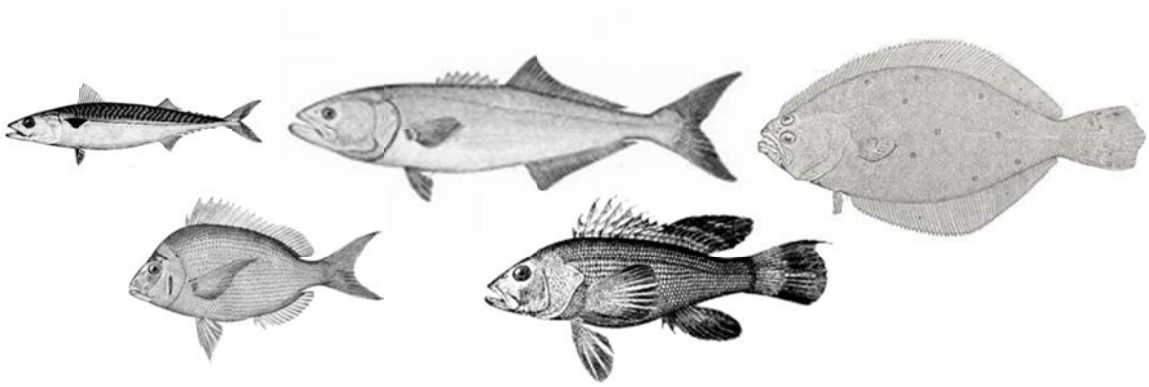
OMNIBUS RECREATIONAL ACCOUNTABILITY MEASURE AMENDMENT

AMENDMENT 17 TO THE ATLANTIC MACKEREL, SQUIDS, AND BUTTERFISH FISHERY MANAGEMENT PLAN

AMENDMENT 4 TO THE BLUEFISH FISHERY MANAGEMENT PLAN

AMENDMENT 19 TO THE SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS FISHERY MANAGEMENT PLAN

(Includes Environmental Assessment)



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

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MID-ATLANTIC FISHERY MANAGEMENT COUNCIL

NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION U.S. DEPARTMENT OF COMMERCE

1.0 EXECUTIVE SUMMARY

Background

This Amendment and Environmental Assessment presents and evaluates alternatives to the existing accountability measures (AMs) for the recreational Atlantic mackerel, bluefish, summer flounder, scup, and black sea bass fisheries. These recreational fisheries are managed by the Mid-Atlantic Fishery Management Council (Council) and administered by the National Marine Fisheries Service (NMFS) Northeast Regional Office (NERO) through three Fishery Management Plans (FMPs). Specifically, this Omnibus document would amend the Atlantic Mackerel, Squid, and Butterfish FMP, the Atlantic Bluefish FMP, and the Summer Flounder, Scup, and Black Sea Bass FMP. The existing AMs for these recreational fisheries were established in the Council's Omnibus Annual Catch Limit (ACL) and Accountability Measure Amendment (MAFMC 2011) which was implemented in order to ensure FMP compliance with the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSA). The methods for setting allowable biological catch (ABC) and ACLs and the Council's Risk Policy were established in the Omnibus ACL/AM Amendment and are not the subject of this amendment, nor are the AMs for any of the Council's commercial fisheries.

According to NMFS' National Standard 1 Guidelines (Guidelines), "AMs are management controls to prevent ACLs, including sector-ACLs, from being exceeded, and to correct or mitigate overages of the ACL if they occur." Also, AMs are invoked to "address the operational issue that caused the overage." The recreational AMs currently in place involve both proactive and reactive components. Proactive AMs function to prevent the ACL from being exceeded. Reactive AMs are a response to catch exceeding the ACL, and are intended to correct the issue that caused the overage.

Problem Statement

Recreational fisheries are inherently uncertain in that catches are estimated through a statistical methodology rather than tallied under a mandatory reporting framework as occurs in federally managed commercial fisheries. Additionally, controls on recreational catches tend to focus on a combination of limits on fish size and the number of fish that can be retained and whether a fishing season is open or closed. These controls can only loosely restrain potential effort because the total number of recreational anglers in the fishery can fluctuate independently.

Under the Omnibus ACL/AM Amendment, AMs for the Council's recreational fisheries include a pound-for-pound reduction from a subsequent year's annual catch target (ACT) when the central value for the recreational catch estimate exceeds the ACL. Paybacks of these overages were initially developed by the Council with an understanding that they would be a necessary component to assure full fishery accountability under the MSA. Subsequent review of the National Standard 1 Guidelines; however, indicates that paybacks may not be an appropriate approach for all fisheries, especially on healthