for the managed resource and non-target species
4) Endangered and protected resources
5) Human Communities

The managed resources VEC includes Atlantic mackerel, butterfish, Atlantic bluefish, spiny dogfish, summer flounder, scup, black sea bass, Atlantic surfclam, ocean quahog, and tilefish, which is managed under the Atlantic Mackerel, Squid, and Butterfish FMP, Bluefish FMP, Spiny Dogfish FMP, Summer Flounder, Scup, and Black Sea Bass FMP, Surfclam and Ocean Quahog FMP and Tilefish FMP. Changes to the FMP, such as those proposed in this Omnibus Amendment, have the potential to directly affect the condition of the managed resources. These impacts may occur when management actions either reduce or expand the directed harvest of managed resources or bycatch of these species.

Similarly, management actions that would change the distribution and/or magnitude of fishing effort for the managed resources may indirectly affect the non-target species VEC (species incidentally captured as a result of fishing activities for the managed resources), the habitat VEC (especially habitats vulnerable to activities related to directed fishing for the managed resource), and the protected resources VEC (especially those species with a history of encounters with the managed resources). The human communities VEC could be affected directly or indirectly through a variety of complex economic and social relationships associated with managing these species.

6.1 Description of the Managed Resources

6.1.1 Description of the Stock Status

Reports on “Stock Status,” including annual assessment and reference point update reports, Stock Assessment Workshop (SAW) reports, Stock Assessment Review Committee (SARC) panelist reports, and peer-review panelist reports are available online at the NEFSC website: http://www.nefsc.noaa.gov.

Table 8 summarizes information from the 2010 second quarter NMFS status of the stocks report to Congress. Based on the second quarter update, none of the managed resources have overfishing occurring. Butterfish is considered overfished and under a rebuilding plan. Both summer flounder and tilefish are under rebuilding plans. With the exception of summer flounder and butterfish, all of the managed resources have stock biomass (either total or spawning stock biomass) above biomass at maximum sustainable yield (B_{MSY}).

6.1.2 Description of Stock Characteristics, and Ecological Relationships

EFH Source Documents, which include details on stock characteristics and ecological relationships, are available at the following website:
http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Table 8. Stock Status based on NMFS second quarter Status of Stocks Report to Congress.

FMP	Stock	Overfishing? (Is Fishing Mortality above Threshold?)	Overfished? (Is Biomass below Threshold?)	Management Action Required	Rebuilding Program Progress	B/Bmsy or B/Bmsy proxy
Atlantic Mackerel, Squid and Butterfish	Atlantic mackerel	No	No[a]	N/A	N/A	3.57
Atlantic Mackerel, Squid and Butterfish	Butterfish	No	Yes[b]	Continue Rebuilding	Year 1 of 4-year plan	0.38
Bluefish	Bluefish	No	No	N/A	N/A	1.05
Spiny Dogfish	Spiny dogfish	No	No	N/A	N/A	1.03
Summer Flounder, Scup and Black Sea Bass	Black sea bass	No	No	N/A	N/A	1.03
Summer Flounder, Scup and Black Sea Bass	Scup	No	No	N/A	N/A	2.04
Summer Flounder, Scup and Black Sea Bass	Summer flounder	No	No - Rebuilding	Continue Rebuilding	Year 11 of 13-year plan	0.77
Atlantic Surfclam and Ocean Quahog	Atlantic surfclam	No	No	N/A	N/A	1.62
Atlantic Surfclam and Ocean Quahog	Ocean quahog	No	No	N/A	N/A	1.62
Tilefish	Tilefish	No	No - Rebuilding[c]	Continue Rebuilding	Year 9 of 10-year plan	1.04

[a] Although this stock is currently listed as not subject to overfishing and not overfished, the most recent stock assessment conducted for Atlantic mackerel (2010) could not determine the overfishing or overfished status.

[b] Although the butterfish stock is listed as overfished, the status of the butterfish stock is unknown because biomass reference points could not be determined in the most recent assessment (SAW 49). Though the butterfish population appears to be declining over time, the underlying causes for population decline are unknown. Despite considerable uncertainty in the recent assessment, no evidence suggests the status of the butterfish stock has improved since the previous assessment (SAW 38). The status of the butterfish stock will remain as overfished in this report until biological reference points can be determined in a future assessment.

[c] Although the most recent B/Bmsy = 1.04, this stock has not been declared rebuilt. SARC 48 notes the following: *The biomass estimates for recent years from the ASPIC model are likely over-optimistic because trends in commercial VTR CPUE declined recently in a manner consistent with the passage of the strong 1999 cohort through the population (an interpretation further supported by the length frequency data). The current assessment model (ASPIC) does not account for those factors. Much of the confidence interval around the 2008 biomass estimate falls below the updated BMSY listed above. Based on these considerations there is no convincing evidence that the stock has rebuilt to levels above.*

6.2 Non-target Species

The term "bycatch," as defined by the MSA, means fish that are harvested in a fishery but that are not sold or kept for personal use. Bycatch includes the discard of whole fish at sea or elsewhere, including economic and regulatory discards, and F due to an encounter with fishing gear that does not result in capture of fish (i.e., unobserved fishing mortality). Bycatch does not include fish released alive under a recreational catch-and-release fishery management program.

Atlantic mackerel and butterfish - The commercial butterfish fishery, recently constrained because of its depleted status, primarily occurs when butterfish itself is caught as bycatch and retained. Red hake, silver hake, spiny dogfish, scup, unclassified skates, fourspot flounder, Loligo squid, Atlantic mackerel, and little skate are have been identified as bycatch and/or discard species for the butterfish fishery. There are no significant recreational landings of butterfish. Mackerel and Atlantic (sea) herring are often caught together in midwater trawls and can make analysis of bycatch in the commercial mackerel fishery difficult. However, analysis has identified spiny dogfish, Atlantic (sea) herring, scup, blueback herring, striped bass, hickory shad, silver hake (whiting), American shad, alewife, unclassified dogfish, and butterfish as primary bycatch and/or discard species for the mackerel fishery. There are significant recreational landings of mackerel in Massachusetts, New Hampshire, and Maine in the summer. Analysis of how much of that catch is directed and how much is incidental has not been undertaken, but the directed portion likely catches other gamefish in those areas such as striped bass and bluefish at least on occasion. Section 6.2 of Amendment 10 to the Atlantic Mackerel, Squid, and Butterfish FMP (MAFMC 2009) provides a full description of bycatch in the butterfish and mackerel fisheries.

Bluefish - The bluefish commercial fishery is a mixed species fishery prosecuted with gillnets, otter trawls, and handlines, where bonito, Atlantic croaker, weakfish, and spiny dogfish are harvested with bluefish. Section 3.1.3.9 of Amendment 1 to the Bluefish FMP (MAFMC 1999a) provides a full description of bycatch in these fisheries. There is a significant recreational fishery for bluefish. The recreational fishery may catch and/or land numerous other species which could include, but are not limited to striped bass, weakfish, and other pelagics.

Spiny dogfish - The spiny dogfish commercial fishery is prosecuted with hook gear, gillnets, and to a lesser degree trawl gear, where by far, the primary discard species in the spiny dogfish fishery is spiny dogfish, followed by other species including cod, skates, herring, and scup. Section 3.1.3.9 of the Spiny Dogfish FMP (MAFMC 1999) provides a full description of bycatch in these fisheries. There is not significant directed recreational fishery for dogfish, but it is a common discard while fishing for other recreationally sought species.

Summer flounder, scup, and black sea bass - The summer flounder, scup and black sea bass commercial fisheries are mixed fisheries, prosecuted with bottom and midwater trawls, fish pots/traps, and lines, where squid, Atlantic mackerel, silver hake, skates, and other species are harvested with summer flounder, scup, and/or black sea bass. Section 5.1.9 of Amendment 13 to the FMP (MAFMC 2002) provides a full description of bycatch in these fisheries. There are significant recreational fisheries for summer flounder, scup, and black sea bass. The recreational fishery may catch and/or land numerous other species within the management units of these resources. These species could include, but are not limited to, striped bass, bluefish, weakfish, tautog, Atlantic croaker, spot, spiny dogfish, skates species, and other flounder species and pelagics.

Atlantic surfclam and ocean quahog - The surfclam and ocean quahog fisheries, prosecuted with hydraulic dredges, are extremely clean, as evidenced by the 1997 NEFSC clam survey species listing (Table 34 of Amendment 13, MAFMC 2003). Surfclams and ocean quahogs comprise well over 80percent of the total catch from the survey, with no fish caught. Only sea scallops, representing other commercially desirable invertebrates were caught at around one-half of one percent. Commercial operations are cleaner than the scientific surveys which have liners in the dredges, as all animate and inanimate objects except surfclams and ocean quahogs are discarded quickly before the resource is placed in the cages. The processors reduce their payments if "things" other than surfclams or ocean quahogs are in the cages (Wallace and Hoff 2004).

Tilefish - The commercial fishery for tilefish is primarily prosecuted with bottom longline gear. According to Amendment 1 of the Tilefish FMP, all of the tilefish landed by directed commercial trips used longline gear. Section 6.2 of Amendment 1 to the FMP provides a full description of bycatch in the fishery. Catch disposition analysis indicates that the tilefish fishery is very clean as the overall pounds landed and/or discarded of other species is low for directed tilefish trips. Bottom otter trawls may also be used to catch tilefish, but have limited utility because of the habitat preferred by tilefish. Bottom otter trawls are only effective where the bottom is firm, flat, and free of obstructions. Soft mud bottom, rough or irregular bottom, or areas with obstructions, which are those areas most frequented by tilefish, are not conducive to bottom trawling. However, tilefish are occasionally taken incidental to other directed fisheries, such as the trawl fisheries for lobster and flounder (Freeman and Turner 1977) and hake, squid, mackerel and butterfish (MAFMC 2000). Recreational landings are very small and there is no substantial directed recreational fishery and the number of tilefish discarded by recreational anglers is low (section 6.1; MAFMC 2009).

6.3 Habitat (Including Essential Fish Habitat)

Detailed information on the affected physical and biological environments inhabited by the managed resources is available in Stevenson et al. (2004). The managed resources inhabit the Northeast U.S. Shelf Ecosystem, which has been described as including the area from the Gulf of Maine south to Cape Hatteras, extending from the coast seaward to the edge of the continental shelf, including the slope sea offshore to the Gulf Stream (Sherman et al. 1996). The continental slope includes the area east of the shelf, out to a depth of 2000 m. Four distinct sub-regions comprise the NOAA Fisheries Northeast Region: the Gulf of Maine, Georges Bank, the Mid-Atlantic Bight, and the continental slope.

The Gulf of Maine is an enclosed coastal sea, characterized by relatively cold waters and deep basins, with a patchwork of various sediment types. Georges Bank is a relatively shallow coastal plateau that slopes gently from north to south and has steep submarine canyons on its eastern and southeastern edge. It is characterized by highly productive, well-mixed waters and strong currents. The Mid-Atlantic Bight is comprised of the sandy, relatively flat, gently sloping continental shelf from southern New England to Cape Hatteras, NC. The continental slope begins at the continental shelf break and continues eastward with increasing depth until it becomes the continental rise. It is fairly homogenous, with exceptions at the shelf break, some of the canyons, the Hudson Shelf Valley, and in areas of glacially rafted hard bottom.

The environment that could potentially be affected by the proposed action overlaps with EFH for the managed resources. The following sections describe where to find detailed information on EFH and any past actions taken in the FMPs to minimize adverse EFH effects to the extent practicable.

6.3.1 Atlantic Mackerel and Butterfish

A description of the habitat associated with the Atlantic mackerel and butterfish fisheries is presented in section 6.3 of Amendment 9 to the Atlantic Mackerel, Squid (*Loligo* and *Illex*), and Butterfish FMP (MAFMC 2008). Amendment 11 is revising the EFH designations for these species and should be implemented in 2011. The impact of fishing on Atlantic mackerel and butterfish habitat (and EFH) and the impact of the Atlantic mackerel and butterfish fisheries on other species' habitat and EFH can be found in Amendment 9 to the FMP (Sections 6.3, 7.3, Appendices; MAFMC 2008). Potential habitat (including EFH) impacts associated with the measures proposed in this document are discussed in section 7.0. The current EFH designation definitions by life history stage for Atlantic mackerel and butterfish are available at the following website: http://www.nero.noaa.gov/hcd/list.htm.

Information on Atlantic mackerel habitat requirements can be found in the document titled, "Essential Fish Habitat Source Document: Atlantic Mackerel, *Scomber scombrus*, Life History and Habitat Characteristics" (Studholme et al. 1999). Information on butterfish habitat requirements can be found in the document titled, "Essential Fish Habitat Source Document: Butterfish, *Peprilus triacanthus*, Life History and Habitat Characteristics" (Cross et al. 1999). Electronic versions of these source documents are available at the following website: http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Any actions implemented in the FMP that affect species with overlapping EFH were considered in the EFH assessment for Amendment 9 to the Atlantic Mackerel, Squid (*Loligo* and *Illex*), and Butterfish FMP (MAFMC 2008). Atlantic mackerel are primarily landed by mid-water trawls and to a lesser degree by bottom otter trawls. Landed butterfish are primarily caught incidentally in bottom otter trawls. Amendment 9 to the FMP included alternatives to minimize the adverse impacts of fishing gear on EFH (as required pursuant to section 303(a)(7) of the SFA). As stated in section 6.3 of Amendment 9, the Council determined that the mobile bottom-tending gear used in

Atlantic mackerel and butterfish fisheries has a potential to adversely impact EFH. The analysis in Amendment 9 to the FMP supported Council selection of an alternative to prohibit fishing for Atlantic mackerel, squids, and butterfish with bottom otter trawls in Lydonia and Oceanographer Canyons in order to minimize adverse EFH effects to the extent practicable. There have been no significant changes to the manner in which the Atlantic mackerel and butterfish fisheries are prosecuted, and none of the alternatives being considered in this document would adversely affect EFH (see section 7.0); therefore, other than specific actions in Amendment 10 to the FMP (butterfish mortality reduction), which were found unlikely to adversely impact habitat (including EFH), the effects of fishing on EFH have not been re-evaluated since Amendment 9 to the FMP, and no alternatives to minimize adverse effects on EFH are presented in this document.

6.3.2 Atlantic Bluefish

A description of the habitat associated with the bluefish fisheries is presented in Section 2.2.2 of Amendment 1 to the FMP (MAFMC 1999). The impact of fishing on bluefish habitat (and EFH) and the impact of the bluefish fishery on other species' habitat and EFH are also described in the FMP. Potential impacts associated with the measures proposed in this document on habitat (including EFH) are discussed in section 7.0. The current EFH designation definitions by life history stage for bluefish are available at the following website: http://www.nero.noaa.gov/hcd/list.htm.

Information on bluefish habitat requirements can be found in the document titled," Essential Fish Habitat Source Document: Bluefish, *Pomatomus saltatrix*, Life History and Habitat Characteristics" (Shepherd and Packer 2006). An electronic version of this source document is available at the following website:
http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Any actions implemented in the FMP that affect species with overlapping EFH were considered in the EFH assessment for Amendment 1 to the Bluefish FMP (MAFMC 1999). A 2004 evaluation of the habitat impacts of bottom otter trawls, gillnets, and handlines used in the commercial bluefish fishery indicated that the baseline impact of the fishery was minimal and temporary in nature (MAFMC 2004). Therefore, it was concluded that adverse effects of the bluefish fishery on EFH were minimal and no action was necessary. There have been no significant changes to the manner in which the bluefish fisheries are prosecuted, and none of the alternatives being considered in this document would adversely affect EFH (see section 7.0); therefore, the effects of fishing on EFH have not been re-evaluated since Amendment 1 to the FMP and the 2004 evaluation, and no alternatives to minimize adverse effects on EFH are presented in this document.

6.3.3 Spiny Dogfish

A description of the habitat associated with the spiny dogfish fishery is presented in section 2.2.2 of the FMP (MAFMC 1999). The impact of fishing on spiny dogfish habitat (and EFH) and the impact of the spiny dogfish fishery on other species' habitat and EFH are also described in the FMP. Potential impacts associated with the measures proposed in this document on habitat (including EFH) are discussed in section 7.0. The current EFH designation definitions by life history stage for spiny dogfish are available at the following website: http://www.nero.noaa.gov/hcd/list.htm .

Information on spiny dogfish habitat requirements can be found in the document titled "Essential Fish Habitat Source Document: Spiny Dogfish, *Squalus acanthias*, Life History and Habitat Characteristics" (Stehlik 2007). An electronic version of this source document is available at the following website:
http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Any actions implemented in the FMP that affect species with overlapping EFH were considered in the EFH assessment for the Spiny Dogfish FMP (MAFMC 1999). The dominant gear types used in the commercial fishery are sink gillnets and hook gear. Gears used in gillnet and hook fisheries are not expected to significantly impact essential fish habitat. The FMP evaluated the potential EFH impacts of the spiny dogfish fishery and concluded that because spiny dogfish are not associated with any particular type of bottom habitat, it is difficult to identify specific adverse impacts from bottom trawls or dredges on spiny dogfish EFH. Therefore, no management measures were proposed at that time for minimizing the potential adverse impacts of trawls on EFH. Since then, the NEFMC has established habitat closed areas for minimizing the adverse impacts of bottom trawls and dredges on EFH for a number of managed species in NMFS Northeast Region. These management measures are sufficient for minimizing any adverse habitat impacts that may be associated with the spiny dogfish fishery. There have been no significant changes to the manner in which the spiny dogfish fishery is prosecuted, and none of the alternatives being considered in this document would adversely affect EFH (see section 7.0); therefore, the effects of fishing on EFH have not been re-evaluated since the Spiny Dogfish FMP, and no alternatives to minimize adverse effects on EFH are presented in this document.

6.3.4 Summer Flounder, Scup, and Black Sea Bass

A description of the habitat associated with the summer flounder, scup, and black sea bass fisheries is presented in section 3.2 of Amendment 13 to the FMP (MAFMC 2002). The impact of fishing on summer flounder, scup, and black sea bass habitat (and EFH) and the impact of the summer flounder, scup, and black sea bass fisheries on other species' habitat and EFH can be found in Amendment 13 to the FMP (section 3.2; MAFMC 2002). Potential impacts associated with the measures proposed in this document on habitat (including EFH) are discussed in section 7.0. The current EFH designation definitions by life history stage for summer flounder are available at the following website: http://www.nero.noaa.gov/hcd/list.htm.

Information on summer flounder habitat requirements can be found in the document titled, "Essential Fish Habitat Source Document: Summer Flounder, *Paralichthys dentatus*, Life History and Habitat Characteristics" (Packer et al. 1999). Information on scup habitat requirements can be found in the documents titled, "Essential Fish Habitat Source Document: Scup, *Stenotomus chrysops*, Life History and Habitat Characteristics" (Steimle et al. 1999). Information on black sea bass habitat requirements can be found in the document titled, "Essential Fish Habitat Source Document: Black Sea Bass, *Centropristis striata*, Life History and Habitat Characteristics"(Steimle et al. 1999) and an update of that document, "Essential Fish Habitat Source Document: Black Sea Bass, *Centropristis striata*, Life History and Habitat Characteristics" (Drohan et al. 2007). Electronic versions of these source documents are available at the following website: http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Any actions implemented in the FMP that affect species with overlapping EFH were considered in the EFH assessment for Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass FMP (MAFMC 2002). Summer flounder are primarily landed by bottom otter trawls. Scup are primarily landed by fish pots/traps, bottom and midwater trawls, and lines. Black sea bass are primarily landed by fish pots/traps, bottom and midwater trawls, and lines. Amendment 13 included alternatives to minimize the adverse impacts of fishing gear on EFH (as required pursuant to section 303(a)(7) of the SFA). As stated in section 3.2 of Amendment 13, the Council determined that both mobile bottom tending and stationary gear have a potential to adversely impact EFH. The analysis in that document also indicated that no management measures were needed, because in Federal waters the fishery is conducted primarily in high energy mobile sand and bottom habitat, where gear impacts are minimal and/or temporary in nature. On that basis, the Council selected the no action alternative, from among the suite of alternatives to minimize fishing gear impacts on EFH in Amendment 13 to the FMP. There have been no significant changes to the manner in which the summer flounder, scup, and black sea bass fishery is prosecuted, and none of the alternatives being considered in this document would adversely affect EFH (see section 7.0); therefore, the effects of fishing on EFH have not been re-evaluated since Amendment 13 to the FMP, and no alternatives to minimize adverse effects on EFH are presented in this document.

6.3.5 Atlantic Surfclam and Ocean Quahog

A description of the habitat associated with the Atlantic surfclam and ocean quahog fisheries is presented in section 2.2 of Amendment 13 to the FMP (MAFMC 2003). The impact of fishing on surfclam and ocean quahog habitat (and EFH) and the impact of the surfclam and ocean quahog fisheries on other species' habitat and EFH can be found in Amendment 13 to the FMP (section 2.2; MAFMC 2003). Potential impacts associated with the measures proposed in this document on habitat (including EFH) are discussed in section 7.0. The current EFH designation definitions by life history stage for Atlantic surfclam and ocean quahog are available at the following website:
http://www.nero.noaa.gov/hcd/list.htm.

Information on Atlantic surfclam habitat requirements can be found in the document titled, "Essential Fish Habitat Source Document: Surfclam, *Spisula solidissima*, Life History and Habitat Requirements" (Cargnelli et al. 1999a). Information on ocean quahog habitat requirements can be found in the document titled, "Essential Fish Habitat Source Document: Ocean Quahog, *Arctica islandica*, Life History and Habitat Requirements" (Cargnelli et al. 1999b). Electronic versions of these source documents are available at the following website: http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Any actions implemented in the FMP that affect species with overlapping EFH were considered in the EFH assessment for Amendment 13 to the Atlantic Surfclam and Ocean Quahog FMP (MAFMC 2003). Atlantic surfclams and ocean quahogs are primarily landed by hydraulic clam dredges. Amendment 13 included alternatives to minimize the adverse impacts of fishing gear on EFH (as required pursuant to section 303(a)(7) of the SFA). As stated in section 2.2 of Amendment 13, the prime habitat of surfclams and ocean quahogs consists of sandy substrates with no vegetation or benthic 'structures' that could be damaged by the passing of a hydraulic dredge. In these 'high energy' environments, it is thought that the recovery time following passage of a clam dredge is relatively short. Because of the potential that the fishery adversely impacts EFH for a number of managed species, eight action alternatives (including closed area alternatives) for minimizing those impacts were considered by the Council in Amendment 13. A panel of experts who participated in a 2001 workshop to evaluate the potential habitat impacts of fishing gears used in the Northeast region concluded that there are potentially large, localized impacts of hydraulic clam dredges on the biological and physical structure of sandy benthic habitats (MAFMC 2003). The Council concluded in Amendment 13 that there may be some adverse effects of clam dredging on EFH, but concurred with the workshop panel that the effects are short term and minimal because the fishery occurs in a relatively small area (compared to the area impacted by scallop dredges or bottom trawls) and primarily in high energy sand habitats. The panel concluded that biological communities would recover within months to years (depending on what species was affected) and physical structure within days in high energy environments to months in low energy environments. The preamble to the EFH Final Rule (50 CFR Part 600) defines temporary impacts as those that are limited in duration and that allow the particular environment to recover without measurable impact. Additionally, the overall area impacted by the clam fisheries is relatively small (approximately 100 square nautical miles), compared to the large area of high energy sand on the continental shelf. The closed area alternatives in Amendment 13 were analyzed for their biological, economic, and social impacts, but given the results of the gear effects analysis in that document (summarized above), the Council concluded that none of them were necessary or practicable. There have been no significant changes to the manner in which the Atlantic surfclam and ocean quahog fishery is prosecuted, and none of the alternatives being considered in this document would adversely affect EFH (see section 7.0); therefore, the effects of fishing on EFH have not been re-evaluated since Amendment 13 to the FMP, and no alternatives to minimize adverse effects on EFH are presented in this document.

6.3.6 Tilefish

A description of the habitat associated with the golden tilefish fishery is presented in section 6.3 of Amendment 1 to the FMP (MAFMC 2009). The impact of fishing on tilefish habitat (and EFH) and the impact of the tilefish fisheries on other species' habitat and EFH can be found in Amendment 1 to the FMP (sections 6.2 and 6.3; MAFMC 2009). Potential impacts associated with the measures proposed in this document on habitat (including EFH) are discussed in section 7.0. The current EFH designation definitions by life history stage for tilefish are available at the following website: http://www.nero.noaa.gov/hcd/list.htm.

Information on tilefish habitat requirements can be found in the document titled, "Essential Fish Habitat Source Document: Tilefish, *Lopholatilus chamaeleonticeps*, Life History and Habitat Characteristics" (Steimle et al. 1999; Appendix F). An electronic version of this source document is available at the following website: http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Any actions implemented in the FMP that affect species with overlapping EFH were considered in the EFH assessment for Amendment 1 to the Tilefish FMP (MAFMC 2009). Tilefish are primarily landed by longline and bottom otter trawl. Amendment 1 included alternatives to minimize the adverse impacts of fishing gear on EFH (as required pursuant to section 303(a)(7) of the SFA). As stated in section 6.3 of Amendment 1, the Council determined that juvenile and adult tilefish are considered to be highly vulnerable to adverse impacts from bottom otter trawls. Specifically, there is potential for a high degree of impact to the physical structure of hard clay outcroppings in which tilefish create burrows. On that basis, the Council selected to close Norfolk, Veatch, Lydonia, and Oceanographer canyons to otter bottom trawl gear to reduce gear impacts on juvenile and adult tilefish EFH in Amendment 1 to the FMP. There have been no significant changes to the manner in which the tilefish fishery is prosecuted, and none of the alternatives being considered in this document would adversely affect EFH (see section 7.0); therefore, the effects of fishing on EFH have not been re-evaluated since Amendment 1 to the FMP, and no alternatives to minimize adverse effects on EFH are presented in this document.

6.4 Endangered and Protected Resources

Information in this section pertains to species formally listed as threatened or endangered under the ESA with one additional species proposed for listing, and two candidate species (Table 9). A more detailed description of the species listed as proposed, threatened, or endangered, including ecological relationships and life history information, is presented in Appendix C. The potential impacts to ESA species listed as proposed, threatened, or endangered in Table 9 under this Omnibus Amendment are discussed in section 7.0. There are no expected impacts to any ESA proposed, endangered, or listed species as the Omnibus Amendment is a description of processes that will be utilized to set ABC, ACL, ACTs, and evoke AMs, as needed. The Council will assess the potential impacts to ESA proposed, threatened, or endangered species when utilizing the Omnibus Amendment established mechanisms to set catches in subsequent years.

Atlantic sturgeon have been proposed for listing under the ESA (Table 9). A status review for Atlantic sturgeon was completed in 2007. NMFS has concluded that the U.S. Atlantic sturgeon spawning populations comprise five Distinct Population Segments (DPSs) (ASSRT, 2007). On October 6, 2010, NMFS proposed listing five populations of Atlantic sturgeon along the U.S. East Coast as either threatened or endangered species. The Gulf of Maine DPS of Atlantic sturgeon is proposed to be listed as threatened, and the New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon are proposed as endangered. A final listing rule is expected by October 6, 2011.

Atlantic sturgeon are known to interact frequently with commercial gillnet and trawl gears. A more detailed description of Atlantic sturgeon life history, including ecological relationships, is included with the species listed as endangered or threatened in Appendix A. The potential impacts to protected species associated with the proposed measures under this specifications document, including Atlantic sturgeon, are discussed in section 7.0.

Two additional species, cusk and Atlantic bluefin tuna, are candidate species for listing under the ESA (Table 9). Candidate species receive no substantive or procedural protection under the ESA; however, NMFS recommends that project proponents consider implementing conservation actions to limit the potential for adverse effects on candidate species from any proposed project. The Protected Resources Division of the NMFS Northeast Regional Office has initiated review of recent stock assessments, bycatch information, and other information for the candidate species of Atlantic bluefish tuna and cusk, which will be incorporated in the status review reports for both candidate species. The results of those efforts are needed to accurately characterize recent interactions between fisheries and the candidate species in the context of stock sizes. Any conservation measures deemed appropriate for these species will follow the information from these reviews. Please note that the conference provisions requirement of the ESA applies only if a candidate species is proposed for listing (and thus, becomes a proposed species) (see 50 CFR 402.10).

The status of these and other marine mammal populations inhabiting the Northwest Atlantic has been discussed in detail in the U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments. Initial assessments were presented in Blaylock et al. (1995) and are updated in Waring et al. (2009). The most recent information on the stock assessment of various marine mammals through 2009 can be found at:
http://www.nmfs.noaa.gov/pr/sars/.
Three other useful websites on marine mammals are:
http://www.nmfs.noaa.gov/pr/recovery, which provides information on recovery plans, http://spo.nwr.noaa.gov/mfr611/mfr611.htm, provides history and status of endangered whales, and http://www.nmfs.noaa.gov/pr/species/mammals, which provides updates of stock status.

Under section 118 of the MMPA of 1972, NMFS must publish, and annually update, the List of Fisheries (LOF), which places all U.S. commercial fisheries in one of three categories based on the level of incidental serious injury and mortality of marine mammals in each fishery (arranging them according to a two-tiered classification system). The categorization of a fishery in the LOF determines whether participants in that fishery may be required to comply with certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements. The classification criteria consist of a two-tiered, stock-specific approach that first addresses the total impact of all fisheries on each marine mammal stock (Tier 1) and then addresses the impact of the individual fisheries on each stock (Tier 2).

Table 9. Species listed as candidates, proposed, threatened, or endangered under the ESA that are found in the environment utilized by the managed resources fisheries under NMFS' jurisdiction.

Species	Common name	Scientific Name	Status
Cetaceans	Northern right	*Eubalaena glacialis*	Endangered
	Humpback	*Megaptera novaeangliae*	Endangered
	Fin	*Balaenoptera physalus*	Endangered
	Blue	*Balaenoptera musculus*	Endangered
	Sei	*Balaenoptera borealis*	Endangered
	Sperm	*Physeter macrocephalus*	Endangered
Sea Turtles	Leatherback	*Dermochelys coriacea*	Endangered
	Kemp's ridley	*Lepidochelys kempii*	Endangered
	Green	*Chelonia mydas*	Endangered
	Hawksbill	*Eretmochelys imbricata*	Endangered
	Loggerhead	*Caretta caretta*	Threatened[5]
Fish	Shortnose sturgeon	*Acipenser brevirostrum*	Endangered
	Atlantic salmon	*Salmo salar*	Endangered
	Smalltooth sawfish	*Pristis pectinata*	Endangered
	Atlantic sturgeon	*Acipenser oxyrinchus*	Proposed
	Cusk	*Brosme brosme*	Candidate
	Atlantic bluefin Tuna	*Thunnus thynnus*	Candidate

[6]) for the stock, then the stock is designated as Tier 1, and all fisheries interacting with this stock would be placed in Category

I. Annual mortality and serious injury of a stock in a given fishery is greater than or equal to 50 percent of the PBR level;

[5] Proposed up-listing from threatened, which is the current status under ESA, to endangered.
[6] PBR is the product of minimum population size, one-half the maximum productivity rate, and a "recovery" factor (MMPA Sec. 3. 16 U.S.C. 1362; Wade and Angliss 1997).

II. Annual mortality and serious injury of a stock in a given fishery is greater than one percent and less than 50 percent of the PBR level; or

III. Annual mortality and serious injury of a stock in a given fishery is less than one percent of the PBR level.

Under Category I, there is documented information indicating a "frequent" incidental mortality and injury of marine mammals in the fishery. In Category II, there is documented information indicating an "occasional" incidental mortality and injury of marine mammals in the fishery. In Category III, there is information indicating no more than a "remote likelihood"[7] of an incidental taking of a marine mammal in the fishery or, in the absence of information indicating the frequency of incidental taking of marine mammals, other factors such as fishing techniques, gear used, methods used to deter marine mammals, target species, seasons and areas fished, and species and distribution of marine mammals in the area suggest there is no more than a remote likelihood of an incidental take in the fishery.

All types of commercial fishing gear are required to meet the gear restrictions detailed in the: Atlantic Large Whale Take Reduction Plan at http://www.nero.noaa.gov/whaletrp/, the Harbor Porpoise Take Reduction Plan at http://www.nero.noaa.gov/prot_res/porptrp/, the MMPA and ESA respectively at http://www.nmfs.noaa.gov/pr/laws/mmpa/ and http://www.nmfs.noaa.gov/pr/laws/esa/. These restrictions are intended to reduce fishery interactions and incidental injury or mortality of protected resources.

Recreational Fisheries

The principle gears used in the recreational fishery for Atlantic mackerel, bluefish, summer flounder, scup, and black sea bass are rod and reel and handline. Recreational fisheries, in general, have very limited interaction with marine mammals and endangered or threatened species. Anecdotal information indicates that recreational anglers periodically foul hook Atlantic sturgeon while in pursuit of other recreational species such as striped bass (Damon-Randall, NMFS, Protected Resources Division, personal communication). These interactions are believed to be infrequent occurrences, the impact of which are well below the level which would impact the continued survivability of Atlantic sturgeon (Damon-Randall, NMFS, Protected Resources Division, personal communication). Recreational fishermen do contribute to difficulties for endangered and threatened marine species in that it is estimated that recreational fishermen discard over 227 million lb (103 million kg) of litter each year (O'Hara et al. 1988). More than nine million recreational vessels are registered in the United States. The greatest concentrations of recreational vessels in the United States are found in the waters off New York, New Jersey, the Chesapeake Bay, and Florida (O'Hara et al. 1988). As previously stated, recreational fishermen are a major source of debris in the form of

[7] A commercial fishery with a "remote likelihood" of causing incidental mortality and serious injury of marine mammals is one that collectively with other fisheries is responsible for the annual removal of: (1) 10% or less of any marine mammal stock's potential biological removal level, or (2) More than 10% of any marine mammal stock's PBR level, yet that fishery by itself is responsible for the annual removal of 1 percent or less of that stock's PBR level.

monofilament fishing line. The amount of fishing line lost or discarded by the 17 million U.S. fishermen during an estimated 72 million fishing trips in 1986 is not known, but if the average angler snares or cuts loose only one yard of line per trip, the potential amount of deadly monofilament line is enough to stretch around the world (O'Hara et al. 1988). Although the recreational fishery may impact these marine species, nothing in this document would modify the manner in which the fishery is prosecuted. Potential impacts to protected species associated with the proposed measures are discussed in section 7.0.

Commercial Fisheries

Atlantic mackerel are primarily prosecuted by mid-water trawls and to a lesser degree by bottom otter trawls. Landed butterfish are primarily caught incidentally in bottom otter trawls. The bluefish commercial fishery are prosecuted by bottom otter trawls, gillnets, and handlines. The dominant gear types used in the commercial fishery for spiny dogfish are sink gillnets and hook gear. The commercial fisheries for summer flounder, scup, and black sea bass are primarily prosecuted with otter trawls, otter trawls and floating traps, and otter trawls and pots/traps, respectively. Atlantic surfclams and ocean quahogs are primarily landed by hydraulic clam dredges. Tilefish are primarily landed by longline and bottom otter trawl.

The 2010 LOF indicates that sink gill nets deployed in the Mid-Atlantic gillnet and Northeast sink gillnet are classified as Category I, with potential to result in incidental injury and mortality of Western North Atlantic bottlenose dolphin, common dolphin, Risso's dolphin, white-sided dolphin, short-finned pilot whale, long-finned pilot whale, fin whales, right whales, gray seal, harp seal, harbor seal, hooded seal, Gulf of Maine, humpback whales, harbor porpoise, and Canadian East coast minke whale. The Mid-Atlantic mid-water trawl (including pair trawl) is classified as a Category II fishery, with potential to result in incidental injury and mortality of Western North Atlantic bottlenose dolphin, common dolphin, Risso's dolphin, white-sided dolphin, short-finned pilot whale, and long-finned pilot whale. The Mid-Atlantic bottom trawl fishery is also a Category II fishery, with potential to result in incidental injury and mortality of Western North Atlantic common dolphins, white-sided dolphin, short-finned pilot whales, and long-finned pilot whales. The Atlantic mixed species trap/pot fishery is listed as a Category II fishery, with potential to result in incidental injury and mortality of North Atlantic fin whales and humpback whales in the Gulf of Maine. This fishery was classified by analogy. There have been no observed interactions of fin and humpback whales with the Atlantic mixed species trap/pot fishery; however, the lobster trap/pot fishery has been involved in entanglements with large cetaceans. The Northeast/Mid-Atlantic bottom longline/hook and line and hydraulic quahog and clam dredges in the Mid-Atlantic are all Category III fisheries, with no known injury and mortality to marine mammals.

The NMFS observer data for the period of January 2007 through December 2009 indicates there were 589 marine mammal observed interactions and 128 observed sea turtle interactions with the managed resources fisheries, where at least one of the managed resources was the target for the fishing trip, the haul target, or was landed on that trip. The interactions where the managed resources were the target species for the trip are as follows.

The NMFS observer data for the period of January 2007 to December 2009 indicates there were 4 observed marine mammal interactions, where Atlantic mackerel was the species being targeted for those trips using midwater otter trawls (including paired trawls). These 4 interactions resulted in 1 dead Risso's dolphin, 1 dead common dolphin, and 2 whitesided dolphins were dead. There were 2 interactions where spiny dogfish was the trip target using fixed or sink gillnets. Of those 2 interactions, 1 harbor seal and 1 harbor porpoise were dead. For trip where summer flounder was the primary target, 3 dead seals (1 gray and 2 unknown species) were observed in trips using sink gillnets.

The NMFS observer data for the period of January 2007 to December 2009 indicate there were 18 observed sea turtle takes (1 Kemp's ridley, 1 leatherback, 16 loggerhead) where summer flounder was the species being targeted for those trips. These 18 takes all involved bottom otter trawls targeting summer flounder and the Kemp's ridley turtle was dead, the leatherback turtle was released alive, 12 loggerhead turtles were released alive, 2 loggerhead turtles were released alive and resuscitated, and 2 loggerhead turtles were dead.

Since 1992, all vessels using bottom trawls to fish for summer flounder in specific areas and times off VA and NC have been required to use NMFS-approved Turtle Excluder Devices (TEDs) in their nets (57 FR 57358, December 4, 1992; 50 CFR 223.206(d)(2)(iii)). NMFS announced in May 2009 (74 FR 21627, May 8, 2009) its intention to prepare an Environmental Impact Statement (EIS) and to conduct public scoping meetings to comply with NEPA by assessing potential impacts resulting from the proposed implementation of new sea turtle regulations in the Atlantic and Gulf of Mexico trawl fisheries. These requirements are proposed to protect threatened and endangered sea turtles in the western Atlantic Ocean and Gulf of Mexico from incidental capture, and would be implemented under the Endangered Species Act (ESA). NMFS announced consideration of rulemaking for these new sea turtle regulations in an Advance Notice of Public Rulemaking (72 FR 7382, February 15, 2007). NMFS will evaluate a range of alternatives in the Draft EIS to reduce sea turtle bycatch and mortality in trawl fisheries along the Atlantic Coast.

Murray (2008) evaluated fisheries observers documented interactions between bottom otter trawl gear and sea turtles in the U.S. Mid-Atlantic region (i.e., south of 41°30'N/66°W to approximately 35º00'N/75°30'W) during 1996-2004. Bycatch rates and total mortality were only estimated for loggerhead turtles, the species involved in the majority of interactions. Vessel Trip Reports (VTR) from fishermen operating bottom otter trawl gear in the Mid-Atlantic were used to expand predicted bycatch rates to total estimated bycatch. Predicted bycatch rates were stratified by a combination of significant variables, which included latitude zone, depth, sea surface temperature, and the use of a working TED. Estimated average annual bycatch of loggerhead turtles in Mid-Atlantic bottom otter trawl gear during 1996-2004 was 616 animals (C.V.=0.23, 95% C.I. over the 9 year period: 367-890). Murray (2006) provided an estimate of loggerhead bycatch in all fisheries using bottom otter trawl fish gear in Mid-Atlantic waters; estimated bycatch in scallop trawl gear is reported separately in Murray (2007). In Murray (2006), there was not enough evidence to suggest that bycatch rates differed significantly among target species groups; thus, rates were not stratified, nor total mortality estimates reported in this manner. However, in Murray (2008) NERO requested this information by FMP group to support their ESA Section 7 consultations for various FMPs. This information, evaluated from 2000-2004, suggests that 47 percent of the loggerhead takes for that period were by the Mid-Atlantic bottom otter trawl fish gear targeting summer flounder, scup, and black sea bass, and less than 1 percent each for bluefish and spiny dogfish (Murray 2008). It should be noted that Murray (2008) highlights extensive data and analysis caveats, which include but are not limited to, assumptions about bycatch rates within expansion stratum, assumptions about bycatch rates across fisheries and years, as well as the representativeness of VTR data. The original report should be consulted when interpreting these results.

Murray (2009), conducted a similar analysis with of sea turtle bycatch in U.S. Mid-Atlantic sink gillnet gear during 1995 through 2006. Highest predicted bycatch rates in this fishery occurred in warm waters of the southern Mid-Atlantic and in large-mesh gillnets. From 1995-2006, the average annual bycatch estimate of loggerheads was 350 turtles (C.V. = 0.20., 95% CI over the 12-year period: 234-504). For bluefish, spiny dogfish, and summer flounder, the average estimate of bycatch was 48, 1, and 6, respectively. It should be noted that non-target species caught on trips with high estimated loggerhead bycatch will, based on these methods of analysis, also have a relatively high estimated loggerhead bycatch (Murray, 2009). Bluefish, for example, is often caught as a secondary or tertiary species on monkfish trips. While an average bycatch of 48 turtles was associated with landings of bluefish, observers from 1995-2006 did not document any loggerheads taken in Mid-Atlantic sink gillnet gear targeting bluefish (Murray, 2009). The original report should be consulted when interpreting these results.

The following provides brief descriptions of the protected resources with documented interactions with the managed resources fisheries in the most recent 3 years (2007-2009). Interactions with the following species have been identified based on this analysis: common dolphin, Risso’s dolphin, white-sided dolphin, harbor porpoise, harbor seal, gray seal, leatherback sea turtle, loggerhead sea turtle, and Kemp's ridley sea turtle. More detailed descriptions of these resources as well as other endangered and threatened species can be found in Appendix C of this EA.

Sea Turtles

Loggerhead, leatherback, Kemp’s ridley, and green sea turtles occur seasonally in southern New England and Mid-Atlantic continental shelf waters north of Cape Hatteras. In general, turtles move up the coast from southern wintering areas as water temperatures warm in the spring (James *et al*. 2005; Morreale and Standora 2005; Braun-McNeill and Epperly 2004; Morreale and Standora 1998; Musick and Limpus 1997; Shoop and Kenney 1992; Keinath *et al.* 1987). The trend is reversed in the fall as water temperatures cool. By December, turtles have passed Cape Hatteras, returning to more southern waters for the winter (James *et al*. 2005; Morreale and Standora 2005; Braun-McNeill and Epperly 2004; Morreale and Standora 1998; Musick and Limpus 1997; Shoop and Kenney 1992; Keinath *et al.* 1987). Hard-shelled species are typically observed as far north as Cape Cod whereas the more cold-tolerant leatherbacks are observed in more northern Gulf of Maine waters in the summer and fall (Shoop and Kenney 1992; STSSN database).

It is noted that on March 16, 2010, NMFS and the US Fish and Wildlife Service announced 12-month findings on the petitions to list the North Pacific populations and the Northwest Atlantic populations of the loggerhead sea turtle as Distinct Population Segments (DPSs) with endangered status. On March 22, 2011, the timeline for the final determination was extended for six months until September 16, 2011 (76 FR 15932).

Small Cetaceans (Dolphins, Harbor Porpoise and Pilot Whale)

Numerous small cetacean species (dolphins, pilot whales, harbor porpoise) occur within the area from Cape Hatteras through the Gulf of Maine. Seasonal abundance and distribution of each species in Mid-Atlantic, Georges Bank, and/or Gulf of Maine waters varies with respect to life history characteristics. Some species primarily occupy continental shelf waters (e.g., white sided dolphins, harbor porpoise), while others are found primarily in continental shelf edge and slope waters (e.g., Risso's dolphin), and still others occupy all three habitats (e.g., common dolphin, spotted dolphins, striped dolphins). Information on the western North Atlantic stocks of each species is summarized in Waring *et al*. (2009).

Pinnipeds

Of the four species of seals expected to occur in the area, harbor seals have the most extensive distribution with sightings occurring as far south as 30° N (Katona *et al*. 1993). Grey seals are the second most common seal species in U.S. EEZ waters, occurring primarily in New England (Katona *et al.* 1993; Waring *et al*. 2006). Pupping colonies for both species are also present in New England, although the majority of pupping occurs in Canada. Harp and hooded seals are less commonly observed in U.S. EEZ waters. Both species form aggregations for pupping and breeding off of eastern Canada in the late winter/early spring, and then travel to more northern latitudes for molting and summer feeding (Waring *et al*. 2006). However, individuals of both species are also known to travel south into U.S. EEZ waters and sightings as well as strandings of each species have been recorded for both New England and Mid-Atlantic waters (Waring *et al*. 2009).

Atlantic Sturgeon

Atlantic sturgeon is an anadromous species that spawns in relatively low salinity, river environments, but spends most of its life in the marine and estuarine environments from Labrador, Canada to the Saint Johns River, Florida (Holland and Yelverton 1973, Dovel and Berggen 1983, Waldman et al. 1996, Kynard and Horgan 2002, Dadswell 2006, ASSRT 2007). Tracking and tagging studies have shown that sub-adult and adult Atlantic sturgeon that originate from different rivers mix within the marine environment, utilizing ocean and estuarine waters for life functions such as foraging and overwintering (Stein et al. 2004a, Dadswell 2006, ASSRT 2007, Laney et al. 2007, Dunton et al. 2010).

Fishery-dependent data as well as fishery-independent data demonstrate that Atlantic sturgeon use relatively shallow inshore areas of the continental shelf; primarily waters less than 50 m (Stein et al. 2004b, ASMFC TC 2007, Dunton et al. 2010). The data also suggest regional differences in Atlantic sturgeon depth distribution with sturgeon observed in waters primarily less than 20 m in the Mid-Atlantic Bight and in deeper waters in the Gulf of Maine (Stein et al. 2004b, ASMFC TC 2007, Dunton et al. 2010).

6.5 Human Communities and Economic Environment

6.5.1 Description of the Fisheries

Detailed descriptions of the economic aspects of the commercial and recreational fisheries for the managed resources, as well as the management regimes are available in the respective FMPs (section 4.3).

Commercial Fisheries

The 2009 ex-vessel value and commercial landings for each of the Omnibus Amendment managed resources is given in Table 10. The total combined ex-vessel value for all the managed resources is $104.0 million. Profiles of the fishing ports and communities in the Northeast Region that are important are available at:
http://www.nefsc.noaa.gov/read/socialsci/community_profiles/

Table 10. The commercial ex-vessel value ($ in million) and commercial landings, in 2009.

Species	2009 Commercial Landings	2009 Ex-vessel Value ($ in million)
Atlantic mackerel	49.9 million lb	8.0
Butterfish	1.0 million lb	0.6
Atlantic Bluefish	6.7 million lb	2.6
Spiny dogfish	12.4 million lb	2.7
Summer flounder	11.1 million lb	20.8
Scup	8.2 million lb	6.3
Black sea bass	1.1 million lb	3.5
Atlantic surfclam	2.6 million bushel	30.0
Ocean quahog	3.4 million bushel	25.0
Tilefish	1.7 million lb	4.2
Total	93.2 million lb and 6.0 million bushels	$104.0 million

Source: Commercial landings based on Dealer Weighout Data, as of May 27, 2010 and for black sea bass, spiny dogfish, and bluefish this includes, General Canvass as of June 28, 2009.

Recreational Fisheries

Summer flounder, scup, black sea bass, and bluefish continue to be important components of the recreational fishery, with 2009 recreational landings of about 6.3 million lb (2.9 million kg), 2.9 million lb (1.3 million kg), 2.4 million lb (1.1 million kg), and 13.6 million lb (6.2 million kg), respectively. Atlantic mackerel is a less frequently landed recreational species, with 2009 landings of 1.6 million lb (0.73 million kg). In 2009, total recreational angler trips on the Atlantic coast were about 43.7 million, with about 30.3 million of those trips taken in the Northeast (i.e., Maine through North Carolina; Table 11). Trips by mode and state for 2009 are also provided in Table 11.

Table 11. The total number of angler trips taken from Maine through Florida East coast by fishing mode in 2009.

	Mode		
Year	**Shore**	**Party/Charter**	**Private/Rental**
Maine	658,286	25,526	329,913
New Hampshire	167,482	97,822	149,033
Massachusetts	1,507,083	227,134	1,871,523
Connecticut	668,369	43,474	724,563
Rhode Island	572,456	54,903	414,423
New York	1,656,148	371,665	2,889,078
New Jersey	2,257,022	434,022	2,753,239
Delaware	378,521	43,265	497,959
Maryland	1,008,249	204,632	1,597,975
Virginia	916,625	46,787	2,020,643
North Carolina	3,446,402	219,180	2,031,935
South Carolina	1,192,003	147,958	1,051,366
Georgia	332,024	16,193	503,246
East Florida	4,560,955	179,654	5,401,059
Total	19,321,625	2,112,215	22,235,955

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division, July 7, 2010.

Angler expenditures in the Northeast Region by state and mode for marine fishing were obtained from Gentner and Steinback (2008). These expenditure data were produced from extensive surveys of marine recreational fishermen in the Northeast Region in 2006 (Table 12). The surveys were conducted as part of the MRFSS. Average nominal fishing trip expenditures were provided for each state and mode of fishing (i.e., private boat, party/charter, and shore) in the Northeast region in 2006. Trip-related expenditure categories shown in the report included private and public transportation, auto rentals, grocery store purchases, restaurants, lodging, boat fuel, boat and equipment rentals, party/charter fees, party/charter crew tips, catch processing, access and parking, bait, ice, tackle used on trip, tournament fees and gifts/souvenirs. In addition to trip-related expenditures, Gentner and Steinback (2008) also estimated anglers' expenditures for semi-durable items (e.g., rods, reels, lines, clothing, etc.) and durable goods (e.g., motor boats, vehicles, etc.).

Table 12. Average nominal daily trip expenditures by recreational fishermen in the Northeast region by mode in 2006.

Expenditures	**$**		
	Party/Charter	**Private/Rental**	**Shore**
Private transportation	13.88	11.03	12.94
Public transportation	0.26	0.07	0.40
Auto rental	0.27	0.02	0.10
Food from grocery stores	7.40	4.92	7.33
Food from restaurants	8.70	3.42	9.28
Lodging	10.0	2.64	14.90
Boat fuel	0	9.54	0
Boat or equipment rental	0.05	0.19	0.03
Charter fees	57.76	0	0
Charter crew tips	3.0	0	0
Catch processing	0.02	0	0
Access and parking	0.44	1.11	1.32

Bait	0.31	3.42	3.25
Ice	0.39	0.59	0.39
Tackle used on trip	1.87	2.04	3.98
Tournament fees	1.10	0.04	0.02
Gifts and souvenirs	1.67	0.10	1.45
Total	107.13	39.14	55.39

6.5.2 Analysis of Permit Data

Federally Permitted Vessels

This analysis estimates that in 2009, there were 17,794 federal Northeast commercial permits and 4,714 recreational (party/charter) permits, issued for the managed resources (Table 13). Since many vessels are issued multiple permits, the number of unique fishing entities totaled 3,911. Of these vessels, 2,854 held only a commercial harvesting permit, 206 held only a party/charter permit, while the remaining 851 operating units held at least one commercial harvest permit and at least one party/charter permit. Nearly all of the 3,911 permitted vessels did report at least some sales of commercially caught species in the Northeast region. This includes most of the 206 vessels that did not hold a commercial permit for any of the species managed under this FMP since they may have held other commercial permits. However, only about one-third of these vessels (1,285) reported landing of at least one pound of the managed species covered by the proposed action.

Table 13. Total Federal commercial and recreational permits in 2009.

Species	Commercial Permits	Recreational Permits (Party/charter)
Atlantic mackerel	2488	850
Butterfish	395[a]	
	2124[b]	
Atlantic Bluefish	3125	971
Spiny dogfish	3020	NA[e]
Summer flounder	956	929
Scup	807	834

Black sea bass	845	904
Atlantic surfclam	839	NA
Ocean quahog	885[c]	NA
Tilefish	2310[d]	226

[a] Loligo/butterfish moratorium permit
[b] Squid/butterfish incidental permit
[c] Maine quahog and non-Maine permits combined
[d] ITQ and incidental fishery combined
[e] NA=Not applicable
Source: Northeast Federal permit database, as of May 27, 2010.

A total of 1,057 vessels were issued at least one recreation party/charter permit during 2009. Of these small entities 548 carried for-hire passengers on at least one occasion of which 452 retained at least one pound of any of the species managed under the proposed action. Note that this number includes 84 of the 206 permitted vessels that only held recreational permits and 368 of the 851 permitted vessels that held both commercial and recreational party/charter permits.

Dealers

There were 339 dealers who purchased at least one of the managed resources in 2009 from 1,306 active commercial fishing vessels. They were distributed by state as indicated in Table 14, and range from 3 dealers in Delaware to 86 dealers in Massachusetts. Employment data for these specific firms are not available.

Table 14. Dealers reporting buying one or more of the managed resources, by state (from NMFS commercial landings database) in 2009.

	ME	NH	MA	RI	CT	NY	NJ	DE	MD	VA	NC	Other
Number of Dealers	14	8	86	46	9	62	42	3	9	27	28	5

Source: Commercial landings based on Dealer Weighout Data, as of May 27, 2010.

7.0 ENVIRONMENTAL CONSEQUENCES AND REGULATORY ECONOMIC EVALUATION OF ALTERNATIVES

The nature and extent of the management programs for the managed resources fisheries have been examined in detail in the EAs and EISs prepared for the management actions and are detailed in section 4.3. The aspects of the environment (Valued Ecosystem Components - VECs) that could be affected by the proposed actions are detailed in section 6.0, and the analysis in this section focuses on impacts relative to those (managed resources and non-target species, habitat (including EFH), protected resources, and human communities). This Omnibus Amendment is wholly administrative in nature and focused on formalizing the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and to establishing a comprehensive system of accountability for catch relative to those limits.

Overall and due to the nature of the measures to be implemented through this Omnibus Amendment, there are very few functional differences (as far as environmental effects are concerned) between the status quo alternatives and the other alternatives under consideration. The expected direct effects are generally well-defined for most fishery management actions, but indirect effects are often less so. While NEPA requires consideration of "reasonably foreseeable effects," it does not require consideration of remote and speculative impacts; these effects remain outside the scope of a NEPA analysis (Bass et al., 2001). During the development of this Omnibus Amendment, there have been occasions when discussions shifted from the process to account for scientific and management uncertainty when establishing catch levels for the managed resources to what the actual catches established through this process might be (i.e., same as current catch levels, higher, lower, for each species). These types of effects are considered too remote and speculative to be appropriate for consideration in this Omnibus Amendment. While this Omnibus Amendment is focused on establishing a clear and transparent process to account for scientific and management uncertainty when establishing catch levels designed to prevent overfishing of stocks, there is nothing to indicate whether the catch levels established under this process would not be similar to the status quo. There is no way to predict the direct effect on the managed resources, non-target species, habitat (including EFH), protected resources, and human communities that the administrative process proposed would have on the managed resources, non-target species, habitat (including EFH), protected resources, and human communities. The actual catch levels that would be established through the processes described in this Omnibus Amendment cannot be predicted; however, the impacts of future catch levels will be evaluated through specifications. Biological impacts are driven not only by the potential catch level, but also the biological state (demographics) of the target and non-target species which also cannot be predicted. Therefore, because the proposed management actions covered in this Omnibus Amendment are too remote and speculative to be adequately or meaningfully addressed, this NEPA analysis focuses solely on the potential direct, indirect, and cumulative effects expected to be immediately associated with the proposed action and primary alternatives.

The direct and indirect impacts of the alternatives described in section 5.0 are given in the following sections (section 7.1-7.3). The cumulative impacts of these alternatives are provided in section 7.4. The actions proposed in this Omnibus Amendment are administrative and have no direct impacts on the VECs (i.e., biological, habitat, ESA proposed, threatened, or endangered species and MMPA protected species, socioeconomic environment). This Omnibus Amendment will establish measures in the FMPs to formalize the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and to establish a comprehensive system of accountability for catch for the managed resources. As this is a description of process, it does not trigger any direct impacts. The incorporation of ABC control rule methods, a Council risk policy, measures to define ACLs and establish AMs for the managed resources, and measures that address any future review and modification of actions taken in this Omnibus Amendment, do not result in direct impacts merely through their existence within the FMP. It is through the application of this administrative process in the future with respect to catch limits, that impacts will be realized; therefore, indirect impacts are anticipated and described in the sections that follow.

The result of the administrative process described in this Omnibus Amendment (i.e., resulting future catch limits implemented and application of AMs to those catch limits, etc.), will be analyzed through specifications for each of the managed resources and subject to NEPA impact analysis as appropriate.

To prevent excessive repetition of text throughout section 7.1-7.4, a discussion of how changes in catch limits may affect habitat and ESA proposed, threatened, or endangered species and MMPA protected species is provided here and would apply to the impact analysis that follows. Habitat (including EFH) could be negatively impacted through increases in gear contact time with habitat. Changes to catch limits could result in increases or decreases in fishing effort, and associated impacts to habitat. For example, an increase in catch limits could result in more, or longer fishing trips, with a corresponding increase in habitat impacts. Conversely, a larger catch limit may mean that managers establish higher possession limits, which could result in an equal number of fishing trips landing a larger volume of fish. Changes in overall stock size and age structure of the managed resources could influence catch-per-unit-effort (i.e., fewer trips landing more or larger (heavier) fish and vice versa).

ESA proposed, threatened, or endangered species and MMPA protected species could be impacted through increases in the interaction rates with the managed resource fisheries. Changes to catch limits could result in increases or decreases in fishing effort, and associated changes to the rate of interactions with ESA proposed, threatened, or endangered species and MMPA protected species. Similar to the habitat discussion above, the management measures implemented and changes in managed resources stock dynamics could also influence changes in fishing effort.

7.1 Specifying Acceptable Biological Catch

7.1.1 Acceptable Biological Catch Alternatives

Section 5.2.1 fully described the ABC alternatives under consideration. For reference, the ABC alternatives are:

- Alternative ABC-A: Status quo/no action
- Alternative ABC-B (Council-Preferred): ABC Control Rule Methods – Four Assessment Levels

7.1.1.1 Biological Impacts

This section details the indirect impacts of the ABC alternatives on the managed resources, as well as other non-target species (sections 6.1 and 6.2). Alternative ABC-B includes a multi-level approach for setting ABCs which describes the process by which scientific information on the managed resources, in conjunction with a Council risk policy, would be used to develop an ABC recommendation. Alternative ABC-B would establish a different process for deriving ABC when compared to the status quo (alternative ABC-A). The ABC for each of the managed resources is already being established through ad hoc means by the SSC (i.e., status quo) and alternative ABC-B would only provide for a more descriptive process for establishing ABC based on the level of assessment. Therefore, both processes would result in an ABC that addresses scientific uncertainty and alternative ABC-B would be expected to result in the same outcome as the status quo. Because only the process of derivation would differ, the anticipated indirect biological impacts of alternative ABC-B are expected to be the same as the status quo.

7.1.1.2 Habitat Impacts

This section details the indirect impacts of the ABC alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resources. Alternative ABC-B would provide for a more descriptive process for establishing ABC and would be expected to result in the same outcome as the status quo (see discussion in section 7.1.1.1). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). However, because the process for derivation of ABC under alternative ABC-B would be expected to result in the same outcome as the status quo (alternative ABC-A), there are no indirect habitat impacts anticipated.

7.1.1.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species

This section details the indirect impacts of the ABC alternatives on ESA proposed, threatened, or endangered species and MMPA protected species. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species with potential for interaction with the managed resources. Alternative ABC-B would provide for a more descriptive process for establishing ABC and would be expected to result in the same outcome as the status quo (see discussion in section 7.1.1.1). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species (see discussion in section 7.0). However, because the process for derivation of ABC under alternative ABC-B would be expected to result in the same outcome as the status quo (alternative ABC-A), there are no indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts anticipated.

7.1.1.4 Socioeconomic Impacts

This section details the impacts of the ABC alternatives on the social and economic environment (section 6.5). Alternative ABC-B would provide for a more descriptive process for establishing ABC and would be expected to result in the same outcome as the status quo (see discussion in section 7.1.1.1). Increasing or decreasing catch limits could result in indirect impacts on fishing vessels, fleets, or ports associated with the managed resources. However, because the process for derivation of ABC under alternative ABC-B would be expected to result in the same outcome as the status quo, there are no indirect social and economic impacts anticipated.

7.1.2 Risk Policy Alternatives

Section 5.2.2 fully described the risk policy alternatives under consideration. For reference, the risk policy alternatives are:

- Alternative Risk-A: Status quo/no action
- Alternative Risk-B: Constant Probability of Overfishing = 25 Percent
- Alternative Risk-C: Stock Status, Inflection at B/B_{MSY} = 1.0
- Alternative Risk-D: Stock Status/Assessment Level, Inflection at B/B_{MSY} = 1.5
- Alternative Risk-E: Stock Status/Assessment Level, 2 Inflection Points at B/B_{MSY} = 1.0 and B/B_{MSY} = 2.0
- Alternative Risk-F: Categorical, Range from 10 - 50 percent
- Alternative Risk-G (Council-Preferred): Stock Status/Life History, Inflection at B/B_{MSY} = 1.0

7.1.2.1 Biological Impacts

This section details the indirect impacts of the Council risk policy alternatives on the managed resources, as well as other non-target species (sections 6.1 and 6.2). Alternatives RISK-B through RISK-G describes the Council tolerance for overfishing of the managed resources through a formalized Council risk policy. Because these alternatives are simply variations of risk expression, the impacts of each of the action alternatives relative to the status quo are expected to be the same. Therefore, they are compared as alternatives RISK-B-G, relative to the status quo, merely for efficiency. There could be indirect impacts associated with the resulting catch limits that are derived from the application of a Council risk policy under alternatives RISK-B-G, depending on whether the policy results in lower or higher catch levels relative to the status quo (alternative RISK-A). However, these impacts would not be expected to depart substantially from those levels associated with status quo, because past precedent has established an upper limit on the risk of overfishing at a given catch level as 50 percent (USDC, 1999) which mitigates negative biological impacts to the managed resources. In addition, catch levels for many of the managed resources have been implemented in prior years (i.e., status quo), which have probabilities of overfishing less than 50 percent. Future catch levels for the managed resources that result from the application of a risk policy intended to reduce the risk of overfishing would result in indirect long-term positive biological impacts. As such, the anticipated indirect biological impacts associated with alternatives RISK-B-G, would be neutral to slight positive, when compared to the status quo.

7.1.2.2 Habitat Impacts

This section details the indirect impacts of the Council risk policy alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resources. Alternatives RISK-B through RISK-G describes the Council tolerance for overfishing of the managed resources through a formalized Council risk policy. There could be indirect impacts associated with changes in effort relative to the resulting catch limits that are derived from the application of the Council risk policy under alternatives RISK-B-G. Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). However, these habitat impacts would not be expected to depart substantial from those levels associated with status quo (alternative RISK-A), because past precedent has established an upper limit on the risk of overfishing at a given catch level as 50 percent (USDC, 1999), which would prevent unconstrained increases in catch limits. In addition, catch levels for many of the managed resources have been implemented in prior years (i.e., status quo), which have probabilities of overfishing less than 50 percent. As such, the anticipated indirect habitat impacts associated with alternatives RISK-B-G would be neutral to slight positive, when compared to the status quo.

7.1.2.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species

This section details the indirect impacts of the Council risk policy alternatives on ESA proposed, threatened, or endangered species and MMPA protected species. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species with potential for interaction with the managed resources. Alternatives RISK-B through RISK-G describes the Council tolerance for overfishing of the managed resources through a formalized Council risk policy. There could be indirect impacts associated with changes in effort relative to the resulting catch limits that are derived from the application of the Council risk policy under alternatives RISK-B-G. Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species s (see discussion in section 7.0). However, these ESA proposed, threatened, or endangered species and MMPA protected species impacts would not be expected to depart substantial from those levels associated with status quo (alternative RISK-A), because past precedent has established an upper limit on the risk of overfishing at a given catch level as 50 percent (USDC, 1999), which would prevent unconstrained increases in catch limits. In addition, catch levels for many of the managed resources have been implemented in prior years (i.e., status quo), which have probabilities of overfishing less than 50 percent. As such, the anticipated indirect ESA proposed, threatened or endangered species and MMPA protected species impacts associated with alternatives RISK-B-G would be neutral to slight positive, when compared to the status quo.

7.1.2.4 Socioeconomic Impacts

This section details the indirect impacts of the Council risk policy alternatives on the social and economic environment (section 6.5). Alternatives RISK-B through RISK-G describes the Council tolerance for overfishing of the managed resources through a formalized Council risk policy. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the Council risk policy, depending on whether catch limits that result from this process increase or decrease. However, these impacts would be expected to be similar to those under the status quo (alternative RISK-A), because past precedent has established an upper limit on the risk of overfishing at a given catch level as 50 percent (USDC, 1999), which would prevent unconstrained increases in fishing effort and a significant departure from current management practices. In addition, catch levels for many of the managed resources have been implemented in prior years (i.e., status quo), which have probabilities of overfishing less than 50 percent. There may be short-term neutral to negative indirect impacts if the application of a formal risk policy results in catch to levels that are same or less than anticipated under the status quo. Future catch levels for the managed resources that result from the application of a risk policy intended to reduce the risk of overfishing would result in indirect long-term social and economic impacts that range from neutral to positive. As such, the anticipated social and economic indirect impacts associated with alternatives RISK-B-G would be short-term neutral to negative and long-term neutral to positive, when compared to the status quo.

7.2 Annual Catch Limits and Accountability Measures

7.2.1 Atlantic Mackerel

Section 5.3.1 fully described the Atlantic mackerel alternatives for ACLs and accountability AMs under consideration. For reference, those alternatives are:

- **Atlantic Mackerel Annual Catch Limit**
    - Alternative ATM-A: Status quo/no action
    - Alternative ATM-B (Council-Preferred): Specify ACL=Domestic ABC
- **Atlantic Mackerel Proactive Accountability Measures**
    - Alternative ATM-C: Status quo/no action
        - **Recreational Harvest Limit Established**
            - Alternative ATM-D (Council-Preferred): Use of ACTs
            - Alternative ATM-E Council-Preferred): General Inseason Closure Authority
        - **No Recreational Harvest Limit Established**
            - Alternative ATM-F: Use of ACT

            - Alternative ATM-G: General Inseason Closure Authority
- **Atlantic Mackerel Reactive Accountability Measures**
    - Alternative ATM-H: Status quo/no action
        - **Recreational Harvest Limit Established**
            - Alternative ATM-I (Council-Preferred): Accountability for Catch Components
        - **No Recreational Harvest Limit Established**
            - Alternative ATM-J: Accountability for Catch Components

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs) are compared to the respective status quo alternatives. Alternatives ATM-D and ATM-F, propose the use of two ACTs or a single ACT, respectively, in the process to address management uncertainty. The impacts of these alternatives would be expected to be the same when compared to the status quo (alternative ATM-C), because either approach would in fact address establish a process to address all relevant sources of management uncertainty when specifying ACT(s). In effect, these are two slightly different approaches which should achieve the same result. Alternatives ATM-E and ATM-G are identical and impacts are therefore the same when compared to the status quo (alternative ATM-C). In addition, regardless of whether three reactive accountability mechanism or a single mechanism are utilized under alternatives ATM-I and ATM-J, respectively, the impacts of these alternatives would be expected to be similar when compared to the status quo (alternative ATM-H), because either approach would trigger reactive AMs if an overage of the ACL occurs.

7.2.1.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on Atlantic mackerel, as well as other non-target species (sections 6.1.and 6.2).

Annual Catch Limit

Alternative ATM-B would merely specify that ACL be set equal to the domestic ABC (i.e., ACL=domestic ABC). Because alternative ATM-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative ATM-A).

Proactive Accountability

Alternatives ATM-D and ATM-F both describe the process by which ACT(s) would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternatives ATM-D and ATM-F, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative ATM-C). This process will not increase catch relative to the ACL because the ACT, or the sum of the two ACTs, cannot exceed the ACL, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty and develop ACT control rules contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative ATM-C).

Alternatives ATM-E and ATM-G would establish general inseason closure authority for the recreational fishery in the FMP for Atlantic mackerel. There could be indirect impacts associated with having this closure authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternatives ATM-E and ATM-G. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to result in negative biological impacts on the managed resource and other non-target species. Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative ATM-C).

Reactive Accountability

Alternatives ATM-I and ATM-J both describe the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternatives ATM-I and ATM-J, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under these action alternatives is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council’s desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative ATM-H).

7.2.1.2 Habitat Impacts

This section details the indirect impacts of the Atlantic mackerel ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.

Annual Catch Limit

Alternative ATM-B would merely specify that ACL be set equal to the domestic ABC (i.e., ACL=domestic ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternative ATM-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on habitat are expected to be identical to those under the status quo (alternative ATM-A).

Proactive Accountability

Alternatives ATM-D and ATM-F both describe the process by which ACT(s) would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternatives ATM-D and ATM-F, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative ATM-C). The process under these alternatives will not increase catch relative to the ACL because the ACT, or the sum of the two ACTs, cannot exceed the ACL, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative ATM-C).

Alternatives ATM-E and ATM-G would establish general inseason closure authority for the recreational fishery in the FMP for Atlantic mackerel. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternatives ATM-E and ATM-G. Recreational fisheries, in general, have limited interaction with bottom habitat. Therefore, the indirect habitat impacts would be expected to be neutral, when compared to the status quo (alternative ATM-C).

Reactive Accountability

Alternatives ATM-I and ATM-J both describe the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternatives ATM-I and ATM-J, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under these action alternatives is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative ATM-H).

7.2.1.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species

This section details the indirect impacts of the Atlantic mackerel ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species s with potential for interaction with the managed resources.

Annual Catch Limit

Alternative ATM-B would merely specify that ACL be set equal to the domestic ABC (i.e., ACL=domestic ABC). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species (see discussion in section 7.0). Because alternative ATM-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on ESA proposed, threatened, or endangered species and MMPA protected species are expected to be identical to those under the status quo (alternative ATM-A).

Proactive Accountability

Alternatives ATM-D and ATM-F both describe the process by which ACT(s) would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternatives ATM-D and ATM-F, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative ATM-C). The process under these alternatives will not increase catch relative to the ACL because the ACT, or the sum of the two ACTs, cannot exceed the ACL, relative to the status quo. Therefore, the indirect ESA proposed, threatened or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative ATM-C)

Alternatives ATM-E and ATM-G would establish general inseason closure authority for the recreational fishery in the FMP for Atlantic mackerel. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternatives ATM-E and ATM-G. Recreational fisheries, in general, have limited interaction with ESA proposed, threatened, or endangered species and MMPA protected species. Therefore, the indirect ESA proposed, threatened or endangered species and MMPA protected species impacts would be expected to be neutral, when compared to the status quo (alternative ATM-C).

Reactive Accountability

Alternatives ATM-I and ATM-J both describe the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternatives ATM-I and ATM-J, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under these action alternatives is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect ESA proposed, threatened or endangered species and MMPA protected species impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative ATM-H).

7.2.1.4 Socioeconomic Impacts

This section details the indirect impacts of the Atlantic mackerel ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternative ATM-B would merely specify that ACL be set equal to the domestic ABC (i.e., ACL=domestic ABC). Because alternative ATM-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment are expected to be identical to those under the status quo (alternative ATM-A).

Proactive Accountability

Alternatives ATM-D and ATM-F both describe the process by which ACT(s) would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternatives ATM-D and ATM-F. This process will not increase catch relative to the ACL because the ACT, or the sum of the two ACTs, cannot exceed the ACL, relative to the status quo. Addressing management uncertainty and the use of an ACT(s) may reduce the amount of fish available to fishermen relative to the ACL specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the ACL, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative ATM-C).

Alternatives ATM-E and ATM-G would establish general inseason closure authority for the recreational fishery in the FMP for Atlantic mackerel. There could be indirect impacts on fishing vessels, fleets, or ports associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternatives ATM-E and ATM-G. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to compromise the sustainability of the managed resource or undermine the Council's desired management system and FMP defined allocations, which would provide positive long-term social and economic benefits. There may however, be short-term neutral to negative consequences associated with closure of the fishery on the social and economic environment. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative ATM-C).

Reactive Accountability

Alternatives ATM-I and ATM-J both describe the process by which overages of the ACL would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternatives ATM-I and ATM-J, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under these action alternatives is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative ATM-H).

7.2.2 Butterfish

Section 5.3.2 fully described the butterfish alternatives for ACL and accountability AMs under consideration. For reference, those alternatives are:

- **Butterfish Annual Catch Limit**
  - Alternative BUTTER-A: Status quo/no action
  - Alternative BUTTER-B (Council-Preferred): Specify ACL= ABC
- **Butterfish Proactive Accountability Measures**
  - Alternative BUTTER-C: Status quo/no action
  - Alternative BUTTER-D (Council-Preferred): Use of ACT
- **Butterfish Reactive Accountability Measures**
  - Alternative BUTTER-E: Status quo/no action
  - Alternative BUTTER-F (Council-Preferred): Accountability for Catch Components

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs) are compared to the respective status quo alternatives.

7.2.2.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on butterfish, as well as other non-target species (sections 6.1 and 6.2).

Annual Catch Limit

Alternative BUTTER-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Because alternative BUTTER-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative BUTTER-A).

Proactive Accountability

Alternative BUTTER-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative BUTTER-D, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative BUTTER-C). This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty and develop ACT control rules contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative BUTTER-C).

Reactive Accountability

Alternative BUTTER-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BUTTER-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council’s desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative BUTTER-E).

7.2.2.2 Habitat Impacts

This section details the indirect impacts of the butterfish ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.

Annual Catch Limit

Alternative BUTTER-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternative BUTTER-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on habitat are expected to be identical to those under the status quo (alternative BUTTER-A).

Proactive Accountability

Alternative BUTTER-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative BUTTER-D, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative BUTTER-C). This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative BUTTER-C).

Reactive Accountability

Alternative BUTTER-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BUTTER-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative BUTTER-E).

7.2.2.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species

This section details the indirect impacts of the butterfish ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species with potential for interaction with the managed resources.

Annual Catch Limit

Alternative BUTTER-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species (see discussion in section 7.0). Because alternative BUTTER-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on ESA proposed, threatened, or endangered species and MMPA protected species is expected to be identical to those under the status quo (alternative BUTTER-A).

Proactive Accountability

Alternative BUTTER-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process alternative BUTTER-D, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo. This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative BUTTER-C).

Reactive Accountability

Alternative BUTTER-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BUTTER-F, depending on whether addressing of an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative BUTTER-E).

7.2.2.4 Socioeconomic Impacts

This section details the indirect impacts of the butterfish ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternative BUTTER-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Because alternative BUTTER-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment is expected to be identical to those under the status quo (alternative BUTTER-A).

Proactive Accountability

Alternative BUTTER-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on

fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternative BUTTER-D. This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Addressing management uncertainty and the use of an ACT may reduce the amount of fish available to fishermen relative to the ACL specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the ACL, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative BUTTER-C).
Reactive Accountability

Alternative BUTTER-F describes the process by which overages of the ACL would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after the process to correct and mitigate these overages has been applied under alternative BUTTER-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative BUTTER-E).

7.2.3 Bluefish

Section 5.3.3 fully described the bluefish alternatives for ACLs and accountability AMs under consideration. For reference, those alternatives are:

- **Bluefish Annual Catch Limit**
  - Alternative BLUE-A: Status quo/no action
  - Alternative BLUE-B (Council-Preferred): Specify ACL= ABC
- **Bluefish Proactive Accountability Measures**
  - Alternative BLUE-C: Status quo/no action
  - Alternative BLUE-D (Council-Preferred): Use of ACTs
  - Alternative BLUE-E (Council-Preferred): General Inseason Closure Authority

- **Bluefish Reactive Accountability Measures**
  - Alternative BLUE-F: Status quo/no action
  - Alternative BLUE-G (Council-Preferred): Accountability for Catch Components
- **Bluefish Joint Action Accountability Measures**
  - Alternative BLUE-H: Status quo/no action
  - Alternative BLUE-I (Council-Preferred): Joint Action to Address Disconnect in Catch Limits

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs) are compared to the respective status quo alternatives.

7.2.3.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on bluefish, as well as other non-target species (sections 6.1 and 6.2).

Annual Catch Limit

Alternative BLUE-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Because alternative BLUE-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative BLUE-A).

Proactive Accountability

Alternative BLUE-D describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative BLUE-D, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative BLUE-C). This process will not increase catch relative to the ACL because the sum of the ACTs cannot exceed the ACL, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty and develop ACT control rules contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative BLUE-C).

Alternative BLUE-E would establish general inseason closure authority for the recreational fishery in the FMP for bluefish. There could be indirect impacts associated with having this closure authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative BLUE-E. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to result in negative biological impacts on the managed resource and other non-target species. Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative BLUE-C).

Reactive Accountability

Alternative BLUE-G describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BLUE-G, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative BLUE-F).

Joint Action Accountability Measures

Alternative BLUE-I would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect biological impacts associated with alternative BLUE-I are not anticipated and impacts would be the same as those under the status quo (alternative BLUE-H).

7.2.3.2 Habitat Impacts

This section details the indirect impacts of the bluefish ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.
Annual Catch Limit

Alternative BLUE-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternative BLUE-B would not result in an increase or decrease in catch relative to

ABC, the indirect impacts on habitat are expected to be identical to those under the status quo alternative BLUE-A.

Proactive Accountability

Alternative BLUE-D describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative BLUE-D, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative BLUE-C). The process under these alternatives will not increase catch relative to the ACL because the sum of the ACTs cannot exceed the ACL, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative BLUE-C).

Alternative BLUE-E would establish general inseason closure authority for the recreational fishery in the FMP for bluefish. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative BLUE-E. Recreational fisheries, in general, have limited interaction with bottom habitat. Therefore, the indirect habitat impacts would be expected to be neutral, when compared to the status quo (alternative BLUE-C).

Reactive Accountability

Alternative BLUE-G describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BLUE-G, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative BLUE-F).

Joint Action Accountability Measures

Alternative BLUE-I would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect habitat impacts associated with alternative BLUE-I are not anticipated and impacts would be the same as those under the status quo (alternative BLUE-H).

7.2.3.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species

This section details the indirect impacts of the bluefish ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species with potential for interaction with the managed resources.

Annual Catch Limit

Alternative BLUE-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species resources (see discussion in section 7.0). Because alternative BLUE-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on ESA proposed, threatened, or endangered species and MMPA protected species are expected to be identical to those under the status quo (alternative BLUE-A).

Proactive Accountability

Alternative BLUE-D describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative BLUE-D, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative BLUE-C). The process under these alternatives will not increase catch relative to the ACL because the sum of the ACTs cannot exceed the ACL, relative to the status quo. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative BLUE-C)

Alternative BLUE-E would establish general inseason closure authority for the recreational fishery in the FMP for bluefish. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative BLUE-E. Recreational fisheries, in general, have limited interaction with ESA proposed, threatened, or endangered species and MMPA protected species. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral, when compared to the status quo (alternative BLUE-C).

Reactive Accountability

Alternative BLUE-G describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BLUE-G, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative BLUE-F).

Joint Action Accountability Measures

Alternative BLUE-I would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts associated with alternative BLUE-I are not anticipated and impacts would be the same as those under the status quo (alternative BLUE-H).

7.2.3.4 Socioeconomic Impacts

This section details the indirect impacts of the bluefish ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternative BLUE-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Because alternative BLUE-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment are expected to be identical to those under the status quo (alternative BLUE-A).

Proactive Accountability

Alternative BLUE-D describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternative BLUE-D. This process will not increase catch relative to the ACL because the sum of the ACTs cannot exceed the ACL, relative to the status quo. Addressing management uncertainty and the use of ACT(s) may reduce the amount of fish available to fishermen relative to the ACL specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the ACL, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative BLUE-C).

Alternative BLUE-E would establish general inseason closure authority for the recreational fishery in the FMP for bluefish. There could be indirect impacts on fishing vessels, fleets, or ports associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative BLUE-E. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to compromise the sustainability of the managed resource or undermine the Council's desired management system and FMP defined allocations, which would provide positive long-term social and economic benefits. There may however, be short-term neutral to negative consequences associated with closure of the fishery on the social and economic environment. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative BLUE-C).

Reactive Accountability

Alternative BLUE-G describes the process by which overages of the ACL would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BLUE-G, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative BLUE-F).

Joint Action Accountability Measures

Alternative BLUE-I would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect social and economic impacts associated with alternatives BLUE-I are not anticipated and impacts would be the same as those under the status quo (alternative BLUE-H).

7.2.4 Spiny Dogfish

Section 5.3.4 fully described the dogfish alternatives for ACLs and accountability AMs under consideration. For reference, those alternatives are:

- **Spiny Dogfish Annual Catch Limit**
  - Alternative DOG-A: Status quo/no action
  - Alternative DOG-B (Council-Preferred): Specify ACL= Domestic ABC
- **Spiny Dogfish Proactive Accountability Measures**
  - Alternative DOG-C: Status quo/no action
  - Alternative DOG-D (Council-Preferred): Use of ACT
- **Spiny Dogfish Reactive Accountability Measures**
  - Alternative DOG-E: Status quo/no action
  - Alternative DOG-F (Council-Preferred): Accountability for Catch Components

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs) are compared to the respective status quo alternatives.

7.2.4.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on spiny dogfish, as well as other non-target species (sections 6.1 and 6.2).

Annual Catch Limit

Alternative DOG-B would merely specify that ACL be set equal to the domestic ABC (i.e., ACL=domestic ABC). Because alternative DOG-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative DOG-A).

Proactive Accountability

Alternative DOG-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative DOG-D, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative DOG-C). This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty and develop ACT control rules contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative DOG-C).

Reactive Accountability

Alternative DOG-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative DOG-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative DOG-E).

7.2.4.2 Habitat Impacts

This section details the indirect impacts of the spiny dogfish ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.

Annual Catch Limit

Alternative DOG-B would merely specify that ACL be set equal to the domestic ABC (i.e., ACL=domestic ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternative DOG-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on habitat are expected to be identical to those under the status quo (alternative DOG-A).

Proactive Accountability

Alternative DOG-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative DOG-D, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative DOG-C). This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative DOG-C).

Reactive Accountability

Alternative DOG-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative DOG-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative DOG-E).

7.2.4.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species

This section details the indirect impacts of the spiny dogfish ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species with potential for interaction with the managed resources.

Annual Catch Limit

Alternative DOG-B would merely specify that ACL be set equal to the domestic ABC (i.e., ACL=domestic ABC). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species s (see discussion in section 7.0). Because alternative DOG-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on ESA proposed, threatened, or endangered species and MMPA protected species are expected to be identical to those under the status quo (alternative DOG-A).

Proactive Accountability

Alternatives DOG-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process alternative DOG-D, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo. This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative DOG-C).

Reactive Accountability

Alternative DOG-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative DOG-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative DOG-E).

7.2.4.4 Socioeconomic Impacts

This section details the indirect impacts of the spiny dogfish ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternative DOG-B would merely specify that ACL be set equal to the domestic ABC (i.e., ACL=domestic ABC). Because alternative DOG-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment are expected to be identical to those under the status quo (alternative DOG-A).

Proactive Accountability

Alternative DOG-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternative DOG-D. This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Addressing management uncertainty and the use of an ACT may reduce the amount of fish available to fishermen relative to the ACL specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the ACL, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative DOG-C).

Reactive Accountability

Alternative DOG-F describes the process by which overages of the ACL would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after the process to correct and mitigate these overages has been applied under alternative DOG-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative DOG-E).

7.2.5 Summer Flounder

Section 5.3.5 fully described the summer flounder alternatives for ACLs and accountability AMs under consideration. For reference, those alternatives are:

- **Summer Flounder Annual Catch Limit**
  - Alternative FLUKE-A: Status quo/no action
  - Alternative FLUKE-B: Specify ACL= ABC with 1-yr Recreational Catch Avg
  - Alternative FLUKE-C (Council-Preferred): Specify ACL= ABC with 3-yr Recreational Catch Avg
- **Summer Flounder Proactive Accountability Measures**
  - Alternative FLUKE-D: Status quo/no action
  - Alternative FLUKE-E (Council-Preferred): Use of ACTs
  - Alternative FLUKE-F (Council-Preferred): General Inseason Closure Authority
- **Summer Flounder Reactive Accountability Measures**

- Alternative FLUKE-G: Status quo/no action
    - Alternative FLUKE-H (Council-Preferred): Accountability for Catch Components
- **Summer Flounder Joint Action Accountability Measures**
    - Alternative FLUKE-I: Status quo/no action
    - Alternative FLUKE-J (Council-Preferred): Joint Action to Address Disconnect in Catch Limits

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs, and Joint Action) are compared to the respective status quo alternatives.

7.2.5.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on summer flounder, as well as other non-target species (sections 6.1 and 6.2).

Annual Catch Limit

Alternatives FLUKE-B and FLUKE-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., Σ ACL_{SECTOR}=ABC). Because alternatives FLUKE-B and FLUKE-C would not result in an increase or decrease in proposed catch relative to ABC, the indirect impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative FLUKE-A). However, there are subtle differences in how the comparison of observed catch based on averaging 1 year (FLUKE-B) versus 3 years (FLUKE-C) of catch may interact with the system of reactive accountability that is implemented. Depending on the reactive accountability alternatives preferred and implemented, recreational overages of the ACL may be deducted, which could affect future specifications of the recreational catch limits. The use of a 3-year average comparison may smooth interannual variability in the observed catch relative to the ACL; however, the potential retention of any overages in the average calculation for multiple years could result in slightly lower future recreational catch limits, when compared to a single year comparison of observed recreational catch. While these differences are noted, the selection of this alternative does not, however, directly propose action for reactive accountability. Therefore, when evaluating indirect impacts solely on the action contained within these alternatives (FLUKE-B and FLUKE-C), the impacts of these alternatives would be expected to be similar when compared to the status quo alternative (FLUKE-A), because these are merely small methodology differences in the calculation of observed recreational catch to be compared to the recreational ACL.

Proactive Accountability

Alternative FLUKE-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative FLUKE-E, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative FLUKE-D). This process will not increase catch because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty and develop ACT control rules contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative FLUKE-D).

Alternative FLUKE-F would establish general inseason closure authority for the recreational fishery in the FMP for summer flounder. There could be indirect impacts associated with having this closure authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative FLUKE-F. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to result in negative biological impacts on the managed resource and other non-target species. Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative FLUKE-D).

Reactive Accountability

Alternative FLUKE-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative FLUKE-H, depending on whether addressing an overage of the sector ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If a sector ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage results in exceeding the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative FLUKE-G).

Joint Action Accountability Measures

Alternative FLUKE-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the

MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect biological impacts associated with alternative FLUKE-J are not anticipated and impacts would be the same as those under the status quo (alternative FLUKE-I).

7.2.5.2 Habitat Impacts

This section details the indirect impacts of the summer flounder ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.

Annual Catch Limit

Alternatives FLUKE-B and FLUKE-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., ΣACL_{SECTOR}=ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternatives FLUKE-B and FLUKE-C would not result in an increase or decrease in catch relative to ABC, the indirect impacts on habitat are expected to be identical to those under the status quo (alternative FLUKE-A). The discussion in section 7.2.5.1 about single year versus 3-year average comparisons of observed recreational catch applies here.

Proactive Accountability

Alternative FLUKE-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative FLUKE-E, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative FLUKE-D). The process under these alternatives will not increase catch relative to the ACL because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative FLUKE-D).

Alternative FLUKE-F would establish general inseason closure authority for the recreational fishery in the FMP for summer flounder. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative FLUKE-F. Recreational fisheries, in general, have limited interaction with bottom habitat. Therefore, the indirect habitat impacts would be expected to be neutral, when compared to the status quo (alternative FLUKE-D).

Reactive Accountability

Alternative FLUKE-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative FLUKE-H, depending on whether addressing an overage of the sector ACL(s) occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the sector ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative FLUKE-G).

Joint Action Accountability Measures

Alternative FLUKE-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect habitat impacts associated with alternative FLUKE-J are not anticipated and impacts would be the same as those under the status quo (alternative FLUKE-I).

7.2.5.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species s

This section details the indirect impacts of the summer flounder ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species s with potential for interaction with the managed resources.

Annual Catch Limit

Alternatives FLUKE-B and FLUKE-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., $\Sigma ACL_{SECTOR}=ABC$). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species s (see discussion in section 7.0). Because alternatives FLUKE-B and FLUKE-C would not result in an increase or decrease in catch relative to ABC, the indirect impacts on ESA proposed, threatened, or endangered species and MMPA protected species s are expected to be identical to those under the status quo (alternative FLUKE-A). The discussion in section 7.2.5.1 about single year versus 3-year average comparisons of observed recreational catch applies here.

Proactive Accountability

Alternative FLUKE-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative FLUKE-E, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative FLUKE-D). The process under these alternatives will not increase catch because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative FLUKE-D)

Alternative FLUKE-F would establish general inseason closure authority for the recreational fishery in the FMP for summer flounder. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative FLUKE-F. Recreational fisheries, in general, have limited interaction with ESA proposed, threatened, or endangered species and MMPA protected species s. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral, when compared to the status quo (alternative FLUKE-D).

Reactive Accountability

Alternative FLUKE-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative FLUKE-H, depending on whether addressing an overage of the sector ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the sector ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect protected and endangered species impacts would be expected to be neutral to positive depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative FLUKE-G).

Joint Action Accountability Measures

Alternative FLUKE-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts associated with alternative FLUKE-J are not anticipated and impacts would be the same as those under the status quo (alternative FLUKE-I).

7.2.5.4 Socioeconomic Impacts

This section details the indirect impacts of the summer flounder ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternatives FLUKE-B and FLUKE-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., ΣACL_{SECTOR}=ABC). Because alternatives FLUKE-B and FLUKE-C would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment is expected to be identical to those under the status quo (alternative FLUKE-A). The discussion in section 7.2.5.1 about single year versus 3-year average comparisons of observed recreational catch applies here.

Proactive Accountability

Alternative FLUKE-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternative FLUKE-E. This process will not increase catch relative to the ACL because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Addressing management uncertainty and the use of ACT(s) may reduce the amount of fish available to fishermen relative to the sector ACLs specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the sector ACL, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative FLUKE-D).

Alternative FLUKE-F would establish general inseason closure authority for the recreational fishery in the FMP for summer flounder. There could be indirect impacts on fishing vessels, fleets, or ports associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative FLUKE-F. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to compromise the sustainability of the managed resource or undermine the Council’s desired management system and FMP defined allocations, which would provide positive long-term social and economic benefits. There may however, be short-term neutral to negative consequences associated with closure of the fishery on the social and economic environment. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative FLUKE-D).

Reactive Accountability

Alternative FLUKE-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative FLUKE-H, depending on whether addressing an overage of the sector ACL(s) occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the sector ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the sector ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative FLUKE-G).

Joint Action Accountability Measures

Alternative FLUKE-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect social and economic impacts associated with alternatives FLUKE-J are not anticipated and impacts would be the same as those under the status quo (alternative FLUKE-I).

7.2.6 Scup

Section 5.3.6 fully described the scup alternatives for ACLs and accountability AMs under consideration. For reference, those alternatives are:

- **Scup Annual Catch Limit**
  - Alternative SCUP-A: Status quo/no action
  - Alternative SCUP-B: Specify ACL= ABC with 1-yr Recreational Catch Avg
  - Alternative SCUP-C (Council-Preferred): Specify ACL= ABC with 3-yr Recreational Catch Avg
- **Scup Proactive Accountability Measures**
  - Alternative SCUP-D: Status quo/no action

- Alternative SCUP-E (Council-Preferred): Use of ACTs
    - Alternative SCUP-F (Council-Preferred): General Inseason Closure Authority
- **Scup Reactive Accountability Measures**
    - Alternative SCUP-G: Status quo/no action
    - Alternative SCUP-H (Council-Preferred): Accountability for Catch Components
- **Scup Joint Action Accountability Measures**
    - Alternative SCUP-I: Status quo/no action
    - Alternative SCUP-J (Council-Preferred): Joint Action to Address Disconnect in Catch Limits

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs, and Joint Action) are compared to the respective status quo alternatives.

7.2.6.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on scup, as well as other non-target species (sections 6.1 and 6.2).

Annual Catch Limit

Alternatives SCUP-B and SCUP-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., Σ ACL_{SECTOR}=ABC). Because alternatives SCUP-B and SCUP-C would not result in an increase or decrease in proposed catch relative to ABC, the indirect impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative SCUP-A). However, there are subtle differences in how the comparison of observed catch based on averaging 1 year (SCUP-B) versus 3 years (SCUP-C) of catch may interact with the system of reactive accountability that is implemented. Depending on the reactive accountability alternatives preferred and implemented, recreational overages of the ACL may be deducted, which could affect future specifications of the recreational catch limits. The use of a 3-year average comparison may smooth interannual variability in the observed catch relative to the ACL; however, the potential retention of any overages in the average calculation for multiple years could result in slightly lower future recreational catch limits, when compared to a single year comparison of observed recreational catch. While these differences are noted, the selection of this alternative does not, however, directly propose action for reactive accountability. Therefore, when evaluating indirect impacts solely on the action contained within these alternatives (SCUP-B and SCUP-C), the impacts of these alternatives would be expected to be similar when compared to the status quo alternative (SCUP-A), because these are merely small methodology differences in the calculation of observed recreational catch to be compared to the recreational ACL.

Proactive Accountability

Alternative SCUP-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative SCUP-E, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative SCUP-D). This process will not increase catch because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty and develop ACT control rules contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative SCUP-D).

Alternative SCUP-F would establish general inseason closure authority for the recreational fishery in the FMP for scup. There could be indirect impacts associated with having this closure authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative SCUP-F. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to result in negative biological impacts on the managed resource and other non-target species. Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative SCUP-D).

Reactive Accountability

Alternative SCUP-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative SCUP-H, depending on whether addressing an overage of the sector ACL(s) occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If a sector ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage results in exceeding the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative SCUP-G).

Joint Action Accountability Measures

Alternative SCUP-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect biological impacts associated with alternative SCUP-J are not anticipated and impacts would be the same as those under the status quo (alternative SCUP-I).

7.2.6.2 Habitat Impacts

This section details the indirect impacts of the scup ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.

Annual Catch Limit

Alternatives SCUP-B and SCUP-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., ΣACL_{SECTOR}=ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternatives SCUP-B and SCUP-C would not result in an increase or decrease in catch relative to ABC, the indirect impacts on habitat are expected to be identical to those under the status quo (alternative SCUP-A). The discussion in section 7.2.6.1 about single year versus 3-year average comparisons of observed recreational catch applies here.

Proactive Accountability

Alternative SCUP-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative SCUP-E, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative SCUP-D). The process under these alternatives will not increase catch relative to the ACL because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative SCUP-D).

Alternative SCUP-F would establish general inseason closure authority for the recreational fishery in the FMP for scup. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative SCUP-F. Recreational fisheries, in general, have limited interaction with bottom habitat. Therefore, the indirect habitat impacts would be expected to be neutral, when compared to the status quo (alternative SCUP-D).

Reactive Accountability

Alternative SCUP-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative SCUP-H, depending on whether addressing an overage of the sector ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the sector ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative SCUP-G).

Joint Action Accountability Measures

Alternative SCUP-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect habitat impacts associated with alternative SCUP-J are not anticipated and impacts would be the same as those under the status quo (alternative SCUP-I).

7.2.6.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species s

This section details the indirect impacts of the scup ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species s with potential for interaction with the managed resources.

Annual Catch Limit

Alternatives SCUP-B and SCUP-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., ΣACL_{SECTOR}=ABC). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species s (see discussion in section 7.0). Because alternatives SCUP-B and SCUP-C would not result in an increase or decrease in catch relative to ABC, the indirect impacts on ESA proposed, threatened, or endangered species and MMPA protected species s are expected to be identical to those under the status quo (alternative SCUP-A). The discussion in section 7.2.6.1 about single year versus 3-year average comparisons of observed recreational catch applies here.

Proactive Accountability

Alternative SCUP-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative SCUP-E, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative SCUP-D). The process under these alternatives will not increase catch because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative SCUP-D)

Alternative SCUP-F would establish general inseason closure authority for the recreational fishery in the FMP for scup. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative SCUP-F. Recreational fisheries, in general, have limited interaction with ESA proposed, threatened, or endangered species and MMPA protected species s. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral, when compared to the status quo (alternative SCUP-D).

Reactive Accountability

Alternative SCUP-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative SCUP-H, depending on whether addressing an overage of the sector ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the sector ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect protected and endangered species impacts would be expected to be neutral to positive depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative SCUP-G).

Joint Action Accountability Measures

Alternative SCUP-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts associated with alternative SCUP-J are not anticipated and impacts would be the same as those under the status quo (alternative SCUP-I).

7.2.6.4 Socioeconomic Impacts

This section details the indirect impacts of the scup ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternatives SCUP-B and SCUP-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., $\Sigma ACL_{SECTOR}=ABC$). Because alternatives SCUP-B and SCUP-C would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment are expected to be identical to those under the status quo (alternative SCUP-A). The discussion in section 7.2.6.1 about single year versus 3-year average comparisons of observed recreational catch applies here.

Proactive Accountability

Alternative SCUP-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternative SCUP-E. This process will not increase catch relative to the ACL because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Addressing management uncertainty and the use of ACT(s) may reduce the amount of fish available to fishermen relative to the sector ACLs specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the sector ACLs, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative SCUP-D).

Alternative SCUP-F would establish general inseason closure authority for the recreational fishery in the FMP for scup. There could be indirect impacts on fishing vessels, fleets, or ports associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative SCUP-F. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to compromise the sustainability of the managed resource or undermine the Council’s desired management system and FMP defined allocations, which would provide positive long-term social and economic benefits. There may however, be short-term neutral to negative consequences associated with closure of the fishery on the social and economic environment. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative SCUP-D).

Reactive Accountability

Alternative SCUP-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative SCUP-H, depending on whether addressing an overage of the sector ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the sector ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the sector ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative SCUP-G).

Joint Action Accountability Measures

Alternative SCUP-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect social and economic impacts associated with alternatives SCUP-J are not anticipated and impacts would be the same as those under the status quo (alternative SCUP-I).

7.2.7 Black Sea Bass

Section 5.3.6 fully described the black sea bass alternatives for ACLs and accountability AMs under consideration. For reference, those alternatives are:

- **Black Sea Bass Annual Catch Limit**
    - Alternative BSB-A: Status quo/no action
    - Alternative BSB-B: Specify ACL= ABC with 1-yr Recreational Catch Avg
    - Alternative BSB-C (Council-Preferred): Specify ACL= ABC with 3-yr Recreational Catch Avg

- **Black Sea Bass Proactive Accountability Measures**
    - Alternative BSB-D: Status quo/no action
    - Alternative BSB-E (Council-Preferred): Use of ACTs
    - Alternative BSB-F (Council-Preferred): General Inseason Closure Authority
- **Black Sea Bass Reactive Accountability Measures**
    - Alternative BSB-G: Status quo/no action
    - Alternative BSB-H (Council-Preferred): Accountability for Catch Components
- **Black Sea Bass Joint Action Accountability Measures**
    - Alternative BSB-I: Status quo/no action
    - Alternative BSB-J (Council-Preferred): Joint Action to Address Disconnect in Catch Limits

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs, and Joint Action) are compared to the respective status quo alternatives.

7.2.7.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on black sea bass, as well as other non-target species (sections 6.1 and 6.2).

Annual Catch Limit

Alternatives BSB-B and BSB-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., Σ ACL_{SECTOR}=ABC). Because alternatives BSB-B and BSB-C would not result in an increase or decrease in proposed catch relative to ABC, the indirect impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative BSB-A). However, there are subtle differences in how the comparison of observed catch based on averaging 1 year (BSB-B) versus 3 years (BSB-C) of catch may interact with the system of reactive accountability that is implemented. Depending on the reactive accountability alternatives preferred and implemented, recreational overages of the ACL may be deducted, which could affect future specifications of the recreational catch limits. The use of a 3-year average comparison may smooth interannual variability in the observed catch relative to the ACL; however, the potential retention of any overages in the average calculation for multiple years could result in slightly lower future recreational catch limits, when compared to a single year comparison of observed recreational catch. While these differences are noted, the selection of this alternative does not, however, directly propose action for reactive accountability. Therefore, when evaluating indirect impacts solely on the action contained within these alternatives (BSB-B and BSB-C), the impacts of these alternatives would be expected to be similar when compared to the status quo alternative (BSB-A), because these are merely small methodology differences in the calculation of observed recreational catch to be compared to the recreational ACL.

Proactive Accountability

Alternative BSB-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative BSB-E, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative BSB-D). This process will not increase catch because the sector-specific ACTs cannot exceed the sector ACL, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty and develop ACT control rules contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative BSB-D).

Alternative BSB-F would establish general inseason closure authority for the recreational fishery in the FMP for black sea bass. There could be indirect impacts associated with having this closure authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative BSB-F. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to result in negative biological impacts on the managed resource and other non-target species. Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative BSB-D).

Reactive Accountability

Alternative BSB-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BSB-H, depending on whether addressing an overage of the sector ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If a sector ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage results in exceeding the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative BSB-G).

Joint Action Accountability Measures

Alternative BSB-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect biological impacts associated with alternative BSB-J are not anticipated and impacts would be the same as those under the status quo (alternative BSB-I).

7.2.7.2 Habitat Impacts

This section details the indirect impacts of the black sea bass ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.

Annual Catch Limit

Alternatives BSB-B and BSB-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., ΣACL_{SECTOR}=ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternatives BSB-B and BSB-C would not result in an increase or decrease in catch relative to ABC, the indirect impacts on habitat are expected to be identical to those under the status quo (alternative BSB-A). The discussion in section 7.2.7.1 about single year versus 3-year average comparisons of observed recreational catch applies here.

Proactive Accountability

Alternative BSB-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative BSB-E, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative BSB-D). The process under these alternatives will not increase catch relative to the ACL because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative BSB-D).

Alternative BSB-F would establish general inseason closure authority for the recreational fishery in the FMP for black sea bass. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative BSB-F. Recreational fisheries, in general, have limited interaction with bottom habitat. Therefore, the indirect habitat impacts would be expected to be neutral, when compared to the status quo (alternative BSB-D).

Reactive Accountability

Alternative BSB-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BSB-H, depending on whether addressing an overage of the sector ACL(s) occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the sector ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative BSB-G).

Joint Action Accountability Measures

Alternative BSB-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect habitat impacts associated with alternative BSB-J are not anticipated and impacts would be the same as those under the status quo (alternative BSB-I).

7.2.7.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species s

This section details the indirect impacts of the black sea bass ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species s with potential for interaction with the managed resources.

Annual Catch Limit

Alternatives BSB-B and BSB-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., ΣACL_{SECTOR}=ABC). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species s (see discussion in section 7.0). Because alternatives BSB-B and BSB-C would not result in an increase or decrease in catch relative to ABC, the indirect impacts on ESA proposed, threatened, or endangered species and MMPA protected species s are expected to be identical to those under the status quo (alternative BSB-A). The discussion in section 7.2.7.1 about single year versus 3-year average comparisons of observed recreational catch applies here.

Proactive Accountability

Alternative BSB-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative BSB-E, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative BSB-D). The process under these alternatives will not increase catch because the sum of the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative BSB-D)

Alternative BSB-F would establish general inseason closure authority for the recreational fishery in the FMP for black sea bass. There could be indirect impacts associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative BSB-F. Recreational fisheries, in general, have limited interaction with ESA proposed, threatened, or endangered species and MMPA protected species s. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral, when compared to the status quo (alternative BSB-D).

Reactive Accountability

Alternative BSB-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BSB-H, depending on whether addressing an overage of the sector ACL(s) occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the sector ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect protected and endangered species impacts would be expected to be neutral to positive depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative BSB-G).

Joint Action Accountability Measures

Alternative BSB-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the

MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts associated with alternative BSB-J are not anticipated and impacts would be the same as those under the status quo (alternative BSB-I).

7.2.7.4 Socioeconomic Impacts

This section details the indirect impacts of the black sea bass ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternatives BSB-B and BSB-C would merely specify that the sum of the recreational ACL and commercial ACL be set equal to the ABC (i.e., ΣACL_{SECTOR}=ABC). Because alternatives BSB-B and BSB-C would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment are expected to be identical to those under the status quo (alternative BSB-A). The discussion in section 7.2.7.1 about single year versus 3-year average comparisons of observed recreational catch applies here.

Proactive Accountability

Alternative BSB-E describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternative BSB-E. This process will not increase catch relative to the ACL because the sector-specific ACTs cannot exceed the sector ACLs, relative to the status quo. Addressing management uncertainty and the use of ACT(s) may reduce the amount of fish available to fishermen relative to the sector ACL(s) specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the sector ACL, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative BSB-D).

Alternative BSB-F would establish general inseason closure authority for the recreational fishery in the FMP for black sea bass. There could be indirect impacts on fishing vessels, fleets, or ports associated with having this authority established in the FMP, if in the future at some time uncertain, the recreational fishery is closed based on the application of alternative BSB-F. Recreational fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to compromise the sustainability of the managed resource or undermine the Council’s desired management system and FMP defined allocations, which would provide positive long-term social and economic benefits. There may however, be short-term neutral to negative consequences associated with closure of the fishery on the social and economic environment. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative BSB-D).

Reactive Accountability

Alternative BSB-H describes the process by which overages of the sector ACLs would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative BSB-H, depending on whether addressing an overage of the sector ACL(s) occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the sector ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the sector ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the sector ACLs are or are not exceeded in the future, when compared to the status quo (alternative BSB-G).

Joint Action Accountability Measures

Alternative BSB-J would require that the ASMFC and MAFMC reconvene under joint rules if the recommendations for TAC, TAL, commercial quotas and/or recreational harvest limits differ. Indirect impacts associated with these action alternatives are not anticipated. Having a mechanism in the FMP to reconvene the ASMFC and MAFMC to reconsider their recommendations has the potential to result in reconsideration of recommendations from those groups; however, this plan mechanism does not in and of itself trigger any specific requirement to modify such recommendations. In addition, any recommendations must be consistent with the MSA and managed resource FMPs, which is the same as under status quo. Therefore, indirect social and economic impacts associated with alternatives BSB-J are not anticipated and impacts would be the same as those under the status quo (alternative BSB-I).

7.2.8 Atlantic Surfclam

Section 5.3.8 fully described the Atlantic surfclam alternatives for ACLs and accountability AMs under consideration. For reference, those alternatives are:

- **Atlantic Surfclam Annual Catch Limit**

- Alternative SURF-A: Status quo/no action
  - Alternative SURF-B (Council-Preferred): Specify ACL= ABC
- **Atlantic Surfclam Proactive Accountability Measures**
  - Alternative SURF-C: Status quo/no action
  - Alternative SURF-D (Council-Preferred): Use of TAL
- **Atlantic Surfclam Reactive Accountability Measures**
  - Alternative SURF-E: Status quo/no action
  - Alternative SURF-F (Council-Preferred): Accountability for Catch Components

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs) are compared to the respective status quo alternatives.

7.2.8.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on Atlantic surfclam, as well as other non-target species (sections 6.1 and 6.2).

Annual Catch Limit

Alternative SURF-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Because alternative SURF-B would not result in an increase or decrease in catch relative to ABC, the impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative SURF-A).

Proactive Accountability

Alternative SURF-D describes the process by which the TAL would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative SURF-D, depending on whether addressing management uncertainty when deriving a TAL results in lower catches relative to the status quo (alternative SURF-C). This process will not increase catch relative to the ACL because the TAL cannot exceed the ACL, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative SURF-C).

Reactive Accountability

Alternative SURF-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative SURF-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative SURF-E).

7.2.8.2 Habitat Impacts

This section details the indirect impacts of the Atlantic surfclam ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.

Annual Catch Limit

Alternative SURF-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternative SURF-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on habitat are expected to be identical to those under the status quo (alternative SURF-A).

Proactive Accountability

Alternative SURF-D describes the process by which the TAL would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative SURF-D, depending on whether addressing management uncertainty when deriving a TAL results in lower catches relative to the status quo (alternative SURF-C). This process will not increase catch relative to the ACL because the TAL cannot exceed the ACL, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative SURF-C).

Reactive Accountability

Alternative SURF-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative SURF-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative SURF-E).

7.2.8.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species s

This section details the indirect impacts of the Atlantic surfclam ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species s with potential for interaction with the managed resources.

Annual Catch Limit

Alternative SURF-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species s (see discussion in section 7.0). Because alternative SURF-B would not result in an increase or decrease in catch relative to ABC, the impacts on ESA proposed, threatened, or endangered species and MMPA protected species s are expected to be identical to those under the status quo (alternative SURF-A).

Proactive Accountability

Alternatives SURF-D describes the process by which the TAL would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative SURF-D, depending on whether addressing management uncertainty when deriving a TAL results in lower catches relative to the status quo. This process will not increase catch relative to the ACL because the TAL cannot exceed the ACL, relative to the status quo. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative SURF-C).

Reactive Accountability

Alternative SURF-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative SURF-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect protected and endangered resource impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative SURF-E).

7.2.8.4 Socioeconomic Impacts

This section details the indirect impacts of the Atlantic surfclam ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternative SURF-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Because alternative SURF-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment are expected to be identical to those under the status quo (alternative SURF-A).

Proactive Accountability

Alternative SURF-D describes the process by which the TAL would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternative SURF-D. This process will not increase catch relative to the ACL because the TAL cannot exceed the ACL, relative to the status quo. Addressing management uncertainty and the use of a TAL may reduce the amount of fish available to fishermen relative to the ACL specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the ACL, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative SURF-C).

Reactive Accountability

Alternative SURF-F describes the process by which overages of the ACL would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative SURF-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative SURF-E).

7.2.9 Ocean Quahog

Section 5.3.9 fully described the ocean quahog alternatives for ACLs and accountability AMs under consideration. For reference, those alternatives are:

- **Ocean Quahog Annual Catch Limit**
  - Alternative QUAHOG-A: Status quo/no action
  - Alternative QUAHOG-B (Council-Preferred): Specify ACL= ABC
- **Ocean Quahog Proactive Accountability Measures**
  - Alternative QUAHOG-C: Status quo/no action
  - Alternative QUAHOG-D (Council-Preferred): Use of ACTs
- **Ocean Quahog Reactive Accountability Measures**
  - Alternative QUAHOG-E: Status quo/no action
  - Alternative QUAHOG-F (Council-Preferred): Accountability for Catch Components

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs) are compared to the respective status quo alternatives.

7.2.9.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on ocean quahog, as well as other non-target species (sections 6.1 and 6.2).

Annual Catch Limit

Alternative QUAHOG-B would merely specify that ACL be set equal to the ABC (i.e., ACL= ABC). Because alternative QUAHOG-B would not result in an increase or decrease in catch relative to ABC, the impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative QUAHOG-A).

Proactive Accountability

Alternative QUAHOG-D describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative QUAHOG-D, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative QUAHOG-C). This process will not increase catch relative to the ACL because the sum of the ACTs cannot exceed the ACL, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty and develop ACT control rules contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative QUAHOG-C).

Reactive Accountability

Alternative QUAHOG-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative QUAHOG-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative QUAHOG-E).

7.2.9.2 Habitat Impacts

This section details the indirect impacts of the ocean quahog ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.

Annual Catch Limit

Alternative QUAHOG-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternative QUAHOG-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on habitat are expected to be identical to those under the status quo (alternative QUAHOG-A).

Proactive Accountability

Alternative QUAHOG-D describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative QUAHOG-D, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo (alternative QUAHOG-C). This process will not increase catch relative to the ACL because the sum of the ACTs cannot exceed the ACL, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative QUAHOG-C).

Reactive Accountability

Alternative QUAHOG-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative QUAHOG-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative QUAHOG-E).

7.2.9.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species s

This section details the indirect impacts of the ocean quahog ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species s with potential for interaction with the managed resources.

Annual Catch Limit

Alternative QUAHOG-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species s (see discussion in section 7.0). Because alternative QUAHOG-B would not result in an increase or decrease in catch relative to ABC, the impacts on ESA proposed, threatened, or endangered species and MMPA protected species s are expected to be identical to those under the status quo (alternative QUAHOG-A).

Proactive Accountability

Alternatives QUAHOG-D describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process alternative QUAHOG-D, depending on whether addressing management uncertainty when deriving ACTs results in lower catches relative to the status quo. This process will not increase catch relative to the ACL because the sum of the ACTs cannot exceed the ACL, relative to the status quo. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative QUAHOG-C).

Reactive Accountability

Alternative QUAHOG-F describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative QUAHOG-F, depending on whether addressing of an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect protected and endangered resource impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative QUAHOG-E).

7.2.9.4 Socioeconomic Impacts

This section details the indirect impacts of the ocean quahog ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternative QUAHOG-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Because alternative QUAHOG-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment are expected to be identical to those under the status quo (alternative QUAHOG-A).

Proactive Accountability

Alternative QUAHOG-D describes the process by which ACTs would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternative QUAHOG-D. This process will not increase catch relative to the ACL because the sum of the ACTs cannot exceed the ACL, relative to the status quo. Addressing management uncertainty and the use of ACTs may reduce the amount of fish available to fishermen relative to the ACL specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the ACL, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative QUAHOG-C).

Reactive Accountability

Alternative QUAHOG-F describes the process by which overages of the ACL would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after the process to correct and mitigate these overages has been applied under alternative QUAHOG-F, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative QUAHOG-E).

7.2.10 Tilefish

Section 5.3.10 fully described the tilefish alternatives for ACLs and accountability AMs under consideration. For reference, those alternatives are:

- **Tilefish Annual Catch Limit**
    - Alternative TILE-A: Status quo/no action
    - Alternative TILE-B (Council-Preferred): Specify ACL= ABC
- **Tilefish Proactive Accountability Measures**
    - Alternative TILE-C: Status quo/no action
    - Alternative TILE-D (Council-Preferred): Use of ACT
    - Alternative TILE-E (Council-Preferred): Incidental Fishery Closure Authority
    - Alternative TILE-F (Council-Preferred): Trip Limit increase to 500 lb
- **Tilefish Reactive Accountability Measures**
    - Alternative TILE-G: Status quo/no action
    - Alternative TILE-H (Council-Preferred): Accountability for Catch Components

The indirect impacts of each set of alternatives (i.e., ACL, Proactive AMs, and Reactive AMs) are compared to the respective status quo alternatives.

7.2.10.1 Biological Impacts

This section details the indirect impacts of the ACL and AM alternatives on tilefish, as well as other non-target species (sections 6.1 and 6.2).

Annual Catch Limit

Alternative TILE-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Because alternative TILE-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the managed resource and non-target species are expected to be identical to those under the status quo (alternative TILE-A).

Proactive Accountability

Alternative TILE-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative TILE-D, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative TILE-C). This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Addressing management uncertainty may reduce the potential for catch overages and potential negative biological impacts associated with exceeding catch limits. In addition, there is not a similar process to address management uncertainty and develop ACT control rules contained within the FMP (i.e., status quo). Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative TILE-C).

Alternative TILE-E would establish closure authority for the commercial tilefish incidental fishery. There could be indirect impacts associated with having this closure authority established in the FMP, if in the future at some time uncertain, the fishery is closed based on the application of alternative TILE-E. Fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to result in negative biological impacts on the managed resource and other non-target species. Therefore, the indirect biological impacts would be expected to be neutral to positive, when compared to the status quo (alternative TILE-C).

Alternative TILE-F would increase the trip limit in the commercial tilefish incidental fishery from 300 lb to 500 lb. Indirect impacts expected from TILE-F are similar to the status quo (alternative TILE-C) because this trip limit adjustment would not be expected change fishing practices (section 5.3.10.2) for the managed resource or other non-target species (sections 6.1 and 6.2). In addition, this action alternative would not alter the allocation under which that trip limit operates; therefore, it would only affect the rate at which tilefish landings are accrued. Therefore, there are no indirect biological impacts associated with alternative TILE-F, relative to the status quo (alternative TILE-C).

Reactive Accountability

Alternative TILE-H describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative TILE-H, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to result in positive biological impacts in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded, by ensuring subsequent year catch limits are reduced such that overages do not negatively impact the sustainability of the managed resource. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. Therefore, the indirect biological impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative TILE-G).

7.2.10.2 Habitat Impacts

This section details the indirect impacts of the tilefish ACL and AM alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resource.

Annual Catch Limit

Alternative TILE-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect habitat (see discussion in section 7.0). Because alternative TILE-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on habitat are expected to be identical to those under the status quo (alternative TILE-A).

Proactive Accountability

Alternative TILE-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process under alternative TILE-D, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo (alternative TILE-C). This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative TILE-C).

Alternative TILE-E would establish closure authority for the commercial tilefish incidental fishery. There could be indirect impacts associated with having this closure authority established in the FMP, if in the future at some time uncertain, the fishery is closed based on the application of alternative TILE-E. Fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages and may prevent fishing activity, and by association gear contact with habitat, in far excess of that intended when the fishery allocations were initially established. Therefore, the indirect habitat impacts would be expected to be neutral to positive, when compared to the status quo (alternative TILE-C).

Alternative TILE-F would increase the trip limit in the commercial tilefish incidental fishery from 300 lb to 500 lb. Indirect habitat impacts expected from TILE-F are similar to the status quo (alternative TILE-C) because this trip limit adjustment would not be expected change fishing practices (section 5.3.10.2) for the managed resource. As such increases or decreases in fishing effort, and associated gear contact with habitat, would not be anticipated. Therefore, there are no indirect habitat impacts associated with alternative TILE-F, relative to the status quo (alternative TILE-C).

Reactive Accountability

Alternative TILE-H describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative TILE-H, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect habitat impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative TILE-G).

7.2.10.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species

This section details the indirect impacts of the tilefish ACL and AM alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species s with potential for interaction with the managed resources.

Annual Catch Limit

Alternative TILE-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Changes in catch limits have the potential to affect ESA proposed, threatened, or endangered species and MMPA protected species s (see discussion in section 7.0). Because alternative TILE-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on ESA proposed, threatened, or endangered species and MMPA protected species s are expected to be identical to those under the status quo (alternative TILE-A).

Proactive Accountability

Alternative TILE-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts associated with the resulting catch limits that are derived from the application of the process alternative TILE-D, depending on whether addressing management uncertainty when deriving an ACT results in lower catches relative to the status quo. This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative TILE-C).

Alternative TILE-E would establish closure authority for the commercial tilefish incidental fishery. There could be indirect impacts associated with having this closure authority established in the FMP, if in the future at some time uncertain, the fishery is closed based on the application of alternative TILE-E. Fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages and may prevent fishing activity, and by association interactions with ESA proposed, threatened, or endangered species and MMPA protected species , in far excess of that intended when the fishery allocations were initially established. Therefore, the indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts would be expected to be neutral to positive, when compared to the status quo (alternative TILE-C).

Alternative TILE-F would increase the trip limit in the commercial tilefish incidental fishery from 300 lb to 500 lb. Indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts expected from TILE-F are similar to the status quo (alternative TILE-C) because this trip limit adjustment would not be expected change fishing practices (section 5.3.10.2) for the managed resource. As such increases or decreases in fishing effort, and associated changes in interaction rates, would not be anticipated. Therefore, there are no indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts associated with alternative TILE-F, relative to the status quo (alternative TILE-C).

Reactive Accountability

Alternative TILE-H describes the process by which overages of the ACL would be addressed. There could be indirect impacts associated with the resulting catch limits in future fishing years after reactive accountability measures have been applied under alternative TILE-H, depending on whether addressing of an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be expected to adjust catch limits in response. Therefore, the indirect protected and endangered resource impacts would be expected to be neutral to positive depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative TILE-G).

7.2.10.4 Socioeconomic Impacts

This section details the indirect impacts of the tilefish ACL and AM alternatives on the social and economic environment (section 6.5).

Annual Catch Limit

Alternative TILE-B would merely specify that ACL be set equal to the ABC (i.e., ACL=ABC). Because alternative TILE-B would not result in an increase or decrease in catch relative to ABC, the indirect impacts on the social and economic environment are expected to be identical to those under the status quo (alternative TILE-A).

Proactive Accountability

Alternative TILE-D describes the process by which an ACT would be used to address management uncertainty when specifying catch levels. There could be indirect impacts on fishing vessels, fleets, or ports associated with the resulting catch limits that are derived from the application of the process under alternative TILE-D. This process will not increase catch relative to the ACL because the ACT cannot exceed the ACL, relative to the status quo. Addressing management uncertainty and the use of an ACT may reduce the amount of fish available to fishermen relative to the ACL specified. As such, there may be short-term neutral to negative social and economic impacts from the application of this process. However, the application of proactive accountability measures are intended to reduce the likelihood of exceeding the ACL, reduce the likelihood that reactive accountability measures would be applied, and to ensure such overages do not negatively impact the sustainability of the managed resource. As such, long-term neutral to positive impacts would also be expected. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative TILE-C).

Alternative TILE-E would establish closure authority for the commercial tilefish incidental fishery. There could be indirect impacts on fishing vessels, fleets, or ports associated with having this authority established in the FMP, if in the future at some time uncertain, the incidental fishery is closed based on the application of alternative TILE-E. Fishery closure is intended as a proactive accountability measure to prevent the accrual of substantial fishery overages that have the potential to compromise the sustainability of the managed resource or undermine the Council's desired management system and FMP defined allocations, which would provide positive long-term social and economic benefits. There may however, be short-term neutral to negative consequences associated with closure of the fishery on the social and economic environment. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, when compared to the status quo (alternative TILE-C).

Alternative TILE-F would increase the trip limit in the commercial tilefish incidental fishery from 300 lb to 500 lb. Indirect social and economic impacts expected from TILE-F may be slightly greater when compared to the status quo (alternative TILE-C) if this trip limit increase allows some tilefish that would have been discarded, with assumed 100 percent mortality, to be retained and sold. Therefore, the indirect social economic impacts associated with alternative TILE-F may be neutral to slightly positive, relative to the status quo (alternative TILE-C).

Reactive Accountability

Alternative TILE-H describes the process by which overages of the ACL would be addressed. There could be indirect social and economic impacts associated with the resulting catch limits in future fishing years after the process to correct and mitigate these overages has been applied under alternative TILE-H, depending on whether addressing an overage of the ACL occurred. The process of overage adjustment under this action alternative is unidirectional, therefore the impacts are also. If the ACL is exceeded in the future, reactive accountability measures would be applied and those measures would ensure overages do not negatively impact the sustainability of the managed resource in instances where stocks are rebuilding, the magnitude of the ACL overage exceeds the OFL, or established F targets are exceeded. This will ensure long-term positive social and economic impacts that provide the greatest benefits can be realized. In situations wherein no explicit biological harm occurs to the stock, as previously outlined, reactive AMs function to preserve the Council's desired management system and FMP defined allocations. There may be short-term social and economic impacts incurred to ensure both the sustainability of the resources and preservation of the management system. Therefore, the indirect social and economic impacts would be expected to be neutral to negative short-term and neutral to positive long-term, depending on whether the ACL is or is not exceeded in the future, when compared to the status quo (alternative TILE-G).

7.3 Future Review and Modification of Actions

7.3.1 Performance Review of ABC, ACL, and AM Alternatives

Section 5.4.1 fully described the alternatives for future performance review under consideration. For reference, those alternatives are:

- Alternative REVIEW-A: Status quo/no action
- Alternative REVIEW-B (Council-Preferred): SSC Review of ABC Control Rules
- Alternative REVIEW-C (Council-Preferred): Monitoring Committee Review of ACL Control Rules

Both alternatives REVIEW-B and REVIEW-C are merely descriptive of process and are expected to result in similar indirect impacts on the VECs.

7.3.1.1 Biological Impacts

This section details the indirect impacts of the performance review alternatives on the managed resources, as well as other non-target species. Alternatives REVIEW-B and REVIEW-C include a process by which the SSC will review performance of the ABC control rules and respective resource Monitoring Committee's (or staff) will review performance of ACLs and AMs, respectively. Indirect impacts associated with these action alternatives are not anticipated, as performance review could result in recommendations for modifications to the processes used to derive ABCs, ACLs, and AMs. These recommendations could, if deemed necessary by the

Council, result in the revision of the administrative processes or measures contained within the FMPs for the managed resources. It is through the future application of those revised processes that impacts will be realized. Therefore, indirect biological impacts associated with alternatives REVIEW-B and REVIEW-C are not anticipated and impacts would be the same as those under the status quo (alternative REVIEW-A).

7.3.1.2 Habitat Impacts

This section details the indirect impacts of the performance review alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resources. Alternatives REVIEW-B and REVIEW-C include a process by which the SSC will review performance of the ABC control rules and respective resource Monitoring Committee's (or staff) will review performance of ACLs and AMs, respectively. Indirect impacts associated with these action alternatives are not anticipated, as performance review could result in recommendations for modifications to the processes used to derive ABCs, ACLs, and AMs. These recommendations could, if deemed necessary by the Council, result in the revision of the administrative processes or measures contained within the FMPs for the managed resources. It is through the future application of those revised processes that impacts will be realized. Therefore, indirect habitat impacts associated with alternatives REVIEW-B and REVIEW-C are not anticipated and impacts would be the same as those under the status quo (alternative REVIEW-A).

7.3.1.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species s

This section details the impacts of the performance review alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species s with potential for interaction with the managed resources. Alternatives REVIEW-B and REVIEW-C include a process by which the SSC will review performance of the ABC control rules and respective resource Monitoring Committee's (or staff) will review performance of ACLs and AMs, respectively. Indirect impacts associated with these action alternatives are not anticipated, as performance review could result in recommendations for modifications to the processes used to derive ABCs, ACLs, and AMs. These recommendations could, if deemed necessary by the Council, result in the revision of the administrative processes or measures contained within the FMPs for the managed resources. It is through the future application of those revised processes that impacts will be realized. Therefore, indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts associated with alternatives REVIEW-B and REVIEW-C are not anticipated and impacts would be the same as those under the status quo (alternative REVIEW-A).

7.3.1.4 Socioeconomic Impacts

This section details the impacts of the performance review alternatives on the social and economic environment. Alternatives REVIEW-B and REVIEW-C include a process by which the SSC will review performance of the ABC control rules and respective resource Monitoring Committee's (or staff) will review performance of ACLs and AMs, respectively. Indirect impacts associated with these action alternatives are not anticipated, as performance review could result in recommendations for modifications to the processes used to derive ABCs, ACLs, and AMs. These recommendations could, if deemed necessary by the Council, result in the revision of the administrative processes or measures contained within the FMPs for the managed resources. It is through the future application of those revised processes that impacts will be realized. Therefore, indirect social and economic impacts associated with alternatives REVIEW-B and REVIEW-C are not anticipated and impacts would be the same as those under the status quo (alternative REVIEW-A).

7.3.2 Description of Process to Modify Actions

Section 5.4.2 fully described the alternatives for the process to modify actions in the future under consideration. For reference, those alternatives are:

- Alternative MODIFY-A: Status quo/no action
- Alternative MODIFY-B (Council-Preferred): Modification of Actions, including Framework Action List

7.3.2.1 Biological Impacts

This section details the indirect impacts of the future modification of measures alternatives on the managed resources, as well as other non-target species. Alternative MODIFY-B describes the process by which the measures contained within this document could be modified in the future via specifications, FMP framework adjustment, or FMP amendment. Indirect impacts associated with the action alternative are not anticipated. Regardless of which process is applied (i.e., status quo alternative MODIFY-A, or action alternative Modify-B), any proposed action will be analyzed through the appropriate NEPA process. Status quo simply means the determination for how to modify measures would be initiated with the Council without the additional guidance of the process described under alternative MODIFY-B. Therefore, indirect biological impacts associated with alternative MODIFY-B would be the same as those under the status quo.

7.3.2.2 Habitat Impacts

This section details the indirect impacts of the future modification of measures alternatives on habitat (including EFH). Section 6.3 discusses habitat for the managed resources. Alternative MODIFY-B describes the process by which the measures contained within this document could be modified in the future via specifications, FMP framework adjustment, or FMP amendment. Indirect impacts associated with the action alternative are not anticipated. Regardless of which process is applied (i.e., status quo alternative MODIFY-A, or action alternative Modify-B), any proposed action will be analyzed through the appropriate NEPA process. Status quo simply means the determination for how to modify measures would be initiated with the Council without the additional guidance of the process described under alternative MODIFY-B. Therefore, indirect habitat impacts associated with alternative MODIFY-B would be the same as those under the status quo.

7.3.2.3 Impacts on ESA proposed, threatened, or endangered species and MMPA protected species s

This section details the indirect impacts of the future modification of measures alternatives on ESA proposed, threatened, or endangered species and MMPA protected species s. Section 6.4 described the ESA proposed, threatened, or endangered species and MMPA protected species s with potential for interaction with the managed resources. Alternative MODIFY-B describes the process by which the measures contained within this document could be modified in the future via specifications, FMP framework adjustment, or FMP amendment. Indirect impacts associated with the action alternative are not anticipated. Regardless of which process is applied (i.e., status quo alternative MODIFY-A, or action alternative Modify-B), any proposed action will be analyzed through the appropriate NEPA process. Status quo simply means the determination for how to modify measures would be initiated with the Council without the additional guidance of the process described under alternative MODIFY-B. Therefore, indirect ESA proposed, threatened, or endangered species and MMPA protected species impacts associated with alternative MODIFY-B would be the same as those under the status quo.

7.3.2.4 Socioeconomic Impacts

This section details the indirect impacts of the future modification of measures alternatives on the social and economic environment. Alternative MODIFY-B describes the process by which the measures contained within this document could be modified in the future via specifications, FMP framework adjustment, or FMP amendment. Indirect impacts associated with the action alternative are not anticipated. Regardless of which process is applied (i.e., status quo alternative MODIFY-A, or action alternative Modify-B), any proposed action will be analyzed through the appropriate NEPA process. Status quo simply means the determination for how to modify measures would be initiated with the Council without the additional guidance of the process described under alternative MODIFY-B. Therefore, indirect social and economic impacts associated with alternative MODIFY-B would be the same as those under the status quo.

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7.4 Cumulative Effects Analysis

A cumulative effects analysis (CEA) is required by the Council on Environmental Quality (CEQ) (40 CFR part 1508.7). The purpose of CEA is to consider the combined effects of many actions on the human environment over time that would be missed if each action were evaluated separately. CEQ guidelines recognize that it is not practical to analyze the cumulative effects of an action from every conceivable perspective, but rather, the intent is to focus on those effects that are truly meaningful. A formal cumulative impact assessment is not necessarily required as part of an EA under NEPA as long as the significance of cumulative impacts have been considered (U.S. EPA 1999). The following remarks address the significance of the expected cumulative impacts as they relate to the federally managed resources described in this document.

7.4.1 Consideration of the VECs

In section 6.0 (Description of the Affected Environment), the valued ecosystem components (VECs) that exist within the managed resources fisheries environment are identified. Therefore, the significance of the cumulative effects will be discussed in relation to the VECs listed below.

1. Managed resources
2. Non-target species
3. Habitat including EFH for the managed resource and non-target species
4. Endangered and protected species
5. Human communities

7.4.2 Geographic Boundaries

The analysis of impacts focuses on actions related to the managed resources. The core geographic scope for each of the VECs is focused on the Western Atlantic Ocean, primarily from Florida through Maine (section and 6.0), as this encompasses the typical biological range for these stocks. For non-target species, those ranges may be expanded and would depend on the biological range of each individual non-target species, but again focused on marine waters from Florida through Maine. For habitat, the core geographic scope is focused on EFH within the EEZ but includes all habitat utilized by the managed resources and other non-target species primarily in marine waters from Florida through Maine. The core geographic scope for ESA proposed, threatened, or endangered species and MMPA protected species s can be considered the overall range of these VECs which occur primarily in marine waters from Florida through Maine. For human communities, the core geographic boundaries are defined as those U.S. fishing communities directly involved in the harvest or processing of the managed resources, which were found to occur in coastal states from Florida through Maine (section 6.5).

7.4.3 Temporal Boundaries

The temporal scope of past and present actions for the managed resources, non-target species, habitat and human communities is primarily focused on actions that have occurred after FMP implementation for the managed resources. For endangered and other protected resources, the scope of past and present actions is on a species-by-species basis (section 6.4) and is largely focused on the 1980s and 1990s through the present, when NMFS began generating stock assessments for marine mammals and turtles that inhabit waters of the U.S. EEZ. The temporal scope of future actions for all five VECs extends about five years (2016) into the future. Because of the dynamic nature of resource management and a lack of information on projects that may occur in the future make it very difficult to predict impacts beyond a few years with any certainty. The Omnibus requires a 5-year review of performance of ACLs and AMs; therefore, it is not unreasonable to anticipate actions that may affect these fisheries for about five years.

7.4.4 Actions Other Than Those Proposed in this Omnibus Amendment

The impacts of each of the alternatives considered in this document are given in section 7.0. Table 15 presents meaningful past (P), present (Pr), or reasonably foreseeable future (RFF) actions to be considered other than those actions being considered in this Omnibus Amendment. These impacts are described in chronological order and qualitatively, as the actual impacts of these actions are too complex to be quantified in a meaningful way. When any of these abbreviations occur together (i.e., P, Pr, RFF), it indicates that some past actions are still relevant to the present and/or future actions.

Past and Present Actions

The historical management practices of the Council (described in section 4.3) have resulted in positive impacts on the health of the managed resources. Numerous actions have been taken to manage these commercial and recreational fisheries through FMP amendment and FMP framework adjustment actions. In addition, the annual (or multi-year) specifications process is intended to provide the opportunity for the Council and NMFS to regularly assess the status of the fishery and to make necessary adjustments to ensure that there is a reasonable expectation of meeting the objectives of the FMP and the targets associated with any rebuilding programs under the FMP. The statutory basis for federal fisheries management is the MSA. To the degree with which this regulatory regime is complied, the cumulative impacts of past, present, and reasonably foreseeable future federal fishery management actions on the VECs should generally be associated with positive long-term outcomes. Constraining fishing effort through regulatory actions can often have negative short-term socio-economic impacts. 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 resources.

Non-fishing activities that introduce chemical pollutants, sewage, changes in water temperature, salinity, dissolved oxygen, and suspended sediment into the marine environment pose a risk to all of the identified VECs. Human-induced non-fishing activities tend to be localized in near shore areas and marine project areas where they occur. 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. The overall impact to the affected species and their habitats on a population level is unknown, but likely neutral to low negative, since a large portion of these species have a limited or minor exposure to these local non-fishing perturbations.

In addition to guidelines mandated by the MSA, NMFS reviews these types of effects through the review processes required by Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act for certain activities that are regulated by federal, state, and local authorities. The jurisdiction of these activities is in "waters of the U.S." and includes both riverine and marine habitats.

Reasonably Foreseeable Future Actions

In terms of Reasonably Foreseeable Future (RFF) Actions, guidance related to National Standard 1 of the MSA will require Council action through this document to address ACLs and AMs for the managed resources to ensure the FMP is compliant with the MSA. This system of catch limits and accountability is intended to be an adaptive, dynamic process. Therefore, future action may be taken to refine and adjust measures within the FMP to ensure this system functions as intended and prevents ACLs from being exceeded.

For many of the proposed non-fishing activities to be permitted under other federal agencies (such as beach nourishment, offshore wind facilities, etc.), those agencies would conduct examinations of potential impacts on the VECs. The MSA (50 CFR 600.930) imposes an obligation on other federal agencies to consult with the Secretary of Commerce on actions that may adversely affect EFH. The eight Fishery Management Councils are engaged in this review process by making comments and recommendations on any federal or state action that may affect habitat, including EFH, for their managed species and by commenting on actions likely to substantially affect habitat, including EFH.

In addition, under the Fish and Wildlife Coordination Act (Section 662), “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the U.S., or by any public or private agency under federal permit or license, such department or agency first shall consult with the U.S. Fish and Wildlife Service (USFWS), Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State wherein the” activity is taking place. This act provides another avenue for review of actions by other federal and state agencies that may impact resources that NMFS manages in the reasonably foreseeable future.

In addition, NMFS and the USFWS share responsibility for implementing the ESA. ESA requires NMFS to designate "critical habitat" for any species it lists under the ESA (i.e., areas that contain physical or biological features essential to conservation, which may require special management considerations or protection) and to develop and implement recovery plans for threatened and endangered species. The ESA provides another avenue for NMFS to review actions by other entities that may impact ESA proposed, threatened, or endangered species and MMPA protected species s whose management units are under NMFS’ jurisdiction.

7.4.5 Magnitude and Significance of Cumulative Effects

In determining the magnitude and significance of the cumulative effects, the additive and synergistic effects of the proposed action, as well as past, present, and future actions, must be taken into account. The following section discusses the effects of these actions on each of the VECs.

Table 15. Impacts of Past (P), Present (Pr), and Reasonably Foreseeable Future (RFF) Actions on the five VECs (not including those actions considered in this document).

Action	Description	Impacts on Managed Resource	Impacts on Non-target Species	Impacts on Habitat and EFH	Impacts on Protected Species	Impacts on Human Communities
P, Pr Original FMPs and subsequent Amendments and Frameworks (section 4.3)	Established commercial and if applicable recreational management measures	**Direct Positive** Regulatory tool available to rebuild and manage stocks	**Direct Positive** Reduced fishing effort, gear restricted areas	**Direct Positive** Reduced fishing effort, defining EFH, HAPC, gear restricted areas	**Indirect Positive** Reduced fishing effort, take reduction provisions	**Indirect Positive** Benefited domestic businesses
P, Pr Managed Resources Specifications	Establish limits on landings (commercial and/or recreational)	**Direct Positive** Regulatory tool to specify reduce landings; allows response to annual stock updates	**Indirect Positive** Reduced effort levels and gear requirements	**Indirect Positive** Reduced effort levels and gear requirements	**Indirect Positive** Reduced effort levels and gear requirements	**Indirect Positive** Benefited domestic businesses
P, Pr Developed and Applied Standardized Bycatch Reporting Methodology (2007)	Established acceptable level of precision and accuracy for monitoring of bycatch in fisheries	**Neutral** May improve data quality for monitoring total removals of managed resource	**Neutral** May improve data quality for monitoring removals of non-target species	**Neutral** Will not affect distribution of effort	**Neutral** May increase observer coverage and will not affect distribution of effort	**Potentially Indirect Negative** May impose an inconvenience on vessel operations
P, Pr, RFF Agricultural runoff	Nutrients applied to agricultural land are introduced into aquatic systems	**Indirect Negative** Reduced habitat quality	**Indirect Negative** Reduced habitat quality	**Direct Negative** Reduced habitat quality	**Indirect Negative** Reduced habitat quality	**Indirect Negative** Reduced habitat quality negatively affects resource
P, Pr, RFF Port maintenance	Dredging of coastal, port and harbor areas for port maintenance	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Uncertain – Likely Direct Negative** Dependent on mitigation effects	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Uncertain – Likely Mixed** Dependent on mitigation effects

Table 15. Continued. Impacts of Past (P), Present (Pr), and Reasonably Foreseeable Future (RFF) Actions on the five VECs (not including those actions considered in this document).

Action	Description	Impacts on Managed Resource	Impacts on Non-target Species	Impacts on Habitat and EFH	Impacts on Protected Species	Impacts on Human Communities
P, Pr, RFF Offshore disposal of dredged materials	Disposal of dredged materials	**Indirect Negative** Reduced habitat quality	**Indirect Negative** Reduced habitat quality	**Direct Negative** Reduced habitat quality	**Indirect Negative** Reduced habitat quality	**Indirect Negative** Reduced habitat quality negatively affects resource viability
P, Pr, RFF Beach nourishment	Offshore mining of sand for beaches	**Indirect Negative** Localized decreases in habitat quality	**Indirect Negative** Localized decreases in habitat quality	**Direct Negative** Reduced habitat quality	**Indirect Negative** Localized decreases in habitat quality	**Mixed** Positive for mining companies, possibly negative for fishing industry
	Placement of sand to nourish beach shorelines	**Indirect Negative** Localized decreases in habitat quality	**Indirect Negative** Localized decreases in habitat quality	**Direct Negative** Reduced habitat quality	**Indirect Negative** Localized decreases in habitat quality	**Positive** Beachgoers like sand; positive for tourism
P, Pr, RFF Marine transportation	Expansion of port facilities, vessel operations and recreational marinas	**Indirect Negative** Localized decreases in habitat quality	**Indirect Negative** Localized decreases in habitat quality	**Direct Negative** Reduced habitat quality	**Indirect Negative** Localized decreases in habitat quality	**Mixed** Positive for some interests, potential displacement for others
P, Pr, RFF Installation of pipelines, utility lines and cables	Transportation of oil, gas and energy through pipelines, utility lines and cables	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Uncertain – Likely Direct Negative** Reduced habitat quality	**Potentially Direct Negative** Dependent on mitigation effects	**Uncertain – Likely Mixed** Dependent on mitigation effects
P, Pr National Offshore Aquaculture Act of 2007	Bill that would grant DOC authority to issue permits for offshore aquaculture in federal waters	**Potentially Indirect Negative** Localized decreases in habitat quality possible	**Potentially Indirect Negative** Localized decreases in habitat quality possible	**Direct Negative** Localized decreases in habitat quality possible	**Potentially Indirect Negative** Localized decreases in habitat quality possible	**Uncertain – Likely Mixed** Costs/benefits remain unanalyzed

Table 15. Continued. Impacts of Past (P), Present (Pr), and Reasonably Foreseeable Future (RFF) Actions on the five VECs (not including those actions considered in this document).

Action	Description	Impacts on Managed Resource	Impacts on Non-target Species	Impacts on Habitat and EFH	Impacts on Protected Species	Impacts on Human Communities
RFF Offshore Wind Energy Facilities (within 3 years)	Construction of wind turbines to harness electrical power (Several proposed from ME through NC, including NY/NJ, DE, and VA)	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Potentially Direct Negative** Localized decreases in habitat quality possible	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Uncertain – Likely Mixed** Dependent on mitigation effects
Pr, RFF Liquefied Natural Gas (LNG) terminals (1 built and others within 3 years)	Transport natural gas via tanker to terminals offshore and onshore (1 terminal built in MA; 1 under construction; proposed in RI, NY, NJ and DE)	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Potentially Direct Negative** Localized decreases in habitat quality possible	**Uncertain – Likely Indirect Negative** Dependent on mitigation effects	**Uncertain – Likely Mixed** Dependent on mitigation effects
RFF Convening Gear Take Reduction Teams (within next 3 years)	Recommend measures to reduce mortality and injury to marine mammals	**Indirect Positive** Will improve data quality for monitoring total removals	**Indirect Positive** Reducing availability of gear could reduce bycatch	**Indirect Positive** Reducing availability of gear could reduce gear impacts	**Indirect Positive** Reducing availability of gear could reduce encounters	**Indirect Negative** Reducing availability of gear could reduce revenues
RFF Strategy for Sea Turtle Conservation for the Atlantic Ocean and the Gulf of Mexico Fisheries (w/in next 3 years)	May recommend strategies to prevent the bycatch of sea turtles in commercial fisheries operations	**Indirect Positive** Will improve data quality for monitoring total removals	**Indirect Positive** Reducing availability of gear could reduce bycatch	**Indirect Positive** Reducing availability of gear could reduce gear impacts	**Indirect Positive** Reducing availability of gear could reduce encounters	**Indirect Negative** Reducing availability of gear could reduce revenues
RFF Future FMPs Amendments and Frameworks	Refine/adapt catch limit system and accountability	**Indirect Positive** Regulatory tool to manage stocks	**Indirect Positive** Reduced fishing effort	**Indirect Positive** Reduced fishing effort	**Indirect Positive** Reduced fishing effort	**Indirect Positive** Benefited domestic businesses

7.4.5.1 Managed Resources

Those past, present, and reasonably foreseeable future actions, whose effects may impact the managed resources and the direction of those potential impacts, are summarized in Table 16. The indirectly negative actions described in Table 16 are localized in near shore areas and marine project areas where they occur. Therefore, the magnitude of those impacts on the managed resources is expected to be limited due to a lack of exposure to the population at large. Agricultural runoff may be much broader in scope, and the impacts of nutrient inputs to the coastal system may be of a larger magnitude, although the impact on productivity of the managed resources is unquantifiable. As described above (section 7.4.4), NMFS has several means under which it can review non-fishing actions of other federal or state agencies that may impact NMFS' managed resources prior to permitting or implementation of those projects. This serves to minimize the extent and magnitude of indirect negative impacts those actions could have on resources under NMFS' jurisdiction.

Past fishery management actions taken through the FMP and specification process have had a positive cumulative effect on the managed resources. It is anticipated that the future management actions, described in Table 16, will result in additional indirect positive effects on the managed resources through actions which reduce and monitor bycatch, protect habitat, and protect ecosystem services on which the managed resources productivity depends. Future action may be taken to refine and adjust measures within the FMP to ensure this catch limit and accountability system contemplated in this document and by the MSA functions as intended, prevents ACLs from being exceeded, and lead to improvements in resource sustainability over the long-term. These impacts could be broad in scope. Overall, the past, present, and reasonably foreseeable future actions that are truly meaningful to the managed resources have had a positive cumulative effect.

Formalizing the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establishing a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, would contribute to sustainable management of the managed resources and help ensure measures are consistent with the objectives of the FMP under the guidance of the MSA. The proposed action in this document would positively reinforce the past and anticipated positive cumulative effects on the managed resources, by achieving the objectives specified in the FMP and mandated by the MSA. Therefore, the proposed action would not have any significant effect on the managed resources individually or in conjunction with other anthropogenic activities (see Table 21).

Table 16. Summary of the effects of past, present, and reasonably foreseeable future actions on the managed resource.

<table>
<tr><th>Action (see Box 7.4.4 for more detailed description)</th><th colspan="2">Past to the Present</th><th>Reasonably Foreseeable Future</th></tr>
<tr><td>Original FMPs and subsequent Amendments and Frameworks to the FMPs</td><td colspan="2">Indirect and Direct Positive</td><td></td></tr>
<tr><td>Managed Resources Specifications</td><td colspan="2">Indirect and Direct Positive</td><td></td></tr>
<tr><td>Developed and Implement Standardized Bycatch Reporting Methodology</td><td colspan="2">Neutral</td><td></td></tr>
<tr><td>Agricultural runoff</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Port maintenance</td><td colspan="3">Uncertain – Likely Indirect Negative</td></tr>
<tr><td>Offshore disposal of dredged materials</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Beach nourishment – Offshore mining</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Beach nourishment – Sand placement</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Marine transportation</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Installation of pipelines, utility lines and cables</td><td colspan="3">Uncertain – Likely Indirect Negative</td></tr>
<tr><td>National Offshore Aquaculture Act of 2007</td><td colspan="2">Potentially Indirect Negative</td><td></td></tr>
<tr><td>Offshore Wind Energy Facilities (within 3 years)</td><td></td><td></td><td>Uncertain – Likely Indirect Negative</td></tr>
<tr><td>Liquefied Natural Gas (LNG) terminals (within 3 years)</td><td></td><td colspan="2">Uncertain – Likely Indirect Negative</td></tr>
<tr><td>Convening Gear Take Reduction Teams (within 3 years)</td><td></td><td></td><td>Indirect Positive</td></tr>
<tr><td>Strategy for Sea Turtle Conservation for the Atlantic Ocean and the Gulf of Mexico Fisheries (within next 3 years)</td><td></td><td></td><td>Indirect Positive</td></tr>
<tr><td>Future FMPs Amendments and Frameworks</td><td></td><td></td><td>Indirect Positive</td></tr>
<tr><td>Summary of past, present, and future actions excluding those proposed in this Omnibus Amendment</td><td colspan="3">Overall, actions have had, or will have, positive impacts on the managed resources
* See section 7.4.5.1 for explanation.</td></tr>
</table>

7.4.5.2 Non-Target Species or Bycatch

Those past, present, and reasonably foreseeable future actions, whose effects may impact non-target species and the direction of those potential impacts, are summarized in Table 17. The effects of indirectly negative actions described in Table 17 are localized in near shore areas and marine project areas where they occur. Therefore, the magnitude of those impacts on non-target species is expected to be limited due to a lack of exposure to the population at large. Agricultural runoff may be much broader in scope, and the impacts of nutrient inputs to the coastal system may be of a larger magnitude, although the impact on productivity of non-target resources and the oceanic ecosystem is unquantifiable. As described above (section 7.4.4), NMFS has several means under which it can review non-fishing actions of other federal or state agencies that may impact NMFS' managed resources prior to permitting or implementation of those projects. At this time, NMFS can consider impacts to non-target species (federally-managed or otherwise) and comment on potential impacts. This serves to minimize the extent and magnitude of indirect negative impacts those actions could have on resources within NMFS' jurisdiction.

Past fishery management actions taken through the FMP and annual specification process have had a positive cumulative effect on non-target species. Implementation and application of a standardized bycatch reporting methodology would have a particular impact on non-target species by improving the methods which can be used to assess the magnitude and extent of a potential bycatch problem. Better assessment of potential bycatch issues allows more effective and specific management measures to be developed to address a bycatch problem. It is anticipated that future management actions, described in Table 17, will result in additional indirect positive effects on non-target species through actions which reduce and monitor bycatch, protect habitat, and protect ecosystem services on which the productivity of many of these non-target resources depend. The impacts of these future actions could be broad in scope, and it should be noted the managed resource and non-target species are often coupled in that they utilize similar habitat areas and ecosystem resources on which they depend. Overall, the past, present, and reasonably foreseeable future actions that are truly meaningful have had a positive cumulative effect on non-target species.

Formalizing the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establishing a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, would contribute to greater consideration of discards and bycatch in these fisheries and help ensure measures are consistent with the objectives of the FMP under the guidance of the MSA. The proposed action in this document would positively reinforce the past and anticipated positive cumulative effects on non-target species, by achieving the objectives specified in the FMP and mandated by the MSA. Therefore, the proposed action would not have any significant effect on non-target species individually or in conjunction with other anthropogenic activities (see Table 21).

Table 17. Summary of the effects of past, present, and reasonably foreseeable future actions on the non-target species.

Action (see Box 7.4.4 for more detailed description)	Past to the Present	Reasonably Foreseeable Future
Original FMPs and subsequent Amendments and Frameworks to the FMPs	**Indirect and Direct Positive**	
Managed Resources Specifications	**Indirect and Direct Positive**	
Developed and Implement Standardized Bycatch Reporting Methodology	**Neutral**	
Agricultural runoff	**Indirect Negative**	
Port maintenance	**Uncertain – Likely Indirect Negative**	
Offshore disposal of dredged materials	**Indirect Negative**	
Beach nourishment – Offshore mining	**Indirect Negative**	
Beach nourishment – Sand placement	**Indirect Negative**	
Marine transportation	**Indirect Negative**	
Installation of pipelines, utility lines and cables	**Uncertain – Likely Indirect Negative**	
National Offshore Aquaculture Act of 2007	**Potentially Indirect Negative**	
Offshore Wind Energy Facilities (within 3 years)		**Uncertain – Likely Indirect Negative**
Liquefied Natural Gas (LNG) terminals (within 3 years)	**Uncertain – Likely Indirect Negative**	
Convening Gear Take Reduction Teams (within 3 years)		**Indirect Positive**
Strategy for Sea Turtle Conservation for the Atlantic Ocean and the Gulf of Mexico Fisheries (within next 3 years)		**Indirect Positive**
Future FMPs Amendments and Frameworks		**Indirect Positive**
Summary of past, present, and future actions excluding those proposed in this Omnibus Amendment	**Overall, actions have had, or will have, positive impacts on the non-target species * See section 7.4.5.2 for explanation.**	

7.4.5.3 Habitat (Including EFH)

Those past, present, and reasonably foreseeable future actions, whose effects may impact habitat (including EFH) and the direction of those potential impacts, are summarized in Table 18. The direct and indirect negative actions described in Table 18 are localized in near shore areas and marine project areas where they occur. Therefore, the magnitude of those impacts on habitat is expected to be limited due to a lack of exposure to habitat at large. Agricultural runoff may be much broader in scope, and the impacts of nutrient inputs to the coastal system may be of a larger magnitude, although the impact on habitat and EFH is unquantifiable. As described above (section 7.4.4), NMFS has several means under which it can review non-fishing actions of other federal or state agencies that may impact NMFS' managed resources and the habitat on which they rely prior to permitting or implementation of those projects. This serves to minimize the extent and magnitude of direct and indirect negative impacts those actions could have on habitat utilized by resources under NMFS' jurisdiction.

Past fishery management actions taken through the FMP and annual specification process have had a positive cumulative effect on habitat and EFH. The actions have constrained fishing effort at a large scale and locally, and have implemented gear requirements, which may reduce habitat impacts. As required under these FMP actions, EFH and HAPCs were designated for some of the managed resources. It is anticipated that the future management actions, described in Table 18, will result in additional direct or indirect positive effects on habitat through actions which protect EFH for federally-managed species and protect ecosystem services on which these species' productivity depends. These impacts could be broad in scope. All of the VECs are interrelated; therefore, the linkages among habitat quality and EFH, managed resources and non-target species productivity, and associated fishery yields should be considered. For habitat and EFH, there are direct and indirect negative effects from actions which may be localized or broad in scope; however, positive actions that have broad implications have been, and it is anticipated will continue to be, taken to improve the condition of habitat. There are some actions, which are beyond the scope of NMFS and Council management such as coastal population growth and climate changes, which may indirectly impact habitat and ecosystem productivity. Overall, the past, present, and reasonably foreseeable future actions that are truly meaningful to habitat have had a neutral to positive cumulative effect.

Formalizing the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establishing a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, would contribute to the sustainability of the management resources consistent with the objectives of the FMP under the guidance of the MSA. The proposed action in this document would positively reinforce the past and anticipated positive cumulative effects on habitat, by achieving the objectives specified in the FMP and mandated by the MSA. Therefore, the proposed action would not have any significant effect on habitat individually or in conjunction with other anthropogenic activities (see Table 21).

Table 18. Summary of the effects of past, present, and reasonably foreseeable future actions on the habitat.

<table>
<tr><th>Action (see Box 7.4.4 for more detailed description)</th><th colspan="2">Past to the Present</th><th>Reasonably Foreseeable Future</th></tr>
<tr><td>Original FMPs and subsequent Amendments and Frameworks to the FMPs</td><td colspan="2">Indirect and Direct Positive</td><td></td></tr>
<tr><td>Managed Resources Specifications</td><td colspan="2">Indirect and Direct Positive</td><td></td></tr>
<tr><td>Developed and Implement Standardized Bycatch Reporting Methodology</td><td colspan="2">Neutral</td><td></td></tr>
<tr><td>Agricultural runoff</td><td colspan="3">Direct Negative</td></tr>
<tr><td>Port maintenance</td><td colspan="3">Uncertain – Likely Direct Negative</td></tr>
<tr><td>Offshore disposal of dredged materials</td><td colspan="3">Direct Negative</td></tr>
<tr><td>Beach nourishment – Offshore mining</td><td colspan="3">Direct Negative</td></tr>
<tr><td>Beach nourishment – Sand placement</td><td colspan="3">Direct Negative</td></tr>
<tr><td>Marine transportation</td><td colspan="3">Direct Negative</td></tr>
<tr><td>Installation of pipelines, utility lines and cables</td><td colspan="3">Uncertain – Likely Direct Negative</td></tr>
<tr><td>National Offshore Aquaculture Act of 2007</td><td colspan="2">Direct Negative</td><td></td></tr>
<tr><td>Offshore Wind Energy Facilities (within 3 years)</td><td></td><td></td><td>Potentially Direct Negative</td></tr>
<tr><td>Liquefied Natural Gas (LNG) terminals (within 3 years)</td><td></td><td colspan="2">Potentially Direct Negative</td></tr>
<tr><td>Convening Gear Take Reduction Teams (within 3 years)</td><td></td><td></td><td>Indirect Positive</td></tr>
<tr><td>Strategy for Sea Turtle Conservation for the Atlantic Ocean and the Gulf of Mexico Fisheries (within next 3 years)</td><td></td><td></td><td>Indirect Positive</td></tr>
<tr><td>Future FMPs Amendments and Frameworks</td><td></td><td></td><td>Indirect Positive</td></tr>
<tr><td>Summary of past, present, and future actions excluding those proposed in this Omnibus Amendment</td><td colspan="3">Overall, actions have had, or will have, neutral to positive impacts on habitat, including EFH
* See section 7.4.5.3 for explanation.</td></tr>
</table>

7.4.5.4 Protected and Endangered Species

Those past, present, and reasonably foreseeable future actions, whose effects may impact the protected resources and the direction of those potential impacts, are summarized in Table 19. The indirectly negative actions described in Table 19 are localized in near shore areas and marine project areas where they occur. Therefore, the magnitude of those impacts on protected resources, relative to the range of many of the protected resources, is expected to be limited due to a lack of exposure to the population at large. Agricultural runoff may be much broader in scope, and the impacts of nutrient inputs to the coastal system may be of a larger magnitude, although the impact on protected resources either directly or indirectly is unquantifiable. As described above (section 7.4.4), NMFS has several means, including ESA, under which it can review non-fishing actions of other federal or state agencies that may impact NMFS' protected resources prior to permitting or implementation of those projects. This serves to minimize the extent and magnitude of indirect negative impacts those actions could have on protected resources under NMFS' jurisdiction.

Past fishery management actions taken through the FMP and annual specification process have had a positive cumulative effect on protected resources through the reduction of fishing effort (potential interactions) and implementation of gear requirements. It is anticipated that the future management actions, specifically those recommended by gear take reduction teams for marine mammals and the development of strategies for sea turtle conservation described in Table 19, will result in additional indirect positive effects on the protected resources. These impacts could be broad in scope. Overall, the past, present, and reasonably foreseeable future actions that are truly meaningful to protected resources have had a positive cumulative effect.

Formalizing the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establishing a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, would contribute to the sustainability of the management resources consistent with the objectives of the FMP under the guidance of the MSA. The proposed actions in this document would not change the past and anticipated cumulative effects on protective resources and thus, would not have any significant effect on protected resources individually or in conjunction with other anthropogenic activities (see Table 21).

Table 19. Summary of the effects of past, present, and reasonably foreseeable future actions on the protected resources.

<table>
<tr><th>Action (see Box 7.4.4 for more detailed description)</th><th colspan="2">Past to the Present</th><th>Reasonably Foreseeable Future</th></tr>
<tr><td>Original FMPs and subsequent Amendments and Frameworks to the FMP</td><td colspan="2">Indirect and Direct Positive</td><td></td></tr>
<tr><td>Managed Resources Specifications</td><td colspan="2">Indirect and Direct Positive</td><td></td></tr>
<tr><td>Developed and Implement Standardized Bycatch Reporting Methodology</td><td colspan="2">Neutral</td><td></td></tr>
<tr><td>Agricultural runoff</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Port maintenance</td><td colspan="3">Uncertain – Likely Indirect Negative</td></tr>
<tr><td>Offshore disposal of dredged materials</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Beach nourishment – Offshore mining</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Beach nourishment – Sand placement</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Marine transportation</td><td colspan="3">Indirect Negative</td></tr>
<tr><td>Installation of pipelines, utility lines and cables</td><td colspan="3">Potentially Direct Negative</td></tr>
<tr><td>National Offshore Aquaculture Act of 2007</td><td colspan="2">Potentially Indirect Negative</td><td></td></tr>
<tr><td>Offshore Wind Energy Facilities (within 3 years)</td><td></td><td></td><td>Uncertain – Likely Indirect Negative</td></tr>
<tr><td>Liquefied Natural Gas (LNG) terminals (within 3 years)</td><td></td><td colspan="2">Uncertain – Likely Indirect Negative</td></tr>
<tr><td>Convening Gear Take Reduction Teams (within 3 years)</td><td></td><td></td><td>Indirect Positive</td></tr>
<tr><td>Strategy for Sea Turtle Conservation for the Atlantic Ocean and the Gulf of Mexico Fisheries (within next 3 years)</td><td></td><td></td><td>Indirect Positive</td></tr>
<tr><td>Future FMPs Amendments and Frameworks</td><td></td><td></td><td>Indirect Positive</td></tr>
<tr><td>Summary of past, present, and future actions excluding those proposed in this Omnibus Amendment</td><td colspan="3">Overall, actions have had, or will have, positive impacts on protected resources
* See section 7.4.5.4 for explanation.</td></tr>
</table>

7.4.5.5 Human Communities

Those past, present, and reasonably foreseeable future actions, whose effects may impact human communities and the direction of those potential impacts, are summarized in Table 20. The indirectly negative actions described in Table 20 are localized in near shore areas and marine project areas where they occur. Therefore, the magnitude of those impacts on human communities is expected to be limited in scope. It may, however, displace fishermen from project areas. Agricultural runoff may be much broader in scope, and the impacts of nutrient inputs to the coastal system may be of a larger magnitude. This may result in indirect negative impacts on human communities by reducing resource availability; however, this effect is unquantifiable. As described above (section 7.4.4), NMFS has several means under which it can review non-fishing actions of other federal or state agencies prior to permitting or implementation of those projects. This serves to minimize the extent and magnitude of indirect negative impacts those actions could have on human communities.

Past fishery management actions taken through the FMP and annual specification process have had both positive and negative cumulative effects by benefiting domestic fisheries through sustainable fishery management practices, while at the same time potentially reducing the availability of the resource to all participants. Sustainable management practices are, however, expected to yield broad positive impacts to fishermen, their communities, businesses, and the nation as a whole. It is anticipated that the future management actions, described in Table 20, will result in positive effects for human communities due to sustainable management practices, although additional indirect negative effects on the human communities could occur through management actions that may implement gear requirements or area closures and thus, reduce revenues. Overall, the past, present, and reasonably foreseeable future actions that are truly meaningful to human communities have had an overall positive cumulative effect.

Formalizing the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establishing a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, would contribute to the sustainability of the management resources consistent with the objectives of the FMP under the guidance of the MSA. It is not clear whether the catch limit and accountability system contemplated in this document will result in future catch limits that are higher or lower for the managed resources, because the future population status and the decision to select catch limit for specifications annually have not yet occurred. However, if future catch limits are reduced there may be impacts on some fishermen caused by reductions in their opportunities to earn revenues in the commercial fisheries. Recreational fisheries may have decreased harvest opportunities due to more restrictive recreational management measures that must be implemented (i.e., minimum fish size, possession limits, fishing seasons).

Despite the potential for slight negative short-term effects on human communities, the expectation is that there would be a positive long-term effect on human communities due to the long-term sustainability of the managed resources. Overall, the proposed actions in this document would not change the past and anticipated cumulative effects on human communities and thus, would not have any significant effect on human communities individually, or in conjunction with other anthropogenic activities (see Table 21).

Table 20. Summary of the effects of past, present, and reasonably foreseeable future actions on human communities.

Action (see Box 7.4.4 for more detailed description)	Past to the Present	Reasonably Foreseeable Future
Original FMPs and subsequent Amendments and Frameworks to the FMP	**Indirect and Direct Positive**	
Managed Resources Specifications	**Indirect and Direct Positive**	
Developed and Implement Standardized Bycatch Reporting Methodology	**Potentially Indirect Negative**	
Agricultural runoff	**Indirect Negative**	
Port maintenance	**Uncertain – Likely Mixed**	
Offshore disposal of dredged materials	**Indirect Negative**	
Beach nourishment – Offshore mining	**Mixed**	
Beach nourishment – Sand placement	**Positive**	
Marine transportation	**Mixed**	
Installation of pipelines, utility lines and cables	**Uncertain – Likely Mixed**	
National Offshore Aquaculture Act of 2007	**Uncertain – Likely Mixed**	
Offshore Wind Energy Facilities (within 3 years)		**Uncertain – Likely Mixed**
Liquefied Natural Gas (LNG) terminals (within 3 years)	**Uncertain – Likely Mixed**	
Convening Gear Take Reduction Teams (within 3 years)		**Indirect Negative**
Strategy for Sea Turtle Conservation for the Atlantic Ocean and the Gulf of Mexico Fisheries (within next 3 years)		**Indirect Positive**
Future FMPs Amendments and Frameworks		**Indirect Positive**
Summary of past, present, and future actions excluding those proposed in this Omnibus Amendment	**Overall, actions have had, or will have, positive impacts on human communities * See section 7.4.5.5 for explanation.**	

7.4.6 Preferred Action on all the VECS

The Council has identified its preferred action alternatives in section 5.0. The cumulative effects of the range of actions considered in this Omnibus Amendment can be considered to make a determination if significant cumulative effects are anticipated from the preferred action.

Table 21. Magnitude and significance of the cumulative effects; the additive and synergistic effects of the proposed action, as well as past, present, and future actions.

VEC	Status in 2009	Net Impact of P, Pr, and RFF Actions	Impact of the Proposed Action	Significant Cumulative Effects
Managed Resource	Complex and variable (Section 6.1)	Positive (Sections 7.4.4 and 7.4.5.1)	Neutral to positive (Sections 7.1-7.3)	**None**
Non-target Species	Complex and variable (Section 6.2)	Positive (Sections 7.4.4 and 7.4.5.2)	Neutral to positive (Sections 7.1-7.3)	**None**
Habitat	Complex and variable (Section 6.3)	Neutral to positive (Sections 7.4.4 and 7.4.5.3)	Neutral to positive (Sections 7.1-7.3)	**None**
Protected Resources	Complex and variable (Section 6.4)	Positive (Sections 7.4.4 and 7.4.5.4)	Neutral to positive (Sections 7.1-7.3)	**None**
Human Communities	Complex and variable (Section 6.5)	Positive (Sections 7.4.4 and 7.4.5.5)	Short-term- negative to positive; long-term- positive (Sections 7.1-7.3)	**None**

The direct and indirect impacts of the proposed action on the VECs are described in sections 7.1 through 7.3. The magnitude and significance of the cumulative effects, which include the additive and synergistic effects of the proposed action, as well as past, present, and future actions, have been taken into account throughout this section 7.4. The action proposed in this document builds off action taken in the original FMP and subsequent FMP amendment and FMP framework adjustment documents. When this action is considered in conjunction with all the other pressures placed on fisheries by past, present, and reasonably foreseeable future actions, it is not expected to result in any significant impacts, positive or negative. Based on the information and analyses presented in these past FMP documents and this document, there are no significant cumulative effects associated with the action proposed in this document.

8.0 APPLICABLE LAWS

8.1 Magnuson-Stevens Fishery Conservation and Management Act (MSA) and National Standards

Section 301 of the MSA requires that FMPs contain conservation and management measures that are consistent with the ten National Standards. The most recent FMP amendments for the managed resources address how the management actions implemented comply with the National Standards. First and foremost, the Council continues to meet the obligations of National Standard 1 by adopting and implementing conservation and management measures that will continue to prevent overfishing, while achieving, on a continuing basis, the optimum yield for the managed resources and the U.S. fishing industry.

Specifically, this action was developed to address the revised NS1 guidelines; therefore, the Council has identified new management measures, when taken in conjunction with existing measures, will establish a process or setting catch limits which address both scientific and management uncertainty as well as a comprehensive system of accountability for all components of the catch for each of the manage resources. By addressing both scientific and management uncertainty by establishing catch limits less than the OFL, the risk of overfishing these managed resources will be reduced and OY can be achieved in these fisheries. The Council uses the best scientific information available (National Standard 2) and the Council's SSC will continue to provide advice such that the Council's decisions are informed by the best science available, including the application of the ABC control rule methods described within this document. The Council manages all of its resources throughout their range (National Standard 3) and this action does not alter the management units or management jurisdictions for any of these resources. These management measures do not discriminate among residents of different states (National Standard 4) because the application of catch limits and accountability are applied to the fishery as a whole or to the fishing sectors (i.e., recreational or commercial). The positive impacts which result from preventing overfishing and achieving OY should be realized by all fishery participants, irrespective of state of residency. The actions taken within this document do not have economic allocation as their sole purpose (National Standard 5); these measures specifically address the NS1 objectives of preventing overfishing and achieving OY and the catch limits and system of accountability merely overlay the fishery allocations that were previously established and deemed consistent with these National Standards. These measures account for variations in these fisheries (National Standard 6) by enabling the inherent scientific and management uncertainty associated with assessing these resources and implementing fishery management measures to be considered when establishing catch limits for these fisheries. This action avoids unnecessary duplication (National Standard 7) and establishes new FMP measures which will work in conjunction with existing FMP measures to address any inconsistencies with the NS1 guidelines. This action would not impose or result in any changes to fishing operations, fishing behavior, fishing gears used, or areas fished, and therefore should not alter the manner in which fishing communities participant in these fisheries. This action considers fishing communities

(National Standard 8); this system of catch limits is designed to prevent overfishing, rebuild stocks that are overfished, and to maintain stocks at a level that produces OY. Achieving these objectives will provide the greatest social and economic benefits to fishery participants and fishing communities. This action does not propose any measures that would affect safety at sea (National Standard 10). Finally, actions taken are consistent with National Standard 9, because the proposed measures would establish comprehensive catch limits and accountability, which consider all components of the catch, including bycatch.

The Council has implemented many regulations that have indirectly acted to reduce fishing gear impacts on EFH. By continuing to meet the National Standards requirements of the MSA through future FMP amendment, FMP framework adjustment, and specifications, the Council will insure that cumulative impacts of these actions will remain positive overall for the ports and communities that depend on these fisheries, the Nation as a whole, and certainly for the resources.

8.2 NEPA (FONSI)

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

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

The proposed action is not expected to jeopardize the sustainability of any target species affected by the action (section 6.1). The action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. As such, the impacts of these alternatives on any species that may be affected by the measures are administrative in nature; there are no significant physical or biological impacts associated with the alternatives (section 7.0).

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

The proposed action is not expected to jeopardize the sustainability of any non-target species (section 6.2). These measures would not impose or result in any changes to fishing operations, fishing behavior, fishing gears used, or areas fished. As such, the impacts of the preferred alternatives on any species that may be affected by the measures are administrative in nature; there are no significant physical or biological impacts associated with the preferred alternatives (section 7.0).

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?

The proposed action is not expected to cause substantial damage to the ocean, coastal habitats, and/or EFH as defined under the Magnuson-Stevens Act and identified in the FMP. In general, bottom-tending mobile gear, primarily otter trawls and hydraulic dredges, has the potential to adversely affect EFH for the species as detailed in section 6.3 of the document. The action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. The direct impacts of the preferred alternatives on habitat are wholly administrative in nature; there are no significant habitat impacts associated with the preferred alternatives (section 7.0 and 9.0).

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

The proposed action would not alter the manner in which the industry conducts fishing activities for the managed resources (section 6.5). Therefore, no changes in fishing behavior that would affect safety are anticipated. The overall effect of the proposed actions on these fisheries, including the communities in which they operate, will not impact adversely public health or safety (section 7.0). NMFS will consider comments received concerning safety and public health issues.

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

The proposed action is not expected to adversely affect ESA listed, threatened, or endangered, marine mammals, or critical habitat of these species (section 6.4). These measures would not impose or result in any changes to fishing operations, fishing behavior, fishing gears used, or areas fished. As such, the impacts of the alternatives on any species that may be affected by the measures are wholly administrative in nature; there are no expected significant impacts on ESA proposed, threatened, or endangered, and MMPA protected species associated with the alternatives (section 7.0).

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.)?

The proposed action is not expected to have a substantial impact on biodiversity and ecosystem function within the affected area (section 6.1.2). The action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. These measures would not impose or result in any changes to fishing operations, fishing behavior, fishing gears used, or areas fished. As such, the impacts of the preferred alternatives on biodiversity and ecosystem function within the affected area are administrative in nature; there are no significant impacts on biodiversity and ecosystem function associated with the alternatives (section 7.0).

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

The proposed action is not expected to have a substantial impact on the natural or physical environment (section 6.0). The action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. These measures would not impose or result in any changes to fishing operations, fishing behavior, fishing gears used, or areas fished. As such, the impacts of the preferred alternatives are administrative in nature and not expected to result in significant social or economic impacts interrelated with natural or physical environmental effects (section 7.0).

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

The impacts of the proposed measures on the human environment are described in section 7.0 of this document. The action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. These measures are administrative in nature and build on measures contained in the FMP which have been in place for many years. Thus, the measures contained in this action are not expected to be highly controversial.

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

The proposed actions described in section 5.0 will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. The fisheries for the managed resources are not known to be prosecuted in any unique areas such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas (section 6.3). Therefore, the alternatives are not expected to have a substantial impact on any of these areas (section 7.0).

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

The impacts of the proposed measures on the human environment are described in section 7.0 of the EA. The action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. These measures are administrative in nature and build on measures contained in the FMP which have been in place for many years. The measures contained in this action are not expected to have highly uncertain effects or to involve unique or unknown risks on the human environment.

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

As discussed in section 7.4, the proposed action is not expected to have individually insignificant, but cumulatively significant impacts. The synergistic interaction of improvements in the efficiency of the fishery is expected to generate positive impacts overall. The proposed actions, together with past, present, and future actions, are not expected to result in significant cumulative impacts on the biological, physical, and human components of the environment.

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

The impacts of the proposed measures described in section 5.0 on the human environment are provided in section 7.0 of the EA. The action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. The fisheries for the managed resources are not known to be prosecuted in any areas that might affect districts, sites, highways, structures, or objects listed in, or eligible for listing in, the National Register of Historic Places or cause the loss or destruction of significant scientific, cultural or historical resources (section 6.0). Therefore, the proposed action is not expected to affect any of these areas.

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

The proposed action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. There is no evidence or indication that the managed resources fisheries have ever resulted in the introduction or spread of nonindigenous species. None of the proposed measures is expected to substantially change the manner in which these fisheries are prosecuted. Therefore, it is highly unlikely that the proposed action would 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?

The proposed action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. The performance of the fisheries relative to catch limits and the entire system of catch limits and accountability will be monitored and measures contained within the FMP will be adjusted in response to those conditions in the future. Therefore, these actions are not expected to result in significant effects, nor do they represent a decision in principle about a future consideration.

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

The proposed action will formalize the process of addressing scientific uncertainty and management uncertainty when setting catch limits with a comprehensive system of accountability for catch (including both landings and discards) for each of the managed resources. The action is not expected to alter fishing methods or activities such that they threaten a violation of federal, State, or local law or requirements imposed for the protection of the environment. In fact, the proposed measures have been found to be consistent with other applicable laws (see sections 8.2-8.11 below).

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?

The impacts of the proposed alternatives on the biological, physical, and human environment are described in section 7.0. The cumulative effects of the proposed action on target and non-target species are detailed in section 7.4 of the EA. None of the proposed measures are expected significantly alter the manner in which the fishery is prosecuted. The synergistic interaction of improvements in the manner in which scientific and management uncertainty is addressed when specifying catch limits for the managed resources fisheries is expected to generate positive impacts overall.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment prepared for this Omnibus Amendment document, it is hereby determined that the proposed actions in this specification package will not significantly impact the quality of the human environment as described above and in the Environmental Assessment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

____________________________________ _________________

Regional Administrator for NERO, NMFS, NOAA Date

8.3 Endangered Species Act

Sections 6.3 and 7.0 should be referenced for an assessment of the impacts of the proposed action on endangered species and protected resources. None of the actions proposed in this document are expected to alter fishing methods or activities. Therefore, this action is not expected to affect proposed, threatened, or endangered species or critical habitat in any manner not considered in previous consultations on the fisheries.

8.4 Marine Mammal Protection Act

Sections 6.3 and 7.0 should be referenced for an assessment of the impacts of the proposed action on marine mammals. None of the actions proposed in this document are expected to alter fishing methods or activities. Therefore, this action is not expected to affect marine mammals or critical habitat in any manner not considered in previous consultations on the fisheries.

8.5 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) of 1972, as amended, provides measures for ensuring stability of productive fishery habitat while striving to balance development pressures with social, economic, cultural, and other impacts on the coastal zone. It is recognized that responsible management of both coastal zones and fish stocks must involve mutually supportive goals. The Council has developed this document and will submit it to NMFS; NMFS must determine whether this action is consistent to the maximum extent practicable with the CZM programs for each state (Maine through North Carolina).

8.6 Administrative Procedure Act

Sections 551-553 of the Federal Administrative Procedure Act establish procedural requirements applicable to informal rulemaking by federal agencies. The purpose is to ensure public access to the federal rulemaking process and to give the public notice and opportunity to comment before the agency promulgates new regulations.

The Administrative Procedure Act requires solicitation and review of public comments on actions taken in the development of an FMP and subsequent FMP amendment and framework adjustments. Development of this document provided many opportunities for public review, input, and access to the rulemaking process. This proposed action and the document were developed through a multi-stage process that was open to review by affected members of the public. The public had the opportunity to review and comment on this action at:

<u>Omnibus ACL/AM Scoping Meetings</u>
April 14, 2009 - Duck, NC
April 21, 2009 - East Setauket, NY
May 4, 2009 - Alexandria, Virginia

<u>Omnibus ACL/AM Committee Meetings</u>
December 9, 2008 - Montauk, NY
February 11, 2009 - Galloway, NJ
April 15, 2009 - Duck, NC
June 11, 2009 - New York, NY

SSC Meetings
January 22, 2009 - Baltimore, MD
July 16, 2009 - Philadelphia, PA
March 9, 2010 - Baltimore, MD

Omnibus ACL/AM Public hearings
May 3, 2010 - Alexandria, Virginia
May 10, 2010 - Newport News, VA
May 12, 2010 - East Setauket, NY
May 18, 2010 - Pomona, NJ

MAFMC Meetings
July 14, 2009 - Philadelphia, PA
August 6, 2009 - Alexandria, VA
December 9, 2009 - Wilmington, DE
February 11, 2010 - Cambridge, MD
April 14, 2010 - Duck, NC
June 10, 2010 - New York, NY
August 17, 2010 – Philadelphia, PA

In addition, the public will have further opportunity to comment on this Omnibus Amendment once NMFS publishes a request for comments notice in the Federal Register (FR).

8.7 Section 515 (Data Quality Act)

Utility of Information Product

This action proposes formalizing the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establishing a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, for each of the managed resources. This document includes: A description of the alternatives considered, the Council-preferred action and rationale for selection, and any changes to the implementing regulations of the FMP. As such, this document enables the implementing agency (NMFS) to make a decision on the actions proposed and this Omnibus Amendment serves as a supporting document for the proposed rule.

The action contained within this document was developed to be consistent with the FMP, MSA, and other applicable laws, through a multi-stage process that was open to review by affected members of the public. The public had the opportunity to review and comment on management measures during the same meetings listed above in section 8.6. The public will have further opportunity to comment once NMFS publishes a request for comments on the proposed regulations in the FR.

Integrity of Information Product

The information product meets the standards for integrity under the following types of documents: Other/Discussion (e.g., Confidentiality of Statistics of the MSA; NOAA Administrative Order 216-100, Protection of Confidential Fisheries Statistics; 50 CFR 229.11, Confidentiality of information collected under the Marine Mammal Protection Act).

Objectivity of Information Product

The category of information product that applies here is “Natural Resource Plans.” This section (section 8.0) describes how this document was developed to be consistent with any applicable laws, including MSA with any of the applicable National Standards. The analyses used to develop the alternatives (i.e., policy choices) are based upon the best scientific information available and the most up to date information is used to develop the EA which evaluates the impacts of those alternatives (see sections 5.0 and 7.0 of this document for additional details). The specialists who worked with these core data sets and population assessment models are familiar with the most recent analytical techniques and are familiar with the available data and information relevant to the Atlantic mackerel, butterfish, Atlantic bluefish, spiny dogfish, summer flounder, scup, black sea bass, Atlantic surfclam, ocean quahog, and tilefish fisheries.

The review process for this document involves MAFMC, NEFSC, NERO, and NMFS headquarters. The NEFSC technical review is conducted by senior level scientists with specialties in fisheries ecology, population dynamics and biology, as well as economics and social anthropology. The MAFMC review process involves public meetings at which affected stakeholders have the opportunity to comments on proposed management measures. 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 Omnibus Amendment and clearance of the rule is conducted by staff at NOAA Fisheries Headquarters, the Department of Commerce, and the U.S. Office of Management and Budget.

8.8 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. The preferred alternatives currently associated with this action do not propose to modify any existing collections, or to add any new collections; therefore, no review under the PRA is necessary.

8.9 Impacts of the Plan Relative to Federalism/EO 13132

This document does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under Executive Order (EO) 13132.

8.10 Environmental Justice/EO 12898

This EO provides that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." EO 12898 directs each Federal agency to analyze the environmental effects, including human health, economic, and social effects of Federal actions on minority populations, low-income populations, and Indian tribes, when such analysis is required by NEPA. Agencies are further directed to "identify potential effects and mitigation measures in consultation with affected communities, and improve the accessibility of meetings, crucial documents, and notices." The action contained within this document are not expected to affect participation in the Atlantic mackerel, butterfish, Atlantic bluefish, spiny dogfish, summer flounder, scup, black sea bass, Atlantic surfclam, ocean quahog, and tilefish fisheries. Since the proposed action represents no changes relative to the current levels of participation in these fisheries, no negative economic or social effects in the context of EO 12898 are anticipated as a result. Therefore, the proposed action is not expected to cause disproportionately high and adverse human health, environmental or economic effects on minority populations, low-income populations, or Indian tribes.

8.10 Regulatory Impact Review/Initial Regulatory Flexibility Analysis

A Regulatory Impact Review (RIR) is required by NMFS for all regulatory actions that either implement a new FMP or significantly amend an existing FMP. An RIR is required by NMFS for all regulatory actions that are part of the "public interest." The RIR is a required component of the process of preparing and reviewing FMPs or amendments and provides a comprehensive review of the economic impacts associated with proposed regulatory actions. The RIR addresses many concerns posed by the regulatory philosophy and principles of E.O. 12866. The RIR serves as the basis for assessing whether or not any proposed regulation is a "significant regulatory action" under criteria specified by E.O. 12866. The RIR must provide the following information: (1) A comprehensive review of the level and incidence of economic impacts associated with a proposed regulatory action or actions; (2) a review of the problems and policy objectives prompting the regulatory proposals; and (3) an evaluation of the major alternatives that could be used to meet these objectives. In addition, an RIR must ensure that the regulatory agency systematically and comprehensively consider all available alternatives such that the public welfare can be enhanced in the most efficient and cost effective manner. Under the Regulatory Flexibility Act (RFA) of 1980, as amended by Public Law 104-121, new FMPs or amendments also require an assessment of whether or not proposed regulations would have a significant economic impact on a substantial number of small business entities. The primary purposes of the RFA are to relieve small businesses, small organizations, and small Government agencies from burdensome regulations and record-keeping requirements, to the extent possible.

This section of the Omnibus Amendment provides an assessment and discussion of the potential economic impacts, as required of an RIR and the RFA, of various proposed actions consistent with the purpose of this action.

8.10.1 Basis and Purpose for the Action

The legal basis for this Omnibus Amendment can be found in the MSA (16 U.S.C. §1853(a)(15)), which includes new requirements for ACLs and AMs and other provisions regarding preventing and ending overfishing. This is described further in section 4.0. The action is needed to ensure that MAFMC FMPs (i.e., Atlantic Mackerel, Squid, and Butterfish FMP, Bluefish FMP, Dogfish FMP, Summer Flounder, Scup, and Black Sea Bass FMP, Surfclam and Ocean Quahog FMP, and Tilefish FMP), comply with the requirements of the MSA. The purpose of the action is to: (1) Establish ABC control rules, (2) Establish a Council risk policy, which is one variable needed for the ABC control rules, (3) Establish ACL(s), (4) Establish a system of comprehensive accountability, which addresses all components of the catch, (5) Describe the process by which the performance of the annual catch limit and comprehensive accountability system will be reviewed, and (6) Describe the process to modify the measures above in 1-5 in the future. The purpose, need, and objectives of this Omnibus Amendment are described further in section 4.0.

8.10 Regulatory Flexibility Analysis (RFA/IRFA)

8.10.2 Evaluation of E.O 12866 Significance

8.10.2.1 Description of the Management Objectives

A complete description of the purpose and need and objectives of this proposed rule is found under section 4.2. This action is taken under the authority of the MSA and regulations at 50 CFR part 648.

8.10.2.2 Description of the Fishery

A description of the managed resources fisheries is presented in section 6.0. Detailed descriptions of the economic aspects of the commercial and recreational fisheries for the managed resources, descriptions of important ports and communities, as well as the management regimes are available in the respective FMPs (section 4.3). The 2009 commercial landings and ex-vessel prices are provided in section 6.5.1. An analysis of permit data is found in section 6.5.2.

8.10.2.3 A Statement of the Problem

A statement of the problem for resolution is presented under section 1.0. The purpose and need for this amendment is found in section 4.2.

8.10.2.4 A Description of Each Alternative

A full description of the alternatives analyzed in this section is presented in sections 5.0.

Description of the Affected Entities

A description of the affected entities is provided in section 8.10.3.1 of the IRFA. As noted in earlier sections (see section 7.1 to 7.4), this action will formalize the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establish a comprehensive system of accountability for catch. Thus, the scope of the impacts associated with this Omnibus Amendment is atypical for an FMP amendment. Most FMP amendments focus on changes to fishing regulations in order to effect a direct change in either fishing effort or fishing practices, and these regulatory changes generally result in direct effect on fishing vessel operations (by modifying where, when, and/or how fishing may take place). These types of changes to fishing vessel operations almost always have socio-economic impacts on the participants of the subject fisheries.

However, as the focus of this amendment is on establishing administrative processes consistent with NS1, and there are therefore no direct impacts. Therefore, although this Omnibus Amendment addresses all fisheries operating for the managed resources, the actual economic impacts associated with this amendment are considered to be negligible. More details on these fisheries are available in section 6.5.

8.10.2.5 Determination of Significance under E.O. 12866

E.O. 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be significant. A "significant regulatory action" is one that is likely to: (1) 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, safety, or state, local, or tribal Governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order. A regulatory program is "economically significant" if it is likely to result in the effects described above. The RIR is designed to provide information to determine whether the proposed regulation is likely to be "economically significant."

A complete evaluation of the expected economic effects of the various alternatives, including cumulative impacts, is presented throughout sections 7.1-7.4. The proposed action would establish a process for addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establish a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, for each of the managed resources. These actions would not affect the conservation objectives associated with each of the managed fisheries. Thus, while having no immediate direct economic impact, these actions will provide greater assurance that the current and future flow of commercial and recreational economic benefits from the managed fisheries will be maintained.

The MAFMC has determined that, given the information presented above, there would no substantive change in net benefits derived from the implementation of the proposed Omnibus Amendment. Because none of the factors defining "significant regulatory action" are triggered by this proposed action, the action has been determined to be not significant for purposes of E.O. 12866.

8.10.3 Initial Regulatory flexibility Analysis

The objective of the RFA is to require consideration of the capacity of regulated small entities affected by regulations to bear the direct and indirect costs of regulation. If an action would have a significant impact on a substantial number of small entities, an Initial Regulatory Flexibility Analysis must be prepared to identify the need for action, alternatives, potential costs and benefits of the action, the distribution of these impacts, and a determination of whether the proposed action would have a significant economic impact on a substantial number of small entities. Depending on the nature of the proposed regulations assessment of the economic impacts on small businesses, small organizations, and small Governmental jurisdictions may be required. If an action is determined to affect a substantial number of small entities, the analysis must include:

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

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

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

8.10.3.1 Description and Estimate of Number of Small Entities to Which the Action Applies

The implementation of this action will formalize the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establishing a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, for each of the managed resources. Because this action would modify the process by which catch limits and accountability are applied to the managed resources fisheries, the small entities to which this action applies include all federally permitted fishing vessels for the managed resources operating in the Northeast Region. These vessels include both small regulated entities engaged in either commercial harvesting or a party/charter business activity. The small business size standard for commercial fishing (NAICS 1411) is $4 million in gross sales while the size standard for party/charter businesses (NAICS 487210) is $6.5 million in gross sales. During fishing year 2009, the total number of Federal fishing permits issued either a recreational or a commercial permit for the managed resources in the Northeast Region were 17,794 and 4,714, respectively (section 6.5.2). However, since many vessels are issued multiple permits the number of unique fishing entities totaled 3,911. Of these vessels, 2,854 held only a commercial harvesting permit, 206 held only a party/charter permit, while the remaining 851 operating units held at least one commercial harvest permit and at least one party/charter permit. Nearly all of the 3,911 permitted vessels did report at least some sales of commercially caught species in the Northeast region. This includes most of the 206 vessels that did not hold a commercial permit for any of the species managed under this FMP since they may have held other commercial permits. However, only about one-third of these vessels (1,285) reported landing of at least one pound of the managed species covered by the proposed action. Based on total sales, there were only 6 of the 1,285 participating regulated commercial fishing entities that had sales exceeding $4 million.

A total of 1,057 vessels were issued at least one recreation party/charter permit during 2009. Of these small entities 548 carried for-hire passengers on at least one occasion of which 452 retained at least one pound of any of the species managed under the proposed action. Note that this number includes 84 of the 206 permitted vessels that only held recreational permits and 368 of the 851 permitted vessels that held both commercial and recreational party/charter permits. Based on average passenger fees of $62.38[8] none of the participating party/charter operators exceeded $861,000 so all participating entities were determined to be small entities under the SBA size standards.

8.10.3.2 Economic Impacts on Small Entities

The economic impacts associated with each alternative considered in the development of this Omnibus Amendment are evaluated throughout section 7.0. For the purposes of the RFA certification review, the following addresses the economic impacts associated with each element of the proposed action.

[8] The 2006 party/charter average expenditure estimate ($57.76; Table 12) was adjusted to its 2009 equivalent using the Bureau of Labor's Consumer Price Index.

8.10.3.2.1 Specifying Acceptable Biological Catch

This element of the proposed action focuses on the alternatives to address the specification of ABC which includes an ABC control rule methods framework for the managed resources as well as a Council risk policy, which is one required variable in this ABC framework (see section 5.2). Because the actions proposed in this section are focused on methods and procedures to specify ABC, and are administrative in nature, there are no marginal changes to the economic impacts on small entities associated with this element (see section 7.0). If in the future, the implementation of the administrative processes described in this document indirectly results in any economic impacts, those would be identified and analyzed in the future management action.

8.10.3.2.2 Annual Catch Limits and Accountability Measures

This element of the proposed action establishes an annual catch limits and comprehensive systems of accountability for catch, for each of the managed resources. Because the actions proposed in this section are administrative in nature, there are no marginal changes to the economic impacts on small entities associated with this element (see section 7.0). If in the future, the implementation of the administrative processes described in this document indirectly results in any economic impacts, those would be identified and analyzed in the future management action.

8.11.3.2.3 Future Revision and Modification of Action

This element of the proposed action would address. This action is administrative and there are no direct or indirect economic impacts to small entities (see section 7.0).

8.11.3.3 Criteria Used to Evaluate the Action

8.11.3.3.1 Significant Economic Impacts

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

8.11.3.3.1.1 Disproportionality

All but 6 commercial fishing entities were determined to be small regulated entities based on the SBA size standard. The proposed action would establish a process for the setting of annual catch limits and accountability measures. Since these actions are administrative in nature, no marginal economic impacts associated with these processes are anticipated. Therefore, the proposed action would not create any disproportionate impacts between small and large entities. If in the future, the implementation of the administrative processes described in this Omnibus Amendment indirectly results in any economic impacts, those would be identified and analyzed in the future management action.

Since all party/charter operators were determined to be small the disproportionality standard does not apply.

8.11.3.3.1.2 Profitability

As noted above, none of the elements of this proposed action are associated with economic impacts on small entities. This is the case for both small regulated entities engaged in either commercial fishing or recreational party/charter activities. Since the proposed action would have no economic impact on small entities there would no change in expected profitability.

8.11.3.4 Substantial Number of Small Entities

Indirectly, the methodologies established by this action apply generally across all of the managed resource fisheries under the subject FMPs. However, although a substantial number of entities are involved in these fisheries, none of these entities are expected to incur any economic impacts as a result of this action.

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

Because the actions proposed in this Omnibus Amendment are all are focused on the administrative aspects of scientific and management uncertainty for these fisheries, along with a comprehensive system of accountability, there are no direct economic impacts associated with this Omnibus Amendment. No assumptions are necessary to conduct the analyses in support of this conclusion.

9.0 EFH ASSESSMENT

The managed resources have EFH designated in many of the same bottom habitats that have been designated as EFH for most of the MAFMC, New England Fishery Management Council, South Atlantic Fishery Management Council, and NMFS Highly Migratory Species Division managed species. An overview of habitat information for the managed resources is available in section 6.3 of this document.

9.1 Description of Action

The purpose of the proposed action is to formalize the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and establishing a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, for each of the managed resources. Under the EFH Final Rule, “Councils must act to prevent, mitigate, or minimize any adverse effect from fishing, to the extent practicable, if there is evidence that a fishing activity adversely affects EFH in a manner that is more than minimal and not temporary in nature...” Because of the narrow scope of this document, and the fact that any action taken is consistent with the current regulations implementing the FMP and the MSA, the effects of fishing on EFH have not been re-evaluated since they were analyzed in Amendment 13, and no alternatives to minimize adverse effects on EFH are presented.

9.2 Analysis of Potential Adverse Effects on EFH

Bottom trawls are used in the commercial fisheries for Atlantic mackerel, butterfish, bluefish, spiny dogfish, summer flounder, scup, black sea bass, and tilefish and hydraulic dredges are used in the commercial Atlantic surfclam and ocean quahog fisheries. Recreational fisheries in general are not associated with significant impacts on habitat (including EFH). Bottom otter trawls and hydraulic dredges can adversely impact EFH for federally-managed species within the affected environment. Increase in bottom trawling activity and gear contact time with the ocean bottom has the potential to increase adverse impacts on benthic EFH. However, the actions proposed within this document are administrative in nature and are not expected to directly result in any increases or decreases in fishing effort, and associated bottom trawling activity (see section 7.1-7.3). Indirectly, these measures are not expected to result in increases in catch levels, and by association increased effort, relative to the status quo. Therefore, habitat areas would be subjected to the same disturbance from being fished by mobile, bottom-tending gear used in this and other fisheries, but no additional impact to habitat and EFH are expected to result from the action contained within this document.

10.0 LITERATURE CITED

(Literature cited in the appendices only can be found in the respective appendix).

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11.0 LIST OF PREPARERS OF THE ENVIRONMENTAL ASSESSMENT

This Omnibus Amendment was submitted to NMFS by the MAFMC. This document was prepared by the following members of the MAFMC technical staff: Jessica Coakley (lead) in consultation with James Armstrong, Jason Didden, Clay Heaton, Dr. Tom Hoff, Dr. José L. Montañez, and Rich Seagraves. In addition, input throughout Omnibus Amendment development was provided by the ACL/AM Amendment Fishery Management Action Team (FMAT): Michael Ruccio, Jen Anderson, Dr. Steven Cadrin, Joel MacDonald, Toni Kerns, Dr. Tom Sminkey, Dr. Eric Thunberg, and Stanley Wang.

Copies of the Omnibus Amendment may be obtained from Dr. Christopher M. Moore, Mid-Atlantic Fishery Management Council, 800 North State St., Suite 201, Dover, DE 19901, (telephone 302-674-2331).

12.0 LIST OF AGENCIES AND PERSONS CONSULTED

In preparing this Omnibus Amendment, the Council consulted with the NMFS, New England and South Atlantic Fishery Management Councils, Fish and Wildlife Service, and the states of Maine through North Carolina through their membership on the Mid-Atlantic and New England Fishery Management Councils. In addition, states that are members within the management unit were consulted by NMFS through the Coastal Zone Management Program consistency process.

In order to ensure compliance with NMFS formatting requirements, the advice of NMFS Northeast Region personnel, Michael Ruccio, Michael Pentony, and Jennifer Anderson, was sought.

GLOSSARY

Acceptable biological catch. A level of stock or stock complex's annual catch that accounts for scientific uncertainty in the estimate of the overfishing limit (OFL; see definition below), and other sources of scientific uncertainty.

Accountability measures. Management controls that prevent annual catch limits (ACLs; see definition below) from being exceeded (i.e., proactive measures), or where possible, correct or mitigate overages if they occur (i.e., reactive measures).

Amendment. A formal change to a fishery management plan (FMP). The Council prepares amendments and submits them to the Secretary of Commerce for review and approval. The Council may also change FMPs through an FMP framework adjustment (see below).

Annual catch limit. The level of annual catch of a stock or stock complex that serves as a basis for invoking accountability measures.

Annual catch target. The level of annual catch of a stock that is the management target of the fishery. Considered to be a type of accountability measure (AM).

B. Biomass, measured in terms of total weight, spawning capacity, or other appropriate units of production.

BMSY. Long-term average exploitable biomass that would be achieved if fishing at a constant rate equal to FMSY. For most stocks, BMSY is about ½ of the carrying capacity. Overfishing definition control rules usually call for action when biomass is below ¼ or ½ BMSY, depending on the species.

Bycatch. Fish that are harvested in a fishery, but which are not sold or kept for personal use. This includes economic discards and regulatory discards. The fish that are being targeted may be bycatch if they are not retained.

Commission. Atlantic States Marine Fisheries Commission (ASMFC).

Committee. The Monitoring Committee, made up of staff representatives of the Mid-Atlantic, New England, and South Atlantic Fishery Management Councils, the Commission, the Northeast Regional Office of NMFS, the Northeast Fisheries Center, and the Southeast Fisheries Center. The MAFMC Executive Director or his designee chairs the Committee.

Conservation equivalency. The approach under which states are required to develop, and submit to the Commission for approval, state-specific or region-specific management measures (i.e., possession limits, size limits, and seasons) designed to achieve state specific or region-specific harvest limits.

Control rule. A pre-determined method for determining actions.

Council. The Mid-Atlantic Fishery Management Council.

Exclusive Economic Zone. For the purposes of the Magnuson-Stevens Fishery Conservation and Management Act, the area from the seaward boundary of each of the coastal states to 200 nautical miles from the baseline.

Fishing for managed resources. Any activity, other than scientific research vessel activity, which involves: (a) the catching, taking, or harvesting of the managed resources; (b) any other activity which can reasonably be expected to result in the catching, taking, or harvesting of the managed resources; or (c) any operations at sea in support of, or in preparation for, any activity described in paragraphs (a) or (b) of this definition.

Fishing effort. The amount of time and fishing power used to harvest fish. Fishing power is a function of gear size, boat size, and horsepower.

Fishing mortality rate. The part of the total mortality rate (which also includes natural mortality) applying to a fish population that is caused by man's harvesting. Fishing mortality is usually expressed as an instantaneous rate (F), and can range from 0 for no fishing to very high values such as 1.5 or 2.0. The corresponding annual fishing mortality rate (A) is easily computed but not frequently used. Values of A that would correspond to the F values of 1.5 and 2.0 would be 78 percent and 86 percent, meaning that there would be only 22 percent and 14 percent of the fish alive (without any natural mortality) at the end of the year that were alive at the beginning of the year. Fishing mortality rates are estimated using a variety of techniques, depending on the available data for a species or stock.

FMSY. A fishing mortality rate that would produce MSY when the stock biomass is sufficient for producing MSY on a continuing basis.

Framework adjustments. Adjustments within a range of measures previously specified in a fishery management plan (FMP). A change usually can be made more quickly and easily by a FMP framework adjustment than through an amendment. For plans developed by the Mid-Atlantic Council, the procedure requires at least two Council meetings including at least one public hearing and an evaluation of environmental impacts not already analyzed as part of the FMP.

Landings. The portion of the catch that is harvested for personal use or sold.

Management uncertainty. Less than perfect application of management measures (i.e., implementation error). Management uncertainty can occur because of a lack of sufficient information about the catch or because of a lack of management precision in many fisheries.

Metric ton. A unit of weight equal to 1,000 kilograms (1 kg = 2.2 lb.). A metric ton is equivalent to 2,205 lb. A thousand metric tons is equivalent to 2.2 million lb.

Mortality rates. The rate at which the numbers in a population decline over time. Mortality rates are critical parameters for determining the effects of harvesting strategies on fish stocks and yields. Together, the natural mortality rate (M) and fishing mortality rate (F) make up the total mortality rate (Z). Natural mortality is the death of fish from all causes other than fishing (e.g. aging, predation, cannibalism, disease, etc.).

MSY. Maximum sustainable yield. The largest long-term average yield (catch) that can be taken from a stock under prevailing ecological and environmental conditions.

Optimum yield. MSY from the fishery, as reduced by any relevant economic, social, or ecological factor; and, in the case of an overfished fishery, that provides for rebuilding to a level consistent with producing the MSY in such fishery.

Overfished. An overfished stock is one "whose size is sufficiently small that a change in management practices is required to achieve an appropriate level and rate of rebuilding." A stock or stock complex is considered overfished when its population size falls below the minimum stock size threshold (MSST). A rebuilding plan is required for stocks that are deemed overfished. A stock is considered "overfished" when exploited beyond an explicit limit beyond which its abundance is considered "too low" to ensure safe reproduction.

Overfishing. According to the National Standard Guidelines, "overfishing occurs whenever a stock or stock complex is subjected to a rate or level of fishing mortality that jeopardizes the capacity of a stock or stock complex to produce maximum sustainable yield (MSY) on a continuing basis." Overfishing is occurring if the maximum fishing mortality threshold (MFMT) is exceeded for 1 year or more. In general, it is the action of exerting fishing pressure (fishing intensity) beyond the agreed optimum level. A reduction of fishing pressure would, in the medium term, lead to an increase in the total catch.

Overfishing limit. The annual amount of catch that corresponds to the fishing mortality rate at maximum sustainable yield applied to stock abundance (in no. or weight).

Party/Charter boat. Any vessel which carries passengers for hire to engage in fishing.

Scientific uncertainty. Less than perfect knowledge about the likely outcome of an event, based on estimates derived from scientific information (models and data).

Sector. A grouping of similar fish harvesting entities participating under a specified ACL. Examples include recreational fishery participants (i.e., recreational sector), commercial fishery participants (i.e., commercial sector) or smaller sub-components of each such as party/charter vessels (i.e., party/charter sector--sub sector of the recreational sector).

Status Determination. A determination of stock status relative to B-threshold (defines overfished) and F-threshold (defines overfishing). A determination of either overfished or overfishing triggers a SFA requirement for rebuilding plan (overfished), ending overfishing (overfishing) or both.

Stock. A grouping of a species usually based on genetic relationship, geographic distribution and movement patterns. A region may have more than one stock of a species (for example, Gulf of Maine cod and Georges Bank cod).

APPENDIX A – Considered But Rejected From Further Analysis by the Council

The following issues, organized by stock, were considered by the Council throughout the document development process, including scoping and public hearings, but rejected the measures from further analysis in the document for these reasons.

Atlantic Mackerel

The Council considered accounting for Canadian catch via another mechanism (i.e., creating a domestic OFL or by using a Canadian ACL) rather than setting the ACL equal the domestic ABC. These alternative approaches were considered but rejected from further analysis. The artificial splitting of the OFL into a stock and domestic portion was undesirable as it raised a number of policy issues. Utilization of a Canadian ACLs would require accountability that is beyond the scope of the MSA or current international agreements for those components of the Canadian fishery.

The Council considered a mechanism which would allow for inseason adjustments to management measures (i.e., fish size, season, and possession limits). This approach was considered but rejected from further analysis as no current management measures are presently utilized for the recreational fishery providing no basis for evaluating the effectiveness of measures for constraining landings. In addition, the development of triggers for recreational fishery closure based on recreational data availability (by wave) was also consider but rejected. The recreational fishery has landed 4 - 11 percent of the annual 33.01 million lb (15.00 million kg) allocation over the last 9 years. The recreational data available does not allow for the development of indicators of imminent fishery overages given no overages have occurred in the recreational fishery; therefore, the data do not support development of fixed/prescriptive triggers to close the fishery.

Butterfish

The Council considered additional reactive and proactive corrective measures; however, these could not be developed for butterfish at this time given the multiple sources of mortality for this fishery, many of which are non-directed.

Atlantic Bluefish

The Council considered using a three year average for observed recreational catch to compare to the ACL. This approach was considered but rejected from further analysis owing to complication associated with the transfer process for this fishery.

The Council considered having a recreational harvest limit overage deduction to be applied if ACL is exceeded and the recreational fishery landings is responsible for the overage when a transfer has occurred from the recreational to commercial fishery. This approach was considered but rejected from further analysis based on a policy decision not to penalize only the recreational fishery for that overage. The Council also considered but rejected the concept of having accountability for that overage occurs at the ACL (overall fishery-level adjustment), in the absence of a required reduction to the transfer amount the next year.

The Council considered a mechanism which would allow for automatic inseason adjustments to management measures (i.e., fish size, season, and possession limits) based on landings triggers. This approach was considered but rejected from further analysis as the lack of adjustment of management measures limits the ability to evaluate the effectiveness of measures at constraining landings (i.e., no history of landings response to regulations). In addition, triggers for recreational fishery closure based on recreational data availability (by wave) was also considered but rejected. Recreational landings have exceeded the RHL in 1 of the most recent 9 years from 2000-2008; the overage was 6 percent. The recreational data available does not allow for the development of indicators of recreational landings overages given only one overage has occurred recently in the recreational fishery; therefore, the data do not support development of fixed/prescriptive triggers to close the fishery. In addition, the effectiveness of these types of inseason measures may be limited unless concurrent state measures are implemented for these fisheries.

<u>Spiny Dogfish</u>

The Council considered accounting for Canadian catch via another mechanism (i.e., creating a domestic OFL or by using a Canadian ACL) rather than setting the ACL equal the domestic ABC. These alternative approaches were considered but rejected from further analysis. The artificial splitting of the OFL into a stock and domestic portion was undesirable as it raised a number of policy issues. Utilization of a Canadian ACLs would require accountability that is beyond the scope of the MSA or current international agreements for those components of the Canadian fishery.

The Council considered the development of proactive inseason adjustments and associated trip limit triggers, but rejected these approached from further analysis. An inseason adjustment to the Federal spiny dogfish commercial trip limit would affect the rate at which spiny dogfish landings from the EEZ accumulate and thus slow landings relative to the annual or periodic (seasonal) quota. Importantly, however, a substantial portion (~ 90 percent + according to dealer weighout data from 2000-2008) of reported commercial spiny dogfish landings do not come from the EEZ. Because of this, the prevailing source of landings is likely to remain unaffected by a potential Federal in-season adjustment. For vessels that currently possess a Federal spiny dogfish permit, the option of responding to reduced trip limits or even closure of the EEZ by relinquishing their Federal permit and fishing in state waters is available. Additionally, under Addendum II (October 2008), the Interstate Fishery Management Plan (ISFMP) allocates the commercial quota regionally rather than seasonally; thus as the Federal periodic (seasonal) quota is being approached, the regional quotas may be less than half landed. Lastly, Amendment 3 to the Federal Spiny Dogfish FMP is contemplating a transition to regional allocation of the commercial quota that would complement the ISFMP allocation scheme. The appropriateness of inseason adjustments to trip limits as a pro-active AM should be further evaluated through the development of that amendment.

Summer Flounder

The Council considered the use of a separate ACT for the party/charter component of the recreational fishery but rejected this approach further analysis on the basis that accountability measures could not be addressed without an allocation for that fishery component.

The Council considered a mechanism which would allow for inseason adjustments to recreational management measures (i.e., fish size, season, and possession limits) but rejected this approach from further analysis. The timing of the availability of the recreational data is insufficient to adequately inform when these measures should be deployed with sufficient time to be highly effective.

The Council also considered prescriptive triggers for inseason recreational fishery closure. Specifically, they considered if 50 percent of the recreational harvest limit has been utilized from MRFSS wave 1 through the end of MRFSS wave 3 (i.e., landings January through June, typically available in mid-August), then the summer flounder recreational fishery in the EEZ would be closed on September 1 for the remainder of the fishing season or year. This is based on MRFSS data from 2000-2008, which suggests in the six years in which overages occurred, in four of those six year about 50 percent or more of the recreational harvest limit had been utilized by wave 3. The effectiveness of recreational inseason measures may be limited unless complementary actions are taken within state waters. For summer flounder, self-reported area information from MRFSS which anglers specify where the majority of their fishing occurred, indicates an average of 10.1 percent of the landings from 1999-2008 occurred in the EEZ. Each state has a different set of requirements for application of inseason measures. Some states can take action through declaration; others must take action through emergency rulemaking. The criteria under which action can be taken varies and in many cases requires the stock be threatened, in jeopardy, or imminent public health threat or danger to a fishing resource or habitat involving finfish can be cited. Ultimately, the Council considered but rejected this approach from further analysis on the basis these measures are unlikely to be highly effective; however general inseason closure authority (without prescriptive triggers) was retained as an action alternative within the document.

Scup

The Council considered the use of a separate ACT for the party/charter component of the recreational fishery but rejected this approach further analysis on the basis that accountability measures could not be addressed without an allocation for that fishery component.

The Council considered a mechanism which would allow for inseason adjustments to recreational management measures (i.e., fish size, season, and possession limits) but rejected this approach from further analysis. The timing of the availability of the recreational data is insufficient to adequately inform when these measures should be deployed with sufficient time to be highly effective.

The Council also considered prescriptive triggers for inseason recreational fishery closure. Specifically, they considered if 15 percent of the recreational harvest limit has been utilized from MRFSS wave 1 through the end of MRFSS wave 3 (i.e., landings January through June, typically available in mid-August), then the scup recreational fishery in the EEZ would be closed on September 1 for the remainder of the fishing season or year. This is based on MRFSS data from 2000-2008, which suggests in the seven years in which overages occurred, in all of those years 15 percent or more of the recreational harvest limit had been utilized by wave 3. The effectiveness of recreational inseason measures may be limited unless complementary actions are taken within state waters. For scup, self-reported area information from MRFSS which anglers specify where the majority of their fishing occurred, indicates an average of 6.1 percent of the landings from 1999-2008 occurred in the EEZ. Each state has a different set of requirements for application of inseason measures. Some states can take action through declaration; others must take action through emergency rulemaking. The criteria under which action can be taken varies and in many cases requires the stock be threatened, in jeopardy, or an imminent public health threat or danger to a fishing resource or habitat involving finfish can be cited. Ultimately, the Council considered but rejected this approach from further analysis on the basis these measures are unlikely to be highly effective; however general inseason closure authority (without prescriptive triggers) was retained as an action alternative within the document.

Black Sea Bass

The Council considered the use of a separate ACT for the party/charter component of the recreational fishery but rejected this approach further analysis on the basis that accountability measures could not be addressed without an allocation for that fishery component.

The Council considered a mechanism which would allow for inseason adjustments to recreational management measures (i.e., fish size, season, and possession limits) but rejected this approach from further analysis. The timing of the availability of the recreational data is insufficient to adequately inform when these measures should be deployed with sufficient time to be highly effective.

The Council also considered prescriptive triggers for inseason recreational fishery closure. Specifically, they considered if 40 percent of the recreational harvest limit has been utilized from MRFSS wave 1 through the end of MRFSS wave 3 (i.e., landings January through June, typically available in mid-August), then the black sea bass recreational fishery in the EEZ would be closed on September 1 for the remainder of the fishing season or year. This is based MRFSS data from 2000-2008, which suggests in the three years in which overages occurred, about 40 percent of the recreational harvest limit had been utilized by wave 3. The effectiveness of recreational inseason measures may be limited unless complementary actions are taken within state waters. For black sea bass, self-reported area information from MRFSS which anglers specify where the majority of their fishing occurred, indicates an average of 73.0 percent of the landings from 1999-

2008 occurred in the EEZ. Each state has a different set of requirements for application of inseason measures. Some states can take action through declaration; others must take action through emergency rulemaking. The criteria under which action can be taken varies and in many cases requires the stock be threatened, in jeopardy, or an imminent public health threat or danger to a fishing resource or habitat involving finfish can be cited. Ultimately, the Council considered but rejected this approach from further analysis on the basis these measures are unlikely to be highly effective; however general inseason closure authority (without prescriptive triggers) was retained as an action alternative within the document.

Tilefish

The Council considered eliminating the tilefish trip limit based on a trip limit analyses presented at the June 2010 Council Meeting in NYC, New York. The Council rejected this approach from further analysis on the basis that future impacts of the newly applied ITQ fishery on market prices are unknown. If tilefish market prices change, the behavior of the incidental fishery could also change. Similarly, changes in other fisheries being directly targeting when tilefish are caught could impact the landings in the incidental fishery, as those fisheries appear to be driving effort.

The Council also considered reactive accountability for the tilefish incidental fishery which would reduce the incidental allocation the subsequent year by the landings overage amount, as a single year adjustment, if the ACL is exceeded, and that overage is due to landings in excess of the incidental fishery allocation of 5percent. This approach was considered but rejected from further analysis based on information provided in the trip limit analyses which suggest that the tilefish incidental fishery is truly incidental and reducing the 5 percent allocation would not reduce fishing activity in the incidental fishery.

APPENDIX B – Tables of Terminology Which Already Exist and Potential New Terminology Under Proposed Action

Table Atlantic Mackerel. Atlantic Mackerel Terms

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of fish.	OFL = catch level calculated by MFMT
Allowable Biological Catch (ABC)	Acceptable Biological Catch (ABC)	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC is established by SSC
	Annual Catch Limit (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs. IOY is a modification of ABC, based on social, economic, and ecological factors. It must be less than or equal to ABC. IOY is composed of RQ, DAH, DAP, and may include JVP and TALFF if specified.	ACL = Domestic ABC
	Sector	Distinct user group to which separate management strategies and separate catch quotas apply. For Atlantic Mackerel, there are recreational and commercial sectors.	Recreational Sector, Commercial Sector
Initial Optimum Yield (IOY)	Sector Annual Catch Target (ACT)	An amount of annual catch of a stock that is the management target of the fishery and accounts for management uncertainty in controlling the actual catch at or below ACL. IOY is a modification of ABC, based on social, economic, and ecological factors. It must be less than or equal to ABC. The sector ACT could account for all these factors.	Recreational ACT, Commercial ACT
Domestic Annual Harvest (DAH)	Unchanged	Annual amount of total domestic commercial landings permitted after removing estimated discards.	DAH = ACT – discards – RSA

Domestic Annual Processing (DAP)	Not specified	DAP is the IOY minus the recreational sector ACT. It is part of the overall ACL structure.	DAP = IOY – recreational sector ACT
Research Quota (RQ)	Research set-Aside (RSA)	Amount of annual landings up to 3 percent that may be set aside to fund research activities.	ACT – X% (up to 3%) = DAH and Recreational fishery allocation
	Recreational Harvest Level (RHL)	Annual management target for the recreational sector landings after removing research set-aside.	Recreational Sector ACT – discards = RHL
Optimum Yield (OY)	Optimum Yield (OY)	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY. For Atlantic Mackerel, OY is the quantity of catch that is less than or equal to the ABC in U.S. waters	OY
½ B_{MSY}	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = ½ B_{MSY}
F_{MSY}	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = F_{MSY}

Table Butterfish. Butterfish Terms

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of fish.	OFL = catch level calculated by MFMT
Allowable Biological Catch (ABC)	Acceptable Biological Catch (ABC)	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC is established by SSC
	Annual Catch Limit (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs. IOY is a modification of ABC, based on social, economic, and ecological factors. It must be less than or equal to ABC. IOY is composed of RQ, DAH, DAP, and may include JVP and TALFF if specified.	ACL = ABC
Initial Optimum Yield (IOY)	Annual Catch Target (ACT)	An amount of annual catch of a stock that is the management target of the fishery and accounts for management uncertainty in controlling the actual catch at or below ACL. IOY could be reduced from ABC, based on social, economic, and ecological factors. The ACT could account for all these factors.	IOY = ACT
Domestic Annual Harvest (DAH)	Unchanged	DAH is the IOY after removal of estimated discards.	DAH = IOY - discards
Domestic Annual Processing (DAP)	Unchanged	DAP is the *Loligo* and other fishery catch cap.	DAP = *Loligo* Fishery Cap + Commercial Fishery Cap
Research Quota (RQ)	Research set-Aside (RSA)	Amount of Annual Catch Limit (ACL) up to 3 percent that may be set aside to fund research activities	ACL – X% (up to 3%) = ACT
Optimum Yield (OY)	Optimum Yield (OY)	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY.	OY
½ B_{MSY}	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = ½ B_{MSY}
F_{MSY}	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = F_{MSY}

Table Bluefish. Atlantic Bluefish Terms

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of fish.	OFL = catch level calculated by MFMT
Acceptable Biological Catch (ABC)	Unchanged	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC is established by SSC
Total Allowable Catch (TAC)	Annual Catch Limit (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs. ACL may not exceed ABC. For Atlantic Bluefish ACL is set equal to ABC.	ACL = ABC
	Sector	Distinct user group to which separate management strategies and separate catch quotas apply. For bluefish, there are recreational and commercial sectors.	Recreational Sector, Commercial Sector
	Sector Annual Catch Target (ACT)	An amount of annual catch of a stock that is the management target of the fishery, inclusive of discards, and accounts for management uncertainty in controlling the actual catch at or below ACL.	Recreational ACT, Commercial ACT
Total Allowable Landings (TAL)	Sector Total Allowable Landings (TAL)	Annual amount of total landings permitted by sector after removing estimated discards.	Sector TAL = sector ACT – sector discards
Research Set-Aside (RSA)	Unchanged	Amount of landings TAL up to 3 percent that may be set aside to fund research activities	TAL – X% (up to 3%) = RHL and Commercial Quota
Recreational Harvest Limit (RHL)	Unchanged	Annual management target for the recreational sector after removing research set-aside.	RHL = Recreational Sector TAL-RSA
Commercial Quota	Unchanged	Annual management target for the commercial sector after removing research set-aside and receiving transfer from the recreational harvest limit.	Commercial Quota = Commercial Sector TAL-RSA

Optimum Yield (OY)	Unchanged	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY.	OY
½ B_{MSY} or B_{MSY} Proxy	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = ½ B_{MSY} Proxy
$F_{THRESHOLD}$ (Also F_{MAX}, F_{MSY})	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = $F_{THRESHOLD}$ = F_{MSY} = F_{MAX}

Table Spiny Dogfish. Spiny Dogfish Terms.

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of fish.	OFL = catch level calculated by MFMT
Acceptable Biological Catch (ABC)	Unchanged	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC is established by SSC
Total Allowable Catch (TAC)	Annual Catch Limit (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs. For spiny dogfish ACL is set equal to ABC.	ACL = Domestic ABC
	Annual Catch Target (ACT)	An amount of annual catch of the stock that is the management target of the fishery, inclusive of discards, and accounts for management uncertainty in controlling the actual catch at or below ACL.	ACT
Total Allowable Landings (TAL)	Unchanged	Annual amount of total landings permitted after removing estimated discards from the total catch level.	ACT – discards = TAL
Optimum Yield (OY)	Optimum Yield (OY)	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY.	OY
$B_{THRESHOLD}$	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = $B_{THRESHOLD}$
$F_{THRESHOLD}$	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = $F_{THRESHOLD}$

Table Summer Flounder. Summer Flounder Terms.

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of fish.	OFL = catch level calculated by MFMT
Acceptable Biological Catch (ABC)	Unchanged	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC is established by SSC
	Sector	Distinct user group to which separate management strategies and separate catch quotas apply. For summer flounder, there are recreational and commercial sectors.	Recreational Sector, Commercial Sector
Total Allowable Catch (TAC)	Sum of Sector Annual Catch Limits (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs. The sum of the sector ACLs may not exceed ABC. For summer flounder Σ sector ACLs is set equal to ABC.	Σ sector ACLs = ABC
	Sector Annual Catch Target (ACT)	An amount of annual catch of a stock by sector that is the management target of the fishery, inclusive of discards, and accounts for management uncertainty in controlling the actual catch at or below ACL.	Recreational ACT, Commercial ACT
Total Allowable Landings (TAL)	Sector Total Allowable Landings (TAL)	Annual amount of total landings permitted by sector after removing estimated discards.	Sector TALs = sector ACT – sector discards
Research Set-Aside (RSA)	Unchanged	Amount of Total Allowable Landings (TAL) up to 3 percent that may be set aside to fund research activities	TAL – X% (up to 3%) = RHL and Commercial Quota
Recreational Harvest Limit (RHL)	Unchanged	Annual management target for the recreational sector after removing research set-aside.	RHL = Recreational Sector TAL-RSA
Commercial Quota	Unchanged	Annual management target for the commercial sector after removing research set-aside.	Commercial Quota = Commercial Sector TAL - RSA

Optimum Yield (OY)	Optimum Yield (OY)	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY.	OY
½ B_{MSY} Proxy	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = ½ B_{MSY} Proxy
$F_{35\%} = F_{MSY}$ Proxy	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = $F_{35\%} = F_{MSY}$ Proxy

Table Scup. Scup Terms.

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of fish.	OFL = catch level calculated by MFMT
Acceptable Biological Catch (ABC)	Unchanged	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC is established by SSC
	Sector	Distinct user group to which separate management strategies and separate catch quotas apply. For scup, there are recreational and commercial sectors.	Recreational Sector, Commercial Sector
Total Allowable Catch (TAC)	Sum of Sector Annual Catch Limits (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs. The sum of the sector ACLs may not exceed ABC. For scup Σ sector ACLs is set equal to ABC.	Σ sector ACLs = TAC = ABC
	Sector Annual Catch Target (ACT)	An amount of annual catch of a stock by sector that is the management target of the fishery, inclusive of discards, and accounts for management uncertainty in controlling the actual catch at or below ACL.	Recreational ACT, Commercial ACT
Total Allowable Landings (TAL)	Sector Total Allowable Landings (TAL)	Annual amount of total landings permitted by sector after removing estimated discards.	Sector TAL = sector ACT – sector discards
Research Set-Aside (RSA)	Unchanged	Amount of Total Allowable Landings (TAL) up to 3 percent that may be set aside to fund research activities	TAL – X% (up to 3%) = RHL and Commercial Quota
Recreational Harvest Limit (RHL)	Unchanged	Annual management target for the recreational sector after removing research set-aside.	RHL = Recreational Sector TAL-RSA
Commercial Quota	Unchanged	Annual management target for the commercial sector after removing research set-aside.	Commercial Quota = Commercial Sector TAL - RSA

Optimum Yield (OY)	Optimum Yield (OY)	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY.	OY
½ B_{MSY} Proxy	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = ½ B_{MSY} Proxy
$F_{40\%} = F_{MSY}$ Proxy	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = $F_{40\%} = F_{MSY}$ Proxy

Table Black Sea Bass. Black Sea Bass Terms.

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of fish.	OFL = catch level calculated by MFMT
Acceptable Biological Catch (ABC)	Unchanged	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC is established by SSC
	Sector	Distinct user group to which separate management strategies and separate catch quotas apply. For black sea bass, there are recreational and commercial sectors.	Recreational Sector, Commercial Sector
Total Allowable Catch (TAC)	Sum of Sector Annual Catch Limit (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs. The sum of the sector ACLs may not exceed ABC. For black sea bass Σ sector ACLs is set equal to ABC.	TAC = Σ sector ACLs = ABC
	Sector Annual Catch Target (ACT)	An amount of annual catch of a stock by sector that is the management target of the fishery, inclusive of discards, and accounts for management uncertainty in controlling the actual catch at or below ACL.	Recreational ACT, Commercial ACT
Total Allowable Landings (TAL)	Sector Total Allowable Landings (TAL)	Annual amount of total landings permitted by sector after removing estimated discards. For black sea bass Σ sector TALs is equal to TAL.	Sector TAL = sector ACT – sector discards
Research Set-Aside (RSA)	Unchanged	Amount of Total Allowable Landings (TAL) up to 3 percent that may be set aside to fund research activities	TAL – X% (up to 3%) = RHL and Commercial Quota
Recreational Harvest Limit (RHL)	Unchanged	Annual management target for the recreational sector after removing research set-aside.	RHL = Recreational Sector TAL-RSA
Commercial Quota	Unchanged	Annual management target for the commercial sector after removing research set-aside.	Commercial Quota = Commercial Sector TAL-RSA

Optimum Yield (OY)	Optimum Yield (OY)	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY.	OY
½ B_{MSY} Proxy	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = ½ B_{MSY} Proxy
$F_{40\%} = F_{MSY}$ Proxy	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = $F_{40\%} = F_{MSY}$ Proxy

Table Atlantic Surfclam. Atlantic Surfclam Terms.

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of clams.	OFL = catch level calculated by MFMT
Acceptable Biological Catch (ABC)	Unchanged	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC established by SSC = TAC = ACL = TAL
Total Allowable Catch (TAC)	Annual Catch Limit (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs. ACL may not exceed ABC. For Atlantic Surfclam ACL is set equal to ABC.	ACL = ABC
Total Allowable Landings (TAL)	Unchanged	Annual amount of total landings permitted.	TAL < ACL
Optimum Yield (OY)	Optimum Yield (OY)	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY.	OY
½ B_{MSY} Proxy	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = ½ B_{MSY} Proxy
F_{MSY} Proxy	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = F_{MSY} Proxy

Table Ocean Quahog. Ocean Quahog Terms.

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of clams.	OFL = catch level calculated by MFMT
Acceptable Biological Catch (ABC)	Unchanged	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC is established by SSC = TAC = ACL
Total Allowable Catch (TAC)	Annual Catch Limit (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs. ACL may not exceed ABC. For Atlantic Surfclam ACL is set equal to ABC.	ACL = ABC
	Annual Catch Target (ACT)	An amount of annual catch of a stock that is the management target of the fishery, exclusive of discards and broken clams, for controlling the actual catch at or below ACL. There are two subdivisions of ACTs in the ocean quahog plan: Maine fishery and non-Maine fishery.	Σ Maine Fishery ACT and Non-Maine Fishery ACT < ACL
F_{MSY} Proxy = Optimum Yield (OY)	Optimum Yield (OY)	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY.	OY
½ B_{MSY} Proxy	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = ½ B_{MSY} Proxy
F_{MSY} Proxy	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = F_{MSY} Proxy

Table Tilefish. Tilefish Terms.

Previous Term	New Term	Definition	Use in Omnibus
Overfishing Limit (OFL)	Unchanged	The OFL is an estimate of the catch level above which overfishing is occurring. The amount of catch that corresponds to the estimate of MFMT applied to a stock and is expressed in terms of numbers or weight of fish.	OFL = catch level calculated by MFMT
Acceptable Biological Catch (ABC)	Unchanged	The level of a stock's annual catch that accounts for the scientific uncertainty in the estimate of OFL. May not exceed OFL.	ABC is established by SSC
	Annual Catch Limit (ACL)	The level of annual catch of a stock that serves as the basis for invoking AMs.	ACL = ABC
	Annual Catch Target (ACT)	An amount of annual catch of a stock that is the management target of the fishery, inclusive of discards, and accounts for management uncertainty in controlling the actual catch at or below ACL.	ACT
Total Allowable Landings (TAL)	Unchanged	Annual amount of total landings permitted after removing estimated discards.	TAL = ACT – discards
Research Total Allowable Catch (TAC)	Research Set-Aside (RSA)	Amount of Total Allowable Landings (TAL) up to 3 percent that may be set aside to fund research activities	TAL – X% (up to 3%) = IFQs + Incidental Category
Total IFQ Amount	Unchanged	95 percent of the annual TAL (After deducting RSA).	IFQ Allocations
Incidental Category	Unchanged	5 percent of the annual TAL (After deducting RSA).	Incidental Category
Optimum Yield (OY)	Optimum Yield (OY)	The long-term average amount of desired yield from a stock or fishery. OY cannot exceed MSY.	OY
½ B_{MSY}	Minimum Stock Size Threshold (MSST)	Level of stock biomass below which the stock is considered to be overfished.	MSST = ½ B_{MSY}
F_{MSY}	Maximum Fishing Mortality Threshold (MFMT)	The level of fishing mortality (F), on an annual basis, above which overfishing is occurring.	MFMT = F_{MSY}

APPENDIX C – Description of Species Listed as Endangered and Threatened which inhabit the management units in the FMPs

Brief descriptions of species which have documented interactions with the managed resources fisheries are provided in section 6.3 of this EA.

<u>Detailed Descriptions of Endangered and Threatened Species within the Management Unit, as well as Species with Documented Interactions</u>

North Atlantic Right Whale

Right whales have occurred historically in all the world's oceans from temperate to subarctic latitudes. NMFS recognizes three major subdivisions of right whales: North Pacific, North Atlantic, and Southern Hemisphere. NMFS further recognizes two extant subunits in the North Atlantic: eastern and western. A third subunit may have existed in the central Atlantic (migrating from east of Greenland to the Azores or Bermuda), but this stock appears to be extinct (Waring et al. 2002).

The north Atlantic right whale has the highest risk of extinction among all of the large whales in the world's oceans. The scarcity of right whales is the result of an 800-year history of whaling that continued into the 1960s (Klumov 1962). Historical records indicate that right whales were subject to commercial whaling in the North Atlantic as early as 1059. Between the 11th and 17th centuries, an estimated 25,000-40,000 right whales may have been harvested. The size of the western north Atlantic right whale population at the termination of whaling is unknown, but the stock was recognized as seriously depleted as early as 1750. However, right whales continued to be taken in shore-based operations or opportunistically by whalers in search of other species as late as the 1920's. By the time the species was internationally protected in 1935, there may have been fewer than 100 western north Atlantic right whales in the western Atlantic (Hain 1975; Reeves et al. 1992; Waring et al. 2002).

Right whales appear to prefer shallow coastal waters, but their distribution is also strongly correlated to the distribution of their prey (zooplankton). In both the northern and southern hemispheres, right whales are observed in the lower latitudes and more coastal waters during winter where calving takes place, and then tend to migrate to higher latitudes during the summer. The distribution of right whales in summer and fall in both hemispheres appears linked to the distribution of their principal zooplankton prey (Winn et al. 1986). They generally occur in Northwest Atlantic waters west of the Gulf Stream and are most commonly associated with cooler waters (21º C). They are not found in the Caribbean and have been recorded only rarely in the Gulf of Mexico.

Right whales feed on zooplankton through the water column, and in shallow waters may feed near the bottom. In the Gulf of Maine they have been observed feeding on zooplankton, primarily copepods, by skimming at or below the water's surface with open mouths (NMFS 1991b; Kenney et al. 1986; Murison and Gaskin 1989; and Mayo and Marx 1990). Research suggests that right whales must locate and exploit extremely dense patches of zooplankton to feed efficiently (Waring et al. 2002). New England waters include important foraging habitat for right whales and at least some portion of the North Atlantic right whale population is present in these waters throughout most months of the year. They are most abundant in Cape Cod Bay between February and April (Hamilton and Mayo 1990; Schevill et al. 1986; Watkins and Schevill 1982) and in the Great South Channel in May and June (Payne et al. 1990) where they have been observed feeding predominantly on copepods, largely of the genera Calanus and Pseudocalanus (Waring et al. 2002). Right whales also frequent Stellwagen Bank and Jeffrey's Ledge, as well as Canadian waters including the Bay of Fundy and Browns and Baccaro Banks, in the spring and summer months. Mid-Atlantic waters are used as a migratory pathway from the spring and summer feeding/nursery areas to the winter calving grounds off the coast of Georgia and Florida.

NMFS designated right whale critical habitat on June 3, 1994 (59 FR 28793) to help protect important right whale foraging and calving areas within the U.S. These include the waters of Cape Cod Bay and the Great South Channel off the coast of Massachusetts, and waters off the coasts of southern Georgia and northern Florida. In 1993, Canada's Department of Fisheries declared two conservation areas for right whales; one in the Grand Manan Basin in the lower Bay of Fundy, and a second in Roseway Basin between Browns and Baccaro Banks (Canadian Recovery Plan for the North Atlantic Right Whale 2000).

The northern right whale was listed as endangered throughout its range on June 2, 1970 under the ESA. The current population is considered to be at a low level and the species remains designated as endangered (Waring et al. 2008). A Recovery plan has been published and currently is in effect (NMFS 1991). This is a strategic stock because the average annual fishery-related mortality and serious injury from all fisheries exceeds the PBR.

The western North Atlantic population of right whales was estimated to be 295 individuals in 1998 (Waring et al. 2008). An updated analysis using the same method gave an updated estimate of 299 animals in 1998. A review of the photo-id recapture database on June 15, 2006, indicated that 313 individually recognized whales were known to be alive in 2002 (Waring et al. 2008). PBR for this stock is zero.

Right whales may be adversely affected by habitat degradation, habitat exclusion, acoustic trauma, harassment, or reduction in prey resources due to trophic effects resulting from a variety of activities including the operation of commercial fisheries. However, the major known sources of anthropogenic mortality and injury of right whales clearly are ship strikes and entanglement in commercial fishing gear. Waring et al. (2008) provide a detailed description of the annual human related mortalities of right whales.

Humpback Whale

The humpback whale was listed as endangered throughout its range on June 2, 1970. Humpback whales calve and mate in the West Indies and migrate to feeding areas in the northwestern Atlantic during the summer months. Six separate feeding areas are utilized in northern waters after their return (Waring et al. 2002). Only one of these feeding areas, the GOM, lies within U.S. waters and is within the action area of this FMP. Most of the humpbacks that forage in the GOM visit Stellwagen Bank and the waters of Massachusetts and Cape Cod Bays. Sightings are most frequent from mid-March through November between 41º N and 43º N, from the Great South Channel north along the outside of Cape Cod to Stellwagen Bank and Jeffreys Ledge (CeTAP 1982), and peak in May and August. Small numbers of individuals may be present in this area year-round. They feed on a number of species of small schooling fishes, particularly sand lance and Atlantic herring, by targeting fish schools and filtering large amounts of water for their associated prey. Humpback whales have also been observed feeding on krill (Wynne and Schwartz 1999).

Various papers (Barlow & Clapham 1997; Clapham et al. 1999) summarized information gathered from a catalogue of photographs of 643 individuals from the western North Atlantic population of humpback whales. These photographs identified reproductively mature western North Atlantic humpbacks wintering in tropical breeding grounds in the Antilles, primarily on Silver and Navidad Banks, north of the Dominican Republic. The primary winter range also includes the Virgin Islands and Puerto Rico (Waring et al. 2002). In general, it is believed that calving and copulation take place on the winter range. Calves are born from December through March and are about 4 meters at birth. Sexually mature females give birth approximately every 2 to 3 years. Sexual maturity is reached between 4 and 6 years of age for females and between 7 and 15 years for males. Size at maturity is about 12 meters.

Humpback whales use the mid-Atlantic as a migratory pathway, but it may also be an important feeding area for juveniles. Since 1989, observations of juvenile humpbacks in the mid-Atlantic have been increasing during the winter months, peaking January through March (Swingle et al. 1993). Biologists speculate that non-reproductive animals may be establishing a winter feeding range in the mid-Atlantic since they are not participating in reproductive behavior in the Caribbean. Swingle et al. (1993) identified a shift in distribution of juvenile humpback whales in the nearshore waters of Virginia, primarily in winter months. Those whales using this mid-Atlantic area that have been identified were found to be residents of the GOM and Atlantic Canada (Gulf of St. Lawrence and Newfoundland) feeding groups, suggesting a mixing of different feeding stocks in the mid-Atlantic region. A shift in distribution may be related to winter prey availability. Studies conducted by the Virginia Marine Science Museum indicate that these whales are feeding on, among other things, bay anchovies and menhaden. In concert with the increase in mid-Atlantic whale sightings, strandings of humpback whales have increased between New Jersey and Florida since 1985. Strandings were most frequent during September through April in North Carolina and Virginia waters, and were comprised primarily of juvenile humpback whales of no more than 11 meters in length (Wiley et al.

1995). Six of 18 humpbacks for which the cause of mortality was determined were killed by vessel strikes. An additional humpback had scars and bone fractures indicative of a previous vessel strike that may have contributed to the whale's mortality. Sixty percent of those mortalities that were closely investigated showed signs of entanglement or vessel collision.

New information has recently become available on the status and trends of the humpback whale population in the North Atlantic. Although current and maximum net productivity rates are unknown at this time, the Gulf of Maine stock has been steadily increasing (Waring et al. 2008). The minimum population estimate is the lower limit of the two-tailed 60% confidence interval of the lognormally distributed best abundance estimate. This is equivalent to the 20th percentile of the log-normal distribution as specified by Wade and Angliss (1997). The best estimate of abundance for Gulf of Maine humpback whales is 847 (CV=0.55). The minimum population estimate for this stock is 549 animals (Waring et al. 2008).

PBR is the product of minimum population size (549 animals), one-half the maximum productivity rate, and a "recovery" factor (MMPA Sec. 3. 16 U.S.C. 1362; Wade and Angliss 1997). The maximum productivity rate is the default value of 0.04. The "recovery" factor, which accounts for endangered, depleted, threatened stocks, or stocks of unknown status relative to optimum sustainable population (OSP) is assumed to be 0.10 because this stock is listed as an endangered species under the ESA. PBR for the Gulf of Maine humpback whale stock is 1.1 whales (Waring et al. 2008).

The major known sources of anthropogenic mortality and injury of humpback whales include entanglement in commercial fishing gear and ship strikes. Waring et al. (2008) provide a detailed description of the annual human related mortalities of humpback whales. Humpback whales may also be adversely affected by habitat degradation, habitat exclusion, acoustic trauma, harassment, or reduction in prey resources due to trophic effects resulting from a variety of activities including the operation of commercial fisheries.

Fin Whale

Fin whales inhabit a wide range of latitudes between 20-75°N and 20-75°S (Perry et al. 1999). Fin whales spend the summer feeding in the relatively high latitudes of both hemispheres, particularly along the cold eastern boundary currents in the North Atlantic and North Pacific Oceans and in Antarctic waters (IWC 1992). Most migrate seasonally from relatively high-latitude Arctic and Antarctic feeding areas in the summer to relatively low-latitude breeding and calving areas in the winter (Perry et al. 1999).

As in the case of right and humpback whales, fin whale populations were heavily affected by commercial whaling. However, commercial exploitation of fin whales occurred much later than for right and humpback whales. Although some fin whales were taken as early as the 17th century by the Japanese using a fairly primitive open-water netting technique (Perry et al. 1999) and were hunted occasionally by sailing vessel whalers in the 19th century (Mitchell and Reeves 1983), wide-scale commercial exploitation of fin whales did not occur until the 20th century when the use of steam power and harpoon- gun technology made exploitation of this faster, more offshore species feasible. In the southern hemisphere, over 700,000 fin whales were landed in the 20th century. More than 48,000 fin whales were taken in the North Atlantic between 1860 and 1970 (Perry et al. 1999). Fisheries existed off of Newfoundland, Nova Scotia, Norway, Iceland, the Faroe Islands, Svalbard (Spitsbergen), the islands of the British coasts, Spain and Portugal. Fin whales were rarely taken in U.S. waters, except when they ventured near the shores of Provincetown, MA, during the late 1800's (Perry et al. 1999).

In the North Atlantic today, fin whales are widespread and occur from the Gulf of Mexico and Mediterranean Sea northward to the edges of the arctic pack ice (Waring et al. 2008). A number of researchers have suggested the existence of fin whale subpopulations in the North Atlantic. Mizroch et al. (1984) suggested that local depletions resulting from commercial overharvesting supported the existence of North Atlantic fin whale subpopulations. Others have used genetics information to provide support for the belief that there are several subpopulations of fin whales in the North Atlantic and Mediterranean (Bérubé et al. 1998). In 1976, the IWC's Scientific Committee proposed seven stocks for North Atlantic fin whales. These are: (1) North Norway; (2) West Norway-Faroe Islands; (3) British Isles-Spain and Portugal; (4) East Greenland-Iceland; (5) West Greenland; (6) Newfoundland-Labrador; and (7) Nova Scotia (Perry et al. 1999). However, it is uncertain whether these stock boundaries define biologically isolated units (Waring et al. 2002). The NMFS has designated one stock of fin whale for U.S. waters of the North Atlantic where the species is commonly found from Cape Hatteras northward.

The overall distribution of fin whales may be based on prey availability. This species preys opportunistically on both invertebrates and fish. The predominant prey of fin whales varies greatly in different geographical areas depending on what is locally available. In the western North Atlantic fin whales feed on a variety of small schooling fish (i.e., herring, capelin, sand lance) as well as squid and planktonic crustaceans. As with humpback whales, fin whales feed by filtering large volumes of water for their prey through their baleen plates. Photo identification studies in western North Atlantic feeding areas, particularly in Massachusetts Bay, have shown a high rate of annual return by fin whales, both within years and between years (Seipt et al. 1990).

The major known sources of anthropogenic mortality and injury of fin whales include ship strikes and entanglement in commercial fishing gear. However, many of the reports of mortality cannot be attributed to a particular source. Fin whales may also be adversely affected by habitat degradation, habitat exclusion, acoustic trauma, harassment, or reduction in prey resources due to trophic effects resulting from a variety of activities including the operation of commercial fisheries.

The fin whale was listed as endangered throughout its range on June 2, 1970 under the ESA. Hain et al. (1992) estimated that about 5,000 fin whales inhabit the northeastern United States continental shelf waters. Waring et al. (2008) present a more recent abundance estimate of 2,269 (CV=0.37) and minimum population estimate of 1,678 for fin whales in the western North Atlantic. PBR for the western North Atlantic fin whale is 3.4 animals. For the period 2001-2005, Waring et al. (2008) report that the average annual rate of human-caused mortality and serious injury to fin whales was 2.4 animals per year.

Blue Whale

Like the fin whale, blue whales occur worldwide and are believed to follow a similar migration pattern from northern summering grounds to more southern wintering areas (Perry et al. 1999). Three subspecies have been identified: *Balaenoptera musculus musculus, B.m. intermedia*, and *B.m. brevicauda* (Waring et al. 2002). Only *B. musculus* occurs in the northern hemisphere. Blue whales range in the North Atlantic extends from the subtropics to Baffin Bay and the Greenland Sea. The IWC currently recognizes these whales as one stock (Perry et al. 1999).

Blue whales are only occasional visitors to east coast U.S. waters. They are more commonly found in Canadian waters, particularly the Gulf of St. Lawrence where they are present for most of the year, and other areas of the North Atlantic. It is assumed that blue whale distribution is governed largely by food requirements. In the Gulf of St. Lawrence, blue whales appear to predominantly feed on *Thysanoessa raschii* and *Meganytiphanes norvegica*. In the eastern North Atlantic, *T. inermis* and *M. norvegica* appear to be the predominant prey.

There is limited information on the factors affecting natural mortality of blue whales in the North Atlantic. Ice entrapment is known to kill and seriously injure some blue whales, particularly along the southwest coast of Newfoundland, during late winter and early spring. Habitat degradation has been suggested as possibly affecting blue whales such as in the St. Lawrence River and the Gulf of St. Lawrence where habitat has been degraded by acoustic and chemical pollution. However, there is no data to confirm that blue whales have been affected by such habitat changes (Perry et al. 1999).

Entanglement in fishing gear, and ship strikes are believed to be the major sources of anthropogenic mortality and injury of blue whales. However, confirmed deaths or serious injuries from either are few. In 1987, concurrent with an unusual influx of blue whales into the Gulf of Maine, one report was received from a whale watch boat that spotted a blue whale in the southern Gulf of Maine entangled in gear described as probable lobster pot gear. A second animal found in the Gulf of St. Lawrence apparently died from the effects of an entanglement. In March 1998, a juvenile male blue whale was carried into Rhode Island waters on the bow of a tanker. The cause of death was determined to be due to a ship strike, although not necessarily caused by the tanker on which it was observed, and the strike may have occurred outside the U.S. EEZ (Waring et al. 2002). No recent entanglements of blue whales have been reported from the U.S. Atlantic. Other impacts noted above for other baleen whales may occur.

Sei Whale

Sei whales are a widespread species in the world's temperate, subpolar and subtropical and even tropical marine waters. However, they appear to be more restricted to temperate waters than other balaenopterids (Perry et al. 1999). The IWC recognized three stocks in the North Atlantic based on past whaling operations as opposed to biological information: (1) Nova Scotia; (2) Iceland Denmark Strait; (3) Northeast Atlantic (Donovan 1991 in Perry et al. 1999). Mitchell and Chapman (1977) suggested that the sei whale population in the western North Atlantic consists of two stocks, a Nova Scotian Shelf stock and a Labrador Sea stock. The Nova Scotian Shelf stock includes the continental shelf waters of the northeastern United States, and extends northeastward to south of Newfoundland. The IWC boundaries for this stock are from the U.S. east coast to Cape Breton, Nova Scotia and east to longitude 42° (Waring et al. 2002). This is the only sei whale stock within the FMP management area.

Sei whales winter in warm temperate or subtropical waters and summer in more northern latitudes. The species occurs in deep water throughout their range, typically over the continental slope or in basins situated between banks. In the northwest Atlantic, the whales travel along the eastern Canadian coast in autumn, June and July on their way to and from the Gulf of Maine and Georges Bank where they occur in winter and spring. Within the action area, the sei whale is most common on Georges Bank and into the Gulf of Maine/Bay of Fundy region during spring and summer, primarily in deeper waters. Individuals may range as far south as North Carolina. It is important to note that sei whales are known for inhabiting an area for weeks at a time then disappearing for year or even decades; this has been observed all over the world, including in the southwestern GOM in 1986. The basis for this phenomenon is not clear.

There are insufficient data to determine trends of the sei whale population. Waring et al. (2008) present a minimum population estimate of 128 fin whales in the western North Atlantic. PBR for the Nova Scotia stock of sei whales is 0.3 animals. Few instances of injury or mortality of sei whales due to entanglement or vessel strikes have been recorded in U.S. waters. Entanglement is not known to impact this species in the U.S. Atlantic, possibly because sei whales typically inhabit waters further offshore than most commercial fishing operations, or perhaps entanglements do occur but are less likely to be observed. Waring et al. (2008) reported that there were no fishery-related mortalities or serious injuries to fin whales observed by NMFS for the period 2001-2005. A small number of ship strikes of this species have been recorded. The most recent documented incident occurred in 1994 when a carcass was brought in on the bow of a container ship in Charlestown, Massachusetts. Other impacts noted above for other baleen whales may also occur. Due to the deep-water distribution of this species, interactions that do occur are less likely to be observed or reported than those involving right, humpback, and fin whales that often frequent areas within the continental shelf.

Sperm Whale

Sperm whales inhabit all ocean basins, from equatorial waters to polar regions (Perry et al. 1999). In the western North Atlantic they range from Greenland to the Gulf of Mexico and the Caribbean. The sperm whales that occur in the western North Atlantic are believed to represent only a portion of the total stock (Blaylock et al. 1995). Sperm whales generally occur in waters greater than 180 meters in depth. While they may be encountered almost anywhere on the high seas, their distribution shows a preference for continental margins, sea mounts, and areas of upwelling, where food is abundant (Leatherwood and Reeves 1983). Sperm whales in both hemispheres migrate to higher latitudes in the summer for feeding and return to lower latitude waters in the winter where mating and calving occur. Mature males typically range to much higher latitudes than mature females and immature animals but return to the lower latitudes in the winter to breed (Perry et al. 1999).

Waring et al. (2008) suggest sperm whale distribution is closely correlated with the Gulf Stream edge. Like swordfish, which feed on similar prey, sperm whales migrate to higher latitudes during summer months, when they are concentrated east and northeast of Cape Hatteras. In the U.S. EEZ, sperm whales occur on the continental shelf edge, over the continental slope, and into the mid-ocean regions, and are distributed in a distinct seasonal cycle; concentrated east-northeast of Cape Hatteras in winter and shifting northward in spring when whales are found throughout the mid-Atlantic Bight. Distribution extends further northward to areas north of Georges Bank and the Northeast Channel region in summer and then south of New England in fall, back to the mid-Atlantic Bight (Waring et al. 2008).

Total numbers of sperm whales off the USA or Canadian Atlantic coast are unknown, although eight estimates from selected regions of the habitat do exist for select time periods. The best estimate of abundance for the North Atlantic stock of sperm whales is 4,804 (CV=0.38). The minimum population estimate for the western North Atlantic sperm whale is 3,539 (Waring et al. 2008).

Few instances of injury or mortality of sperm whales due to human impacts have been recorded in U.S. waters. Because of their generally more offshore distribution and their benthic feeding habits, sperm whales are less subject to entanglement than right or humpback whales. Sperm whales are also struck by ships. In May 1994 a ship struck sperm whale was observed south of Nova Scotia (Waring et al. 2002). A sperm whale was also seriously injured as a result of a ship strike in May 2000 in the western Atlantic. Due to the offshore distribution of this species, interactions that do occur are less likely to be reported than those involving right, humpback, and fin whales that more often occur in nearshore areas. Other impacts noted above for baleen whales may also occur. Due to their offshore distribution, sperm whales tend to strand less often than, for example, right whales and humpbacks.

Long-finned (Globicephala melas) and short-finned (Globicephala macrorhynchus) pilot whales

There are two species of pilot whales in the Western Atlantic - the Atlantic (or long-finned) pilot whale, Globicephala melas, and the short-finned pilot whale, G. macrorhynchus. These species are difficult to identify to the species level at sea; therefore, the descriptive material below refers to Globicephala sp., and is identified as such. The species boundary is considered to be in the New Jersey to Cape Hatteras area. Sightings north of this are likely G. melas.

Pilot whales (Globicephala sp.) are distributed principally along the continental shelf edge in the winter and early spring off the northeast USA coast, (CETAP 1982; Payne and Heinemann 1993). In late spring, pilot whales move onto Georges Bank and into the Gulf of Maine and more northern waters, and remain in these areas through late autumn (CETAP 1982; Payne and Heinemann 1993). In general, pilot whales occupy areas of high relief or submerged banks. They are also associated with the Gulf Stream north wall and thermal fronts along the continental shelf edge (Waring et al. 1992; Waring et al. 2002).

The long-finned pilot whale is distributed from North Carolina to North Africa (and the Mediterranean) and north to Iceland, Greenland and the Barents Sea (Leatherwood et al. 1976; Abend 1993; Buckland et al. 1993). The stock structure of the North Atlantic population is uncertain (Fullard et al. 2000). Recent morphometrics and genetics (Siemann 1994; Fullard et al. 2000) studies have provided little support for stock structure across the Atlantic (Fullard et al. 2000). However, Fullard et al. (2000) have proposed a stock structure that is correlated to sea surface temperature: 1) a cold-water population west of the Labrador/North Atlantic current and 2) a warm-water population that extends across the Atlantic in the Gulf Stream (Waring et al. 2002).

The short-finned pilot whale is distributed worldwide in tropical to warm temperate water (Leatherwood and Reeves 1983). The northern extent of the range of this species within the USA Atlantic Exclusive Economic Zone (EEZ) is generally thought to be Cape Hatteras, North Carolina (Leatherwood and Reeves 1983). Sightings of these animals in U.S. Atlantic EEZ occur primarily within the Gulf Stream [Southeast Fisheries Science Center (SEFSC) unpublished data], and along the continental shelf and continental slope in the northern Gulf of Mexico. There is no information on stock differentiation for the Atlantic population (Waring et al. 2002).

The total number of pilot whales off the eastern USA and Canadian Atlantic coast is unknown, although the best abundance estimate for Globicephala sp. is 31,139 (CV=0.27) based on 2004 survey data. The minimum population size for Globicephala sp. is 24,866. The maximum productivity rate is 0.04, the default value for cetaceans. The “recovery” factor, which accounts for endangered, depleted, threatened stocks, or stocks of unknown status relative to optimum sustainable population (OSP) is assumed to be 0.5 because the CV of the average mortality estimate is less than 0.3 (Wade and

Angliss 1997) and because this stock is of unknown status. PBR for the western North Atlantic Globicephala sp. is 249 (Waring et al. 2009).

Harbor porpoise

This species is found in U.S. and Canadian Atlantic waters. During summer (July to September), harbor porpoises are concentrated in the northern Gulf of Maine and southern Bay of Fundy region, generally in waters less than 150 m deep (Gaskin 1977; Kraus et al. 1983; Palka 1995a; Palka 1995b), with a few sightings in the upper Bay of Fundy and on the northern edge of Georges Bank (Palka 2000). During fall (October-December) and spring (April-June), harbor porpoises are widely dispersed from New Jersey to Maine, with lower densities farther north and south. They are seen from the coastline to deep waters (>1800 m; Westgate et al. 1998), although the majority of the population is found over the continental shelf. During winter (January to March), intermediate densities of harbor porpoises can be found in waters off New Jersey to North Carolina, and lower densities are found in waters off New York to New Brunswick, Canada. There does not appear to be a temporally coordinated migration or a specific migratory route to and from the Bay of Fundy region. However, during the fall, several satellite tagged harbor porpoises did favor the waters around the 92 m isobath, which is consistent with observations of high rates of incidental catches in this depth range (Read and Westgate 1997). There were two stranding records from Florida during the 1980s (Smithsonian strandings database) and one in 2003 (NE Regional Office/NMFS strandings and entanglement database).

Gaskin (1984; 1992) proposed that there were four separate populations in the western North Atlantic: the Gulf of Maine/Bay of Fundy, Gulf of St. Lawrence, Newfoundland, and Greenland populations. Recent analyses involving mtDNA (Wang et al. 1996; Rosel et al. 1999a; Rosel et al. 1999b), organochlorine contaminants (Westgate et al. 1997; Westgate and Tolley 1999), heavy metals (Johnston 1995), and life history parameters (Read and Hohn 1995) support Gaskin's proposal. Genetic studies using mitochondrial DNA (Rosel et al. 1999a) and contaminant studies using total PCBs (Westgate and Tolley 1999) indicate that the Gulf of Maine/Bay of Fundy females were distinct from females from the other populations in the Northwest Atlantic. Gulf of Maine/Bay of Fundy males were distinct from Newfoundland and Greenland males, but not from Gulf of St. Lawrence males according to studies comparing mtDNA (Palka et al. 1996; Rosel et al. 1999a) and CHLORs, DDTs, PCBs and CHBs (Westgate and Tolley 1999). Nuclear microsatellite markers have also been applied to samples from these four populations, but this analysis failed to detect significant population sub-division in either sex (Rosel et al. 1999a). These patterns may be indicative of female philopatry coupled with dispersal of males. Both mitochondrial DNA and microsatellite analyses indicate that the Gulf of Maine/Bay of Fundy stock is not the sole contributor to the aggregation of porpoises found in the Mid-Atlantic States during winter (Rosel et al. 1999a; Hiltunen 2006). Mixed-stock analyses using twelve microsatellite loci in both Bayesian and likelihood frameworks indicate that the Gulf of Maine/Bay of Fundy is the largest contributor (~60%), followed by Newfoundland (~25%) and then the Gulf of St. Lawrence (~12%), with Greenland making a small contribution (<3%). For Greenland, the lower confidence interval of the likelihood analysis includes zero. For the Bayesian analysis, the lower 2.5% posterior quantiles include zero for both Greenland and the Gulf of St. Lawrence. Intervals that reach zero provide the possibility that these populations contribute no animals to the mid-Atlantic aggregation. The most recent stock assessment followed Gaskin's hypothesis on harbor porpoise stock structure in the western North Atlantic, where the Gulf of Maine and Bay of Fundy harbor porpoises are recognized as a single management stock separate from harbor porpoise populations in the Gulf of St. Lawrence, Newfoundland, and Greenland.

The best estimate of abundance for harbor porpoises is 89,054 (CV=0.47). The minimum population estimate for the Gulf of Maine/Bay of Fundy harbor porpoise is 60,970. Potential Biological Removal (PBR) is the product of minimum population size, one-half the maximum productivity rate, and a “recovery” factor (MMPA Sec. 3. 16 U.S.C. 1362; Wade and Angliss 1997). The minimum population size is 60,970. The maximum productivity rate is 0.046. The “recovery” factor, which accounts for endangered, depleted, threatened stocks, or stocks of unknown status relative to optimum sustainable population (OSP) is assumed to be 0.5 because the CV of the average mortality estimate is less than 0.3 (Wade and Angliss 1997). PBR for the Gulf of Maine/Bay of Fundy harbor porpoise is 703 (Waring et al. 2009).

Atlantic white sided dolphin

Atlantic white-sided dolphins are found in temperate and sub-polar waters of the North Atlantic, primarily in continental shelf waters to the 100m depth contour. The species inhabits waters from central West Greenland to North Carolina (about 35° N) and perhaps as far east as 43° W (Evans 1987). Distribution of sightings, strandings and incidental takes suggest the possible existence of three stocks units: Gulf of Maine, Gulf of St. Lawrence and Labrador Sea stocks (Palka *et al*. 1997). Evidence for a separation between the well documented unit in the southern Gulf of Maine and a Gulf of St. Lawrence population comes from a hiatus of summer sightings along the Atlantic side of Nova Scotia. This has been reported in Gaskin (1992), is evident in Smithsonian stranding records, and was seen during abundance surveys conducted in the summers of 1995 and 1999 that covered waters from Virginia to the entrance of the Gulf of St. Lawrence. White-sided dolphins were seen frequently in Gulf of Maine waters and in waters at the mouth of the Gulf of St. Lawrence, but only a few sightings were recorded between these two regions. The Gulf of Maine stock of white sided dolphins is most common in continental shelf waters from Hudson Canyon (approximately 39°N) north through Georges Bank, and in the Gulf of Maine to the lower Bay of Fundy. Sightings data indicate seasonal shifts in distribution (Northridge *et al.* 1997). During January to May, low numbers of white-sided dolphins are found from Georges Bank to Jeffrey's Ledge (off New Hampshire), and even lower numbers are south of Georges Bank, as documented by a few strandings collected on beaches of Virginia and North Carolina. From June through September, large numbers of white-sided dolphins are found from Georges Bank to lower Bay of Fundy. From October to December, white-sided dolphins occur at intermediate densities from southern Georges Bank to southern Gulf of Maine (Payne and Heinemann 1990). Sightings south of Georges Bank, particularly around

Hudson Canyon, have been seen at all times of the year but at low densities. The Virginia and North Carolina observations appear to represent the southern extent of the species range. Prior to the 1970's, white-sided dolphins in U.S. waters were found primarily offshore on the continental slope, while whitebeaked dolphins (L. albirostris) were found on the continental shelf. During the 1970's, there was an apparent switch in habitat use between these two species. This shift may have been a result of the decrease in herring and increase in sand lance in the continental shelf waters (Katona *et al*. 1993; Kenney *et a*l. 1996).. The minimum population size is 50,883. The maximum productivity rate is 0.04, the default value for cetaceans. The "recovery" factor, which accounts for endangered, depleted, threatened, or stocks of unknown status relative to optimum sustainable population (OSP) is assumed to be 0.5 because the CV of the average annual mortality estimate is less than 0.3. PBR for the western North Atlantic stock of white-sided dolphin is 509 (Waring *et al*. 2009).

Risso's dolphin

Risso's dolphins are distributed worldwide in tropical and temperate seas, and in the Northwest Atlantic occur from Florida to eastern Newfoundland (Leatherwood et al. 1976; Baird and Stacey 1990). Off the northeast U.S. coast, Risso's dolphins are distributed along the continental shelf edge from Cape Hatteras northward to Georges Bank during spring, summer, and autumn (CETAP 1982; Payne et al. 1984). In winter, the range is in the mid-Atlantic Bight and extends outward into oceanic waters (Payne et al. 1984). In general, the population occupies the mid-Atlantic continental shelf edge year round, and is rarely seen in the Gulf of Maine (Payne et al. 1984). During 1990, 1991 and 1993, spring/summer surveys conducted along the continental shelf edge and in deeper oceanic waters sighted Risso's dolphins associated with strong bathymetric features, Gulf Stream warm-core rings, and the Gulf Stream north wall (Waring et al. 1992; 1993; Hamazaki 2002). There is no information on stock structure of Risso's dolphin in the western North Atlantic, or to determine if separate stocks exist in the Gulf of Mexico and Atlantic. In 2006, a rehabilitated adult male Risso's dolphin stranded and released in the Gulf of Mexico off Florida was tracked via satellite to waters off Delaware (Wells et al. 2008). The Gulf of Mexico and Atlantic stocks are currently being treated as two separate stocks (Waring et al. 2009).

The best estimate of abundance for Risso's dolphins is 20,479 (CV=0.59), obtained from the 2004 surveys. The minimum population estimate for the western North Atlantic Risso's dolphin is 12,920. There are insufficient data to determine population trends for this species. Current and maximum net productivity rates are unknown for this stock. For purposes of the most recent assessment, the maximum net productivity rate was assumed to be 0.04 (Waring et al. 2009). This value is based on theoretical modeling showing that cetacean populations may not grow at rates much greater than 4% given the constraints of their reproductive life history (Barlow et al. 1995). Potential Biological Removal (PBR) is the product of minimum population size, one-half the maximum productivity rate, and a "recovery" factor (MMPA Sec. 3. 16 U.S.C. 1362; Wade and Angliss 1997). The minimum population size is 12,920. The maximum productivity rate is 0.04, the default value for cetaceans (Barlow et al. 1995). The "recovery" factor, which accounts for endangered, depleted, threatened stocks, or stocks of unknown status relative to optimum sustainable population (OSP) is assumed to be 0.48 because the CV of the average mortality estimate is between 0.3 and 0.6 (Wade and Angliss 1997). PBR for the western North Atlantic stock of Risso's dolphin is 124 (Waring et al. 2009).

Short-Beaked Common dolphin

The common dolphin may be one of the most widely distributed species of cetaceans, as it is found worldwide in temperate, tropical, and subtropical seas. In the North Atlantic, common dolphins appear to be present along the coast over the continental shelf along the 200-2000 m isobaths or over prominent underwater topography from 50° N to 40°S latitude (Evans 1994). The species is less common south of Cape Hatteras, although schools have been reported as far south as eastern Florida (Gaskin 1992). They are widespread from Cape Hatteras northeast to Georges Bank (35 to 42 North latitude) in outer continental shelf waters from mid-January to May (Hain et al. 1981; CETAP 1982; Payne et al. 1984). Common dolphins move northward onto Georges Bank and the Scotian Shelf from mid-summer to autumn. Selzer and Payne (1988) reported very large aggregations (greater than 3,000 animals) on Georges Bank in autumn. Common dolphins are occasionally found in the Gulf of Maine, where temperature and salinity regimes are lower than on the continental slope of the Georges Bank/mid-Atlantic region (Selzer and Payne 1988). Migration onto the Scotian Shelf and continental shelf off Newfoundland occurs during summer and autumn when water temperatures exceed 11°C (Sergeant et al. 1970; Gowans and Whitehead 1995).

The following information was taken from the most recent Stock Assessment Report for the species (Waring et al. 2009) Total numbers of common dolphins off the USA or Canadian Atlantic coast are unknown, although several estimates from selected regions of the habitat do exist for selected time periods. However, the most recent SAR considers the best abundance estimate for common dolphins to be 120,743 animals (CV=0.23). This is the sum of the estimates from two 2004 U.S. Atlantic surveys, where the estimate for the northern U.S. Atlantic is 90,547 (CV=0.24) and 30,196 (CV=0.54) for the southern U.S. Atlantic. This joint estimate is considered best because together these two surveys have the most complete coverage of the species' habitat. The minimum population size is 99,975. The maximum productivity rate is 0.04, the default value for cetaceans. The "recovery" factor, which accounts for endangered, depleted, threatened stocks, or stocks of unknown status relative to optimum sustainable population (OSP) is assumed to be 0.5 because the CV of the average mortality estimate is less than 0.3 (Wade and Angliss 1997). PBR for the western North Atlantic common dolphin is 1000.

Harbor seal

The harbor seal is found in all nearshore waters of the Atlantic Ocean and adjoining seas north of 30ºN (Katona et al. 1993). In the western North Atlantic, they are distributed from the eastern Canadian Arctic and Greenland south to southern New England and New York, and occasionally to the Carolinas (Mansfield 1967; Boulva and McLaren 1979; Katona et al. 1993; Gilbert and Guldager 1998; Baird 2001). Stanley et al. (1996)

examined worldwide patterns in harbor seal mitochondrial DNA, which indicate that western and eastern North Atlantic harbor seal populations are highly differentiated. Further, they suggested that harbor seal females are only regionally philopatric, thus population or management units are on the scale of a few hundred kilometers. Although the stock structure of the western North Atlantic population is unknown, it is thought that harbor seals found along the eastern U.S. and Canadian coasts represent one population (Temte et al. 1991). In U.S. waters, breeding and pupping normally occur in waters north of the New Hampshire/Maine border, although breeding occurred as far south as Cape Cod in the early part of the twentieth century (Temte et al. 1991; Katona et al. 1993).

Harbor seals are year-round inhabitants of the coastal waters of eastern Canada and Maine (Katona et al. 1993), and occur seasonally along the southern New England, to New Jersey coasts from September through late May (Schneider and Payne 1983; Barlas 1999; Schroeder 2000; deHart 2002). Scattered sightings and strandings have been recorded as far south as Florida (NMFS unpublished data). A general southward movement from the Bay of Fundy to southern New England waters occurs in autumn and early winter (Rosenfeld et al. 1988; Whitman and Payne 1990; Barlas 1999; Jacobs and Terhune 2000). A northward movement from southern New England to Maine and eastern Canada occurs prior to the pupping season, which takes place from mid-May through June along the Maine Coast (Richardson 1976; Wilson 1978; Whitman and Payne 1990; Kenney 1994; deHart 2002). While earlier research identified no pupping areas in southern New England (Payne and Schneider 1984; Barlas 1999), more recent information suggests that some pupping is occurring at high-use haulout sites off Manomet, Massachusetts (Waring et al. 2009). The overall geographic range throughout coastal New England has not changed significantly during the last century (Payne and Selzer 1989).

The best estimate of abundance for harbor seals is 99,340 (CV=.097). The minimum population estimate is 91,546 based on corrected total counts along the Maine coast in 2001 (Waring et al. 2009). The maximum net productivity rate was assumed to be 0.12 in the most recent stock assessment based on theoretical modeling showing that pinniped populations may not grow at rates much greater than 12% given the constraints of their reproductive life history (Barlow et al. 1995). Potential Biological Removal (PBR) is the product of minimum population size, one-half the maximum productivity rate (½ of 12%), and a "recovery" factor (MMPA Sec. 3. 16 U.S.C. 1362; Wade and Angliss 1997). The minimum population size is 91,546. The recovery factor (FR) for this stock is 0.5, the value for stocks of unknown status. Therefore, PBR for harbor seals in U.S. waters is 2,746 (Waring et al. 2009).

Gray seal

The gray seal is found on both sides of the North Atlantic, with three major populations: eastern Canada, northwestern Europe and the Baltic Sea (Katona et al. 1993). The western North Atlantic stock is equivalent to the eastern Canada population, and ranges from New York to Labrador (Davies 1957; Mansfield 1966; Katona et al. 1993; Lesage and Hammill 2001). This stock is separated by geography, differences in the breeding

season, and mitochondrial DNA variation from the northeastern Atlantic stock (Bonner 1981; Boskovic et al. 1996; Lesage and Hammill 2001). There are two breeding concentrations in eastern Canada; one at Sable Island, and one that breeds on the pack ice in the Gulf of St. Lawrence (Laviguer and Hammill 1993). Tagging studies indicate that there is little intermixing between the two breeding groups (Zwanenberg and Bowen 1990) and, for management purposes, they are treated by the Canadian DFO as separate stocks (Mohn and Bowen 1996). In the mid 1980s, small numbers of animals and pupping were observed on several isolated islands along the Maine coast and in Nantucket-Vineyard Sound, Massachusetts (Katona et al. 1993; Rough 1995). In the late 1990's, a year-round breeding population of approximately 400+ animals was documented on outer Cape Cod and Muskeget Island (Waring et al. 2009)). In December 2001, NMFS initiated aerial surveys to monitor gray seal pup production on Muskeget Island and adjacent sites in Nantucket Sound, and Green and Seal Islands off the coast of Maine (Wood et al. 2007).
The minimum population size for gray seals is unknown (Waring et al. 2009). The maximum productivity rate is 0.12, the default value for pinnipeds. The recovery factor (FR) for this stock is 1.0, the value for stocks of unknown status, but is known to be increasing. PBR for the western North Atlantic gray seals in U.S. waters is unknown (Waring et al. 2009).

Leatherback Sea Turtle

Leatherback turtles (*Dermochelys coriacea*) were listed as endangered under the ESA on June 2, 1970. Leatherback turtles are widely distributed throughout the oceans of the world, and are found in waters of the Atlantic, Pacific, Caribbean, and the Gulf of Mexico (Ernst and Barbour 1972). It is the largest living turtle and ranges farther than any other sea turtle species, exhibiting broad thermal tolerances (NMFS and USFWS, 1995). Evidence from tag returns and strandings in the western Atlantic suggests that adults engage in routine migrations between boreal, temperate and tropical waters (NMFS and USFWS, 1992). Located in the northeastern waters during warmer months, this species is found in coastal waters of the continental shelf and near the Gulf Stream edge, but rarely in the inshore areas. A 1979 aerial survey of the outer Continental Shelf from Cape Hatteras, North Carolina to Cape Sable, Nova Scotia showed leatherbacks to be present throughout the area with the most numerous sightings made from the Gulf of Maine south to Long Island. Shoop and Kenney (1992) also observed concentrations of leatherbacks during the summer off the south shore of Long Island and off New Jersey. This aerial survey estimated the leatherback population for the northeastern U.S. at approximately 300-600 animals (from near Nova Scotia, Canada to Cape Hatteras, North Carolina).

Leatherbacks are predominantly pelagic and feed on jellyfish (i.e., *Stomolophus, Chryaora*, and *Aurelia* (Rebel 1974)), cnidarians (*medusae*, *siphonophores*) and tunicates (*salps, pyrosomas*). Time-Depth-Recorder data recorded by Eckert et al. (1998b) indicate that leatherbacks are night feeders and are deep divers, with recorded dives to depths in excess of 1000 meters. However, leatherbacks may come into shallow waters if there is an abundance of jellyfish nearshore. Leary (1957) reported a large group of up to 100 leatherbacks just offshore of Port Aransas, Texas associated with a dense aggregation of *Stomolophus*. Leatherbacks also occur annually in places such as Cape Cod and Narragansett Bays during certain times of the year, particularly the fall.

Anthropogenic impacts to the leatherback population are similar to those for the loggerhead sea turtle, including fishery interactions as well as intense exploitation of the eggs (Ross 1979). Eckert (1996) and Spotila et al. (1996) recorded that adult mortality has also increased significantly, particularly as a result of driftnet and longline fisheries. Zug and Parham (1996) attribute the sharp decline in leatherback populations to the combination of the loss of long-lived adults due to fishery related mortality and the lack of recruitment (because of intense egg harvesting). Poaching is not known to be a problem for U.S. nesting populations. However, numerous fisheries that occur in both U.S. state and federal waters are known to negatively impact juvenile and adult leatherback sea turtles, including incidental takes in several commercial and recreational fisheries. Fisheries known or suspected to incidentally capture leatherbacks include those deploying bottom trawls, off-bottom trawls, purse seines, bottom longlines, hook and line, gill nets, drift nets, traps, haul seines, pound nets, beach seines, and surface longlines (NMFS and USFWS 1992). Leatherback interactions with the southeast shrimp fishery are also common. Turtle Excluder Devices (TEDs), typically used in the southeast shrimp fishery to minimize sea turtle/fishery interactions are less effective for the large-sized leatherbacks. As such, NMFS has used several alternative measures to protect leatherback sea turtles from lethal interactions with the shrimp fishery including establishment of a Leatherback Conservation Zone (60 FR 25260) and emergency measures such as the implementation of area specific 30-day TED requirements (December 8, 1999 (64 FR 69416)) when warranted. Leatherbacks are also susceptible to entanglement in lobster and crab gear, possibly as a result of attraction to gelatinous organisms and algae that collect on buoys and buoy lines at or near the surface, attraction to the buoys which could appear as prey, or the gear configuration which may be more likely to wrap around flippers.

Nest counts are currently the only reliable indicator of population status available for leatherback turtles. The status of the leatherback population in the Atlantic is difficult to assess since major nesting beaches occur over broad areas within tropical waters outside the United States. The most recent 5-year leatherbacks where the species appears to be stable or increasing (NMFS & USFWS 2007c). However, the East Pacific and Malaysian leatherback populations appear to have collapsed. Given the best available information, NMFS & USFWS (2007) concluded that the leatherback turtle should not be reclassified under the ESA and should remain listed as endangered. In addition, the review also concluded that available information indicates that an analysis and review of the species should be conducted in the future to determine if application of the Distinct Population Segment policy under the ESA to the endangered leatherback turtle is warranted.

Green Sea Turtle

Green sea turtles are more tropical in distribution than loggerheads, and are generally found in waters between the northern and southern 20°C isotherms. In the western

Atlantic region, the summer developmental habitat encompasses estuarine and coastal waters as far north as Long Island Sound, Chesapeake Bay, and the North Carolina sounds, and south throughout the tropics (NMFS 1998). Most of the individuals reported in U.S. waters are immature (NMFS 1998). Green sea turtles found north of Florida during the summer must return to southern waters in autumn or risk the adverse effects of cold temperatures.

There is evidence that green turtle nesting has been on the increase during the past decade. For example, increased nesting has been observed along the Atlantic coast of Florida on beaches where only loggerhead nesting was observed in the past (NMFS 1998). Recent population estimates for the western Atlantic area are not available. Green turtles are threatened by incidental captures in fisheries, pollution and marine habitat degradation, destruction/disturbance of nesting beaches, and other sources of man-induced and natural mortality.

Juvenile green sea turtles occupy pelagic habitats after leaving the nesting beach. At approximately 20 to 25 cm carapace length, juveniles leave pelagic habitats, and enter benthic foraging areas, shifting to a chiefly herbivorous diet (NMFS 1998). Post-pelagic green turtles feed primarily on sea grasses and benthic algae, but also consume jellyfish, salps, and sponges. Known feeding habitats along U.S. coasts of the western Atlantic include shallow lagoons and embayments in Florida, and similar shallow inshore areas elsewhere (NMFS 1998). Sea sampling data from the summer flounder bottom trawl fishery has recorded incidental takes of green turtles

i.e., ≥ 20 years) are available for nine sites, all of which are increasing. Despite the apparent global increase in numbers, NMFS & USFWS (2007a) noted that this positive overall trend should be viewed with caution because trend data are available for just over half of all sites examined. Within the Western Atlantic/Caribbean, there are five threatened breeding populations, all of which appear to be stable or increasing (NMFS & USFWS 2007a). The green turtle nesting population of Florida, which is listed as endangered, also appears to be increasing based on 18 years (1989-2006) of index nesting data collected throughout the state (NMFS & USFWS 2007a). While green turtle nest counts have generally increased, NMFS & USFWS (2007a) concluded that populations of both endangered and threatened green turtles should not be reclassified under the ESA. However, the review also concluded that available information indicates that an analysis and review of the species should be conducted in the future to determine if application of the Distinct Population Segment policy under the ESA to both endangered and threatened green turtle populations is warranted.

Kemp's Ridley Sea Turtle

Kemp's ridley turtles (*Lepidochelys kempii*) were listed as endangered under the ESA on December 2, 1970. The only major nesting site for ridleys is a single stretch of beach near Rancho Nuevo, Tamaulipas, Mexico (Carr 1963). Juvenile Kemp's ridleys inhabit northeastern US coastal waters where they forage and grow in shallow coastal areas during the summer months. Juvenile ridleys migrate southward with autumnal cooling and are found predominantly in shallow coastal embayments along the Gulf Coast during the late fall and winter months. Ridleys found in mid-Atlantic waters are primarily post-pelagic juveniles averaging 40 cm in carapace length, and weighing less than 20 kg. After loggerheads, they are the second most abundant sea turtle in Virginia and Maryland waters, arriving there during May and June and then emigrating to more southerly waters from September to November. In the Chesapeake Bay, ridleys frequently forage in shallow embayments, particularly in areas supporting submerged aquatic vegetation (Lutcavage and Musick 1985).

The model presented by Crouse et al. (1987) illustrates the importance of subadults to the stability of loggerhead populations and may have important implications for Kemp's ridleys. The vast majority of ridleys identified along the Atlantic Coast have been juveniles and subadults. Sources of mortality in this area include incidental takes in fishing gear, pollution and marine habitat degradation, and other man-induced and natural causes. Loss of individuals in the Atlantic, therefore, may impede recovery of the Kemp's ridley sea turtle population. Sea sampling data from the northeast otter trawl fishery and southeast shrimp and summer flounder bottom trawl fisheries has recorded takes of Kemp's ridley turtles.

The Kemp's ridley population, as measured by number of nesting females, declined precipitously from the late 1940's through the mid-1980's. Due to intensive conservation actions, the Kemp's ridley began to slowly rebound during the 1990's and this increasing trend has continued to this day (NMFS & USFWS 2007d). Approximately 4,000 females are currently documented nesting annually, which is less than half of the downlisting criterion of 10,000 nests. As a result, the most recent five year review conducted by NMFS & USFWS 2007d concluded that the species should not be reclassified under the ESA and should remain listed as endangered. In addition, a full revision of the current Recovery Plan for the Kemp’s ridley Sea Turtle (which was signed in 1992) is currently under way by the services.

Loggerhead Sea Turtle

The loggerhead sea turtle occurs throughout the temperate and tropical regions of the Atlantic, Pacific and Indian Oceans (Dodd 1998). The loggerhead turtle was listed as "threatened" under the ESA on July 28, 1978, but is considered endangered by the World Conservation Union (IUCN) and under the Convention on International Trade in Endangered Species of Flora and Fauna (CITES). It is noted that on March 16, 2010, NMFS and the US Fish and Wildlife Service announced 12-month findings on the petitions to list the North Pacific populations and the Northwest Atlantic populations of the loggerhead sea turtle as Distinct Population Segments (DPSs) with endangered status. On March 22, 2011, the timeline for the final determination was extended for six months until September 16, 2011 (76 FR 15932). Loggerhead sea turtles are found in a wide range of habitats throughout the temperate and tropical regions of the Atlantic. These habitats include open ocean, continental shelves, bays, lagoons, and estuaries (NMFS& USFWS 2007b).

Because they are limited by water temperatures, loggerhead sea turtles do not usually appear on the summer foraging grounds in the Gulf of Maine until June, but are found in Virginia as early as April. They remain in these areas until as late as November and December in some cases, but the large majority leaves the Gulf of Maine by mid-September. Loggerheads are primarily benthic feeders, opportunistically foraging on crustaceans and mollusks (NMFS & USFWS 1995).

ESA. However, the review also concluded that available information indicates that an analysis and review of the species should be conducted in the future to determine if application of the Distinct Population Segment policy under the ESA is warranted for the species. Additionally, the Center for Biological Diversity and the Turtle Island Restoration Network filed a petition to reclassify loggerhead turtles in the North Pacific Ocean as a distinct population segment (DPS) with endangered status and designate critical habitat under the ESA (72 *Federal Register* 64585; November 16, 2007). NMFS has found that the petition presented substantial scientific information and in 2008, NMFS and FWS convened a biological review team (BRT), which recently completed a status review on the loggerhead sea turtle. The BRT evaluated genetic data, tagging and telemetry data, demographics information, oceanographic features, and geographic barriers to determine whether population segments exist. The BRT submitted their independent report to NMFS and FWS on August 11, 2009, to review and determine what, if any, action is appropriate under the ESA.

Hawksbill Sea Turtle

The following is a summary of information on the Hawksbill sea turtle made available by NMFS at the following website:
http://www.nmfs.noaa.gov/pr/species/turtles/hawksbill.html

The hawksbill occurs in tropical and subtropical seas of the Atlantic, Pacific and Indian Oceans. The species is widely distributed in the Caribbean Sea and western Atlantic Ocean, with representatives of at least some life history stages regularly occurring in southern Florida and the northern Gulf of Mexico (especially Texas); in the Greater and Lesser Antilles; and along the Central American mainland south to Brazil. Within the United States, hawksbills are most common in Puerto Rico and its associated islands, and in the U.S. Virgin Islands. In the continental U.S., the species is recorded from all the gulf states and from along the eastern seaboard as far north as Massachusetts, with the exception of Connecticut, but sightings north of Florida are rare.

The hawksbill is a small to medium-sized sea turtle. In the U.S. Caribbean, nesting females average about 62-94cm in straight carapace length. Weight is typically to 80 kg in the wider Caribbean, with a record weight of 127 kg. Hatchlings average about 42 mm straight carapace length and range in weight from 13.5-19.5 g. The following characteristics distinguish the hawksbill from other sea turtles: two pairs of prefrontal scales; thick, posteriorly overlapping scutes on the carapace; four pairs of coastal scutes; two claws on each flipper; and a beak-like mouth. The carapace is heart-shaped in very young turtles, and becomes more elongate or subovate with maturity. Its lateral and posterior margins are sharply serrated in all but very old individuals.

Hawksbills utilize different habitats at different stages of their life cycle. Posthatchling hawksbills occupy the pelagic environment, taking shelter in weedlines that accumulate at convergence points. Hawksbills reenter coastal waters when they reach approximately 20-25 cm carapace length. Coral reefs are widely recognized as the resident foraging habitat of juveniles, subadults and adults. This habitat association is undoubtedly related to their diet of sponges, which need solid substrate for attachment. The ledges and caves of the reef provide shelter for resting both during the day and night. Hawksbills are also found around rocky outcrops and high energy shoals, which are also optimum sites for sponge growth. Hawksbills are also known to inhabit mangrove-fringed bays and estuaries, particularly along the eastern shore of continents where coral reefs are absent. In Texas, juvenile hawksbills are associated with stone jetties.

Hawksbills utilize both low- and high-energy nesting beaches in tropical oceans of the world. Both insular and mainland nesting sites are known. Hawksbills will nest on small pocket beaches, and, because of their small body size and great agility, can traverse fringing reefs that limit access by other species. They exhibit a wide tolerance for nesting substrate type. Nests are typically placed under vegetation.

Incidental catch of hawksbill turtles during fishing operations is an unquantified and potentially significant source of mortality. Gill nets, longlines and shrimp trawls all take turtles in Gulf of Mexico waters. The extent to which hawksbills are killed or debilitated after becoming entangled in marine debris are unknown, but it is believed to be a serious and growing problem. Hawksbills have been reported entangled in monofilament gill nets, "fish nets", fishing line and rope. Hawksbill turtles eat a wide variety of debris such as plastic bags, plastic and styrofoam pieces, tar balls, balloons and plastic pellets. Effects of consumption include interference in metabolism or gut function, even at low levels of ingestion, as well as absorption of toxic byproducts.

Shortnose Sturgeon

Shortnose sturgeon occur in large rivers along the western Atlantic coast from the St. Johns River, Florida (possibly extirpated from this system), to the Saint John River in New Brunswick, Canada. The species is anadromous in the southern portion of its range (i.e., south of Chesapeake Bay), while northern populations are amphidromous (NMFS 1998). Population sizes vary across the species' range with the smallest populations occurring in the Cape Fear and Merrimack Rivers and the largest populations in the Saint John and Hudson Rivers (Dadswell 1979; NMFS 1998).

Shortnose sturgeon are benthic and mainly inhabit the deep channel sections of large rivers. They feed on a variety of benthic and epibenthic invertebrates including mollusks, crustaceans (amphipods, chironomids, isopods), and oligochaete worms (Vladykov and

Greeley 1963; Dadswell 1979). Shortnose sturgeon are long-lived (30 years) and mature at relatively old ages. In northern areas, males reach maturity at 5-10 years, while females reach sexual maturity between 7 and 13 years.

In the northern part of their range, shortnose sturgeon exhibit three distinct movement patterns that are associated with spawning, feeding, and overwintering periods. In spring, as water temperatures rise above 8° C, pre-spawning shortnose sturgeon move from overwintering grounds to spawning areas. Spawning occurs from mid/late April to mid/late May. Post-spawned sturgeon migrate downstream to feed throughout the summer.

As water temperatures decline below 8° C again in the fall, shortnose sturgeon move to overwintering concentration areas and exhibit little movement until water temperatures rise again in spring (NMFS 1998). Young-of-the-year shortnose sturgeon are believed to move downstream after hatching (NMFS 1998) but remain within freshwater habitats. Older juveniles tend to move downstream in fall and winter as water temperatures decline and the salt wedge recedes. Juveniles move upstream in spring and feed mostly in freshwater reaches during summer.

Shortnose sturgeon spawn in freshwater sections of rivers, typically below the first impassable barrier on the river (e.g., dam). Spawning occurs over channel habitats containing gravel, rubble, or rock-cobble substrates (NMFS 1998). Environmental conditions associated with spawning activity include decreasing river discharge following the peak spring freshet, water temperatures ranging from 9 -12 C, and bottom water velocities of 0.4 - 0.7 m/sec (NMFS 1998).

Atlantic salmon

The recent ESA-listing for Atlantic salmon covers the wild population of Atlantic salmon found in rivers and streams from the lower Kennebec River north to the U.S.-Canada border. These include the Dennys, East Machias, Machias, Pleasant, Narraguagus, Ducktrap, and Sheepscot Rivers and Cove Brook. Atlantic salmon are an anadromous species with spawning and juvenile rearing occurring in freshwater rivers followed by migration to the marine environment. Juvenile salmon in New England rivers typically migrate to sea in May after a two to three year period of development in freshwater streams, and remain at sea for two winters before returning to their U.S. natal rivers to spawn from mid October through early November. While at sea, salmon generally undergo an extensive northward migration to waters off Canada and Greenland. Data from past commercial harvest indicate that post-smolts overwinter in the southern Labrador Sea and in the Bay of Fundy. The numbers of returning wild Atlantic salmon within the Gulf of Maine Distinct Population Segment (DPS) are perilously small with total run sizes of approximately 150 spawners occurring in 1999 (Baum 2000). Although capture of Atlantic salmon has occurred in commercial fisheries (usually otter trawl or gillnet gear) or by research/survey, no salmon have been reported captured in the Atlantic surfclam and ocean quahog fisheries.

Smalltooth sawfish

NMFS issued a final rule to list the DPS of smalltooth sawfish in the United States as an endangered species on April 1, 2003. Smalltooth sawfish are tropical marine and estuarine fish that have the northwestern terminus of their Atlantic range in the waters of the eastern United States. In the United States, smalltooth sawfish are generally a shallow water fish of inshore bars, mangrove edges, and seagrass beds, but larger animals can be found in deeper coastal waters. In order to assess both the historic and the current distribution and abundance of the smalltooth sawfish, a status review team collected and compiled literature accounts, museum collection specimens, and other records on the species. This information indicated that prior to around 1960, smalltooth sawfish occurred commonly in shallow waters of the Gulf of Mexico and eastern seaboard up to North Carolina, and more rarely as far north as New York. Subsequently their distribution has contracted to peninsular Florida and, within that area, they can only be found with any regularity off the extreme southern portion of the state. The current distribution is centered in the Everglades National Park, including Florida Bay (NMFS 2003).

Smalltooth sawfish have declined dramatically in U.S. waters over the last century, as indicated by publication and museum records, negative scientific survey results, anecdotal fishermen observations, and limited landings per unit effort (NMFS 2003). The fact that documented smalltooth sawfish catch records have declined during the twentieth century despite tremendous increases in fishing effort underscores the population reduction in the species. While NMFS lacks time-series abundance data to quantify the extent of the DPS's decline, the best available information indicates that the abundance of the U.S. DPS of smalltooth sawfish is at an extremely low level relative to historic levels.

The smalltooth sawfish continues to face threats from: (1) loss of wetlands, (2) eutrophication, (3) point and non point sources of pollution, (4) increased sedimentation and turbidity, (5) hydrologic modifications, and (6) incidental catch in fisheries (NMFS 2003). Commercial bycatch has played the primary role in the decline of this species. While Federal, state, and interjurisdictional laws, regulations, and policies lead to overall environmental enhancements indirectly aiding smalltooth sawfish, very few have been applied specifically for the protection of smalltooth sawfish. Based on the species' low intrinsic rate of increase resulting from their slow growth, late maturation, and low fecundity, population recovery potential for the species is limited and the species is at risk of extinction. Current protective measures and conservation efforts underway to protect the smalltooth sawfish are confined to: actions directed at increasing general awareness of this species and the risks it faces; possession prohibitions in the state waters of Florida and Louisiana; and research being pursued by the Mote Marine Laboratory's Center for Shark Research. There are no Federal or state conservation plans for the smalltooth sawfish.

Atlantic Sturgeon

At this time, Atlantic sturgeon have been proposed for listing under the ESA. A status review for Atlantic sturgeon was completed in 2007. NMFS has concluded that the U.S. Atlantic sturgeon spawning populations comprise five Distinct Population Segments (DPSs) (ASSRT, 2007). On October 6, 2010, NMFS proposed listing five populations of Atlantic sturgeon along the U.S. East Coast as either threatened or endangered species. The Gulf of Maine DPS of Atlantic sturgeon is proposed to be listed as threatened, and the New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon are proposed as endangered. A final listing rule is expected by October 6, 2011.

Atlantic sturgeon is an anadromous species that spawns in relatively low salinity, river environments, but spends most of its life in the marine and estuarine environments from Labrador, Canada to the Saint Johns River, Florida (Holland and Yelverton 1973, Dovel and Berggen 1983, Waldman et al. 1996, Kynard and Horgan 2002, Dadswell 2006, ASSRT 2007). Tracking and tagging studies have shown that sub-adult and adult Atlantic sturgeon that originate from different rivers mix within the marine environment, utilizing ocean and estuarine waters for life functions such as foraging and overwintering (Stein et al. 2004a, Dadswell 2006, ASSRT 2007, Laney et al. 2007, Dunton et al. 2010). Fishery-dependent data as well as fishery-independent data demonstrate that Atlantic sturgeon use relatively shallow inshore areas of the continental shelf; primarily waters less than 50 m (Stein et al. 2004b, ASMFC TC 2007, Dunton et al. 2010). The data also suggest regional differences in Atlantic sturgeon depth distribution with sturgeon observed in waters primarily less than 20 m in the Mid-Atlantic Bight and in deeper waters in the Gulf of Maine (Stein et al. 2004b, ASMFC TC 2007, Dunton et al. 2010). Information on population sizes for each Atlantic sturgeon DPS is very limited. Based on the best available information, NMFS has concluded that bycatch, vessel strikes, water quality and water availability, dams, lack of regulatory mechanisms for protecting the fish, and dredging are the most significant threats to Atlantic sturgeon.

Seabirds

Most of the following information about seabirds is taken from the Mid-Atlantic Regional Marine Research Program (1994) and Peterson (1963). Fulmars occur as far south as Virginia in late winter and early spring. Shearwaters, storm petrels (both Leach's and Wilson's), jaegers, skuas, and some terns pass through this region in their annual migrations. Gannets and phalaropes occur in the Mid-Atlantic during winter months. Nine species of gulls breed in eastern North America and occur in shelf waters off the northeastern US. These gulls include: glaucous, Iceland, great black-backed, herring, laughing, ring-billed, Bonaparte's and Sabine's gulls, and black-legged caduceus. Royal and sandwich terns are coastal inhabitants from Chesapeake Bay south to the Gulf of Mexico. The Roseate tern is listed as endangered under the ESA, while the least tern is considered threatened (Safina pers. comm.). In addition, the bald eagle is listed as threatened under the ESA and is a bird of aquatic ecosystems. Piping plover are listed as threatened and their critical habitat includes prairie alkali wetlands and surrounding shoreline; river channels and associated sandbars and islands; and reservoirs and inland lakes and their sparsely vegetated shorelines, peninsulas, and islands. These areas provide primary courtship, nesting, foraging, sheltering, brood-rearing and dispersal habitat for piping plovers.

Like marine mammals, seabirds are vulnerable to entanglement in commercial fishing gear. Human activities such as coastal development, habitat degradation, and the presence of organochlorine contaminants are considered the major threats to some seabird populations.

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APPENDIX D – Comments

Comments Received on this Document During the Public Hearing Process.

The MAFMC held public hearings to provide interested parties and stakeholders the opportunity to comment on the issues relevant to this Omnibus ACL/AM Amendment, and ensure the Council had the opportunity to consider the diverse range of viewpoints on these issues. Four public hearings were held:

Omnibus ACL/AM Public hearings
May 3, 2010 - Alexandria, Virginia
May 10, 2010 - Newport News, VA
May 12, 2010 - East Setauket, NY
May 18, 2010 - Pomona, NJ

The Council was provided with transcripts of the verbal comments provided at the meetings themselves, as well as any written comments that were provided. These comments are provided below.

ACL/AM Omnibus Public Hearing #1
Alexandria, VA
May 3, 2010

Moderator/Hearing Officer: Peter Himchak
Council Members and Staff: Jessica Coakley, Rick Robins
Attendees: Tom Fote, Ken Stump, Frank Kearney, Adam Nowalsky, Kristen Cevoli, Pete Jensen, Jeff Kaelin, David Pierce, Rebecca Hared, Tom O'Connell, Joe O'Hop, Wilson Laney, Buffy Baumann, Arnold Leo, Dorothy Thumm, A.C. Carpenter, Vincent O'Shea

Dr. David Pierce, MA-DMF: We are going to submit some written comments on this Amendment because we see it is a critical amendment. We need to promote good cooperation, communication, collaboration, between ASMFC and the Council. All of us have had a lot of experience under our belt (inaudible) what we have already done with the setting of ABCs, ACLs, ACTs, etc., so hopefully we can all school under each other to try to prevent what could be a rather difficult management situation for us down the road. I've already made a few comments so along with the questions I have asked, so I'm not going to repeat that, but I will only say that clearly what the National Standard 1 guidelines have done is create a situation where are implementing a precautionary approach to fisheries management and obviously that's needed, it's important, however my fear is that if we are not careful collectively that we may actually implement protocol procedures, control rules, that I would call inordinately precautious, to the point where we may just go too far and to the extent that while we're risk adverse for the resource and of course we need to be because the standard (inaudible) of the resource, we become very risk prone for the fishing industry. We don't put enough time into assessing the effects of our management and actions on the recreational and commercial fishing communities. We just don't do it maybe because the data aren't that good, maybe because we always put conservation in at the top, we have to obviously but still we shouldn't put to the top to the extent that we are extremely risk prone for the fishing industry that provides us with valuable fish for the table and of course critically important recreational fishery experiences. So that's my message in a nutshell. Let's be careful that we create, construct some options as to how we should proceed relative to management uncertainty considering that it would be very important for us to put the numbers onto the protocol for us to see what it means as opposed to just adopt the protocol and then work the numbers through and whatever it is, that's the way it is. I still say there is a need for us to reflect on socioeconomic impact and certainly for the Councils. Now I'm on the New England Council so I've got history here and I have participated in the decision making processes relative to New England. Socioeconomic impact at the Council level is considered, in depth analyses are done but when all is said and done all of the impact analyses tends to trumped by other aspects of the management plan so, whereas with ASMFC the trumping doesn't necessarily occur the way it does with the Council. There is more concern about the sensitivity to socioeconomic impact, and why is that, because we are (inaudible), we are in the ports; we are in the fishing communities. We're on the front lines so to speak, having to deal with fishermen day in and day out, whether recreational or commercial. My hope is that by working together, ASMFC and the Mid-

Atlantic Council specifically we can come to some agreement, some balance, as hard as that may be, some balance that will enable us to be responsive to the National Standard guidelines and more importantly to Magnuson-Stevens itself, all the while not putting ourselves into the position where we're faced with tremendous unnecessary socioeconomic impact, and I can tell you right now, that's what we're going to have with groundfish as a consequence of implementation of Amendment 16, I do not want to repeat with scallop, sea bass, and fluke, I do not want to repeat what I suspect is going to happen with groundfish in New England and the Mid-Atlantic as a consequence of the inordinately precautious steps we felt we were obliged to take on groundfish that I fear will be an outcome of this particular Omnibus Amendment. I urge you to be wary of that. Thanks.

Ms. Buffy Baumann, Oceana: Thank you for the opportunity to comment on the Omnibus ACL/AM Amendment. We will be submitting your comments for consideration on behalf of Oceana and we will be submitting written comments as well. This is actually a comment on the document in general, rather than specific to management measures or fisheries covered in the Omnibus. I am sorry to say we are disappointed by a number of elements of the current version of the Amendment and feel that a number of options in the Amendment are ill-advised, irresponsible, and, illegal. The Omnibus actually fails to establish ACLs. Magnuson-Stevens was very clear in its mandate for the Council to establish and implement ACLs and corresponding AMs for all federal fisheries by the 2011 fishing year. In our review of this document indicates that the Amendment doesn't actually establish these mandated limits but instead establishes a process to set these limits without any specific numbers. We feel that this approach is vague and doesn't satisfy the requirements of the MSA. We assert that actual numbers must be specified for the ACLs for each Fishery Management Plan. These numerical limits, rather than a description of the process to set these limits should either be included in the Omnibus Amendment for each FMP or for each individual FMP. We do want to note that going FMP by FMP using that approach will likely mean that the Council will not be able to meet the deadline for having ACLs and AMs in place by 2011. As you all well know, the ACL approach is significantly different than the current system of catch regulations for the fisheries that the Council manages and the ACLs therefore must be clearly defined and reviewed as part of the public process. So our second main concern is that Omnibus fails to adequately explore the issue stocks in the fishery. Basically the Mid-Atlantic Council hasn't gone beyond that default listed target fisheries, target stocks, MSA and subsequent guidance that came from the agency to implement NS 1 requires limits on catch in each fishery (inaudible) catch limit. The guidance definition of catch includes target catch, incidental catch, and bycatch. All of these components of overall catch need to be fully considered in the Omnibus. So the fundamental concepts in this NS 1 guidance is the idea of stocks in the fishery. The guidance directs that these must include target stocks but may also include non-target stocks and ecosystem components species. That leads the determination of which stocks to include in each fishery to cue the Council. It places the responsibility to rationally consider which species and stocks to include in each FMP in compliance with the Administrative Procedure Act with the Council. It also requires that the Council consider feasible and reasonable alternative choices and to analyze the environmental impacts of these choices pursuant to NEPA. So in developing the Omnibus Amendment, the Council actually failed to satisfy these duties based (inaudible) the agencies requirement or guidance requirements of these two Acts, the APA and NEPA. So it is important to note this consideration of that true, overall catch of the fisheries is also required by section 303(A)2 of the Magnuson-Stevens Act. So we have suggested that throughout the development of this Omnibus Amendment the Council complete a full analysis of catch in the fisheries covered by the Omnibus as a foundation of the system of ACLs that recognize interaction between fisheries. Unfortunately this public hearing document describes an approach by which the Council appears to use just the bare minimum of interpretation of stocks in the fishery and restricts the use of ACLs to target stocks alone. Furthermore, the approach for (inaudible) here fail to rationally explore the overall catch in the fishery and to include a discussion and explanation of which stocks in the fishery do and do not require ACLs in the FMP and the reasons for such inclusion or exclusion from the Magnuson-Stevens requirements. So in closing, we are urge you to revisit the concept of catch in this document and fully explore the catch (inaudible) under the Council management as well as the catch of species that are managed by Council fisheries outside of the Council jurisdiction, which is New England, South Atlantic, Atlantic States Marine Fisheries Commission. Such an assessment of total catch we feel is the only way the Council will effectively manage the catch in the fisheries and the mortality of the stocks under its control. So we feel that this Omnibus Amendment that is currently drafted is illegal and must be amended before being implemented (inaudible).

Mr. Adam Nowalsky, Recreational Fishing Alliance (RFA): Again, Recreational Fishing Alliance will also be submitting written comments. Just to reiterate some of the concerns that have been voiced here, as well as the Council meetings leading up to this process regarding this document. With regards to section 1, one of the concerns here is while in general the idea of a tiered approach to the stocks assessments is a good one at the SSC level, the concern here is that where do stocks get a priority to move from one level to another, especially as part of the control rule its going to go ahead and effect the maximum probability of overfishing that's allowed. The concern is that especially at a time when there are cuts in funding for research that is going on it will cause stocks for whatever reason are not receiving research priority to remain (inaudible) at a lower level, so that's a concern that remains at that level and again we will also submit that there is the concern that most stocks have the probability as have been discussed so far the potential of being tier 4 with the exception of summer flounder and spiny dogfish at the Mid-Atlantic level right now. In section 2, again there is the concern with regards to tying it to an assessment level specifically an assessment level that we know while it may be based on the best available science may not and in many cases is not based on the best science of even good science. So if you going ahead and tie the control rule back to these assessment levels there has to be more focus put on the increasing of research that is done on these fisheries to move them level to level. With regards to section 3, where we are going to actually apply accountability measures, ACLs, I will have to echo some of the comments here about becoming overly cautious in the approach here. By my count, you can actually see uncertainty apply, three, four, five times throughout the process. And by the time you get it down to something it just becomes risk prone for the fishermen where National Standard 1 indicates achieving optimum yield on an ongoing basis and just can't see that being achieved under this Amendment. Additionally, with regards to the accountability measures, the marine recreational fishing statistical survey is mandated under section 401(G)3 of Magnuson to have been approved. Specifically 401(G)3(d) states that those improvements shall be completed by January 1, 2009. So what we see in this instance is selective application of components of Magnuson. Going forward with ACLs, accountability measures prior to implementation of other components to improve the way those systems would perform. Specifically, the recreational landings estimation which is only an estimation and now we are going to tie it to something harder and we are going to say well we'll use a soft target to account for that which just results in a lower quota for fishermen. With regards to section 4 with grounds for review we would specifically like to see grounds for underperformance included in here. If you are going to go ahead and provide modifications to the ACL/AMs as there implemented for the benefit of the fishery, they should also be implemented for the benefit of the fishermen as well. If you're not achieving getting close to the ACTs, if your 25% below ACT every year, there should be some discussion about how that would be approached. Again, we'll submit written comments about these but those are some of the concerns that have been voiced at Council meetings previously. The Mid-Atlantic Council to their credit currently has no species experiencing overfishing and only 1 species at a currently overfished status. The process that has been established now specifically at the Ocean City meeting last October seems to be a process with regards to an interaction between the SSC, Monitoring Committee and the Council body itself, that in itself is a process written in the Fishery Management Plan right now, you already have modifications to season, size, and bag limit. These are in effect an accountability measure at the discretion of the Council and for these reasons we have concerns about this going forward and we will submit written comments. Thank you for your time.

Mr. Ken Stump, Marine Fish Conservation Network (MFCN): Thank you. My name is Ken Stump; I am Policy Director for the Marine Fish Conservation Network based in Washington DC. Thank you for the opportunity and for the great presentation. That was a lot of information. We are encouraged by the process that we see being developed here. The hearing document and the proposed alternatives contained some of the features of system of annual catch limits and accountability measures that we recommended in our previous scoping document comments from 2009 and I know its getting late so I am going to try to briefly touch here on a few key issues that we spotted in this document and we will submit more detailed written comments in the coming weeks. First, the public hearing documents assumes that those stocks are already listed in the FMPs are the only stocks the fishery requires ACLs and AMs and we are concerned and we have expressed concern to the Council in the past that there is no evaluation of other non-target stocks that are caught incidentally as bycatch and it may indeed qualify stocks in the fishery. We regard this as a very serious matter effecting species such as river herring that we have written to you about and we think that the absence of evaluation of non-target bycatch species is an omission and needs to be addressed in this document. Unfortunately it appears that no vulnerability analysis has been done for managed species or non-target species that are caught incidentally as well. The vulnerability of the stock is defined in the National Standard 1 guidelines and is a combination of stock productivity and susceptibility to the fishery and the use of a productivity and susceptibility analysis has been recommended and methodology has been developed by the National Marine Fishery Service and is available online which could be used readily to help identify the key aspects of like history and susceptibility that might otherwise be ignored and we believe that this analysis is a necessary part of this process and should be integrated into an ABC control rule. Thirdly, we support your efforts to develop an ABC control rule based on advice from the SSC. I think conceptually we support the proposed 4-tier control rule structure. However, the dimensions of scientific uncertainty that would or wouldn't be considered when setting ABC are not clearly specified and I spoke to that earlier during the question period on the presentation. We think that specific rules for each tier should be more clearly specified in the Amendment and laid out and if the probability based approach is not applicable for determining the uncertainty associated with the given fishing limit we recognize that there will be a need for alternative methodologies to be used but we think that those processes, those steps, those decision rules for those tiers should be laid out more clearly. In addition, finally the ABC control rule appears to lack the use of productivity and susceptibility analysis and we think that also should be incorporated as one of the features of the control rule. Fourthly, we support the Council's efforts to develop a formal risk policy as part of the required ABC control rule. The proposed alternative policies would have a scalable uncertainty buffer that increases in size as uncertainty increases for stock and lower tiers of an ABC control rule and that is something we support. We think that follows the recommendations of National Standard 1 guidelines. However, none of the alternatives provide an adequate margin of safety against the risk of overfishing in our view. We have written a report looking at what is the National Standard 1 guidelines, what are the statutory requirements for preventing overfishing and we have written comments during the scoping phase of this process to you all last year which we indicated we think ABCs and ACLs should be set at a level that has a high probability of not exceeding of the overfishing level and specifically that it should have a 75% or higher probability of not exceeding the overfishing level, which is based on technical guidance from (inaudible) in 1998. So in light of all of that, we support at this time alternatives 2D of the risk policy as a preferred approach. In part because it incorporates the stock assessment levels and because it appears to be more conservative of the stock biomass so that the inflection point in which fishing mortality is reduced starts when the stock size is 150% of Bmsy or proxy b target rather than waiting until after the stock has fallen to the critically low level. We do emphasize that we do think that there is a need for consideration of less probability of overfishing in the risk policy and then we should at the very least be considered as one of the alternatives. We would just note that the public hearing document states that the risk policy may only be included in the Council or may be included in the Council on a SOPPs however, the NS1 guidelines clearly state the risk policy is intended to be part of the required control rule and we think it is very clear the Council must include the risk policy as part of the ABC control rule in the FMP. I spoke to that briefly earlier during the question period. I think that in the ways that this has been developed and described elsewhere the elements of the risk policy that you illustrate graphically are typically described as part of a control rule and I think that part of our confusion has been that this appears to be separated out and treated as separate features. I think they actually, as you noted, work together. For communication purposes I think that is something to address. Two quick points regarding accountability measures. There is a lot of issues in these fisheries with regard to accountability and having adequate monitoring in order to be accountable but we were particularly concerned that the ACT, there is no ACT control rule and if you are going to use an ACT as an accountability measure the NS1 guidelines are quite clear that you have to have an ACT control rule which could be a simple decision rule and you may feel you already have it, but I don't think you clearly articulated what it is so people have some fairly transparent idea of how it's going to work in a given situation. Lastly, a very important issue to our member groups, to fishermen and non-fishermen alike, is concern about addressing optimum yield and having specific consideration of mechanisms for achieving optimum yield which is part of the legal requirement of National Standard 1 in the Magnuson Act and we have said before and we will say again in our written comments that an FMP must contain conservation management measures to achieve OY on a continuing basis and we feel it is very important that some of these target fisheries that you manage to develop specific procedures of setting ACLs to achieve optimum yield for forage fish stocks which would maintain significantly higher biomass for those stocks than conventional single species approaches that are aiming toward Bmsy stock size. That is referenced in the improvised National Standard 1 guidelines and endorsed, mandated by National Fisheries Service. We think this is an important feature of an ecosystem based approach and that (inaudible) needs of predators and the fish stocks and this management Council rely on these forage stocks which would include mackerel and butterfish and herring and so forth. We hope to see further development of more specific mechanisms for achieving optimum yield in this rule. That is in summary all (inaudible) and we will submit written comments. Thank you.

Mr. Peter Himchak (Moderator): Mr. Robins has a question.
Mr. Rick Robins, MAFMC Chair: Ken, I just had a question to clarify. I had trouble hearing but I think you said on the risk policy that you supported a specific option and which one was that? Could you restate that?
Mr. Ken Stump: Yes, we were supporting option 2D.

Mr. Tom Fote: Yeah, I started coming to Council meetings in 1984 and started to volunteer my time to do Council and Commission meetings and basically I have done that for 26 years now. I guess sometimes I am a little harsh but I think it is the frustration of 26 years of sitting at meetings and seeing very little progress. We are sitting here arguing over management tools. We have spent a lot of money on management tools. The problem is I am looking at plans that will (inaudible) stock assessments that I have about as much information as we do now in 1992 when I look at scup, when I look at sea bass, and when I look at a bunch of other species that (inaudible) managed. I don't see those stocks ever coming out of tier 4. So we are always being super precautious, super restrictive on commercial / recreational sector because we are not doing what we are supposed to do. My other frustration comes when I look at the budget (inaudible) with no (inaudible) for the budget for the National Marine Fisheries Service and I look at diverting more money for the management tool and taking it away from stock assessment tools. Part of the frustration with sitting here for years is because we don't understand what is going on in the ocean; we don't understand what is (inaudible) summer flounder, scup, black sea bass. We are in no better shape than we were 26 years ago. That's a shame. We have better models, we can look at that but the real biological data that, the real on the (inaudible) but we are losing that. If you look at the budget of every state there is less work being done on real fish biology. So we are making more and more use of models without having the data. A long time ago I learned garbage in, garbage out, and that's basically where we are. I can sit here and go through this whole document, that's what I use to do 15, 20, 26 years ago, and go page by page and say this is what's wrong but when you start off with the premise where you're not spending the money to get the stock assessment, the only thing you're doing is putting (inaudible) on the image to start with. What we are talking about here, and I looked at it, are the Regional Director shutting down (inaudible) based on MRFSS. Let me see, I got figures that the US Fish and Wildlife Service basically puts out how many recreational rules we have. Those figures do not gel with the National Marine Fisheries Service. They do not compare at all. Then we have license figures. When you look at North Carolina they have 450,000 licensed anglers, you look at MRFSS and it say they have 2 million anglers. The US Fish and Wildlife Service they have a different number completely. How are we supposed to get estimates? As Adam pointed out, the Magnuson Act was to get better information on the recreational sector. We spent three years basically doing a registry that only give us a better phone book. I went to a cooperative and statistical program meeting on Thursday and I could walk in there, I could have walked in there 5 years ago, 6 years ago, or 10 years ago, and we are probably at about the same point. We're getting a little better. But 10 years of frustration of both recreational and the fishing community that is basically dealing with the pain because of a precautionary approaches that are put on sometimes needlessly because of lack of information. I am not going to sit here and go page by page because I guess my frustration level after going through this time and you can maybe appreciate it a little bit Rick but I have been going to these meetings for a long time and the mackerel fishery is the one I really (inaudible) because I remember sitting with a good man from Maryland Jim McHugh and Axel Carlson and we looked at that fishery specifically on why it disappeared on the in-trawl fishery and I am sitting here 26 years later because that was done in 1984 when we started looking at it, when we were going to rebuild the stock and there is no rebuilding of the in-trawl fishery. There is no way you can go five miles off shore and catch mackerel doing those spring runs, occasionally a small run. And yet, we have been penalized because when they collapsed the fishery done by the foreign fleets, we get rewarded by the smaller quota. I guess bluefish is another example where if we didn't do the transfers, we let the stock rebuild, where would that stock be right now. That is always a difficult situation. I actually voted for the transfer originally because the management plan was horrible. We made the commercial quota based upon the recreational catch. That's a better plan now, it was suppose to be an 80/20 split but it never happened. It is about 50/50 when we actually look at what's being allocated. It is a management plan that we never have followed as far as the allocation process. I will just leave it at that. I mean, it's just a lot of frustration and I'm sorry that I'm not going to go page by page, somebody at the commission or maybe I'll be part of the process and maybe I'll get over the frustration, but I really look at the budget. And when you tell me you're going to transfer to do catch shares programs and I look at the lack of fisheries information that we have on stock assessment, it just drives my frustration over the wall. That's what has happened in the last year and a half.

Ms. Kristen Cevoli, Pew Environment Group: We would like to thank you for this opportunity to provide public comments on the record. We will also be submitting in more detail a couple of comments. This will specifically address (inaudible) alternatives but for the time being my comments (inaudible) the document as a whole. We are generally optimistic about the contents of the Omnibus Amendment and we really commend the Council and staff for all the hard work that they have put into this. We do believe there are still some essential elements that need to be included in this document before it will fully comply with the requirements of the Magnuson-Stevens Act and the NS1 guidelines. Our first point is on the Council risk policy. The 2006 Amendment to the MSA required catch limits do not allow overfishing. This is reiterated again in the NS1 guidelines. The law doesn't state that most of the time there shouldn't be overfishing; it says there should be no overfishing. Because of this clear mandate we at Pew have repeatedly stated the probability that overfishing will not occur needs to be high and that in order to do this the Council needs to select and upper range which should not be higher than 10% of probability of overfishing. Because the Council is proposing setting the ACL equal to the ABC, sorry, the Council then needs to select a risk policy that really ensures a high probability that overfishing will not occur because the Council really can't adequately account for the magnitude of what that overage could possibly be. In addition, we feel the Council risk policy should be fully integrated into the FMPs and not a part of the Council's Standard Operating Procedure's as is required by the NS1 guidelines. On next point is on management uncertainty. The Council must account for management uncertainty and the ACT control rule is one way to do this. Therefore we support the inclusion in the document of annual catch targets as a buffer to ensure that the ACL is not exceeded. However, we feel that the Council really needs to have a better analysis of what management uncertainty is. Clearly articulate how management uncertainty will be accounted for as is outlined in the NS1 guidelines. Simply stating that the Council is considering a process really doesn't satisfy the NS1 guidelines. We agree that the individual species management committees have particular knowledge and expertise that's really applicable to this process but the Council really needs to have an overarching policy that's clearly articulated in the Omnibus Amendment which then the individual committees can use in order to guide their decisions. On optimum yield, we believe that the Amendment currently does not sufficiently account for ecological concerns in determining OY. The Council should adopt ACT control rules that address the ecologic, economic, and social factors that must be considered accounted for when accounting for OY as is outlined within the NS1 guidelines. In addition, OY must account for all fishing mortality including target catch, bycatch, discards, and scientific research. And our final point is on the Environmental Impact Statement, and although we have already previously gone on the record with the Council with our March 25 letter regarding the Council's intention to prepare an Environmental Assessment instead of an EIS we would like to reiterate our opposition to this decision again, and note that the Council's explanation for this move is inadequate. We do not believe that the potential effects to implementing this Omnibus Amendment are too remote and speculative to it as stated in the Omnibus as to access the impacts on all managed species, on all non-target species, habitat, protected resources, human, communities, and other things that the Council really should be looking at and should be preparing and EIS to evaluate these impacts. Thank you for the opportunity to comment and we will be submitting more details on this as well.

ACL/AM Omnibus Public Hearing #2
Newport News, VA
May 10, 2010

Moderator/Hearing Officer: Jack Travelstead
Council Members and Staff: Jessica Coakley, Rick Robins
Attendees: David Agee. Harry Doernte, Skip Feller, and 1 other

No formal statements were made. However, general comments about the adequacy of the MRFSS data. Several questions were also raised about when the ASMFC was considering accountability, and how the application of Federal coastwide accountability may allow states who manage conservative not to be penalized because of states which have overages.

ACL/AM Omnibus Public Hearing #3
East Setauket, NY
May 12, 2010

Moderator/Hearing Officer: Jim Gilmore
Council Members and Staff: Jessica Coakley, Steve Heins
Attendees: Arnold Leo, Charles Witek, Laurie Nolan, John Nolan, Kristen Cevoli

Ms. Laurie Nolan, F/V Seacapture, Montauk, NY, fulltime tilefish boat, ITQ holder: I am a little disturbed to see that one of the alternatives considered would adjust the ITQ allocation, which is a directed fishery, to accommodate an increase in incidental landings in the incidental category. I don't think accommodating to discard should jeopardize the landings that can occur in a directed fishery. The allocation that has been given to the ITQ holders was based on historical landings that occurred over a long period of time. If we are going to take from that sector we are basically reallocating that quota. If we are going to take from them in order to accommodate a discard issue, doesn't think is fair. There will be analysis done on trip limits in the incidental category. The 300 pounds was chosen as a trip limit because, looking at years and years of data, it was a buffer that well captured any landings that occurred in the dragged fishery. If you go around increasing incidental trip limits, you are creating incentives for targeted species. Who can resist when it comes to covering their expenses? I don't think that is the right way to go about it. If you are going to talk about accountability, you punish the people who have exceeded, not the ones working within the guidelines. Certainly the directed fleet could go out and land more fish but they don't because of the regulations in place. While you have these users abiding by the regulations not overharvesting, they are going to be penalized in the end anyway because another user group is exceeding its targeted quota. I am not pushing to shut down other fisheries or pointing fingers. I don't think that was the intent of creating accountability measures. If my son does something wrong, I don't punish my daughter. Thinks we are not dealing with accountability when it comes to the guy who messed up. Jessica did an unbelievable job. There are a lot of comments to be made on the document. I will write more comments. But I have made the comments that bother me today that are disturbing.

Mr. Arnold Leo, Town of East Hampton, representing the commercial industry: Disagree with the use of these 4 tiers to determine the probability of overfishing for the different species. A species in tier 4, it is likely that it is going to have a requirement of something like 20% probability of overfishing. I find that to be objectionable that they would be using that [assessment level] in the risk level of overfishing. To put it in other words for the poor data, the only one who is going to pay for it is the fishermen. I think over the years the system presently used for management has resulted in no overfishing of any species managed by the Mid-Atlantic Council. The amount of energy and expense that has gone into this alphabet bouillabaisse is utterly offensive to my sense of efficiency. I will be at the June meeting and you may expect to hear more from me.

Mr. Charles Witek, Coastal Conservation Association, NY: This is just a summary of written comments to be provided. CCA of NY is really pleased with some of the possibilities that are coming out with respect to the ABC. We like the idea of a tiered system; we like to see scientific uncertainty categorized because obviously there is more risk involved in managing a species where data is unavailable and where a lot of important facts are unknown. This makes it more unlikely a stock would be inadvertently overfished which would ultimately harm all of us. Therefore, we endorse Alternative 1B [ABC framework]. With regard to risk assessment, we think what you do and amount of risk you are willing to accept when managing species with varying types of data, a species that is very fecund and begins to mature very early, should be very different than managing a species that is badly depleted or one with a long age to maturity or long marginal fecundity. Therefore, what we would suggest is a modified Alternative 2F. We think the distinction between a stock that is overfished and one that has never been overfished is an artificial distinction. Almost every thing has been overfished at sometime in its history. Odds are that if something has not been overfished, it probably will be for a brief period in the future. Rather, we would suggest that the panel that is used for stocks that have been overfished would be adopted in its entirety and that the panel that has never been overfished would be deleted from 2F. We find it somewhat unacceptable that any risk should be set at 50%. This is a long deliberative process that involves a lot of time and a lot of analysis. At the end we should have a probability of success that would be better achieved than tossing a coin. Therefore, 50% would probably be too high, so maybe something in the 40s%. So start at 45% and go to 10%. The life history differentiation is important when dealing with a species like black sea bass where removing a dominant male from a spawning aggregation could make a real difference and disrupt the aggregation. That means something and should be accounted for. When we get to the ACLs and AMs there is a problem. The problem results from a failure to differentiate from AMs in the commercial and those types used in recreational fisheries. The characteristics of those two sectors are very different. We have no problems with the commercial AMs. If there are problems, someone more familiar with the fishery should point them out. In a recreational fishery the biggest problem we have is that rather than governing a small body of fishes where the catch is recorded in near real-time, you are dealing with millions of individual anglers who land very few fish, all of which aggregates significantly, and whose harvest is estimated with a six week lag. That makes it much more difficult to impose various AMs in-season. In addition, when you deal with recreational anglers, you are not really regulating harvest, you are regulating behavior. What happens, if you shut down a season, mid-season, assuming that occurs, all you are going to do is get a massive effort shift into another fishery and force overfishing in another fishery. When we talk about imposing AMs, as alluded to in the discussion, there is also another major problem. All four major recreational species managed by the Mid-Atlantic Council are co-managed by the ASMFC. The evidence is pretty clear that the ASMFC will not impose mid-season closures. We just saw that with black sea bass. ASMFC is much less likely to be concerned about quickly ending overfishing as they get into rebuilding. We saw this with weakfish, 3% SPR and they continue the fishery. We had southern New England winter flounder, 8% B(MSY) and they continue the fishery in that species, even though Federal government closed that fishery down. ASMFC is an unrealizable partner, at best. By imposing AMs as mid-season closures and paybacks in the following season, what you are likely to see is divergence between ASMFC management measures and Council management measures. Since most of those species are caught inshore, all you are going to do is frustrate the goals of the plan. What we should be doing is creating a management scheme that would be more acceptable by using an F(target) and F(threshold) to manage the recreational fishery. Yes, I believe in a proactive ACT but in the form of an F(target). If you want to see the model for successful management of a mixed fishery look at Atlantic striped bass. The commercial fishery is managed on firm quotas and the recreational fishery is managed on basis of F(target) and F(threshold). In Fifteen years since the stock's was declared recovered, you have a very active fishery and successful fishery at an F(threshold), that to my knowledge has not been exceeded although it has been approached once or twice. That has managed to constrain harvest while maintaining a healthy fishery and that is an approach that ASMFC would probably endorse. I have species specific recommendations but will not go into too much detail except for two. Summer flounder, again in talking about paybacks, mid-season closures in a fishery managed state by state basis, it is not going to work. It is in the interest of the smaller state to set regulations that look good on paper knowing they are only going to have to pay back 4 or 5% of the overage they caused because the other states are going to have to pick up the slack. Even the bigger states: Virginia at 16%, New York around 17.5% and New Jersey about 39%. A state can set regulations that cause an overage and they know they have to pay back a portion of that overage and the other states are going to be responsible for the harm they caused. In the case of scup, 15% trigger would not work. It is a four state fishery between MA and NY. The MA fishery is a spring fishery, ends in middle of June. The other three it is a Sept - Oct fishery. If you see an overage of 15% in Wave 3, that means that MA took the fish. The fish will not be caught and NY, CT, and RI will be deprived of their fishery. That is something that is not going to work.

Mr. James Gilmore, ASMFC Commissioner: This goes back to something that Charlie said. One of the things that concern me is that these measures are in Federal waters, and the ASMFC is not considering ACLs and AMs yet. Measures need to been in alignment because essentially the fish are in both places for several of the stocks. There is concern in the SSC, setting the parameters, the ABCs and assessment levels, etc. We got the first flavor of this last August with scup and BSB in that SSC came out with some determinations and there was no dialog, which is very foreign to a lot of the Council members. Suddenly their inclination was to have a discussion now, but they said no, we have already decided. If the SSC is going to have that autonomy, first of all they are going to hand something down which is really foreign to this whole system that has been operating for decades. It is essentially something of a cooperative, something of a dialog and becoming something of more that these guys make a decision or this group makes a decision and it is supposed to be based on best science and some of those decisions seem to be extremely conservative and I think a lot of the Council members do too. Getting back to the alignment with the Commission, if you have that sort of level of autonomy and that they are being very conservative that it is even upsetting the Council itself that is going to make it even more difficult to the Commission to start buying into what has been said by the SSC. For the Councils, I think that is going to further complicate this whole process. If you are trying to get one management scheme for a particular species that is both in state and federal waters, and you have one group that doesn't really want to play with the rest of the gang, I think we are setting ourselves up for a problem. So that needs to be reconsidered maybe, that the SSC maybe has to have a more open process in terms of what they are coming up with, include some more dialog rather than coming up with the decision that this is what we are doing, here it is, deal with it.

ACL/AM Omnibus Public Hearing #4
Stockton, NJ
May 18, 2010

Moderator/Hearing Officer: Peter Himchak
Council Members and Staff: Jessica Coakley
Attendees: Bill Shillingful, Ron Goschler, Jack Fullmer, Jeff Bauer, Eddie Yates, Lars Axelsson, Greg DiDomenico, Mike Loper, Ed Goldman, Brook Koeneke, Lee Scanny, Marty Buzas, John Herron, Jim Winn, Fran Verdi, John Hopslider, Kevin Bradshaw, Tom Buban, Scott Russell, James Hauselt, Joe Fumo, David Banke, George Forrer, David Meunier, George Bracheart, Jeff Gutman, Jim Hutchinson, Paul Thompson, Jim Cincchitti, Andrew Morrison, Adam Nowalsky, Lindsay Fuller, Mark Taylor, Jason Kleinschmidt, John Sullivan, Michael Tabassl, John Henson, John Oswald, Tom Siciliano, Maria Dowd, Fred Dowd, Jerry Hurd, Bert Gibbs, James Krauss, Ted White

Mr. Ed Goldman: On page 21, the trigger for AMs, when looking at that it occurred to me that our management regime puts us at a catch 22. Our management regime requires us to harvest bigger and bigger fish. That creates discards to go up and then the discard mortality goes up. It's like a merry go round and we can never get off, we are going to keep going and going. With AMs thrown in there and uncertainty and everything else, the Council really needs to look at the management regimes of what taking bigger fish actually means. On page 34, harvest overages for bluefish, subsection C would be my choice. Don't really like it but it bust is best of the three. Again it would put us in a catch 22 where we could wind up giving back the overages on the recreational side and we would probably wind up without having much of a quota at all. I think that transfer needs to go away. If we overfish it should come off that transfer. On page 43, when we evaluate the ACLs exceeding the recreational catch, for the recreational sector only two options exist. Evaluation based on signal year comparison on a three year moving average. Analysis is conducted with MRFSS recreational landings data for 2008 and the associated recreational harvest limit potential effect. We know summer flounder has been managed on state-by-state conservation equivalency. In the past, I have argued heavily for that but I don't see how the AMs for state-by-state would be compatible. Certain states have set their regulations to be targets that we have been given in the past and some states have been more conservative than other states. This was assuming that NMFS was right. I know we all believe in conservatism, and in NJ, we try to be more conservative. In this scenario there are states that aren't so conservative. Basically more conservatively managed states will be paying for it in the long run. We will see what happens when the Council and Commission meeting on that. The other point is where there is a season where there is basically no closure and they start their other season say January and NJ starts theirs May 29, it was closed down in the Federal waters Sept 1 we have a three month season and they have a nine month season. So that would cause disparities there. On page 44 where it says "NMFS Regional Administrator will monitor recreational fisheries based on MRFSS and other available information" what other information? I think we need to get as much information as possible. Don't see how MRFSS can be used. It was never intended to monitor closed quotas as we know, just long term trends in the fishery. As time goes on, we keep expecting MRFSS to do more and more. In the Reauthorization, they said we need to fix MRFSS and along with AMs and ACLs. Here we are three years later and doing the ACLs, but we have gotten no where with MRFSS. I understand the MRIP program is slowly moving forward. I have asked this question numerous times, what would make MRIP better than MRFSS? I still haven't gotten a satisfactory answer to that. On page 44, it talks about the 50% rule, based on MRFSS data for 2000-2008. As explained before about the overages, again conservation equivalency in some states will be impacted by other state regulations. I don't think it would be good to for states to start their season earlier. I would give same comments for scup but not as much because it is kind of regionally based right now. BSB would not apply to that as much because they are managed by a coastwide basis. Can conservation equivalency exist with the AMs as spelled out? We get to the general recreational closure authority; refer to my earlier comments on summer flounder. Doesn't think it will work. Page 71, review process, did see this mentioned but hopefully the Council will put something in there to look to see if the ACLs and AMs are being too restrictive, therefore reducing the long term MSY unnecessarily. Hopefully they are not looking at any one direction and will loosen the screws a little bit and make it a little better for everybody. Didn't really see anything except a quick reference in the paper there is not much mention of social and economic impacts. It appears they have ignored it in this document. [Staff noted that impact analysis will be part of the next step of document development].

Jim Hutchinson, Recreational Fishing Alliance: We will have our official comments submitted by the end of the week. I wanted to thank you for coming to NJ and doing this presentation. This Amendment cannot possibly go through until NOAA fisheries meets it's congressionally requirement to fix MRFSS. Everybody in this room has mentioned it. It is not just the recreational fishing community saying any longer that there is something wrong with the MRFSS data. It has been stated by the NRC. It has been mandated by congress to fix this data to have these types of AMs that have recreational paybacks, in-season closures, and basing it on fatally flawed data that is not supposed to be used in this. It is reckless and dangerous and could cause catastrophic closures and have a catastrophic impact on the fishing community. You cannot possibly go through with these measures without fixing those.

Burt Gibbs, Captain Robins Deep Sea Fishing: The sea bass closure virtually crushed everyone in this room. You have no idea of the vast economic damage that has occurred because of bad data. The closure was made on bad data and if NOAA and NMFS was a public company, I would sue them in any court in the land and I would easily prevail. I want each and everyone on the Committee to take a pause and realize if you get it wrong again, I may not be attending the next meeting because NMFS and NOAA put me out of business.

Jeff Gutman: I want to echo what Jim [Hutchinson] from RFA said. For a number of reasons all of these measures based on MRFSS data are absolutely a terrible idea. We also run into a situation that could occur with a front end [loading] of seasons with conservation equivalency. On the coastwide situation where certain species are prevalent in certain waters during a certain portion of the open season, and that part of the country catches say 15% of scup or whatever the species may be, pausing the trigger that closes the rest of the coast of the management area that really hasn't had time to fish for those fish. A lot of things people forget are that it is very difficult to run a business when you don't know when you're going to be out of business. It is kind of like saying you are a dentist and need to do fillings and root canals. But at any time we can tell you can't. Whatever your job may be, if you didn't know you were going to be there on Sept 22 and you are only going to tell someone two weeks in advance, I guess that could be considered generous compared to what they did with black sea bass last year where there was a four day notice. All of those things, especially when based on MRFSS data are potentially devastating. There won't be an industry for the Council or Commission to manage, at least not on the recreational side if they start closing things down haphazardly.

Tom Buban, Atlantic Star: We are about 75 miles from here. These are important topics. The meeting should have been someplace in the middle to have people from North Jersey to start making these meetings. There is no one here but two or three people from up north. Agree with Jeff [Gutman] and Jim [Hutchinson] from RFA.

Paul Thompson, Cape May: Like Jeff [Hutchinson] said, how do you run a business or stay in business or hire people if you don't even know if you are going to be in business. In season closures should be stricken from this plan. I see how the figures were arrived at, which no one believes.

Gary Gretcher: Agrees with RFA and Jeff Gutman. We seem to be held accountable for overfishing and NMFS screwed up the numbers, and they are not being accountable for it. Who is holding them accountable for our dismay?

Tom Siciliano, Recreational Angler: This entire document is based on assumptions. It shows a lot of nice charts and shows scup going over this year and down this year. But that was based on the assumption that the stock assessment for scup was correct. It's not. You made the statement that the stock assessment for fluke was very good, the summer flounder group [from SSFFF] proved that was incorrect last year. How can you say that? Recreational anglers don't believe anything that is coming out of NMFS. They don't believe in any of the numbers. The numbers don't make sense. They don't correspond to what people are seeing on the water. A quick example, back in the 80s, Atlantic mackerel was the fist fish to hit Jersey. All the party boats loaded up and caught barrels and barrels of mackerel. Now Jersey will go over in two days. Use the data that is available. Use the party and charter boat data that is sitting in a warehouse over there. They have 20 years of data, put it in and see what the trends are for the party and charter boats. Discards keep going higher and higher. Size limits going up will cause more and more discards. Catching the larger females are the ones that you are killing.

Adam Nowalsky, RFA, NJ Chapter: We reiterate the comments that anything in this document that utilizes MRFSS for an in-season or reactive recreational payback is unacceptable. The Magnuson requirements were very clear; improve MRFSS by January 1, 2009, then go ahead and utilize the AMs in 2011. Here we are going forward with all the AMs provisions before MRFSS has been fixed. It is very clear that is not acceptable.

Additionally, there is a tremendous amount of concern in regards to the tired levels for the stock assessments. We have heard on multiple occasions from multiple sources most notably the chair of the SSC himself that most of the stock assessments with the exceptions of summer flounder and spiny dogfish would be a level four assessment. Now glancing at these levels, and the charts using the probability density functions for generating ABC offsets and the success that has been seen in the north Pacific Council utilizing this process, it would seem like something reasonable. However, understanding where we are with the level for stock assessments. Specific language in here says that "in these circumstances, the SSC may propose alternative approaches for satisfying the guidelines with MS1 then those set forth in the MS1 guidelines. It goes on to say that the SSC may deviate from the framework and recommend an ABC different from the resultant calculation. So what have we achieved? If managers and fishermen are looking for something that they can look back on and say I can now understand how we arrived at this quota for the given year, given the fact that almost everything here in the Mid-Atlantic is in a tier 4, we have achieved no improvement. Additionally, the fact that funding at the NOAA level for primarily doing this research is being shifted in a number of cases to catch shares or others, where is the money going to come from to increase a stock from a lower level tier to a higher level tier that would result in higher quotas for fishermen. It simply is not being made a priority. There are things already in use, possession limits, size and season modifications which meets the Magnuson requirement of a reactive measure and the fact of the idea of using an ACT reduction as a proactive concern so any of these in-season measures are unnecessary in meeting the constraints and are unacceptable based on MRFSS. I would like to offer the same comments on behalf of Captain Tony Bogan who asked me to offer his name as President of the United Boatman and on behalf of SSFFF.

Rande Burte: I want to reiterate what everyone else was saying. Everything is this whole document is based on MRFSS. You cannot have an in-season closure, whatsoever. If you do have that, you shouldn't have a season at all. We do close Sept 1. I can only imagine what the pressure would be for species we don't't' fish for like striped bass. I saw this last year when sea bass closed, instead of fishing with 100 boats there (inaudible).

Mark Taylor, President of Jersey Coast Anglers Association: I have written comments to send in. JCAA does not include [support] the four tier system dealing with poor stock assessment data. The four tier system deals with the fact the NMFS is still dealing with the same poor stock assessments for the last 25 years. JCAA asked them 25 years ago to get better stock assessments. They failed to spend the money to accomplish this. Instead of doing stuff like that, putting the money to help us, they are not doing it. Garbage in, gospel out, according to NMFS. If they put in garbage, they treat it as gospel coming out. There are people that are very upset on how the money is being spent. JCAA does not support giving the Northeast Regional Director the power to shut down the recreational fisheries. We had that problem with the 3rd wave of the sea bass. (inaudible) This document is very difficult to understand to the normal person that is out there in the fisheries. There are no examples. Everybody has different interpretations of what comes out of this. There are different Councils that are dealing with this data and have their own interpretation. It is tough to come up with one consensus of what is going on here. Everyone should know what is going on.

Eddie Yates: One thing that disturbs me the most as everyone has spoken so far about MRFSS, last year wave 6 numbers from sea bass came back 85% under. How can you possibly have any kind of catch rates at all when the fishery was 100% closed? It should have been 100% not 85%, and they used it based on 2008 data. NMFS published they were 85% under on Wave 6 on a 100% closed fishery, think about it. That goes to show you that MRFSS possibly did not have good data.

Jim Krauss: I would like to point out three things. First of all, professionally I have been a CPA for 37 years. I want to complement you on what looks to be a marvelous model in [this]. One fatal flaw is the data. I think you have turned a "wag into a swag." If you don't know what that means it is a wild ass guess turned into a scientific wild ass guess. Secondly, I am a taxpayer of NJ and the US. This industry contributes a lot of dollars in sales taxes and income taxes. There has got too be a cost benefit analysis before anything is shut down or substantially reduced. Finally, as a recreational fishermen I think everybody in this room has something they need to protect, and manage the resource, because we want to keep it for our kids and grandkids.

Maria Dowd, RFA NJ Chapter: I agree the document needs tightening; the requirements are very loosely written. I believe that basically CVs for the recreational fish based on other than regional data is unconscionable, in that excuse, the outcome before the process is even done. Having somebody catching flats off the coast of NJ and the inlet, having their data based on Alaska or overfished places in Japan is unbelievable.

Jack Fulmer, NJ Counsel Diving Clubs: As mentioned, I believe this is rushed too fast and is very complicated. I suggest a longer comment period. I think a lot of the automatic measures in this proposal are likely to cause closures. I think that is what you should be trying to avoid rather than the opposite. Finally, I think that the idea in the MSA was to have more science involved, but I don't see where science has been involved here. Basically, there has been less science because of the fact is that the states no longer have the money to do the surveys and really are no surveys being done. As a result, there is less science involved. It is like they are playing with methodology rather than doing what needs to be done.

Mr. John Ketterer, Fishhaven Charter Fishing Association: The plan looks good on paper, but they surely result in management overkill of a fishery that is important to everyone in this room. Until you get MRFSS, who are now 18 months into a plan that was supposed to imposed 18 months ago, you surely shouldn't be able to manage the fishery using data that was unacceptable several years ago. If I didn't pay my income tax for 18 months, people get upset. I'd pay interest and penalties. You haven't supplied correct data for 18 months and nothing happens.

Fred Dowd, RFA NJ: I am a fairly typical small recreational fishermen. My investment for me is rather substantially. I just purchased a 23,000 dollar boat. I have several hundred of dollars worth of fishing equipment, dock fees, gas, oil, bait. All of this adds up to a lot of money every year. For you to use raw data to cut out of my fishing time and to take fish off my table, to take the enjoyment from me, my wife, friends, it is not like a social economic impact, it is horrendous. A lot of gentlemen in the room have big party boats and have a lot more invested as far as money. But I have a lot of investment too. The fact is that it is that something I love to do and I'm willing to spend the money to do. It is getting to the point where it is not feasible to even think about it because you can't catch fish anymore. My boat will be sitting at the dock. If the flounder season had been open like it was supposed to be, I would have been out fishing having a great time. With this raw data controlling our lives, we can't do it and it is just wrong.

Greg DiDomenico, GSSA: We have members who participate in every one of these fisheries and we have followed this amendment throughout its entirety from the beginning to the end and have provided public testimony. We will provide testimony at the June Council meeting.

John Herron, RFA: I am sure it takes a lot of money to run NMFS. What they have to do is learn how to build the fish stocks with the industry instead of just putting people out of business. They need to find a way to put people to work. Put money back into the economy that they are taking out.

Jim Cincchitti: Concurs with comments regarding MRFSS data. Economically this is ridiculous.

COASTAL CONSERVATION ASSOCIATION
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May 12, 2010

Daniel T. Furlong
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901

Dear Mr. Furlong:

Coastal Conservation Association New York ("CCA NY") is taking this opportunity to provide the Mid-Atlantic Fisheries Management Council (the "Council") with comments regarding the Omnibus Amendment establishing Annual Catch Limits ("ACL") and Accountability Measures ("AM") in all fisheries management plans that fall within the jurisdiction of the Council (the "Amendment"). In general, CCA NY is in agreement with the goals of the Amendment. However, the Amendment, as currently drafted, fails to recognize essential structural differences between the recreational and commercial fisheries and, because of such failure, the AMs proposed for the recreational sector in the various management plans must be revised. Such need will be explained in greater detail in the appropriate section of these comments.

I

With respect to the control rules used to establish Allowable Biological Catch ("ABC"), the Council should adopt Alternative 1B, which establishes four assessment levels that link the methodology used to establish ABC with the quality of the data available.

Calculations of ABC, as well as other management parameters, must be based on the best available data. However, the quality of the data available to manage various species differs widely, from the good and still improving information used to manage summer flounder to the relatively scant data applicable to species such as butterfish or monkfish. Since the quantity and quality of the data available is directly related to the confidence that one may have in both the accuracy of a stock assessment and the efficacy of the management measures imposed, it is logical that such factors should be taken into consideration when determining the point at which ABC is to be set for each managed species.

Alternative 1B does a good job of organizing the various factors which might affect the available data, creating four assessment levels distinguished by successively diminishing data quality. Such distinctions are important, as when data is known to be reliable, the ABC can be set relatively close to the Overfishing Limit ("OFL"), while when data is of more questionable quality, or reliable data is altogether absent, managers must take a far more precautionary approach in order to properly address the scientific uncertainty, and set an ABC which is significantly less than the OFL.

For those reasons, CCA NY endorses Alternative 1B.

II

The Council should establish a risk policy which makes it unlikely that overfishing will occur, which incorporates both a species' life history and the condition of the stock into consideration when determining the appropriate management measures.

Although CCA NY cannot give an unqualified endorsement to any of the alternatives provided, it can give general support to the concepts incorporated in Alternatives 2D-2F. All have points militating in favor of their adoption, but all share a common flaw. Each, assuming that data is of the highest quality and that the stock's biomass attained a target level, would permit the adoption of measures that would reduce the likelihood of avoiding overfishing to a mere 50%. While the proper level of risk in any given situation might be subject to debate, everyone should agree that the lengthy process of data gathering, analysis and deliberation inherent in the management process should produce a result with a higher likelihood of success than could be achieved by the simple toss of a coin. Attempts to constrain overfishing which are as likely to fail as to succeed are, at best, of dubious utility. Alternative 2C is inflexible and has very little to recommend it. It's one virtue, however, is that it never permits the likelihood of overfishing to be set at coin-toss odds.

Alternatives 2D and 2E are better, as they condition the level of acceptable risk on the quality of the available data. However, neither considers the additional scientific uncertainty that can arise when dealing with species that have atypical life histories, perhaps best exemplified within Council jurisdiction by the black sea bass, a protogynous hermaphrodite that forms spawning aggregations that can be disrupted by the removal of a single dominant male. Alternative 2F, which incorporates such considerations, comes very close to the ideal, but perhaps adds an undue complication in dividing stocks into those which have previously been overfished and those that have not. CCA NY believes that fisheries management should be forward-looking. The fact that a stock has been overfished in past years does not mean that it will be overfished in the future; managers should have the ability to learn from past errors, and be able to keep from repeating past mistakes. Similarly, the fact that a stock has not been overfished does not mean that overfishing will not occur; if anything, there will be a temptation to grow complacent as a result of past successes, to "push the envelope" and eventually violate the overfishing threshold. Wait long enough, and there will be no such thing as a stock that has not experienced overfishing. There will only be the question of when and for how long such overfishing took place.

CCA NY therefore suggests that the Council adopt a variant of Alternative 2F, which would omit the "Has Never Been Overfished" category. By doing so, they would adopt a risk management policy which takes into account the greatest number of variables, and recognizes that there must be a greater aversion to risk when dealing with a badly depleted stock. It would also assure that no management plan would contain measures that are as likely to fail as to succeed, and would effectively adopt the concept expressed on page 19 of the draft Amendment, that "the application of a lower [maximum probablility of overfishing] such as 45 percent or 40 percent" is, indeed, appropriate.

III
ACLs and AMs

While the ACLs and ACMs proposed for the various commercial fisheries managed by the Council appear satisfactory, and the recreational ACLs should prove viable if established in conjunction with "proactive" AMs in the form of Annual Catch Targets ("ACT"), the Council's failure to recognize the essential nature of the recreational fishery and its differences from the commercial fishery renders all proposed "reactive" AMs inappropriate.

A
In the case of all species discussed in the draft Amendment which are subject to both commercial and recreational fishing, the alternatives presented fail to adequately consider the essential nature of recreational fisheries and the motivations of recreational fishers. As a result, the AMs proposed for the recreational sector are similar to those proposed for the commercial sector. That is not appropriate, and will result in overly punitive and likely ineffective AMs.

Despite years of comment from the recreational sector, fisheries managers have yet to recognize the essential difference between recreational and commercial fishing. Commercial fishers must necessarily emphasize dead fish, and fish as efficiently as practicable to maximize the profit realized on their catch. Recreational fishers, while they may retain some portion of their catch, fish primarily to enjoy the outdoor experience, to spend time with family and friends, and to escape the workaday world. Unlike commercial fishers, they intentionally engage in a very inefficient activity, and want to stretch their portion of the ACL out over as long a season as possible. Such lengthened season maximizes not only the recreational opportunities offered by each fishery, but also the economic benefits of recreational angling.

In addition, the commercial fishing industry is characterized by a relatively small number of fishers who each catch a relatively large number of fish, and can only participate in fisheries for which they hold the required permits (the few remaining open-access fisheries being a minor exception to that general rule). Mandatory, real-time reporting, verified by weigh-out slips or similar groundtruthing measures, is practical, and allows managers to make a reasonably accurate estimate of harvest at any time during the course of a season. The recreational fishery, however, is made up of millions of fishers who each catch only a small number of fish, and frequently switch target species depending on what is most available. For most species, no type of real-time reporting system is practicable; instead, representative anglers must be surveyed, and harvest estimated within what is hoped to be a reasonable degree of error. Such estimates cannot be made in real time, but in the best circumstances lag harvest by six to eight weeks.

That being the case, commercial and recreational fishers cannot be shoehorned into the same type of AMs, yet that is what the draft Amendment would do. For commercial fishers, closing a season early once the ACL is reached is an appropriate measure, as they will already have landed their quota and realized whatever profit was to be had. In the same vein, requiring commercial harvesters to pay back overages in a following year is not unreasonable, as the measure would likely affect the same group of individuals who caused the overage, and the "excess" earnings resulting from the overharvest in the first year can be set off against the lesser earnings resulting from any payback. Thus, in the case of commercial fisheries, the AMs set in Section 3 of the draft Amendment would appear logical.

However, that is not the case with the recreational AMs. Anglers fish not for pounds, but for pleasure. Thus, while a midseason closure in a commercial fishery merely means that the fishers involved caught their entire quota quickly, and thus could cash out early, a midseason closure in a recreational fishery is something else entirely—it is a denial of significant recreational opportunity that can never be recaptured. It is that recreational opportunity, and not such dead fish as might ultimately be taken home, that is an angler's primary motivation. If anglers sought nothing more than a fish dinner, their wants could be met, at far less cost in both time and money, by a quick trip to the local market. For anglers and angler-related businesses, midseason closures are far more punitive that they are for commercial fishers. They are also counterproductive.

Closing a commercial fishery early will result in some effort shift, but only to the extent that commercial fishers have the permits and the quota to do so. Any such shift is likely to cause an accelerated closure of the newly targeted fishery, but because of near real-time commercial reporting, would probably not result in a significant overharvest. In recreational fisheries, a mid-season closure would result in not only wholesale effort shift, but also significant overfishing, as delayed reporting and estimates of harvest would not be able to timely prevent such overharvest. The recreational black sea bass overage of 2009, brought about largely by a shift of effort out of the summer flounder fishery due to strict regulation and, in some jurisdictions, closed seasons is a perfect example of such an outcome.

Mandatory paybacks of previous seasons' overages would have an even more malignant effect on the recreational fishery, and we would eventually see a domino effect among the most popular species. As the recreational ACL for one species is reduced, harvest regulations for that species would grow more severe, causing anglers to shift effort to other species, which would then be subject to overfishing and the resultant paybacks. Due to the sheer number of anglers and the delays inherent in estimating harvest, it is likely that any overharvest would not be detected until it had continued for some time, likely leading to draconian paybacks in the following year. It is not inconceivable that, after just a few years of such management, the ACLs for the most popular species (e.g. summer flounder, scup and black sea bass) will be reduced to levels that cannot not support a meaningful fishery. While the law requires that overfishing be ended and that AMs be adopted, it is certainly not the law's intent to drive anglers out of fisheries and deprive fishing-related businesses of the ability to make a living.

In addition, all of the most important recreational species managed by the Council (bluefish, summer flounder, scup and black sea bass) are managed jointly with the Atlantic States Marine Fisheries Commission ("ASMFC"). ASMFC is not bound by any legal mandate which requires it to end overfishing, rebuild overfished stocks or impose AMs in any fishery. As demonstrated by its recent decisions to continue harvests of the Southern New England/Mid-Atlantic stock of winter flounder (currently at 8% of $B_{threshold}$, $F_{rebuild}$=0.00) and weakfish (currently at 3%SPR), ASMFC takes advantage of such lack of legal constraints to avoid the mandates of responsible stewardship. Similarly, its refusal to close state waters in conformity with either the National Marine Fisheries Service's indefinite closure of the Southern New England/Mid-Atlantic stock of winter flounder or its 2009 emergency closure of the recreational black sea bass fishery suggests that any recreational-sector AMs involving mid-season closures, and very possibly any AMs including significant poundage paybacks, may well be ignored with impunity by ASMFC. Since the majority of the bluefish, summer flounder, scup and black sea bass recreational harvest takes place within state waters, any federally imposed AM not adopted by ASMFC would be largely ineffective.

Thus, measures must be adopted that will provide adequate protection for both the resource and the public's access to them, and not result in the Council and ASMFC adopting divergent management plans. One of the simplest means of doing so is to establish a proactive AM in the form of an Annual Catch Target ("ACT") which is far enough below the sector ACL to account for management uncertainty in the fishery. However, because the recreational fishery is so different from the commercial fishery, and because recreational harvest is only estimated well after the fact, and not calculated in near real time, it is most appropriate to establish an ACT based not on pounds of fish landed, but on a fishing mortality rate ("F"). ASMFC provides a perfect model for managing a mixed commercial/recreational fishery in its Fishery Management Plan for Atlantic Striped Bass, in which ASMFC establishes both an $F_{threshold}$ (corresponding to an ACL) and an F_{target} (corresponding to an ACT) for anglers, while commercial fishing is governed by hard quotas and, if required, paybacks and midseason closures. The system works. In the fifteen years since the striped bass stock was declared to be recovered, recreational overfishing has never been an issue, and the stock remains healthy. Arguably, nothing ever proposed by the Council has worked as well, and there is no reason why the Council could not adopt a similar approach for mixed fisheries it manages. While the law requires a "mechanism" that assures accountability, it does not require that any AM impose poundage limits, paybacks, etc. It only requires that the mechanism be effective. Experience demonstrates that an F-based management system, such as that employed by ASMFC to manage striped bass, can be extremely effective. It also demonstrates that a poundage-based system, such as the Council employs to manage the recreational scup fishery, often fails to adequately constrain harvest

B

To the extent that paybacks may be adopted as an AM in the recreational bluefish fishery, no payback should be imposed on anglers unless recreational harvest exceeds the recreational allocation prior to any shift of allocation to the commercial sector; Sub-option C most closely addresses the proper approach to any such problem.

The Council's bluefish management plan establishes the allocation of harvest between the recreational and commercial sectors, but permits some portion of the recreational allocation to be transferred to the commercial sector should the Council believe that the recreational sector will not harvest its share in any given year. There are reasons, irrelevant to this discussion, why CCA NY believes that any such transfer is inappropriate. However, for purposes of the Amendment, it is clearly inequitable for the recreational sector to face the imposition of punitive AMs should it exceed its sector ACL in any year, to the extent that the sector would not have exceeded such ACL had fish not been transferred from the recreational to the commercial sector. Thus, the proposed Sub-option A is completely unacceptable. Sub-option B, which would share a subsequent year's reduction in the ACL, is only marginally preferable, as it still places part of the blame for the overage on the recreational sector, which was in fact merely a victim of a faulty reallocation decision made by the Council. To the extent that the problem can be fully addresses by Sub-option C, which would reduce the amount transferred from the recreational to the commercial sector in the following year in order to account for the overage, then Sub-option C should the exclusive AM used to address such overage. However, should the Council decide that the transfer amount in the year following the overage is insufficient to fully address such overharvest, than the commercial sector, which received the benefit of the unwarranted transfer which caused the recreational overage, should bear full responsibility for any payback, except to the extent that the overage exceeds the amount of fish transferred. Such procedure would closely link the benefits realized in the prior year's overage with the costs of any payback imposed, something that is not necessarily accomplished by any of the proposed Sub-options.

C

Any AM involving an In-season closure of the recreational summer flounder fishery would likely prove ineffective; AMs involving paybacks of overages in subsequent years will, under the current management of the species, unfairly harm anglers in states which maintain harvest levels within their annual allocations.

As stated in subsection IIIA, above, in-season closures of recreational fisheries are an undesirable remedy, which are likely to cause as many problems as they purport to solve. In the summer flounder fishery, such AMs are likely to be completely ineffective, as it is very likely that ASMFC will not adopt similar measures. The reason is simple. Summer flounder are one of the most important recreational species caught in coastal waters between Rhode Island and Virginia, and the profits of many businesses rise and fall in direct proportion to participation in the recreational summer flounder fishery. ASMFC has no federal mandate which requires that ending overfishing, and rebuilding overfished stocks, be given priority over other issues. In fact, the ASMFC charter requires that economic factors be considered when making many management decisions. In addition, many of ASMFC's commissioners either have a personal economic interest in one or more fisheries, represent individuals who have such an interest, or are state employees who are not immune to pressure being put on them by fishing-related businesses. Given those truths, and given ASMFC's recent history of ignoring other federal fisheries closures (as further described in subsection IIIA of these comments), it is not realistic to assume that ASMFC will conform to federal closures in any fishery as economically important as summer flounder. For similar reasons, any significant payback is likely to result in ASMFC setting its own harvest limit for summer flounder, which would likely to be substantially higher than the recreational ACL, net of any payback, adopted by the Council.

In addition, so long as the recreational summer flounder fishery is based on conservation equivalency instead of a single, coastwide set of regulations, enforcement of a sector-wide payback would prove inequitable to many anglers. Unlike commercial fishers, who might range over wide sections of coast during the course of a season, following the fish wherever they might be available, recreational fishers generally fish in a very limited area, often included within the waters of a single state. It is thus inequitable to impose a payback on the residents of a state which stayed within its annual allocation as a result of another state's overfishing. "Conservation equivalency" is a simple concept to understand but one that is difficult to properly effectuate, and any person familiar with a state's fishery can easily draft regulations that adequately constrain harvest on paper but will not do so in practice. It is not inconceivable that a small state might draft such regulations, knowing that even if they caused substantial overfishing, the conservation equivalency methodology would result in it paying back only four or five percent of the resulting overage; it is not inconceivable that even a larger state with a shorefront economy heavily dependent on summer flounder would be more willing to risk overharvest, knowing that, depending on the state involved, it would only pay back 16, 17 or, at most, 39 percent of the excess fish killed.

AMs consisting of an F-based ACT that can be adjusted downward if overages occur would be a far more successful mechanism.

D

For reasons similar to those stated in subsection IIIC, above, AMs involving in-season closures or significant paybacks will likely prove ineffective in the scup and black sea bass fisheries; closing the scup season on September 1 in the event that Wave 3 landings exceeded the 15% threshold would impose grave and inequitable regional hardships.

Neither scup nor black sea bass are as important, over the course of the year, to the recreational fisher and to recreational fishing industries as are summer flounder. However, the scup does support an intense fishery off Massachusetts during the spring, and off Rhode Island, Connecticut and New York during the fall. As noted in the draft Amendment, any effective AM would require the affected states to implement conforming measures within state waters. ASMFC's failure to conform to NMFS' October, 2009 black sea bass closure is probably a good predictor of how such states would respond to any in-season closure imposed as an AM. While there is a possibility that the threat of paybacks might influence states with a significant offshore black sea bass fishery, it would have little influence in the scup fishery, which occurs primarily in state waters. In addition, in-season closures would have a very disproportionate regional impact if imposed. More than 90 percent of the recreational scup harvest is caught in the states of Massachusetts, Rhode Island, Connecticut and New York. However, the Massachusetts season peaks in May and early June, while the other three states see peak harvest occur in September and October. By closing the scup season on September 1 should Wave 3 harvest appear excessive, the Council would effectively be allowing Massachusetts to control the recreational fishery, and potentially permit it to prevent the other three states) as well as those farther south from extracting an equal benefit from what has traditionally been a shared fishery. That is not an equitable result, and might arguably run afoul of national standards requiring an equitable distribution of conservation impacts.

IV
Summary

CCA NY supports the creation of a four-tiered assessment system as described in Alternative 1B, as well as a variant of Alternative 2F, which would utilize such assessment system, along with information on a species life history, which would determine the acceptable level of risk that could be assumed in any regulatory regime, while never permitting the possibility of overfishing to near or equal 50%. CCA NY also supports the creation of proactive AMs, in the form of ACTs, in recreational fisheries. However, it vehemently opposes poundage-based AMs which would result in in-season closures of recreational fisheries, or impose poundage-based paybacks on such fisheries, believing such AMs to be an inappropriate means of managing anglers (for in a recreational fishery, it is angler behavior which is actually the key target of management, while in commercial fishery, actual landings may be regulated), and further believing that many or all of such AMs will be frustrated by the actions of ASMFC. Instead, CCA believes that a system of F-based landings targets and thresholds will more effectively constrain recreational harvest and be more readily accepted by both anglers and ASMFC.

Thank you for your consideration of the above.

Sincerely,

Charles A. Witek, III
Vice Chair

GARDEN STATE SEAFOOD ASSOCIATION

212 West State Street
Trenton, New Jersey 08608
office (609) 898-1100
gregdi@voicenet.com

Daniel T. Furlong
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901
Telephone: (302) 674-2331
Sent Via Fax: (302) 674-5399
Dear Mr. Furlong:

Please accept these comments on behalf of the Garden State Seafood Association (GSSA); GSSA is comprised of commercial fishermen, shore-based processors, commercial dock facilities, seafood markets, restaurants, and various industry support businesses from New Jersey.

In an effort to provide comments on this amendment we are simplifying our statements as much as possible. The level of detail provided in the amendment is nearly overwhelming and until its methodologies can be applied to species-specific scenarios, more detailed comments on every alternative would have little value. After participating in numerous stock assessments, we are very concerned about the uncertain state of our scientific knowledge of fisheries, including our collective inability to collect and assess the data needed to more accurately determine the status of our stocks, many of which have been harvested in this region for decades. In addition, we are very concerned about the real dynamics of "scientific uncertainty" and the interpretation of this mandate by several members of the SSC; an interpretation that was revealed during the most recent SSC meeting. Based upon our experiences in the last year, we anticipate that nothing but reduced quotas will be the result of the new ACL and AM requirements being implemented by the Omnibus Amendment. Given the conditions and encouraging regulatory status of the majority of stocks and fisheries under the jurisdiction of the MAFMC, why are reductions of quotas, particularly in fisheries with long time-series of data and landings, the likely outcome of this process?

This amendment leaves us with many questions, making actual positions on the all alternatives contained in the amendment difficult for us to develop at this time. In addition, the amendment offers industry no blueprint for an expectation that quotas may actually go up one day through the use of applied research, with industry assistance, to help produce more reliable stock assessments in the future.

ES-5.0 Impact Analysis

While we understand that this amendment establishes the administrative process for the consideration of scientific and management uncertainty we cannot comprehend why the amendment does not clearly articulate the range of possible changes to catch levels as a direct result of the amendment. Furthermore, we do not agree that the impacts are "too remote and speculative to be appropriate for consideration in this amendment" as stated on page 12 of the amendment.

Section 1.0: Acceptable Biological Catch (ABC) Alternatives.

Alternative 1A: We support no Action on ABC control rule.

Alternative 1B: ABC Control Rule Framework – Four Assessment Levels: We do not support a "multi-level" approach for setting an ABC for a specific fishery. This approach is too precise for the current state of our scientific knowledge of the fisheries you are obligated to manage. Furthermore, it is being implemented during a time where the lack of money and time available to perform stock assessments is significant. Please consider recent stock assessments that have been performed; the scup and black sea bass stocks were classified as data poor stocks until 2009 when an assessment occurred declaring them rebuilt. Consider the inconclusive results of the Atlantic mackerel TRAC and Atlantic butterfish assessment, the stark differences between the previous assessments for both stocks and an unknown status determination for butterfish. How will the multi-level approach assign an assessment level for these stocks? Furthermore, how can this approach achieve the stated goal of maintaining optimum yield from these fisheries?

Section 2.0: Council Risk Policy Alternatives.

We support Alternative 2C: Stock Replenishment Threshold with Inflection at $B/B_{MSY} = 1.0$, XIntercept at $B/B_{MSY} = 0.1$.

Section 3.0: Annual Catch limits (ACL) and Accountability Measure (AM) Alternatives.

Action Alternatives for: Atlantic Mackerel ACLs and AMs: For the last few years we have demonstrated the potential impacts on the U.S. mackerel fishery due to Trans-boundary stock management. We supported an exemption for trans-boundary resources in our NS 1 comments similar to the position of the MAFMC and articulated this dilema during our testimony before the House of Representatives Committee on Natural Resources.

Since, accountability measures cannot be applied or enforced on the Canadian fishery why would the U.S. industry be put at a disadvantage and be the only entity to take conservative measures? We request that the fishery-level ACL would be set equal to the entire acceptable biological catch (ABC) for the Atlantic mackerel stock, in this case 80,000 metric tons.

Action Alternatives for: Butterfish ACL and AMs: We do not support any of the alternatives and believe that Atlantic butterfish should be exempt from accountability measures and should qualify for the short lived exception. With the high natural mortality exhibited on this stock and the fact that very few butterfish survive beyond one year and almost none survive to age 2, why not exempt this species and the FMP from ACL's / AM's?

Action Alternative for: Atlantic Bluefish ACL and AMs:

Annual Catch Limit (ACL): We support the fishery-level ACL being set equal to the ABC for the bluefish stock.

Accountability Measures (AMs): We support the current management already required by the FMP including the state overage reductions, the seasonal requirements to monitor commercial landings and the transfer of recreational quota to the commercial sector.

Proactive AMs: We support sector specific ACT's.

Action Alternative for: Spiny Dogfish ACL and AMs:

Domestic Acceptable Biological Catch (ABC): We do not support reducing the domestic ABC due to the Canadian catch. The domestic ABC should be set at the total stock ABC.

Action Alternative for: Black Sea Bass, Scup and Summer Flounder ACLs and AMs:

Annual Catch Limits (ACLs): We support separate ACLs for each sector (commercial and recreational) and that each sector ACL would be set equal to the acceptable biological catch (ABC) for the black sea bass, scup and summer flounder stock.

ACL Evaluation for (Recreational Sector): When the recreational catch exceeds the recreational sector ACL the overage deductions should be adjusted from the recreational sector ACL in the next year.

Accountability Measures (AMs) for (Commercial Sector): We support the current management already required by the FMP including the state overage reductions and the seasonal requirements to monitor commercial landings.

Proactive AMs: We support sector specific ACT's.

Section 4.0: Periodic Review of ABC, ACL, and AM Alternatives: A clear role for stakeholders to participate in a review process should be articulated in this amendment and a review to revisit and evaluate ABC control rules should be conducted immediately following the implementation of this amendment.

Section 5.0: Description of Process to Modify Actions: We support a process that allows for the timely modification of the action alternatives proposed in this document through the annual specification or framework process. The process to modify actions implemented by this amendment should not take more than 6 months or should be completed before the beginning of the next fishing season.

Thank you for the opportunity to comment.

Gregory P. DiDomenico
Executive Director
Garden State Seafood Association

JERSEY COAST ANGLERS ASSOCIATION

Working For Saltwater Resource & Marine Anglers
1201 Route 37 East, Suite 9, Toms River, NJ 08753
Phone 732-506-6565
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Web Site http://www.JCAA.org
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May 18, 2010

Daniel T. Furlong
Mid-Atlantic Fishery Management Council
800 North State St., Suite 201
Dover, De. 19901

JCAA Comments to Omnibus Amendment

JCAA comments:

1. The JCAA does not support the four-tier system for dealing with poor stock assessment data.

The Omnibus Amendment sets up a four-tier system to deal with the fact that NMFS is still dealing with the same poor stock assessment for many species that it was 25 years ago. JCAA asked NMFS 25 years ago for better stock assessment data for many species including black sea bass and scup. NMFS has failed to spend the money to accomplish this and it is still not doing anything to improve that data for these and many other species. The NMFS Data Poor Workshops provided better models but not better basic stock assessment data. So in this system, even if scup and black sea bass are considered recovered, overfishing is not taking place and they are not overfished, then the SSC could set a quota greatly reduced from what the stock assessment recommends. The fishing community is paying the consequences because the NMFS has failed to spend its money on good stock assessment data. Instead, they spend it on models and management tools. JCAA's Legislative Chairman, Tom Fote, often uses the expression, "Garbage In, Garbage Out." However, we believe a better expression is **"Garbage In, Gospel Out According to NMFS."** NMFS puts garbage into the models and then treats the output as gospel. They implement regulations based on that flawed gospel. We are stuck with **The Gospel According to NMFS**, since it is, according to NMFS, "the best available science."

That is why Congress, the Senate, JCAA and many other fishing and environmental groups were so upset when we heard that the head of NOAA had proposed in the NMFS budget to divert stock assessment science money for a management program called Catch Share.

2. **The JCAA does not support giving the NE Regional Director the power to shut down the recreational fishery.**

This Omnibus Amendment would allow the Northeast Regional Director to shut down the recreational fishing of a species based on the first 3 waves of the flawed Marine Recreational Statistical Survey. Look how well this worked this year for Black Sea Bass. We are 5 months into the following year and are now doing a reduction that is half of what was recommended at the end of the previous year. Another example is the scup fishery which in the first 3 waves only represents 15% of the harvest. If, in any year, the first 3 waves were 20%, the Regional Director could shut down the rest of the year's fishery. This is using data the National Academy of Science calls worthless. JCAA cannot support this action.

3. This document is very difficult to understand and there are not examples on what will be the outcome with the new interpretations.

The new language for SSC operation used in the Magnusson Act is open to interpretation. NMFS has one way of interpreting the Magnusson Act. There is not general agreement with the interpretation made by NMFS. Further confusing and complicating this issue is that the Councils are further interpreting what NMFS has said. There is not consistency among the interpretations by the Federal Fishery Management Councils. As a Commissioner to ASMFC, Tom Fote deals with 3 Councils, each with a different interpretation of what NMFS meant when it interpreted the Magnusson Stevens Act. We need a clear, consistent interpretation of the content of the Magnusson Stevens Act in order to make appropriate management decisions. NMFS and all the Federal Management Councils need to agree to a set of rules, make sure everyone understands those rules and then consistently play by those rules. What we have now is pure chaos.

JCAA doesn't think President Bush or Congress, with the passage of the 2006 Magnusson Stevens Act, intended to destroy commercial and recreational fishing. We think their goal was to rebuild sustainable fisheries. But the way NMFS is interpreting the law could destroy the infrastructure of both the commercial and recreational fishing industry for years to come. There needs to be a balance between the needs of the fishing public and the rebuilding of the stocks. There are ways of doing both and somehow this has gotten lost in NMFS interpretation of the Magnusson Stevens Act. If you turn people from commercial and recreational fishing, there is no incentive for them to be stewards of the environment and the oceans we love. The commercial and recreational fishing communities were and remain the original environmentalists. We spearheaded the drive to end ocean dumping and many other important environmental initiatives.

JCAA understands there has been much staff and council time working on the Omnibus Amendment, but we are asking the Mid-Atlantic Fishery Management Council to put this Amendment on hold and draft a National Omnibus Amendment that would include all the Councils. NMFS should be developing the guidelines and not the Councils.

Very truly yours,

Mark Taylor,
JCAA President

Coakley, Jessica

From: [redacted]
Sent: Wednesday, May 19, 2010 3:37 PM
To: Info1
Subject: OMNIBUS AMENDMENT

I agree with the concept that has been presented in this amendment to manage fish stocks HOWEVER the data used to develop the key targets is seriously flawed
(not my words but your own scientist)
Before implementing this amendment you need to fix the data used to developed targets
While random data can be helpful , it has a high risk of inaccuracy ,better data can be found by using the required logs of boat captains, both charter and head boat captains as well as anglers like me who have detail information on every trip
which includes dates,location, and size
With more reliable data the Amendment as presented could work very well and meet our objectives BUT without better data this amendment will only seriously hurt both recreational and commercial fishing as well as have serious negative economic impact on not just fisherman but every other aspect of the economy from gas to food to lodging etc
Lets get the date improved FIRST

Bill Shillingford
20 Pinewood Ct
Swainton ,NJ 08210
representing Tri-State Anglers of Sea Isle City,NJ with over 75 members

Coakley, Jessica

From: [redacted]
Sent: Thursday, May 20, 2010 7:47 PM
To: Info1
Subject: Omnibus ACL/AM Amendment Comments
Attachments: Ominibus Amendment.pages

5/20/10

Daniel T. Furlong
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901

RE: Omnibus ACL/AM Amendment Comments

Dear Daniel Furlong,

I am Capt. Fran Verdi, and I had the opportunity to hear Jessica talk on the omnibus amendment. I was able to comment at the meeting but feel that there was so much to digest in such a short time. While the presentation was great, there are many questions that need to be asked. The first thing is that all of the numbers are based on MRFSS Science, which has been stated to be flawed and has been proven to be flawed. The Amendment does not state what other science is going to be used. I feel that it should be listed in the amendment. For example, the VST Reports that the charter and party boats turn in on a monthly basis could be used. We are on the front lines everyday like the commercial guys, so why would this data not be used?
Another thing that came to light was that, if there was no science available for a particular species, they would try to use something similar. Using something similar is not the same as getting the correct science. MRFSS science has to go before you can move forward with this. Jessica told us that the counsel would be looking for feed back on the Council's Risk Policy Alternatives. I feel Alternative 2C would be correct with the correct science.
Under The Atlantic Bluefish section, I have a major problem with the transfer of any stock to the commercial side. I find it hard to believe that the Recreational side would be punished if we went over the OFL and there was a transfer of stock. If this is the case, I would never want a transfer of stock. I understand that it has not happened yet, but you never know what is going to happen with a stock. The Bluefish limit had already dropped from 25 fish to 15 fish.
The last thing that I would like to comment on is the In-season Closures for Sea Bass, Summer Flounder and Scup. The Amendment states that at different %'s, we would be faced with a closure using data from wave 1 through wave 3. This would be a disaster for the fisheries as each state may have a different season. States with an early start would catch most of the quota. If there was a closure on September 1, it would have a devastating effect on the industry. Many people would be put out of business in an industry that is already in trouble. Another question about this is if one of the waves of data did not come in; how would that be handled? This actually happened last year with wave data 5 for sea bass. It took months to get the data and it was actually reported

after wave data 6.
In closing I would like to say you are trying to push this through on bad science. We need to get better science on the stocks before something like the Omnibus Amendment can move forward. Our system is broken and we have to fix it before we can move forward. Two wrongs do not make a right. Please take the time that is needed to do this right the first time rather then pushing something through with inaccurate science. I will do everything in my power to make sure this does not get pushed through. I appears that I will be attending more meetings, since my business and my future ability to take my kids fishing is on the line.

Thank you,

Captain Fran Verdi

Fish The Drop Off

Member of:
Recreational Fishing Alliance - (RFA-NJ)
Beach Haven Charter Fishing Assoc.
National Charter Boat Assoc.

Beach Haven Charter Fishing Association, Inc.
576 Sentinel Road
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An IRS Approved 503 (c)(3) Tax-Exempt Public Foundation

MAFMC
May 21, 2010
Omnibus Amendment Comments

Charter boats and Head boats are in business to provide legal fish for their customers to take home and eat. This bill has been written with tiered regulations so tough that this bill must be considered regulatory overkill. This Amendment proposes regulations in specific multiple tiers each one tougher that the previous one. Anglers were informed at the NJ Omnibus meeting that only Fluke and Spiny Dogfish are tier #2, all other species are tier #4. This is totally unacceptable! NMFS will NEVER provide the money required to move tier #4 fish species to #2 or higher. The Charter boat and Head boat business will be decimated if these proposed regulations are approved.

We ask that all fisheries in MAFMC plans begin at 50% using the Framework as shown on page #8 of the proposed plan. All additional quota restraints, tiers and other provisions be eliminated since each additional tier in this bill mandates additional quota reductions far beyond what is required to control any fishery.

We ask that the following changes be in any bill MAFMC approves.

A. The council proposes to authorize NMFS Regional Administrator to close specific fisheries based on MRFSS Wave 2 & 3 recreational angler landing data. These fisheries will be closed when predetermined landing percentages are estimated to be exceeded. We request that this "Recreational Inseason Accountability" provision be totally stricken from all fisheries in the proposed Omnibus Bill.

B. The NAS study of MRFSS was found to be a "Fatally Flawed" fishery management stool. The NAS requested the use of the MRFSS plan be ended by Jan 2009. The new system named MRIP has yet to be introduced. We ask that no recreational fishery MRFSS data be used for recreational fishery management in this proposed bill.

C. All proposed bill redundant management actions must be eliminated. They state that MSY will be replaced by ACL and the other various provisions that end with RHL being the managed goal. This is far more than is required by Magnuson/ Stevens Act. The framework proposed on Page 8 should be the only management changes if the entire bill is not eliminated.

Thank you for considering our comments.

Sincerely

MEMBERS OF THE BEACH HAVEN CHARTER FISHING ASSOCIATION

Coakley, Jessica

From: Thomas Siciliano [redacted]
Sent: Friday, May 21, 2010 4:39 PM
To: Info1
Subject: Omnibus ACL/AM Amendment Comments

May 21, 2010

Daniel T. Furlong
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901

Dear Mr. Furlong

Subject: Omnibus ACL/AM Amendment Comments

First the comment period is entirely too short for consideration of a document of this magnitude.

If the idea was to construct a document that is so confusing that 99% of anglers don't understand it you have succeeded. That is 99% with a plus or minus statistical probability of 1%. I just made that number up, but it has more of a chance of being accurate than the numbers used by MRFSS.

This entire document should be scrapped. The number of assumptions that are made to reach the conclusions are far too many for the document to be considered. The charts use stock assessment information, which is known to be inaccurate, then the catch estimates based on MRFSS are used. This leads to an uncertainly level that is totally unacceptable.

On page 24 it states that MRFSS and other available information will be used. There is a plethora of information that is available and has been available for years. This information has been ignored. There are no assurances in this document that the Party and Charter boat data or any other information will be used. When the Party and Charter boat data is used in its entirety NMFS will start to have some credibility with anglers.

It has been a year and a half since the MRFSS system was supposed to have been improved. Where is the new system? When the new improved MRFSS has been in place for five years and has been proven to provide more accurate information then maybe we can start to talk about the possibility of doing some of the things in this document. Until then it is premature to even consider the vast changes proposed in this document.

Rather than consider this document do something that makes sense like reducing the size limits to minimize the number of discards. This simple step would save more fish than any regulation and have the additional benefit of allowing anglers to take fish home.

Sincerely,

Thomas Siciliano

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May 21, 2010

Daniel T. Furlong
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901

Submitted via Email to:info1@mafmc.org, Subject: Omnibus ACL/AM Amendment Comments

Re: Omnibus ACL/AM Amendment Comments

Dear Mr. Furlong:

Oceana would like to submit the following comments for the consideration of the Council in its development and approval of the Omnibus Annual Catch Limit (ACL) and Accountability Measure (AM) Amendment that is currently being developed by the Council and its staff. As you know, Oceana has been involved with the Omnibus Amendment since its inception and was enthusiastic about the possibilities of this holistic look at the fisheries of the region in responding to the new mandates of the Magnuson-Stevens Reauthorization Act (MSRA). Unfortunately, we are disappointed in the current draft and that the Council has not done more with the opportunity presented by this action.

While the approach laid out in the Public Hearing Document *could possibly be developed into an amendment that would* satisfy the requirement for *ACLs and AMs* that is spelled out in the new elements of the MSRA and the January 6, 2009 National Standard One rulemaking (NS1), this approach completely neglects significant *other* requirements of the MSRA, the National Environmental Policy Act (NEPA) and the Administrative Procedure Act (APA), which this action is also required to satisfy.

Oceana encourages the Council to act quickly to amend this action to ensure that the amendment includes:

- A full discussion of the species caught in each affected fishery including Target, Non-Target and Ecosystem Component Species and a rationale for the Stocks in the Fishery that serve as the basis for Annual Catch Limits together with a discussion of alternatives to the preferred list of Stocks in the Fishery.

- A clearly defined numerical set of Annual Catch Limits for the 2011 fishing year and corresponding Accountability Measures.

- A clearly defined mechanism to monitor Annual Catch Limits in the fisheries of the Mid-Atlantic and ensure accountability.

- A full NEPA document to describe this significant change to these fisheries, analyze its effects and compare its effects with the effects of all reasonable and feasible alternatives, and explore the changes to the fisheries that may come as a result of the suites of actions proposed under the Omnibus.

Until these important elements are included in the amendment, the actions of the Council will be shortsighted and the final regulations that are the result of this amendment will not satisfy the law.

The omnibus fails to explore the 'Stocks in the Fishery' for the affected fisheries beyond the default list of target species.

A central principle in the agency's guidance concerning the development and management of ACLs is the concept of 'Stocks in the Fishery.' The agency's guidance anticipates that these Stocks in the Fishery will includes target stocks identified in the Fishery Management Plans (FMPs) but could also include Non-Target stocks and Ecosystem Component species. Agency guidance directed the Councils to establish ACLs with corresponding AMs for each such Stock in the Fishery, but does not require ACLs for stocks that are not 'in the fishery.' This approach results from the agency's interpretation of the new ACL requirement with the preexisting mandate of the Magnuson-Stevens Act requiring FMPs to identify the species of fish involved in a fishery and their location (16 U.S.C. § 1853(a)(2)).

The agency's NS1 guidance left the determination of which stocks to include in each fishery to the Council.[1] This approach places on the Council the responsibility to rationally consider which species and stocks to include in each FMP, in consideration of its duty under the Magnuson-Stevens Act, (16 U.S.C. §1852(h)(1)) to provide for conservation and management in a fishery management plan for all fisheries requiring conservation and management. The Council must also consider feasible and reasonable alternatives to these choices pursuant to the National Environmental Policy Act (NEPA) and analyze the environmental impacts of these choices pursuant to NEPA. In developing the Omnibus Amendment, it appears that the Council failed to satisfy the duties placed upon it.

In order to fully comply with these mandates, Oceana has suggested in comments submitted throughout the development of the Omnibus that the Council complete a full analysis of catch in each fishery. Despite these repeated attempts to persuade the

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[1] 74 Fed. Reg. 3204. January 16, 2009.

Council to use an analytical approach to make a fully-informed decision that would recognize and manage the true catch of the fisheries of the region, the Omnibus 4 Public Hearing Document describes an approach by which the Council will use a bare minimum interpretation of 'Stocks in the Fishery' and restrict the use of ACLs to only target stocks.

The Council failed to rationally explore the issue of overall catch in the fisheries and to include a discussion of which stocks in the fishery require ACLs in the FMP, which fisheries do not, and reasons for such inclusion or exclusion from the MSRA requirements. This approach, which appears to result from an erroneous interpretation of the law, ignores the catch of stocks other than target stocks that is described in the 2008 and 2009 Standardized Bycatch Reporting Methodology Annual Discard Reports (SBRM)[2,3]. The approach violates the requirement to treat sea turtles as Stocks in the Fishery, which is discussed more fully in the next section. It also ignores the existing regulations of the Atlantic Highly Migratory Species FMP which establishes clear limits on the catch of Atlantic swordfish by squid trawl vessels that are regulated under the Council FMP[4] and recognizes swordfish as a stock in the squid fishery.

An equally important benefit of the analysis to support the selection of Stocks in the Fishery is an analysis of the fisheries that catch stocks managed by the Mid-Atlantic Council. The data presented in the SBRM indicates that a number of these stocks are being caught in significant numbers by fisheries outside of the Council's jurisdiction, including the bycatch of Summer Flounder in the Scallop dredge and New England groundfish trawl fisheries, which Oceana brought to your attention in 2009[5]. The Council is obligated by the ACL requirement to account for and allocate sub-ACLs for such catch to ensure accountability in its fisheries.

Without a full analysis and discussion of the overall catch of the fisheries of the Mid-Atlantic region, including target catch and non-target catch, the disposition of this catch, and the environmental impact of decisions concerning which stocks are in the fishery, the action of the Council to limit the scope of ACLs in the Omnibus to target stocks alone is not lawful and fails to implement ACLs as required by the MSRA. Hiding or clouding the true nature of the catch of these fisheries when the expertise

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[2] Northeast Fisheries Science Center. 2010. Standardized Bycatch Reporting Methodology Annual Discard Report 2009. (http://www.nefsc.noaa.gov/femad/fsb/SBRM%20Annual%20Discard%20Report/SBRM%20Annual%20Discard%20Reports.htm)

[3] Northeast Fisheries Science Center. 2010. Standardized Bycatch Reporting Methodology Annual Discard Report 2010. (http://www.nefsc.noaa.gov/femad/fsb/SBRM%20Annual%20Discard%20Report/SBRM%20Annual%20Discard%20Reports.htm)

[4] 50CFR635.21 and 50CFR 635.24

[5] *See* Oceana letter to the Gene Kray, Development of Annual Catch Limits for Non-Target Fisheries, July 31, 2009.

clearly exists in the region to estimate the true magnitude and significance of these catches[6] is unacceptable and illegal.

The Omnibus Amendment must include a discussion of Sea Turtles as Stocks in the Fishery and Consider Developing ACLs and AMs for Sea Turtles

The fisheries of the Mid-Atlantic region have a well documented interaction with sea turtles, an issue which has resulted in a variety of actions under the Endangered Species Act to identify, analyze, and control takes of sea turtles in these fisheries. Included in the list of species caught and taken in Mid-Atlantic fisheries is the loggerhead turtle, a species which is currently being considered for 'uplisting' from threatened to endangered under the Endangered Species Act to reflect a decline in its population and the current risk of extinction for this species. Furthermore, the 2009 Status Review concludes that the Northwest Atlantic Distinct Population Segment (DPS)is likely to decline in the foreseeable future, even under the scenario of the lowest anthropogenic mortality rates. These results are largely driven by mortality of juvenile and adult loggerheads from fishery bycatch that occurs throughout the North Atlantic Ocean ....Therefore, the BRT concluded that the Northwest Atlantic Ocean DPS is currently at risk of extinction"[7]

As you know, the Magnuson-Stevens Act defines the term *fish* to mean ". . . all other forms of marine animal and plant life other than marine mammals and birds.[8]" Exceptions are given for mammals and birds that are protected under the Marine Mammal Protection Act and the Migratory Bird Treaty Act, but ESA-listed marine species are included as fish. Hence, the Councils have the *authority* and the *duty* to identify affected species of sea turtles as Stocks in the Fishery for relevant fisheries, establish ACLs and AMs for these species, and limit catch and takes of these species.

The agency anticipated the need for Councils to manage the catch of prohibited species, such as sea turtles in its January, 2009 NS1 rulemaking, giving firm guidance that:

> Prohibition on directed catch and/or retention can be applied to either a stock that is "in the fishery" or an "ecosystem component" species. Managers should consider the classification scheme outlined in § 600.310(d) of the final action as well as MSA conservation and management requirements generally. If a stock contains one of the "in the fishery" characteristics, then it belongs "in the fishery", regardless of the management tools that will be applied to it (*e.g.*, prohibition, bag limits, quotas, seasons, etc.). Also, if the intent is to prohibit directed fishing and retention throughout the exclusive economic zone (EEZ) for which a Council has jurisdiction,

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[6] Testimony of Dr. Wendy Gabriel to the New England Fishery Management Council related to Standardized Bycatch Reporting Methodology. January 28, 2010.
[7] Loggerhead Sea Turtle (*Caretta caretta*) 2009 Status Review. p164
[8] 16 U.S.C. § 1802(12)

> then the stock would, most likely, be identified in an FMP as "in the fishery" rather than as an ecosystem component of one particular FMP.[9]

It is clear that the fisheries of the Mid-Atlantic region which have ESA Incidental Take Statements to limit takes and prohibit catch are included in this directive and must be included in the Council's analysis of Non Target Stocks in the Fishery for which ACLs and AMs apply.

Failing to consider this clear requirement of the MSRA on these species of sea turtles violates both the ESA *and* the ACL/AM requirements of the MSRA.

The Omnibus Fails to Establish ACLs

The MSRA is very clear in the mandate for the Councils to establish ACLs and corresponding AMs by the 2011 fishing year[10, 11]. Despite this clear directive, the Public Hearing Document indicates that the amendment will fail to *establish* these mandated limits but instead establish a *process* to set these limits without any specific limits for the 2011 fishing year. This vague approach violates the MSRA.

The Omnibus Fails to Establish Measures to Ensure Accountability-

The Public Hearing Document describes the way that Annual Catch Targets (ACTs) will be used throughout the region to respond to the mandate that all fisheries include measures to ensure accountability. NEPA and the MSRA demand much more. The Council must consider all reasonable and feasible alternatives, take a hard look at their environmental impacts, and compare their environmental impacts. The range of reasonable and feasible alternatives certainly includes at least the alternatives discussed in the guidelines, such as hard caps, in-season management measures, and overages.

Although the use of ACTs was considered in the agency guidance to the Councils, there is little discussion in the Public Hearing Document of exactly how these measures will prevent overfishing, control both landings and discards (the two equally important components of catch) and ensure overall accountability. This lack of consideration violates both NEPA and the APA.

Without an effective means to monitor catch, the utility of ACLs or any other mechanism to prevent overfishing is undermined. The final Omnibus document must include a robust discussion of the ways that the fisheries of the Mid-Atlantic region will

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[9] *See* National Standard One Rulemaking. Response to Comment 22. 74 Fed. Red 3186. January 16, 2009
[10] Magnuson-Stevens Reauthorization Act Section 302 (h)(6) and 303(a) (15)
[11] Magnuson-Stevens Reauthorization Act Section 303 note, 1853a (1)

be monitored under the ACL management program to ensure that all catch is accounted for, that bycatch is reduced and catch limits are not exceeded. NEPA requires a consideration and comparison of all reasonable and feasible alternatives for such monitoring. Oceana notes that the Northeast Region Standardized Bycatch Reporting Methodology explicitly conceded that the observer deployment schedule completed to support the SBRM is not intended for monitoring annual quotas and the SBRM forecasts must be adjusted for the purpose of real-time quota monitoring.[12]

Recommendations for Council Action-

Oceana strongly suggests that the Council delay approval of the Omnibus Amendment until an honest and empirical approach to listing Stocks in the Fishery can be included in the amendment and appropriate ACLs and AMs are defined in the amendment document. Until these important elements are corrected in the Omnibus, Oceana believes that the narrowly focused Omnibus puts the Council at a disadvantage in confronting its management challenges and violates the MSRA, NEPA, and the APA and is subject to significant challenge.

Oceana remains committed to the implementation of these important measures in time for the 2011 fishing year as required by the MSRA and looks forward to working with the Council to meet its obligations.

Thank you for considering these comments

Sincerely,

Gilbert A Brogan

Gib Brogan
Northeast Representative
Oceana
Wayland, MA

Cc: Lois Schiffer, NOAA General Counsel
Eric Schwaab, NOAA Assistant Administrator for Fisheries

[12] *See* Northeast Region Standardized Bycatch Reporting Methodology at E-12 and E-19.

May 21, 2010

Daniel T. Furlong
Mid-Atlantic Fishery Management Council
800 North State Street. Suite 201
Dover, DE 19901

RE: Public Hearing Document for the Omnibus Amendment

Dear Mr. Furlong,

We, the undersigned groups are writing in response to the Mid-Atlantic Fishery Management Council's (MAFMC) request for public comments on the Omnibus Amendment document to establish Annual Catch Limits (ACLs) and Accountability Measures (AMs) for all species managed by the MAFMC. We would like to thank the MAFMC and its staff for their hard work and dedication in completing this document. While we appreciate the effort that went into this document, we believe that the following improvements are necessary to ensure that ACLs and AMs are set in a precautionary manner to ensure that overfishing will not occur.

- **Council risk policy must be set in a manner that ensures a high probability that overfishing will not occur:**
  The reauthorized Magnuson-Stevenson Fishery Conservation and Management Act (MSA) is clear in its mandate – Councils must put an end to overfishing. In order to achieve this, the Council's risk policy should include a high probability that overfishing *will not occur*. Overfishing has long been a problem in the Mid-Atlantic and the MAFMC has only recently been able to put an end to it. To prevent overfishing from re-occurring, the probability that overfishing might occur should no higher than 10%. Anything higher would be inconsistent with the spirit and letter of the MSA's mandate to end overfishing.

- **Fishery Management Plans (FMPs) should include buffers to ensure that overfishing does not occur:**
  There are many uncertainties in fishery management, so we are encouraged to see that the Council has included annual catch targets (ACTs) as buffer to ensure that an ACL is not exceeded and that overfishing does not occur. ACTs should be set below the ACL, to a degree that accounts for management uncertainly. While the omnibus amendment calls for an ACT, the Council should adopt explicit policies describing how to account for management risk and establish specific mechanisms to address these sources of uncertainty within the Omnibus Amendment. The current document tasks the MAFMC committees with identifying sources of uncertainly, but fails to identify how catch will be reduced to prevent the ACL from being

exceeded. It is not enough that the Council be "considering a process," it must clearly articulate how management uncertainty is accounted for in setting an ACT.

- **The Council should better account for ecosystem needs:**
  As fish management moves from a single-species to a more integrated ecosystem-based approach, the MAFMC should better address incidentally caught non-target species, or regulatory discards – fish discarded as a result of regulations. The goal of the MSA is to sustainably manage ocean fish, a goal that requires management to prevent overfishing of all fish populations – not simply target fish. In addition the council should consider the role that various species play in the marine and estuary ecosystems, such as forage fish, the primary food source for predator fish, marine mammals, and seabirds of the Mid-Atlantic, when setting ACLs. Accounting for ecosystem needs when setting ACLs is necessary not only for the health of individual fish populations managed by the Council, but for the overall long-term health and sustainability of the ocean and coastal ecosystems of the Mid-Atlantic.

- **The Council should prepare an Environmental Impact Statement:**
  When implemented by the MAFMC, the Omnibus Amendment will require significant changes to the current FMPs in the Mid-Atlantic, which in turn will significantly affect the ocean environment and thus should require the development of an Environmental Impact Statement (EIS). Although the Council cannot place specific numerical figures as to the actual catch of a particular species under the Omnibus amendment, the potential effects of implementing the omnibus are not too remote or speculative to assess such impacts on manage species, non-target species, habitat, protected resources, and human communities. Therefore, the Council should prepare an EIS evaluating the impacts of the Omnibus Amendment, just as the Gulf and South Atlantic Council have prepared for their Omnibus amendments.

Thank you for considering our comments.

Sincerely,

Brent C. Bolin,
Director of Advocacy
Anacostia Watershed Society
Maryland

Deborah A. Mans,
Baykeeper & Executive Director
NY/NJ Baykeeper
New Jersey

Carl Safina, PhD,
President
Blue Ocean Institute
New York

Gary Allen,
Executive Director
Center for Chesapeake Communities
Maryland

Terra Pascarosa,
Chair
Chesapeake Bay Group, Sierra Club
Virginia

Bill Goldsborough,
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Chesapeake Bay Foundation
Maryland

Drew Koslow,
Choptank Riverkeeper
Choptank River Eastern Bay Conservancy
Maryland

Jan Jarrett,
President and CEO
Citizens for Pennsylvania's Future (PennFuture)
Pennsylvania

Michael Riska,
Executive Director
Delaware Nature Society
Delaware

Maya K. van Rossum,
the Delaware Riverkeeper
Delaware Riverkeeper Network
Pennsylvania

Brad Heavner,
State Director
EnvironmentMaryland
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Doug O'Malley,
Field Director

Environment New Jersey
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Elizabeth Ouzts,
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Environment North Carolina
North Carolina

J.R. Tolbert,
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Don Sims,
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Float Fishermen of Virginia
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Bill Tanger,
Chair
Friends of the Rivers of Virginia
Virginia

Fred Akers,
River Administrator
Great Egg Harbor Watershed Association
New Jersey

Captain Bill Sheehan,
the Hackensack Riverkeeper
Hackensack Riverkeeper
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Stan Kotala,
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Eric Stiles,
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Larry Baldwin,
Lower Neuse Riverkeeper
Neuse Riverkeeper Foundation
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Michael L. Pisauro, Jr,
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New Jersey Environmental Lobby
New Jersey

Polina Reznikov,
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Michael Feld,
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Jeff Kelble,
the Shenandoah Riverkeeper
Shenandoah Riverkeeper
Virginia

Jeff Tittel,
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Sierra Club, New Jersey Chapter
New Jersey

James Sacci,
President
The Scuba Sports Club
New York

Mark D. Berg,
President
Watershed Alliance of Adams County
Pennsylvania

NATIONAL COALITION FOR MARINE CONSERVATION

Conserving Ocean Fish and Their Environment
Since 1973

May 21, 2010

Daniel T. Furlong, Executive Director
Mid-Atlantic Fishery Management Council
Suite 201
800 N. State St
Dover, DE 19901

Re: Omnibus ACL/AM Amendment Comments

Dear Mr. Furlong,

The National Coalition for Marine Conservation (NCMC) commends the Mid-Atlantic Fishery Management Council for its work to date to bring fishery management plans into compliance with the Magnuson-Stevens Reauthorization Act (MSRA) provisions to end overfishing. At the core of these provisions is the separation of science from allocation decisions to ensure that fishery catches are constrained within biologically safe limits. To assist federal councils with MSRA compliance, revised National Standard 1 (NS1) Guidelines, published in January 2009, outlined requirements for a new system of Overfishing Limits (OFLs), Acceptable Biological Catch (ABC), Annual Catch Limits (ACLs) and Accountability Measures (AMs) to be incorporated in all federal fishery management plans by 2011. In addition, the revised NS1 Guidelines also contain new criteria for addressing economic, social, and ecological factors in Optimum Yield (OY) specifications.

The goal of the Omnibus Amendment is to ensure all Mid-Atlantic Council FMPs conform to these new criteria, and we appreciate the opportunity to provide recommendations on these important measures.

Acceptable Biological Catch Alternatives
NCMC supports the ABC control rule framework proposed in **Alternative 1B**, although we ask for the following clarifications to be included in the final amendment:

- **The ABC control rule and risk policy must apply to *Loligo* and *Illex* squid.** Annual species managed by the Council (*Loligo* and *Illex* squid) are exempt from ACL and AM requirements, but they are not exempt from needing an ABC

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determined through a control rule and council risk policy.[1] To avoid confusion, Alternative 1B should explicitly describe the requirements for annual species and the application of Alternative 1B to squid stocks.

- **Alternative 1B should describe default methodology for ABC specifications for assessments lacking a probability distribution function of OFL.** At a recent meeting of the Mid-Atlantic Council's Scientific and Statistical Committee (SSC), assessments for all of the six species discussed were ranked as either Tier 3 or Tier 4.[2] While the SSC has not undertaken this exercise for all Mid-Atlantic species as of yet, we are concerned that the majority of council-managed species may fall into these lower tiers, and it is critical for the Council and stakeholders to have a clear understanding of how ABC will be specified in these situations. Tier 3 assessments contain an OFL estimate but lack a usable probability distribution of OFL. Tier 4 assessments do not provide either an OFL point estimate or probability distribution. As currently described in Alternative 1B, the Council risk policy is applied using the OFL distribution function, so it is unclear how risk policy will be applied in the absence of this important tool. **We recommend the inclusion of the following default rules to serve as the higher bound of ABC to be used when OFL is unknown or uncertainty surrounding OFL cannot be determined with confidence.** *[Note: we feel these control rules conform to our recommended risk policy of 25% (Alternative 2B)]*

    - **Tier 3: ABC= .75 OFL**

    - **Tier 4: Set OFL equal to recent (5 years or less) median catch, and set ABC=.75 OFL**

<u>Council Risk Policy Alternatives</u>
For the Mid-Atlantic Council's risk policy, NCMC recommends that the Council adopt **Alternative 2B**, which would apply a constant probability of overfishing of no greater than 25% to all species. This value is derived from National Standard 1 Technical Guidance that recommends that "the probability of exceeding the MFMT be not greater than 20%-30%, and certainly smaller than 50%." We believe this straightforward risk-adverse policy is the most appropriate method for taking into account the diverse life histories and ecological roles of species the Council manages.

In addition, the Omnibus states that the Council may consider social, economic and ecological factors in addition to the biological consequences of exceeding the OFL when it selects its risk policy.[3] We fully support these considerations and believe that a conservative risk policy, as

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[1] 50 CFR. § 600.310(h)(2)(i)

[2] The Mid-Atlantic Council's Scientific and Statistical Committee met May 11-12, 2010 to determine ABC recommendations for surfclams, ocean quahogs, longfin squid, shortfin squid, Atlantic mackerel and Atlantic butterfish. Butterfish, mackerel and shortfin squid assessments were labeled "Tier 4"; surfclams, ocean quahogs and longfin squid were ranked as "Tier 3."

[3] Omnibus, p. 9

described under Alternative 2B, is especially relevant when considering the consequences of overfishing forage fish populations (e.g., butterfish, squid, and mackerel), which play a central role in the food web and support a wealth of predator populations.

Annual Catch Limit (ACL) and Accountability Measure (AM) Alternatives
We limit our comments on these alternatives to butterfish and mackerel. As mentioned above, we believe the ecological role of forage fish is an important consideration as the Council chooses policies and procedures for establishing catch limits. NS1 guidelines recognize impacts on forage fish stocks and predator-prey interactions as relevant ecological factors for reducing MSY to achieve OY, and for the first time, national guidance is provided on how this should be done. These factors are to be "quantified and reviewed in historical, short-term and long-term contexts. Even where quantification of…ecological factors is not possible, the FMP still must address them in its OY specification." [4] Further, "(s)pecies interactions that have not been explicitly taken into account when calculating MSY should be considered as relevant factors for setting OY below MSY. In addition, consideration should be given to managing forage stocks for higher biomass than B_{MSY} to enhance and protect the marine ecosystem."[5]

In the mackerel and butterfish Term Tables (Omnibus, pp. 27-28 & p.32), we are pleased that the ACT definition (formerly initial optimum yield) includes ecological factors as a basis for modification of ABC. However, this definition is also included in the definition of ACL. Since ABC=ACL for all species, we assume that the Council plans to address ecological factors in the specification of ACT. While ACT can be an effective tool for dealing with many forms of management uncertainty (e.g., lag times between actual landings and availability of reports and data), it is inappropriate to address ecological factors in this specification since accountability measures are not triggered until the ACL is exceeded. In other words, if the Council deemed it appropriate to implement a forage reserve in the form of a buffer between the ACL and ACT, there would be no trigger to prevent the forage reserve from being depleted and no triggered actions to replenish the forage reserve. **We strongly urge the Council to set mackerel and butterfish ACLs<ABC, and allow for optimum yield factors to be addressed in the ACL specification.**

While it is important to clearly show where in the process ecological factors will be accounted for, it is more important to *demonstrate how* they will be considered. Clear rules and procedures for addressing management uncertainty should be developed and incorporated into the Omnibus before the document is submitted for final approval by the Council. If the Council chooses to maintain OY considerations as part of the ACT, ACT control rules should be added to the amendment to describe how ecological, economic, and social factors will be quantified, reviewed and addressed, as required by the NS1 Guidelines.

National Standard 1 Guidelines –Guidance Not Addressed in the Omnibus
We understand that the Council has been focused on meeting the statutory deadlines of the MSRA. Nonetheless, important guidance regarding managing forage fish stocks to protect their

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[4] 50 CFR § 600.310 (3)(iv)

[5] 50 CFR § 600.310 (e)(3)(iv)(C)

role in the ecosystem and also for identifying and classifying stocks in a fishery (including non-target and ecosystem component species) has been omitted from consideration in this amendment. Since the revised NS1 guidelines were issued in January 2009, NCMC has attended a number of Mid-Atlantic Council meetings and has submitted recommendations for this guidance to be applied to management of the Atlantic mackerel, butterfish, and squid fisheries, including setting biomass targets significantly higher than B_{MSY}.[6] Squid, mackerel, butterfish and non-target species in these fisheries (river herring and shad) comprise a large part of the Northeast forage base. Conforming the Atlantic Mackerel, Squid and Butterfish (MSB) FMP to the above mentioned criteria in the NS1 Guidelines would be an important step in the Council's evolution to ecosystem-based fishery management, and we hope the Council will make this a priority for the next MSB FMP amendment.

Thank you for considering our comments. We look forward to our continued work with the Council.

Sincerely,

Pam Lyons Gromen

Pam Lyons Gromen
Executive Director

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[6] NCMC Memorandum to the MAFMC. "NS1 Guidelines and Forage Fish." 27 March 2009.

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Start a Sea Change

May 21, 2010

Daniel T. Furlong, Executive Director
Mid-Atlantic Fishery Management Council
800 North State Street
Suite 201
Dover, DE 19901

Via email (info1@mafmc.org)

Re: Omnibus ACL/AM Amendment Comments

Dear Mr. Furlong:

Please accept the following comments on the public hearing document for the draft Omnibus Fishery Management Plan Amendment ("Omnibus" or "Draft Omnibus"), submitted on behalf of the Natural Resources Defense Council and The Ocean Conservancy. Our groups appreciate the opportunity to comment on this highly significant regulatory action, by which the Mid-Atlantic Fishery Management Council ("MAFMC" or "Council") proposes to come into compliance with statutory requirements enacted as part of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, P.L. 109-479, that all fishery management plans ("FMPs") include mechanisms to set annual catch limits ("ACLs") "at a level such that overfishing does not occur in the fishery" and accountability measures ("AMs") for the ACLs.[1] We seek to ensure that the Omnibus amends each of the relevant FMPs to include the *substantive rules* that the Council (in conjunction with the Council's Science and Statistical Committee ("SSC"), as provided by the 2006 amendments) *will apply* to establish ACLs and to trigger AMs each year, and that such rules are *sufficiently detailed* to ensure, based on best available science, that overfishing will not occur in any fishery under MAFMC jurisdiction, consistent with the detailed framework for implementation of the ACLs/AMs requirements set out in the revised National Standard 1 Guidelines ("NS1 Guidelines" or "Guidelines"), 50 CFR § 600.310. To this end, we have the following comments on the Draft Omnibus (organized according to subtopics):

Stocks "in a fishery"

A central principle in the NS1 Guidelines is the concept of "stocks in the fishery." The Guidelines anticipate that these stocks in the fishery will include target stocks identified in the FMPs but could also include non-target stocks and "ecosystem component" species. The Guidelines directed the

[1] 16 U.S.C. § 1853(a)(15).

Councils to establish ACLs with corresponding AMs for each such stock in the fishery, but does not require ACLs for stocks that are not "in the fishery."

The Guidelines left the determination of which stocks to include in each fishery to the Council.[2] This approach places on the Council the responsibility to rationally consider which species and stocks to include in each FMP in compliance with the Administrative Procedure Act, to consider feasible and reasonable alternatives to these choices pursuant to the National Environmental Policy Act ("NEPA") and to analyze the environmental impacts of these choices pursuant to NEPA. Relative to developing these mechanisms on a FMP by FMP basis, the Omnibus is obviously an ideal vehicle to carry out these evaluations and analyses as part of the development of the required ACLs and AMs because the Omnibus encompasses most of the managed stocks in the region.

Unfortunately, the Draft Omnibus adopts the narrowest possible interpretation of "stocks in the fishery" and simply assumes that those stocks already listed in the FMPs are the only stocks in the fishery requiring ACLs and AMs. The document lacks any evaluation of other non-target stocks caught incidentally as bycatch that may qualify as stocks in the fishery. It ignores the catch of stocks other than target stocks that is described in the 2008 and 2009 Standardized Bycatch Reporting Methodology Annual Reports, various stock assessments and FMPs for stocks in the Mid-Atlantic and adjacent regions, and the work of the Atlantic States Marine Fisheries Commission. The absence of any evaluation of non-target bycatch species must be addressed in the next stage of the Omnibus' development.

ABC Control Rule

As the Council described in its original March 24, 2009 scoping notice for the Omnibus, "ABC control rules" are "*formulaic* approaches ... that can be consistently applied to derive ABC relative to the status of the stock and the level of scientific uncertainty surrounding the stock status estimate."[3] The NS1 Guidelines define an ABC control rule as a "*specified approach* to setting the ABC for a stock or stock complex as a function of the scientific uncertainty in the estimate of OFL and any other scientific uncertainty."[4] Pursuant to the Guidelines, the ABC control rule should consider uncertainty in factors such as stock assessment results, time lags in updating assessments, the degree of retrospective revision of assessment results, and projections.[5] Because they are a critical part of the "mechanism to set ACLs,"[6] ABC control rules must be in the FMPs themselves.[7]

The ABC control rule outlined in the Draft Omnibus would assign stocks to one of four levels based on the level of scientific uncertainty associated with its stock assessment. For stocks assigned to Levels 1-3, ABCs would be set based on a Council "risk policy," for which the Draft Omnibus provides a number of options, applied to an "OFL probability distribution" for the stock. For stocks assigned to Level 4, "a simple control rule will be used based on biomass and catch history and the Council's risk policy." Draft Omnibus at 15.

[2] NS1 Guidelines Final Rule, 74 Fed. Reg. 3178, 3204 (January 16, 2009).
[3] 74 Fed. Reg. 12314, 12315 (Mar. 24, 2009) (emphasis added).
[4] 50 C.F.R. § 600.310(f)(2)(iii) (emphasis added).
[5] 50 C.F.R. § 600.310(f)(4).
[6] 50 C.F.R. § 600.310(c)(4) (ACLs are to be specified "in relationship to the ABC").
[7] 50 C.F.R. § 600.310(c)(3) (FMP must evaluate and describe ABC control rule); *see also* NS1 Guidelines Final Rule, 74 Fed. Reg. 3178, 3192 (January 16, 2009); 16 U.S.C. § 1853(a)(15).

Our groups are generally supportive of this conceptual approach to ABC control rules for purposes of the Omnibus. However, we have the following significant concerns with how the approach is set out in the Draft Omnibus:

(1) The Draft Omnibus's description of the ABC control rule's 4-tiered structure (at pp. 13-15) is inadequate. As an initial matter, the Draft Omnibus does not provide sufficiently-determinable criteria for assignment of stocks to tiers. More critically, particularly given that we understand that the majority of stocks will likely be assigned to either Level 3 or 4, the buffer-setting mechanism for stocks in these tiers is extremely unclear (indeed, it is not readily apparent that buffer-setting for stocks in Level 4 will result in larger buffers than for Level 3 stocks). For Level 3, the Draft Omnibus states only that a stock's OFL "probability distribution"– which it says may or may not be contained in the stock assessment – will be "adjust[ed]" and an ABC developed, possibly through the use of a "set of default levels of uncertainty in the OFL probability distribution for this level based on literature review and a planned evaluation of ABC control rules." *See* Draft Omnibus at 15. For Level 4, the best we can gather is that ABC-setting will be ad hoc.

Because of the Draft Omnibus's extremely limited discussion of the tiered component of the ABC control rule, we are unable to evaluate whether ABCs set for the various stocks in the region are likely to adequately account for scientific uncertainty, *i.e.,* result in adequate buffers, as an initial matter and over time. It also means that the Draft Omnibus lacks an actual ABC control rule for at least stocks assigned to Levels 3 and 4. As the NS1 Guidelines make clear, a control rule is not merely a process, but rather "a *policy* for establishing a limit or target."[8]

We strongly recommend that the Omnibus include a significantly more detailed description of the ABC-setting mechanisms for stocks in Levels 3 and 4, including a description of the specific types of uncertainty that will be considered. We understand that this process has been mapped out in significantly more detail than is set forth in the Draft Omnibus, *e.g.,* the SSC will conduct certain activities and make certain decisions at certain times; we ask that the details of this process be included in the Omnibus. An appropriate place to provide this description is in the upcoming NEPA documentation for this regulatory action; the public should then be provided an opportunity to comment on this document. In addition, as it is likely that development of the probabilistic approach envisioned for stocks assigned to Level 3 will be technically-challenging and, depending on the exact approach taken, may depend on information that is not available in a timely fashion, we strongly recommend that the Omnibus include an interim buffer-setting mechanism for Level 3 stocks. We recommend an interim default buffer of ABC= 0.75%OFL for Level 3 stocks. We also strongly recommend that the Omnibus include a default buffer for Level 4 stocks, which should ensure that buffers for these stocks are more precautionary than those used for Level 3 stocks.

(2) We are concerned that ABCs for stocks assigned to Level 2 will not adequately account for scientific uncertainty. For these stocks, the Omnibus recognizes that the probability distribution of the OFL taken from the stock assessment model will fail to include "important sources of uncertainty." Draft Omnibus at 14. The Omnibus nevertheless appears to

[8] *Id.* § 600.310(f)(1) (emphasis added).

contemplate relying on this inadequate measure of scientific uncertainty as the basis for setting ABCs. *Id.* at 15.

(3) With respect to the Draft Omnibus' risk policy options, while we support the Council's development of a risk policy, none of the options provide an adequate margin of safety against the risk of overfishing. Given that the Council is proposing to set ACL = ABC in all cases, it is critical that the Council risk policy effectively address the risk of overfishing, including the ABC-setting process, in order to satisfy the Congressional directive to permanently end overfishing. In our view, to guide the development of adequate control rule uncertainty buffers, councils should adopt a policy that ABCs and ACLs be set at a level that has a high probability (e.g., 75% or higher) of *not* resulting n overfishing, based on technical guidance from Restrepo *et al.* (1998).[9]

With the above caveat, *i.e.*, the maximum probability of overfishing in the risk policy should not exceed 25%, we support Alternative 2D of the risk policy alternatives as the preferred approach because this approach appears to be more conservative of stock biomass – the inflection point at which fishing mortality is reduced linearly starts at a stock size 150% of B_{MSY} (or B_{TARGET}) rather than waiting until stock size has fallen below B_{MSY} (or B_{TARGET}). This policy is proactive in approach because it requires action before stock size has fallen to critically low levels.

(4) The Draft Omnibus states that the risk policy may only be included in the Council "Standard Operating Procedures" (SOPPs).[10] However, the NS1 Guidelines clearly state that a risk policy used in this manner is part of the required ABC control rule[11] and that ABC control rules should be included in FMPs, not SOPPs.[12] The Council must include the risk policy as part of the ABC control rule in the FMP.

<u>OY</u>

National Standard 1 requires that conservation and management measures, including ACLs and AMs, prevent overfishing while achieving OY on a continuing basis.[13] Although the Draft Omnibus discusses the OY requirement, it does not specifically include any mechanisms to ensure that ACLs will be set at a level to achieve OY on a continuing basis. For instance, the development of the ACL-setting mechanism must explicitly consider food needs of predators that rely on the managed species. Specific procedures for setting ACLs to achieve OY for forage fish stocks should be developed to maintain significantly higher biomass than the conventional single-species target biomass of B_{MSY}.[14]

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[9] V.R. Restrepo *et al.* Technical Guidance On the Use of Precautionary Approaches to Implementing National Standard 1 of the MSFCMA. NOAA Technical Memorandum NMFS-F/SPO-##, July 17, 1998.
[10] *See* MAFMC, Public Hearing Document: Omnibus Amendment, April 2010 ("Draft Omnibus") at 9.
[11] *See* NS1 Guidelines, Preamble, 74 Fed. Reg. at 3192.
[12] *See* 74 Fed. Reg. at 3198 ("NMFS does not agree that the ACL and AM mechanisms should be established in the SOPPs. Also, NMFS never intended that ABC control rules would be described in the SOPPs and agrees that the ABC control rules should be described in the Fishery Management Plans.").
[13] 50 C.F.R. 600.310(e)(3)(ii).
[14] 50 C.F.R. § 600.310(e)(3)(iv)(C).

Annual Catch Targets

The Draft Omnibus proposes annual catch targets ("ACTs") for a number of fisheries to account for management uncertainty. However, no ACT control rule is included as called for by the NS1 guidelines[15] -- in the absence of such a control rule, it is unclear how such management uncertainty will be accounted for in the ACT. The ACT control rule should clearly articulate how management uncertainty in the amount of catch in the fishery, including bycatch (as discussed more below), is accounted for in setting the ACT.[16] The control rule should account for uncertainty both in the ability to constrain catch and in quantifying the true catch amount, and consider past management performance in the fishery and such factors as time lags in reported catch.

Management Uncertainty and Accountability Mechanisms with Respect to Bycatch

The Draft Omnibus does not adequately consider management uncertainty with respect to bycatch. It is well-recognized that bycatch monitoring in fisheries in the region is generally inadequate, *i.e.*, results in highly-uncertain estimates of bycatch for purposes of annual catch levels. It is not readily apparent from the Draft Omnibus how or whether this uncertainty will be factored into ACL-setting. Moreover, the Draft Omnibus does not incorporate accountability mechanisms with respect to bycatch, which are currently lacking in fisheries in the region (with the exception of butterfish bycatch in the *Loligo* fishery).

* * * *

We thank the Council for this opportunity to submit these comments on this historic set of FMP amendments.

Sincerely,

Bradford H. Sewell
Senior Attorney
Natural Resources Defense Council

Chris Dorsett
Director, Fish Conservation and Management
Ocean Conservancy

cc: Lois Schiffer, NOAA General Counsel
Patricia Kurkul, NMFS Northeast Regional Administrator

[15] 50 CFR § 600.310(f)(6).
[16] *Id.*

MAFMC

Omnibus Bill Comments

The NMFS and the Councils have worked hard to control the overfishing of most key ocean fish species. Only New England Council has fought hard to ignore their legal responsiblilty. The Omnibus Bill is an excessive reaction to the deeds of a single council.

Charter boats and Head boats are in business to provide legal fish for their customer to take home and eat. This bill was written with tiered regulations so tough that this bill must be considered excessive regulation. This Amendment proposes regulations in specific multiple tiers each one tougher that the previous one. Anglers were informed at the NJ Omnibus meeting that only Fluke and Spiny Dogfish are tier #2, all other species are tier #4. This is totally wrong! NMFS will never provide the money required to move tier #4 fish species to #2 or higher. Charter boats and Head boats are in business to provide legal fish for their customers to take home and eat. The Charter boat and Head boat business will be decimated if these proposed regulations are approved.

I ask that all fisheries in MAFMC plans begin at 50%.using the Framework as shown on page #8 of the proposed plan. All additional quota restraints, tiers and other provisions are eliminated. Each additional tier in this bill mandates additional quota reductions.

I ask that the following four changes be in any bill MAFMC approves.
A- The council proposes to authorize NMFS Regional Administrator to close specific fisheries based on MRFSS Wave 2 & 3 recreational angler landing data. These fisheries will be closed when predetermined landing percentages are estimated to be exceeded We request that this "Recreational Inseason Accountability" provision be totally stricken from all fisheries in the proposed Omnibus Bill.

B- The NAS study of MRFSS was found to be a "Fatally Flawed" fishery management stool. The NAS requested the use of the MRFSS plan be ended by Jan 2009. The new system named MRIP has yet to be introduced. We ask that no recreational fishery MRFSS data be used for recreational fishery management in this proposed bill

C- This proposed bills excessive management actions must be eliminated.
It states that MSY will be replaced by ACL and the other various provisions that end with RHL being the management goal. This is far more than is required by Magnuson/ Stevens Act. .All other management provisions of this Amendment must be eliminated. The framework proposed on Page 8 should be the only management changes in this bill.

I can not support this Omnibus Amendment if it is not totally rewritten

Thank you for considering my comments.
Captain John T. Koegler
8 Ringneck Lane, Radnor, Pa. 19087

May 21, 2010

Daniel T. Furlong
Executive Director
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901
FAX: (302) 674-5399

RE: Comments on Public Hearing Document Omnibus Amendment 13 to the Atlantic Mackerel, Squids and Butterfish Management Plan, Amendment 3 to the Bluefish Management Plan, Amendment 15 the Summer Flounder, Scup and Black Sea Bass Fishery Management Plan and Amendment 3 to the Tilefish Management Plan

Dear Mr. Furlong:

Please accept the following comments submitted on behalf of the Recreational Fishing Alliance (RFA)[1] and RFA New Jersey Chapter.

I. General Comments

RFA has major concerns with the public hearing document and the glaring absence of criticism regarding the Marine Recreational Fishing Statistics Survey (MRFSS) and its limitations in monitoring and estimating performance of the recreational fishing sector. Many of the proposed options in the Omnibus Amendment particularly those that deal with proactive and reactive accountability measures (AMs), demand accuracy and timeliness far beyond the current capabilities and design of MRFSS. This point has been made by National Marine Fisheries Service (NMFS) in response to similar action being proposed for the recreational scup fishery through Amendment 8 to the Summer Flounder, Scup and Black Sea Bass Fishery Management Plan.[2] NMFS went beyond calling the use of MRFSS in this manner as inappropriate and indicated it was in violation of numerous national standards.

"The provision that would deduct the annual recreational harvest in excess of the specified limit from the limit for the following year would base the deductions on the results of the

[1] The Recreational Fishing Alliance (RFA) is a national, 501(c)(4) non-profit grassroots political action organization that has been representing individual sport fishermen and the sport fishing industry since 1996. The RFA Mission is to safeguard the rights of saltwater anglers, protect marine, boat and tackle industry jobs and ensure the long-term sustainability of U.S. saltwater fisheries. RFA members include individual anglers, boat builders, fishing tackle manufacturers, party and charter boat businesses, bait and tackle retailers, marinas, and many other businesses in fishing communities.

[2] http://www.mafmc.org/fmp/pdf/SFSCBSB_Amend_8.pdf

Marine Recreational Fishery Statistics Survey (MRFSS). This measure impacts the annual allocation of the recreational sector of the fishery with no clear conservation benefit, in violation of national standard 4. The MRFSS is an excellent fishery management tool for the purpose for which it was designed, that is, giving an overall projection of recreational catch from the recreational fishery from Maine to Texas. However, the survey was not intended to be used as a basis for calculating an overage in the recreational fishery that would then be deducted from the quota established for the subsequent year. The survey variability becomes problematic, and this problem is further exacerbated if the fishery is managed on a regional quota basis as is a possibility in the scup fishery. In addition, the survey variability could affect residents of different states unevenly with respect to quota overages. These problems make the provision inconsistent with national standard 4. Likewise, because the survey is based on contacts with recreational fishermen, it reflects a sampling variability in addition to variations in the stock. The effects of this sampling variability render its use to calculate overages inconsistent with national standard 6. Finally, it would take a significant expenditure of funds to reduce the survey variability, especially as the geographic area for which estimates are made is reduced, to render it consistent with national standard 2. This conflicts with national standard 7."[3]

Specific to the revised National Standard 1guidance cited on page 7 of the public hearing document which has been identified as a major driving force of the entire Omnibus Amendment, NMFS finds this approach and its reliance on MRFSS inconsistent with National Standard 1. This is a profound contradiction that must be resolved.

"***This raises concern regarding its consistency with national standard 1.*** *In failing to account for these variations, the use of the survey affects the overall ability of the entire scup quota management process to achieve on a continuing basis, the optimum yield from this fishery. This raises concern regarding its consistency with national standard 1."*[4]

In response to a Congress mandate to address deficiencies of MRFSS, the National Research Council (NRC) conducted a peer review of the data collection program and released their findings in 2006. Statements such as "fatally flawed" arose from the report and a series of recommendations were made available to fisheries managers, legislators, and stake holders. NRC indicated that a complete overhaul was necessary to meet the ever increasing demands of fisheries management as expressed in the following statement.

"The MRFSS (as well as many of its component or companion surveys conducted either indirectly or independently) should be completely re-designed to improve the effectiveness and appropriateness of sampling and estimation procedures, applicability to various kinds of management decisions, and usefulness for social and economic analyses."[5]

and,

"For recreational fishing surveys, the designs, sampling strategies, and collection methods of recreational fishing surveys do not provide adequate data for management and

[3] **Federal Register** Vol. 61, No. 107, Docket Number **960520141–6141–01.**

[4] **Federal Register** Vol. 61, No. 107, Docket Number **960520141–6141–01.**

[5] National Research Council. Committee on the Review of Recreational Fisheries Survey Methods, National Research Council, ISBN: 0-309-66036-X. page 3

policy decisions."[6]

Following the NRC findings and consistent with recommendations offered by members of the recreational fishing community, MRFSS was slated to be improved through language included in the 2006 Magnuson Reauthorization. RFA supported having these improvements implemented in order to address significant deficiencies in the MRFSS program that were having a deleterious effect on the recreational fishing community. MSA section 401 (g) mandates the improvement of MRFSS and other recreational data collection programs through the development of a saltwater angler registry, implementation of National Research Council recommendations, and enacting five measures that would produce immediate improvements. The saltwater registry was delayed one year and only just became effective January 1, 2010. Calibration between the random digit dialing survey and a known sampling frame created through the registry will require a minimum of 3 years to fully determine biases and their magnitude. Of the 18 NRC recommendations, RFA can only identify 5 that have been fully or partially implemented. Congress, recognizing the importance and urgency of improving recreational data collection programs establish a deadline[7] for enacting improvements under this section of January 1, 2009. That deadline has expired and NMFS remains severely delinquent on these critical improvements. RFA believes the MAFMC has full justification to postpone moving forward with the recreational component of the Omnibus Amendment until all sections of MSA 401 (g) are fully implemented and a report is submitted to Congress. As expressed by NMFS, the NRC and the fishing community, MRFSS was not designed nor intended to collect data in a timely or accurately enough manner to meet the demands of the Omnibus Amendment. Doing so with the current MRFSS would violate no less than five of the 10 National Standards.

Another major concern lies with the lack of acknowledgment of optimum yield (OY). National Standard 1 mandates that conservation and management measures shall prevent overfishing while achieving on a continuing basis, the optimum yield from each fishery.[8] Optimum yield is defined by MSA as the yield from a fishery that provides the greatest benefit to the Nation in terms of food production and recreation, the amount equal to maximum sustainable yield (MSY) reduced by relevant economic, social or ecological factors, and for rebuilding fisheries, the level of yield that produces MSY.[9] In the most general sense, optimum yield should be a level of fishing that occurs on rebuilt stocks that offsets sacrifices, loss opportunity and loss participation that have accumulated during rebuilding. This is consistent with the basic premise used by NMFS when rationalizing conservation measures in the present that result in negative socioeconomic impacts. RFA further believes this to have been the intent of Congress when passing the Sustainable Fisheries Act in 1996.

The Omnibus Amendment fails to indicate where optimum yield would fall on the chart included on page 8 of the document. It is understood that OY can be equal to or less than MSY. Specific to the Omnibus Amendment, staff has indicated that OY would most likely equal the Allowable Biological Catch (ABC) set by the Science and Statistical Committee (SSC). The RFA can make

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[6] National Research Council. Committee on the Review of Recreational Fisheries Survey Methods, National Research Council, ISBN: 0-309-66036-X.

[7] MSA § 401 (g)(3)(D)

[8] MSA § 301 (a)(1)

[9] MSA § 3(33)(A-C)

a prediction about where OY will fall on the flow chart on page 8 but by leaving this out of the document, fishermen are not made fully aware of the implications of the amendment. If OY is equal to ABC and then ACLs and ACT are set below the ABC, fishermen will never fish at OY even with rebuilt fisheries. This is counter to what NMFS has told the fishing communities to quell concerns about negative impacts during rebuilding. RFA believes it is irresponsible to not make fishermen fully aware that this Omnibus Amendment will institutionalize fishing levels below OY even once rebuilding objectives are achieved.

RFA has explained in comments submitted to other fishery management councils as well as testimony before the House Subcommittee on Insular Affairs, Oceans and Wildlife that MRFSS is neither accurate nor reliable enough to implement accountability measures and annual catch limits in the recreational sector. RFA stands by this position and contends that it is completely inappropriate for the MAFMC to move forward with the section of MSA that deals with ACLs and AM while ignoring critical sections that deal specifically with recreational data collection improvements necessary

II. Section 1.0 Acceptable Biological Catch (ABC) Alternatives.

RFA supports Alternative 1A No Action on ABC control rule. RFA acknowledges that Alternative 1B would perhaps simplify the council member's ability to evaluate a confidence level of a particular stock assessment and subsequent SSC ABC recommendation. The problem with simplifying the process by assigning a number to an assessment is that council members will not take the time to review the supporting documentation associated with a SSC recommendation or stock assessment. As the MAFMC is fully aware, every SSC recommendation includes a section that discusses the scientific uncertainty that was considered during the recommendation setting process. This uncertainty is ultimately dealt with in the SSC recommendation. Uncertainty simply means there is a large amount of variability in estimations of fishing mortality and/or biomass due to missing or less than reliable data that is incorporated at the stock assessment level. In a fishery such as scup, the uncertainty may demand a level 4 but in application, the uncertainly only means the estimate of abundance may vary from 300% rebuilt to 100% rebuilt. Yet, the stigma associated with a level 4 assessment may prompt council members to reduce ACLs or ACT unnecessarily. A low assessment grading may have the unintended consequence of misleading council members and the public that a stock is not responding to management measures or is a state of decline. As seen in the scup fishery which would likely be assigned a proposed level 4, a low assessment level does not mean a stock is performing poorly. Of additional concern, assessment grading levels may be used by NMFS as justification to supersede council recommendations or existing regulation under section MSA 305§ (c)(1).

Currently, there are fishing mortality targets contained within the summer flounder, scup and black sea bass fishery management plan that promote rebuilding or maintenance of these fisheries. The most recent assessment for these species indicate that in the scup and black sea bass fisheries, the current fishing mortality estimates are .048 and 0.28 respectively. These estimates are considerably under the F_{msy} values for these fisheries set at 0.177 and 0.42. It should be noted that projections produced by Council staff using F_{msy} values for scup and black sea bass show a continued increase in stock size. Both fisheries have already achieved their respective rebuilding targets and therefore are no additional rebuilding is required. Since continued rebuilding is projected under annual catch limits consistent with fishing levels of 2009, it seems extremely remote that even is if fishing pressure was doubled compared to 2009 levels that overfishing would occur. The very definition of overfishing as defined by MSA describes it as taking too many fish from the stock to support MSY on a continuing basis and yet, F_{msy} for these species would cause rebuilding not a decline.

In addition, RFA does not support Alternative 1B due to the lack of available funding or commitment on behalf of NMFS to move fisheries from low stock assessment levels to higher ones. Fisheries that are assigned a level 4 will most likely wallow at the level for minimum of 10years because there is currently no program in place that has the potential to gather the data necessary to improve their stock assessments. Many stock assessments could see improvements by gathering empirical information on life history parameters such as natural mortality. Yet, there is no funding mechanism to prompt this action. In fact, the FY 2011 NOAA budget cut millions of dollars from cooperative research programs. RFA believes it is unwise to lock fisheries into assigned assessment levels knowing there are no options to improve their situation.

III. Section 2.0: Council Risk Policy Alternatives

RFA supports Alternative 2C: Stock Replenishment Threshold with Inflection at B/B_{msy}. RFA supports the use of inflection points based on B/B_{msy} ratio where the probability of overfishing is allowed to increase as the status of the stock increases. However, RFA suggests that two or preferably three inflection points are included in Option 2C similar to inflection points in Option 2E. RFA specifically suggests developing a B/B_{msy} vs Probability of Overfishing curve with a stock replenishment threshold set at 0.1 B/B_{msy}. The first inflection point would correspond to a .75 B/B_{msy} ratio and 40% overfishing probability. The second inflection point would correspond to a B/B_{msy} ratio of 1.0 and a 45% probability of overfishing and a final inflection point at 1.5 B/B_{msy} with the probability of overfishing plateaus at 50%. This represents a shift towards the origin and allows the fishing community to utilize rebuilding success at a quicker rate.

RFA does not support the options contained in section 2.0 that create an artificially low probability of overfishing solely on the basis of scientific uncertainty. All of the important recreational fisheries under the MAFMC jurisdiction have F_{msy} or F_{msy} proxy values. These values and all other biological reference points (BRP) are established through the stock assessment workshop and peer review process. As these numbers are developed, considerable discussion is had on every data point that is included in the numerical models. With data sets that contain more variability as would be expected in proposed level 4 stock assessment fisheries, stock assessment participants add numerous levels of precaution to account for the scientific uncertainty. Even basic parameters such as natural mortality are not always empirically based but are set using assumptions that also include a level of precaution. This noted, it is fair to conclude that fisheries with high coefficient of variability and other characteristics of a proposed level 3 or 4 assessment have a higher level of precaution incorporated into their BRP. Therefore, risk assigned to fisheries by the MAFMC should be independent of assessment level because the risk is already dealt with through the individual assessments. RFA does not support any reduced SSC ABC recommendation as this number is already conservative in terms of dealing with scientific uncertainty.

In addition, RFA does not support options contained in Section 2.0 that link stock assessment levels to a fixed risk policy. As mentioned by the chair of the SSC, most fisheries in the Mid-Atlantic management area would fall in the proposed level 4 stock assessment level. It is unlikely that there will be much progress in moving stocks from level 4 to levels 2 or even level 3 considering the significant financial investment necessary and lack of funding currently available.

The public hearing document indicates that the MAFMC is also considering the appropriateness of a stock replenishment threshold. The concept of a SRT is valid but it is unlikely that a stock could cascade out of control to a B/B_{msy} ratio of 0.1 due to fishing mortality considering the very strict language in MSA. For stocks that are currently rebuilt such as scup and black sea bass, MSA specifies that a rebuilding plan be initiated if these stocks were to fall below the overfished threshold, thus rebuilding requirements would be set through that process. RFA does have concerns with the use of SRT where the probability of overfishing would be set at zero. This situation would not allow any directed fishing and could potential prompt regulations enacted in other recreational fisheries that result in incidental catch. That could have profound impacts on many important recreational fisheries.

IV. Section 3.0: Annual Catch Limits (ACLs) and Accountability Measure (AMs) Alternatives

RFA's comments on this section pertain to the bluefish, summer flounder, scup and black sea bass fisheries. RFA generally supports the flow charts for the above mentioned species on pages 36, 46, 52, and 58 respectively. However, RFA takes issue with all the flowcharts in that they identify scientific uncertainty first deducting catch levels from the overfishing limit (OFL) and do not specifically identity OY. As mentioned earlier in our comments, OFL is a biological reference point set at the stock assessment level. Stock assessments by design, deal with scientific uncertainty when developing biological reference points as they relate to MSY. The SSC accounts for scientific uncertainty in making ABC recommendations and uses the OFL as guidance. Therefore, scientific uncertainty is accounted for at two levels before ACLs and ACT are set through the Omnibus Amendment process. While it is important to understand the multiple levels at which available quota is removed to deal with scientific uncertainty, the fishing community and managers do not have any understanding how these decisions translate into actual pounds of fish. When the final harvest limits are set, recreational anglers are often frustrated by the limited options available to them in setting seasons, size limits and bag limits due to inadequate harvest limits. Many of the most important recreational fisheries are fully rebuilt and near rebuilt which causes a perplexing situation in the recreational sector because regulations have become more and more restrictive. The flowcharts in this section, beginning with the stock assessment process, should identify either the poundage or percentage removed from the OFL to the recreational harvest limit or target beginning at the stock assessment level.

As more recreational fisheries move into a rebuilt or near rebuilt status, regulatory discards and its associated mortality account for a larger portion of the recreational annual catch limit. In the summer flounder fishery, discard mortality is now equal to harvest. While there is some benefit in discarding in fisheries that have a high nonconsumptive value such as marlin and to some extent striped bass and bluefish, regulatory discards in the summer flounder fishery serves no purpose. The consequence is reduced recreational harvest limits and less flexibility in setting seasons, size limits, and bag limits. Furthermore, with discards being removed at a level above the recreational harvest limit, it will be difficult to correct this problem under the provisions of the Omnibus Amendment.

Action Alternatives for Atlantic Mackerel

RFA does not support proactive AMs in the recreational Atlantic Mackerel fishery. Recreational harvest represents a minimal percentage of the overall domestic harvest and recreational harvest has remained stable over the 28 year timeframe MRFSS has been in operation. The recreational mackerel fishery is extremely dependent upon weather. Combined with a traditional mackerel season that occurs when MRFSS sampling is nominal, landings have the potential to be highly variable from year to year. MRFSS currently does not support this concern and in fact estimates indicate stable landings from the recreational sector. However, MRFSS is unpredictable and this traditional fishery should not be penalized through reactive AMs because of when and how it is prosecuted and the inability of MRFSS to adequately monitoring it. Therefore, RFA does not support reactive AMs for the recreational mackerel fishery nor does it support affording the NMFS Regional Administrator the authority to invoke inseason adjustments and/or closures based on MRFSS. This is simply not acceptable.

Action Alternative for: Atlantic Bluefish ACL and AM

RFA supports Sub-option B for reactive AMs in the recreational bluefish fishery.
RFA does not support general recreational closure authority being placed with NMFS Regional Administrator. For the past 12 years, a third of all bluefish caught are released ACL=ABC which includes discards.

Action Alternatives for: Summer Flounder, Scup and Black Sea Bass

RFA submits the following general comments that are relevant to all three species. For all species, RFA supports a minimum 3-year ACLs evaluation as described by Sub-Option B. As mentioned in our general comments, MRFSS was designed to show trends in recreational fishing activity. In fact, MRFSS becomes more accurate as the terminal years moves farther from the year of question. This well known limitation of MRFSS should automatically cause the MAFMC to reject Sub-Option A for the recreational summer flounder, scup and black sea bass fisheries.

Again citing the limited capabilities of MRFSS and/or MRIP, RFA does not support granting NMFS Regional Administrator authority to close the recreational summer flounder, scup and/or black sea bass fishery based on real-time monitoring. MRFSS by design cannot be used to provide managers real time monitoring of recreational catch, harvest, effort and participation. Consistent with this argument, RFA cannot support inseason adjustments to the recreational summer flounder, scup and black sea bass fisheries when the primary monitoring tool is MRFSS. Both of these proposed management options would completely disrupt any sense of stability in the recreational fisheries. It would be nearly impossible for fishing related businesses to develop efficient business plans with the uncertainty of mid-season closures pending. Anglers would view this scenario as "race to fish" management similar to red snapper in the Gulf of Mexico which proved to be disastrous for the fishing community. Such options are also completely incompatible with current conservation equivalency and dual management under MAFMC and Atlantic States Marine Fishery Commission (Commission) jurisdiction.

RFA contends that MSA and National Standard 1 guidance requirements for proactive AMs are satisfied through deductions to ABC accounting for management uncertainty as illustrated in the flow charts provided for these species. In addition, regulation modifications account for the previous fishing season's landings relative to that year's landings limit. Recently adopted Performance Standards implemented through the Commission's Summer Flounder, Scup and Black Sea Bass plan, deduct available landings based an average of overage in the three previous fishing seasons. This provides additional assurances that the proactive AM requirement has been met.

RFA is opposed to the implementation of additional reactive AMs in the recreational summer flounder, scup and black sea bass fisheries. Reactive AMs are already a management tool included in the fishery management plan and are the mechanisms that prompt automatic adjustment of seasons, size limits, and bag limits based on a comparison of landings to landings target. The public hearing document qualifies on page 10 that examples of reactive AMs include "modification of subsequent year trip or possession limits."

Action Alternative for: Tilefish ACL and AM

RFA does not support the implementation of ACL or AM in the recreational tilefish fishery. Though once it supported a strong recreational fishery, tilefish is now dominated by the commercial sector and recreational landings should not be set based on the current allocation. The prosecution of this fishery is very demanding and naturally constrains participation and growth. Recreational anglers should be allowed to engage this fishery without ACLs or AMs specific to the sector. This can always be reconsidered in the future if recreational tilefish unexpectedly expands.

V. Section 4.0: Periodic Review of ABC, ACL, and AM Alternatives

RFA supports Alternative 4B: Review of control rules by SSC and Council. While it is stated that the SSC and Council will undertake an evaluation of ABC control rules and AMs if a ACLs for a specific stock is exceeded at a frequency greater than 25%, RFA believes that the MAFMC and SSC should be equally concerned if the fishing communities are unnecessarily restricted from the fisheries, particularly rebuilt fisheries. National Standard 1 mandates achieving optimum yield on an on-going basis. If excessive poundage is removed from a potential landing target due to an unnecessary accumulation of uncertainty, both scientific and management, optimum yield will not be achieved and the fishing community will suffer. Unfortunately, the failure to make meaningful improvements to the recreational data collection unfairly impacts the recreational sector. The application of management uncertainty disadvantages the recreational sector more because its landings are estimated through inefficient survey techniques as opposed to the commercial sector where accounting for every pound of fish sold to dealers is attainable. Equal effort must be made to ensure the recreational sector is given fair opportunity to utilize its sector specific AHT consistent with optimum yield and National Standard 1 guidance.

VI. Section 5.0: Description of Process to Modify Actions

RFA concurs with the following statement contained in this section, "*Flexibility is imperative and must allow for timely modifications give the dynamic nature of fisheries and the environment.*" Many of the problems we face in the recreational sector relative to the lack of access to rebuilding or rebuilt stocks can be linked to the lack of flexibility in MSA. While fisheries science has drastically improved in the last 10 years, numerical modeling is still an imperfect science. More sophisticated models have the ability to give managers a more refined range of outcomes in response to their management choice. However, much of fisheries management is trial and error due to the dynamic nature of the marine environment and the often unpredictable social component of the recreational fishery. For this reason, it paramount that flexibility be explicitly included in the Omnibus Amendment.

RFA will submit additional comments specific to Section 5.0 following the June 2010 council meeting.

Sincerely,

Jim Donofrio
Executive Director

Capt. Adam Nowalsky
RFA New Jersey Chapter Chair

marine fish conservation network

ACHIEVING HEALTHY OCEANS & PRODUCTIVE FISHERIES

May 21, 2010

To: Daniel T. Furlong, Executive Director
Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover, Delaware 19904-6790

Re: Public hearing document for an Omnibus FMP amendment to implement NS1 requirements for a system of ACLs and AMs

Dear Mr. Furlong:

The Marine Fish Conservation Network (Network), representing nearly 200 environmental, fishing and marine science organizations nationwide, submits the following comments on the public hearing document for the Omnibus FMP amendment to implement statutory requirements enacted as part of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, P.L. 109-479, that all fishery management plans ("FMPs") include mechanisms to set annual catch limits ("ACLs") "at a level such that overfishing does not occur in the fishery" and accountability measures ("AMs") to ensure that ACLs are not exceeded.[1] These comments are in addition to verbal testimony that we delivered on May 3, 2010 at the public scoping hearing in Alexandria, VA.

Ending overfishing was the highest priority of the reauthorized Magnuson-Stevens Act of 2006 (MSRA). To achieve that end, the MSRA requires each U.S. fishery to adopt a system of ACLs and AMs that is risk-averse, based on scientific advice, and aimed at achieving long-term sustainability in the nation's fisheries. The ACLs may not exceed the acceptable biological catch (ABC) recommendations of the Council's Science and Statistical Committee (SSC). In the Network's 2009 review of the revised National Standard 1 (NS1) Guidelines (*ACL final rule*, 74 Fed. Reg. 3178), we concluded that *all* regions will have to amend their FMPs and their operating procedures to implement the new ACL requirements fully, with support from NMFS.[2] We are pleased that the Mid-Atlantic Council is making progress in this direction and has provided the public with the opportunity to comment on how to proceed with amending its FMPs.

The Network is encouraged by the Council's initial efforts to develop a system of ACLs and AMs for stocks in its fisheries. The public hearing document and the proposed alternatives contain a number of the features of a system of ACLs and AMs that we recommended in our previous public scoping comments from 2009, which were drawn from our earlier national report on ACL implementation (*Implementing Annual Catch Limits: A Blueprint for Ending Overfishing in U.S. Fisheries*).[3] However, the proposed alternatives lack critical elements of an effective system of ACLs and AMs that comply with the law and the NS1 Guidelines. While the public hearing document contains many promising features and represents a good start, the Network believes that much work remains to be done. Specifically,

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- The Draft Omnibus public hearing document simply assumes that those stocks already listed in the FMPs are the only stocks in the fishery requiring ACLs and AMs; the document lacks any evaluation of other, non-target stocks caught incidentally as bycatch that may qualify as stocks in the fishery.
- The proposed system of ABC control rules appears to be designed in such a way that substantial sources of scientific uncertainty would not be considered and uncertainty buffers would not be adequate.
- The proposed alternative risk policies do not provide an adequate margin of safety against the risk of overfishing and should be more conservative.
- The proposed system of accountability measures relies primarily on reactive measures that would not enable managers to close a fishery upon attainment of its ACL, and fails to address the shortcomings of the catch monitoring system.
- The document lacks any adequate consideration of procedures for achieving OY, including measures addressing ecosystem considerations in the setting of ACLs in order to achieve OY.

We address these issues in more detail below.

1. The Draft Omnibus hearing document fails to consider non-target stocks in the fishery and lacks any formal mechanism or classification system for evaluating and determining which stocks are "in the fishery."

The Mid-Atlantic Council only includes target species in its FMPs, even though species other than target stocks are caught in these fisheries and have been identified and described in the 2008 and 2009 Standardized Bycatch Reporting Methodology (SBRM) Annual Reports and in the documents of the Atlantic States Marine Fisheries Commission. The public hearing document simply assumes that those stocks already listed in the FMPs are the only stocks in the fishery requiring ACLs and AMs, and lacks any evaluation of other, non-target stocks caught incidentally as bycatch that may qualify as stocks in the fishery.

The revised NS1 guidelines for ACLs and AMs state that the requirement for ACLs and AMs applies to all stocks in a fishery, and all stocks in the FMP should be considered "in the fishery" unless otherwise specified through rulemaking.[4] This includes non-target stocks that are caught incidentally as bycatch during the pursuit of target stocks in a fishery, as well as "regulatory discards" as defined under Magnuson-Stevens Act section 3(38), which may or may not be retained for sale or personal use.[5] The ACL final rule clarifies that all stocks in a fishery *must* have status determination criteria, MSY and OY specification, an ABC control rule, mechanisms for specifying ACLs, and accountability measures.[6]

Unfortunately, the public hearing document does not include a formal classification system for determining all the species that qualify as stocks in the fishery requiring a system of ACLs and AMs. It appears that no vulnerability analysis has been done for target species or non-target species that are caught incidentally in the fishery as bycatch. We believe that such an analysis is necessary and that vulnerability analysis should also be used to determine if some non-target species may qualify for classification as EC species. We urge the Council to incorporate a formal evaluation process to determine whether other, non-target species qualify as stocks in the fishery requiring a system of ACLs and AMs. In the case of non-target species, the ACL would serve as a bycatch limit.

As stated in past Network letters to the Council on this subject, we believe river herring caught incidentally as bycatch likely qualifies as one of the stocks in the trawl fisheries. In the case of river herring, the catch limit would be a non-target species ACL designed to limit bycatch of river herring in the trawl fisheries. Upon attainment of the river herring bycatch ACL, accountability measures might be designed so that bycatch-triggered area closures would move the fishery out of areas of high bycatch of river herring.

2. The proposed system of ABC control rules appears to be designed in such a way that substantial sources of scientific uncertainty would not be considered and uncertainty buffers would not be adequate.

Control rules have been described by Restrepo *et al.* (1998) as "pre-agreed plans for making management decisions based on stock size."[7] In order to set ACLs for all stocks in the fishery, the Councils and NMFS must establish control rules for each FMP that will enable them to set numeric catch limits across a wide range of data quality situations and many different species. To achieve a high probability of not overfishing, it is essential that the framework of FMP control rules includes explicit mechanisms to account for uncertainty. If a control rule is structured to reflect different levels of information available for each stock in the FMP, then the system of uncertainty buffers for each category or "tier" should increase precaution as available information decreases and uncertainty increases. In other words, control rules should be designed to be more conservative when the information is limited and uncertainty is greater.

The NS1 guidelines specify that each Council must establish an ABC control rule based on scientific advice from its SSC, which may not exceed the OFL.[8] The NS1 Guidelines define an ABC control rule as a "*specified approach* to setting the ABC for a stock or stock complex as a function of the scientific uncertainty in the estimate of OFL and any other scientific uncertainty."[9] Because the ABC is a level of annual catch that is intended to account for the scientific uncertainty in the estimate of OFL and any other scientific uncertainty, therefore NMFS expects that ABC will virtually always be reduced from OFL to reduce the risk that overfishing might occur in a given year.[10] The ABC control rule should also reduce fishing mortality as stock size declines and establish a stock abundance level below which fishing would not be allowed.[11] The Network supports an approach in which directed fishing should be halted beyond a certain cutoff point that is *no less than* 10-15% of the stock's unfished biomass, or higher if the biology and ecology of the stock indicates that more precaution is warranted.

Conceptually, we support the Council's proposed 4-tier ABC control rule structure. However, the dimensions of scientific uncertainty that would or would not be considered when setting ABC are not clearly specified. Similarly, the criteria for assignment of stocks to tiers of the control rule are not clearly specified. For stocks assigned to Levels 1-3, the uncertainty buffer between ABC and OFL would based on a Council "risk policy," for which the Draft Omnibus provides a number of options. In theory, the risk policy would be applied to an "OFL probability distribution" for stocks in these tiers of the control rule. For data-poor and unassessed stocks assigned to Level 4, however, "a simple control rule will be used based on biomass and catch history and the Council's risk policy."[12] If a probability-based approach is not applicable for determining the uncertainty associated with the overfishing limit

(OFL) for a given stock, then a simple percentage buffer will be required and should be included in the control rule.

Due to the Draft Omnibus's extremely limited discussion of the tiered component of the ABC control rule, we are unable to evaluate whether ABCs set for the various stocks in the region will adequately account for scientific uncertainty and include appropriate buffers. The Omnibus amendment must include a significantly more detailed description of the ABC-setting mechanisms, including a description of the specific types of uncertainty that will be considered in each tier or "level" of the control rule. In addition, it is our understanding that there is no actual assessment methodology in place for most or all stocks in the Mid-Atlantic region with which to calculate the uncertainty associated with estimates of OFL. That being the case, how can the SSC apply a risk policy that is premised on knowing the risk of overfishing associated with the estimate of OFL? The public hearing document is silent on this point, but the final Omnibus amendment and the accompanying NEPA documentation must provide clear answers.

Since it appears likely that the development of a probability-based approach envisioned for stocks assigned to Levels 1-3 will be difficult or may not be available for some time, the Network recommends that the Omnibus include an interim default uncertainty buffer for stocks where the probability of overfishing associated with the OFL cannot be calculated. It would also be important to retain the concept that an ABC control rule buffer system should reflect the increasing uncertainty associated with stocks in lower tiers of the rule. If, for instance, the default buffer for ABC = .75OFL for stocks in Level 3, then the uncertainty buffer should be larger in Level 4.

For data-poor stocks lacking any assessment, the method of determining the buffer may include the use of a vulnerability analysis, other research data, and professional judgment. Inclusion of a Productivity and Susceptibility Analysis (PSA) for data-limited stocks in the lowest assessment tier would be especially important to evaluate the potential risks associated with a given fishing level recommendation.

3. The proposed alternative risk policies do not provide an adequate margin of safety against the risk of overfishing and should be modified accordingly.

The MSRA's strong mandate to end overfishing requires a risk-averse policy to setting ABCs and ACLs such that there is a high probability of not exceeding the OFL. Rosenberg *et al.* (2007) emphasized the need for fishery managers to consider the acceptable level of risk of exceeding the prescribed OFL when setting ACLs.[13]

With respect to the Draft Omnibus' risk policy options, we support the Council's development of a risk policy and proposed inclusion of the policy into the ABC control rule. However, none of the options provide an adequate margin of safety against the risk of overfishing. Given that the Council is proposing to set ACL = ABC in all cases, it is critical that an integrated system of ABC control rules and the Council risk policy effectively addresses the risk of overfishing in the ABC-setting process in order to satisfy the Congressional directive to permanently end overfishing. In addition, the absence of an adequate catch monitoring system means that there is high uncertainty regarding total fishing mortality (including at-sea discards in the fishery and bycatch in other fisheries), and this is yet another reason for having a highly risk-averse policy. To guide the development of adequate control rule uncertainty buffers, councils should base their development should adopt a policy that ABCs and ACLs should be set at a level that has a high probability (e.g., 75% or higher) of *not* exceeding the overfishing level, based on technical guidance from Restrepo *et al.* (1998).[14]

In light of the above comments, we support Alternative 2D of the risk policy alternatives as the preferred approach because this approach appears to be more conservative of stock biomass – the inflection point at which fishing mortality would be reduced linearly starts at a stock size 150% of B_{MSY} (or B_{TARGET}) rather than waiting until stock size has fallen below B_{MSY} (or B_{TARGET}). Alternative 2D risk policy also has a scalable uncertainty buffer that increases in size as uncertainty increases for stocks in lower tiers of the ABC control rule – an essential feature of an adequate risk policy. This policy is proactive in approach because it requires action before stock size has fallen to critically low levels, but we continue to believe that the maximum probability of overfishing in the risk policy should not exceed 25%. The rationale for this approach is even stronger given that the Council is proposing to set ACL = ABC for all stocks and the catch-monitoring system is inadequate to provide a reliable and timely estimate of fishing mortality for any fishery.

In addition, the Public Hearing Document states that the risk policy may only be included in the Council "Standard Operating Procedures" (SOPPs).[15] However, the NS1 Guidelines clearly state that the risk policy is intended to be part of the required control rule.[16] Therefore, the Council must include the risk policy as part of the ABC control rule in the FMP.

4. The proposed system of accountability measures (AMs) for managed species relies primarily on reactive measures and a system of annual catch targets (ACTs), but the Draft Omnibus hearing document fails to explain how the ACTs will prevent fisheries from exceeding ACLs and lacks the required ACT control rule that must accompany the use of a system of ACTs.

The revisions to the NS1 guidelines specify that an ACL may not exceed the SSC-recommended ABC, and that ACL is the limit that triggers AMs.[17] The objective of establishing AMs is that the ACL not be exceeded.[18] In the revised NS1 guidelines, AMs are defined as management controls that prevent ACLs or sector-ACLs from being exceeded (inseason AMs), where possible, and correct or mitigate overages if they occur (reactive AMs). In addition to inseason AMs and reactive AMs, AMs may include area closures, changes in gear, changes in trip size or bag limits, reductions in effort, and other appropriate management controls for the fishery.[19] For fisheries without inseason management controls, AMs should include annual catch targets (ACTs) that are set below ACLs to reduce the risk that catches will exceed the ACLs.[20] In fisheries without inseason monitoring capability, setting the ACT less than ACL is intended to increase the chances of staying within the limit and avoiding frequent overage deductions in subsequent years. The Draft Omnibus hearing document proposes annual catch targets (ACTs) for a number of fisheries to account for management uncertainty, but it is not clear how these ACTs will prevent the fishery catch (landings and discards) from exceeding ACLs and ensure overall accountability, given the general lack of reliable and timely catch monitoring in these fisheries. This issue must be addressed squarely in the accompanying NEPA documentation for the Omnibus amendment.

In addition, no ACT control rule is included as called for by the NS1 guidelines.[21] In the absence of such a control rule, it is unclear how management uncertainty will be accounted for in the ACT or what aspects of management uncertainty are to be considered. The ACT control rule should clearly articulate how management uncertainty in the amount of catch in the fishery is accounted for in setting the ACT.[22] The control rule should account for uncertainty both in the ability to constrain catch below ACL and in quantifying the true catch amount, and consider past management performance in the fishery and such factors as time lags in reported catch.[23] In some data-poor fisheries, it may be appropriate to consider the use of a system of multiyear average ACLs and AMs based on achievement of a rolling average catch.[24] But NMFS intends that evaluation of moving average catch to the average ACL would be conducted annually and that AMs would be implemented if average catch exceeds the average ACL.[25] If ACTs are to be used in the system of AMs, these issues must be addressed in the Omnibus amendment and accompanying NEPA documentation.

In general, we find that the lack of a reliable catch monitoring system and the Council's intent to set ACL = ABC for all fisheries underscores the importance of adopting a highly risk-averse ABC control rule and risk policy that acts proactively prevent overfishing at earliest stages of the catch specification process.

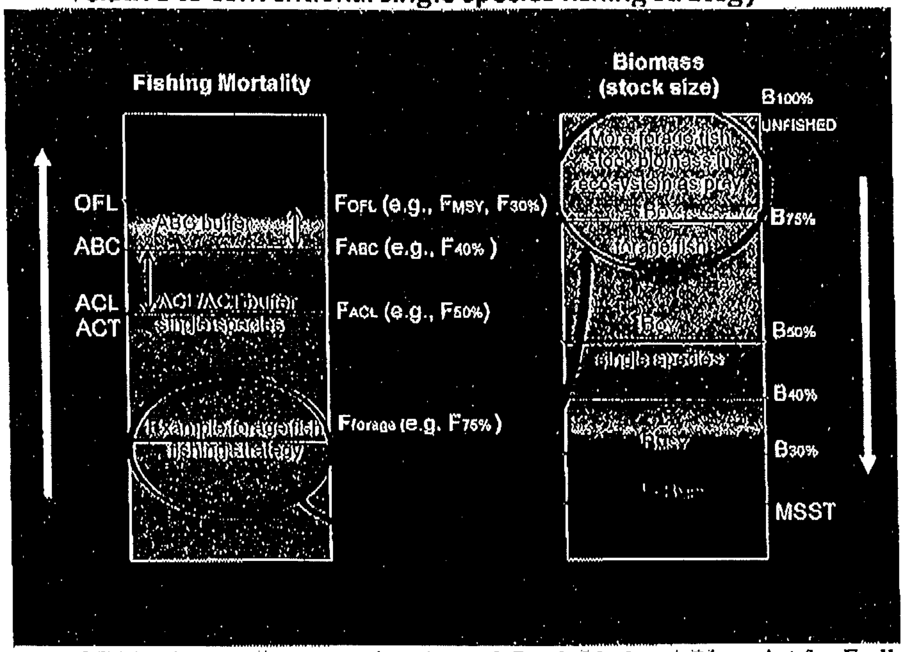
5. The Draft Omnibus scoping document lacks any consideration of procedures for setting ACLs to achieving OY, including measures addressing ecological factors in the setting of ACLs in order to achieve OY.

The National Research Council's Committee on Ecosystem Effects of Fishing, Phase II (NRC 2006) concluded that if the United States is to manage fisheries within an ecosystem context, food web interactions, life-history strategies, and trophic effects will need to be explicitly accounted for when developing fishery harvest strategies.[26]

This ACL Omnibus amendment affords the Council the opportunity to advance precautionary and ecosystem-based approaches to the conservation and management of forage species, specifically, those managed under the Mackerel, Squid and Butterfish (MSB) FMP. The central importance of conserving forage fish is recognized in the existing regulations implementing the MSA's essential fish habitat (EFH) provisions and implementing regulations, which establish that loss of prey species constitutes an adverse effect on EFH.[27] The importance of forage species is also recognized in the revised NS1 guidelines, which emphasize the importance of maintaining adequate forage for all components of the ecosystem when determining the greatest benefit to the Nation.[28] The Guidelines recommend measures to reduce OY from MSY to maintain forage stocks at higher biomass than B_{MSY} to enhance and protect the marine ecosystem.[29]

To achieve these objectives, the Omnibus amendment should include specific mechanisms for setting ACLs to achieve OY with the goal of maintaining significantly higher biomass than the conventional single-species target biomass of B_{MSY} for important forage fish species under the Council's management, including mackerel, squids and butterfish. We offer an example of how such a mechanism or ACL control rule might be structured in Fig. 1 below:

Fig. 1 – Illustration of a more conservative forage fish "F_{Forage}" relative to conventional single-species fishing strategy



Source: MFCN (2009), ***Implementing Annual Catch Limits: A Blueprint for Ending Overfishing in U.S. Fisheries.***[30]

***

In conclusion, the issues raised here underscore the need for further detailed exposition of the alternatives and adequate NEPA documentation to accompany the Omnibus amendment. The Network believes that the adoption of ABC and ACL control rules and corresponding AMs via the Omnibus Amendment is likely to have significant effects on the environment that would require an EIS. Other Councils which are developing omnibus amendments for purposes of complying with the 2011 deadline for implementing Section 303(a)(15) of the MSA are conducting EISs in conjunction with these amendments. Given the statutory deadline, we believe it at least prudent that the Council proceed now also with developing an EIS, as it originally intended and as will likely be necessary.

We thank the Council for this opportunity to submit these comments on this important amendment and set of issues.

Bruce Stedman, Executive Director
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[1] 16 U.S.C. § 1853(a)(15).
[2] All Network reports cited in these comments can be found on the Network's website at: http://www.conservefish.org/index.php?option=com_content&task=section&id=11&Itemid=228.
[3] See note 2.
[4] 50 CFR § 600.310(d)(1).
[5] 50 CFR § 600.310(d)(3-4).
[6] 50 CFR § 600.310(c)(1-5).
[7] V.R. Restrepo *et al.* Technical Guidance On the Use of Precautionary Approaches to Implementing National Standard 1 of the MSFCMA. NOAA Technical Memorandum NMFS-F/SPO-##, July 17, 1998.
[8] 50 CFR § 600.310(f)(4).
[9] 50 C.F.R. § 600.310(f)(2)(iii) (emphasis added).
[10] 50 CFR § 600.310(f)(3).
[11] 50 CFR § 600.310(f)(4).
[12] Draft Omnibus at 15.
[13] Andrew Rosenberg *et al.* Setting Annual Catch Limits for U.S. Fisheries. Report of the Lenfest Working Group on Annual Catch Limits, Lenfest Ocean Program, September 2007. 36 p.
[14] V.R. Restrepo *et al.* Technical Guidance On the Use of Precautionary Approaches to Implementing National Standard 1 of the MSFCMA. NOAA Technical Memorandum NMFS-F/SPO-##, July 17, 1998.
[15] *See* MAFMC, Public Hearing Document: Omnibus Amendment, April 2010 ("Draft Omnibus") at 9.
[16] *See* NS1 Guidelines, Preamble, 74 Fed. Reg. at 3192.
[17] 50 CFR § 600.310(f)(2)(iv) and (f)(6).
[18] 50 CFR § 600.310(f)(6).
[19] 50 CFR § 600.310(g)(2) and (3).
[20] 74 Fed. Reg. at p. 3178.
[21] 50 CFR § 600.310(f)(6).
[22] *Id.*
[23] 50 CFR § 600.310(f)(6)(i)
[24] 50 CFR § 600.310(g)(4).
[25] Fed. Reg. at p. 3197.
[26] National Research Council, Committee on Ecosystem Effects of Fishing, Phase II. Dynamic Changes in Marine Ecosystems: Fishing, Food Webs, and Future Options. National Academies Press, Washington, D.C. (2006). 160 pp.
[27] 50 CFR 600.815(a)(7).
[28] 50 C.F.R. § 600.310(e)(3)(iii)(C).
[29] (50 CFR 600.310(e)(3)(iv)(C)).
[30] MFCN report available at: http://www.conservefish.org/storage/marinefish3/documents/mfcnacl09.pdf.

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May 21, 2010

Daniel T. Furlong
Executive Director
Mid-Atlantic Fishery Management Council
800 N. State Street
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Dover, DE 19901

Re: Omnibus ACL/AM Amendment Comments

Dan,

Dear Mr. Furlong:

The Massachusetts Division of Marine Fisheries (*MarineFisheries*) offers the following comments on the Mid-Atlantic Fishery Management Council's (MAFMC) Omnibus ACL/AM Amendment. We intend to offer other constructive comments at your June meeting in New York when you're scheduled to continue debate and make final decisions. We appreciate this is an ambitious Amendment encompassing all of your plans. Consequently, we hope for a consistent approach between species to avoid confusion.

We urge the Council to comply with federal law but be aware that National Standard #1 guidelines go well beyond the law obliging the Council to be inordinately precautious at the expense of the fishing industry. Being risk adverse is all well and good, but not to the extent that the Council adopts a risk-prone attitude for the fishing industry, i.e., simply accepting major socioeconomic impacts and fishing industry disruption as a necessity and consequence on adhering to National Standard #1 guidelines.

Several species covered in this Omnibus Amendment are managed jointly by the New England Fishery Management Council and/or the Atlantic States Marine Fisheries Commission, both on which the Commonwealth serves. It is this joint management framework that compels us to comment on the Amendment's proposed calculation and implementation of Acceptable Biological Catch (ABCs), Annual Catch Limits (ACLs) and Accountability Measures (AMs).

ABC Alternatives

Council staff has indicated that the tiered ABC Control Rule Framework relies on published work by Prager & Shertzer (2010) and Caddy & McGarvey (1996). The precautions included in those papers, and any other reports that underpin the recommended methodology, should be explicit in the Omnibus Amendment itself. Applying the detailed methodology to one of the included fisheries, perhaps mackerel, would allow for comprehensive consideration of complications, i.e., (un)availability of the probability distribution of OFL, and bring further clarity to practical benefits, risks and detriments of the proposed framework. Is it appropriate to underestimate ABC when estimated distributions of OFL are unavailable?

The Council's Science and Statistical Committee (SSC) sets ABCs by reducing OFLs for scientific uncertainty. How will the Council proceed within the proposed framework when an ABC is not based on science? I understand the SSC embraced the recommendation of the Transboundary Resource Assessment Committee that total mackerel catches not exceed the average total landings (80,000 mt U.S. and Canadian) over the last three years (2006-2008). I suggested in my May 11th letter to SSC Chairman John Boreman, if averaged landings are to be used to set the ABC, the Council should make that decision and not the SSC. Let the Council pick the years, assess the effects of that decision, and then accept the consequences. It's really a management call.

Council Risk Policy

When considering P*, how much inconsistency in results is acceptable? Prager & Shertzer (2010) suggest a P* range between 0.25 and 0.50 given that overfishing will be controlled through multiple mechanisms thereby making it reasonable to consider higher P* values. Additionally, higher values reduce the possible concern of inconsistent results noted above. For these reasons, *MarineFisheries* does not support consideration of a lower P* such as the 0.20 value noted on page 16 by the Council.

ACL and AM Alternatives

The Council proposes generally to set ACLs equal to ABCs and use the proactive AM of an Annual Catch Target to account for management uncertainty. How will the Council and its Monitoring Committees ensure the New England Fishery Management Council and Atlantic States Marine Fisheries Commission are involved proactively in management uncertainty decisions for jointly managed species?

Before any consideration should be given to species-specific alternatives, it will be informative for the Council to provide its management partners with empirical examples of proposed alternatives. For example, apply the recommended approach for scup, black sea bass, and fluke to the 2009 fishery. What would the quotas have become and how would that have impacted the further allocation of quota by ASMFC among member states? Assumptions may need to be made, but that factor should not prohibit the practical examination of potential impacts anymore than it would prohibit the implementation of final recommendations.

Alternatives that take advantage of the joint management structure with ASMFC will lead to a more useful management toolbox. Consider the rejection of in-season AMs due, in part, to the need to have concurrent state measures (e.g., recreational bluefish). This should be possible with adequate coordination. We cannot emphasize enough that a thorough examination of the implications of proposed approaches for every species, especially fluke, scup, and black sea bass, for which there is a recreational fishery with state's recreational fisheries accounting for the lion's share of recreational catch must be done for the benefit of ASMFC and the recreational fishing industry. Otherwise, it will be difficult if not impossible to acquire needed ASMFC support for your OFL/ABC/ACL/ACT approach. We must completely understand the likely consequences of how you intend to follow National Standard Guideline #1 that doesn't apply to the states.

Thank you for your attention to our comments.

Sincerely,

David O Pierce

David E Pierce, Ph.D.
Deputy Director

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Comments on the Public Hearing Document
to the OMINIBUS AMENDMENT

Daniel T. Furlong
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901

Dear Mr. Furlong:

The New Jersey Council of Diving Clubs (NJCDC) is an organization of 16 sport diving clubs in New Jersey with a few clubs in nearby states. Recreational Sport Diving is an important industry in New Jersey with 25 specialized dive shops, about 25 commercial dive boats, even more private dive boats, and several manufacturing companies devoted to producing dive gear and supporting the sport. There is a sport diver fishery involved that takes Fluke, Black Sea Bass, Tautog, etc. The NJCDC respectfully submits the following comments on the Ominbus Amendment.

My real concern with the Ominibus Amendment is that it seems to be creating an automatic methodology for closing fisheries, and my chief concern is the recreational sector. I would think that it would be prudent to use every administrative device possible to avoid a complete fishery closure. No charter boat or dive boat captain can schedule charters in advance if he/she doesn't know if the fishery will be open when its supposed to be open. Charter boat captains would be reluctant to charter past June if they thought closures possible.

In addition to ABCs, ACLs, and AMs, the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSRA) also stated that social and economic impacts on fishing communities and fisheries be considered. Where does that consideration appear in the Ominibus Amendment?

Furthermore, it appears that the primary data source to be used for the recreational fishery will be the fatally flawed MRFSS, a system that was so poorly designed that a national saltwater fishery register was recently created to replace it at the request of scientists. Yet "The NMFS Regional Administrator will monitor the recreational fishery based on MRFSS and other available information, and shall determine if the recreational landing will exceed the recreational harvest limit. The Regional administer shall publish notification in the Federal Register advising that, effective upon a specific date, the recreational fishery will be closed for the remainder of the fishing year"(p 34, 44, 50, 56 etc.). Hence, bad data will be used to close recreational fisheries. Since most recreational fishermen do not read the Federal Register for casual reading, I truly hope that NMFS will find a better way to notify recreational fishermen.

The MSRA was supposed to allow more and better science to be utilized in fishery management. But if the number and quality of ocean fishery surveys has not increased, and MRFSS is still being used, and States have no money to conduct there own surveys due to economic troubles, there is no improvement in science and there might be a decline. It does no good to give more power to the SSC if the data they are using is flawed. If scientific uncertainty is high and you are at a level 4, then science is doing little good.

I will not comment on all aspects of this proposal as most of the options appear to be draconian in nature. In general, I favor a proactive approach with in season adjustments to bag limits in the recreational fishery to avoid closure at all cost, but this depends on getting reliable data quickly. I favor revising the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSRA) to make it more flexible. I don't think most Congressmen understood the implications and impacts of hard ABCs, ACLs, and AMs on the recreational fishery industry, and I really don't think Congress thought it would close recreationally fisheries like a drunken sailor.

Nothing in this letter is designed to deprecate the author of this document, who apparently was trying to do her best to follow the guidelines of the NS1 and wording of Congress.

Is this amendment being rushed through? It was only presented to the Mid Atlantic Council in April and its little more then a month since that happened, and already the comment period is about to end. It is a very complicated document, 75 pages long, full of scientific jargon and abbreviations, with proposed automatic cutoffs that could shut down both commercial and recreational fisheries. I'm requesting that the public comment period be extended to allow proper public evaluation and response.

Sincerely

Jack Fullmer
Legislative Committee
NJCDC

Please reply directly to :

Jack Fullmer
443 Chesterfield-Arneytown Rd
Allentown, NJ 08501
Jf2983182@msn.com

Coakley, Jessica

From: James Krauss [redacted]
Sent: Friday, May 21, 2010 4:27 PM
To: Info1
Subject: Omnibus ACL/AM Amendment Comments

Dear Mr. Furlong -

I spoke at the hearing in Stockton, NJ on Tuesday evening, but in case my remarks were not completely lucid, I am submitting a written version, as follows:

I'm a Certified Public Accountant and have been in practice for 37 years. As such, I am in a measurement business and have seen and used many models and measurement tools over the years. I was very impressed with the work that was done by your staff. It was somewhat analagous to the actuarial calculations that I see used in pension calculations. But the major difference that I see beween the models used in my work and yours is that the data used in your models are completly invalid. As the computer geeks say, no matter how good your program, "if its garbage in, it's garbage out."

As a taxpayer, I was dismayed to find absolutely no cost-benefit analysis. Directly and indirectly, the recreational fishing generates millions, if not billions, of tax dollars, and hundereds of thousands of jobs. To have a black and white closure point and/or severely increased restrictions based on data that is not valid with no thought to the socio-economic impact doesn't make any sense.

Finally, as someone who has fished in saltwater for well over fifty years, and hope to do so for many more, I find it terribly upsetting that the government has spent a tremendous amount of time and effort to develop sophisticated models and measuement tools designed to regulate and possibly close down fisheries, and at the same time has not developed any sophisticated or even common sense measures to gather data.

This amendment should be shelved until real data can be developed and evaluated. You have truly put the cart in front of the horse.

James Krauss
77 Bayside Drive
Atlantic Highlands, NJ 07716

THE PEW ENVIRONMENT GROUP

May 21, 2010

Daniel T. Furlong
Mid-Atlantic Fishery Management Council
800 North State Street. Suite 201
Dover, DE 19901

RE: Public Hearing Document for the Omnibus Amendment

Dear Mr. Furlong,

I am writing to submit the comments of the Pew Environment Group (PEG) in response to the Mid-Atlantic Fishery Management Council's (MAFMC) request for public comments on the Omnibus Amendment document to establish Annual Catch Limits (ACLs) and Accountability Measures (AMs) for all species managed by the MAFMC. We would like to thank the Council and its staff for their hard work and dedication in completing this document. PEG commends the Council for developing a proposal that represents a good faith effort to implement new legal requirements to establish ACLs that prevent overfishing. While we are generally optimistic about the contents of the Omnibus Amendment, we believe that there are still some essential elements of the document that need revision in order for it to meet the requirements of the reauthorized Magnuson-Stevenson Fishery Conservation and Management Act (MSA) and the National Standard 1 (NS1) guidelines.

Council Risk Policy Alternatives:

The 2006 amendments to the MSA require catch limits that do not allow overfishing, and this is reiterated in the NS1 guidelines. Therefore, because of this absolute prohibition on allowing overfishing, we believe that the probability that overfishing will not occur should be high. Due to the long history of overfishing in the Mid-Atlantic, and the fact that the Omnibus Amendment sets the ACL equal to the acceptable biological catch (ABC), it is imperative that the Council adopt a precautionary, risk averse policy to ensure that the ACL is not exceeded.

The Council risk policy must be set in a manner that ensures a high probability that overfishing will not occur. Although the NS1 guidelines state that the probability that overfishing will occur cannot exceed 50 percent, we believe that the selection of a risk policy with this upper limit is unacceptable as a matter of policy. In its risk policy, the Council should operate under the assumption that an actual catch equal to the stock's ABC would result in overfishing, as there is no buffer between the ACL and the ABC. With the 2006 amendments to the MSA, Congress clearly intended that overfishing must end, thus there must be a high probability of success to meet this objective. In order to ensure this, the Council should select an upper probability limit that should not be higher than 10 percent. Anything higher would not be consistent with the spirit and letter of the MSA.

As we stated in our comments on the scoping document, PEG supports a tier-based approach to setting ABC that categorizes stocks by specific criteria, with each tier representing a different level of stock assessment complexity. Additionally, the ABC control rules should be directly linked to stock size through linear or stepwise relationships. As a result, we cannot support alternatives 2A (no action), 2B (constant probability), and 2C which do not used a tiered approach, or 2F which is not directly linked to actual stock status.

Of the remaining alternatives (D and E), we are most supportive of alternative 2D, providing the probability range is modified to be more risk averse in line with our comments above. We agree with using a stock replenishment threshold defined as the ratio of B/Bsmy = 0.10, and we believe that the Council should use an inflection point of B/Bsmy of 1.5. The use of an inflection point of B/Bsmy of 1 is in our view inadequate to ensure that overfishing will not occur. Stocks at a threshold of 1 are at or around the ideal stock size, and therefore vulnerable to high fishing pressure. Because the Council cannot account for the magnitude by which the ACL (and as a result the ABC) may be exceeded, it is essential that the risk policy have a high probability that overfishing not occur.

The Omnibus Amendment also states that the Council is considering including the risk policy in either the FMPs or the Council Standard Operating Procedures (SOPPs). The Council's risk policy must be made part of the Omnibus, not simply the Council SOPPs. The risk policy is an essential element of the ABC control rule. The NS1 Guidelines clearly state that the ABC control rules must be included in FMPs, and not simply in SOPPs (50 C.F.R. § 600.310(c)(3)), and as such, the risk policy must also be included in the FMPs.

Rebuilding:

Section 2.0 of the Omnibus states that for stocks under a rebuilding plan, "the probability of exceeding fishing mortality rate F will be 50 percent unless modified to a lesser value". For the reasons listed above with regard to the Council risk policy, we feel that it is unacceptable as a matter of policy to allow such a high risk of exceeding the fishing mortality rate for the rebuilding plan. Stocks under rebuilding programs are typically depleted (some severely), and therefore more vulnerable. Therefore, the Council should be more risk averse when stocks below their biomass targets, as the consequences of exceeding F are more severe for those stocks. As such, the Council should select an upper probability limit for stocks in rebuilding plans such that the probability that overfishing may occur should not be higher than 10 percent.

Accounting for Management Uncertainty:

Due to the inherent uncertainty in fisheries management, we applaud the Council's use of both proactive and reactive AMs in the Omnibus Amendment. Specifically we are encouraged that the Council has included annual catch targets (ACTs) as a buffer to ensure that an ACL is not exceeded and that overfishing does not occur, as well as a proactive AM. The Council however, must complete its analysis of management uncertainly by developing an ACT control rule that clearly articulates how management uncertainly will be accounted for as required under section (§600.310(f)(6) of the NS1 Guidelines. Simply stating that the Council is "considering a process" does not satisfy the guidelines requirements that the Council specifically identify a method to account for two factors; (1) uncertainty in the ability of managers to constrain catch so the ACL is not exceeded, and (2) uncertainty in quantifying the true catch amounts (i.e., estimation errors). Furthermore, the analyses need to consider past management performance in the fishery and factors such as time lags in reported catch.

We recognize that there is a degree of variability in each fishery as to the exact level of management uncertainly, and that the species management committees have particular knowledge and expertise, so that it is appropriate for each committee to make *ad hoc* decisions on how to account for uncertainty year to year. However, the Council must have an overarching policy, clearly articulated in the Omnibus Amendment, that individual committees will use to guide their decisions. In order to guide the relevant species committees, the Council must adopt explicit policies so that management uncertainly is accounted for uniformly across managed species so that the Council's uncertainly policy is followed. The Council must carefully craft appropriate policy now and include it within the Omnibus Amendment, not postpone the discussion for a later day.

The Council should also use ACTs as a means of addressing deficiencies in the system of catch monitoring and reporting, in both the commercial and recreational sectors. In both sectors the Council does not have an adequate understanding of total fishing mortality, which can be improved through expanded observer coverage, increased dockside sampling, and other methods to measure bycatch and discards. We recognize that this will be an evolving process, but the Council must acknowledge and begin to address these issues now.

ACL Evaluation:

We note that the Omnibus amendment includes alternatives to evaluate the recreational ACL sector on a three year running average for Summer Flounder, Black Sea Bass, and Scup. We support evaluating recreational fisheries on the basis of a three year moving average - the average catch is compared to average ACL over a three year period and accountability measures triggered if the average catch exceeds the average ACL. Since recreational fisheries currently lack the timely catch data necessary to have effective in-season closures, the fisheries should be evaluated based on a multiyear period. Using a three year moving average of annual catch estimates to determine whether AMs should be instituted will moderate annual variability in recreational catches while still allowing annual evaluations and institution of AMs if necessary.

Optimum Yield:

While we are encouraged that the Omnibus Amendment contains a more detailed description of optimum yield (OY) than the original scoping document, the omnibus amendment still lacks any substantive measure to address necessary factors that must be considered and accounted for in determining OY, in particular ecological factors. As such we would like to repeat our original comments with regard to OY;

> *ACLs should also be set so that optimum yield is achieved, as per NS1's mandate that "conservation and management measures shall prevent overfishing while achieving, on a*

continuing basis, the optimum yield (OY) from each fishery" (§600.310(a)). Thus, a principal focus of management must be to prevent overfishing and rebuild stocks, so that conservation drives the process, but beyond this, management must aim to achieve OY on a continuing basis. OY is the yield that provides the "greatest overall benefit to the Nation" and is reduced from MSY by economic, social, and ecological factors (§600.310(e)(3)). While current science may make it difficult to quantify such factors with confidence, they must be addressed in OY specification. The final rule provides several examples for each of the three factors an FMP must address (§600.310 (e)(3)(iv)).

While all the factors are important, we highlight the need to adequately consider ecological factors, stressing that this consideration must be beyond just predator-prey interactions and include impacts on forage fish stocks and other species (marine mammals, birds, other fisheries). We strongly support the rule's recommendation to set OY farther from MSY according to the degree of uncertainty in estimates of MFMT, biomass, and management controls (§600.310 (e)(3)(v)). The Council should adopt ACL control rules that address the achievement of OY, which means that ecological, economic, and social factors must be considered and accounted for. OY must account for all catch, including all fishing mortality, bycatch, discards, and scientific research (§600.310(e)(3)(v)(C))."

Adopting an ACL control rule, or as an alternative an ACT control rule, which incorporates these factors is necessary because the Council has chosen to set the ACL = ABC. Species in the Mid-Atlantic exemplify the need to take into account ecologic factors. For example, in the tilefish fishery there is a directed recreational fishery that is not accounted for in management measures. If not specifically addressed through an individual quota, then the Council must account for this known catch through the OY for tilefish as required by (50 C.F.R.§600.310(e)(3)(v)(C), as quoted above. In the summer flounder fishery, as is the case in other fisheries, there are unaccounted for bycatch and discards from interactions with other fisheries that should be accounted for.

Better accounting of all catch will allow the Council to better account for ecosystem needs. The key goal of the MSA is to sustainably manage ocean fisheries, a goal that cannot be achieved without an end to all overfishing of all fish populations – not simply target fish. In addition, the Council should consider the role that various species play in the marine and estuary ecosystems, such as forage fish, the primary food source for predator fish, marine mammals, and seabirds of the Mid-Atlantic when setting ACLs. Accounting for ecosystem needs when setting ACLs is necessary not only for the health of individual fish populations managed by the Council, but for the overall long-term health and sustainability of the ocean and coastal ecosystems of the Mid-Atlantic.

The Council should prepare an Environmental Impact Statement:

On March 25th, PEG, along with four other national environmental and conservation groups, sent a letter to the Council regarding the Council's intention to prepare an environmental assessment (EA) instead of an environmental impact statement (EIS). We would like to reiterate our opposition to this decision and note that we feel that the Council's explanation for this move is inadequate. When implemented by the MAFMC, the Omnibus Amendment will require significant changes to the current FMPs in the Mid-Atlantic, which in turn will significantly affect the ocean environment and thus should require the development of an Environmental Impact Statement (EIS). Although the Council cannot place specific numerical figures as to the actual catch of a particular species under the Omnibus amendment, the potential effects of implementing the omnibus amendment are not too remote or speculative to assess such impacts on managed species, non-target species, habitat, protected resources, and human communities. Therefore, the Council should prepare an EIS evaluating the impacts of the Omnibus Amendment, just as the New England, the South Atlantic and the Gulf Council have prepared for their Omnibus amendments.

Periodic Review:

PEG supports Alternative 4B, for a periodic formal review conducted by the SSC and the Council to review and revise ABC and ACL control rules on a regular basis. This is consistent with the NS1 guidelines which state that the whole ACL/AM system should be re-evaluated if an ACL is exceeded more than once in the last four years (50 C.F.R.§600.310 (g)(3)). The reason for poor performance, if found, must be determined and fixed, which may include revising the ABC and ACL control rules or accountability measures.

In order to assess this performance standard, there should be a review every two years. If the target has been exceeded in the first year and again in the second, then the four year standard would be violated and the system would need to be re-evaluated. Being proactive and keeping on top of performance objectives ensures the system functions effectively and minimizes the potential damage from misspecifications.

Conclusion:

PEG appreciates the comprehensive approach set forth in the Omnibus Amendment and the seriousness with which the Council has addressed the MSA and NS1 requirements pertaining to annual catch limits and accountability measures. As noted above, due to the inherent uncertainty in fisheries science and management, and particularly the scientific and management uncertainty present in mid-Atlantic fisheries, the Mid-Atlantic Council must establish sufficient buffers when setting ABCs, ACLs, and ACTs, and consider appropriate levels of risk when developing ABC and ACL control rules. We support the general framework that the Council has proposed for the Omnibus; however, we strongly encourage the Council to incorporate our comments and concerns listed above in order to fully comply with MSA and NS1 requirements.

The Mid-Atlantic Council has made considerable effort to end overfishing and rebuild depleted fish populations, and this puts it ahead of the curve in relation to many of the other regional councils. We hope that such promising trends continue so that the Mid-Atlantic can serve as an example for other regions.

Sincerely,

Lee R Crockett

Lee R. Crockett
Director, Federal Fisheries Policy
The Pew Environment Group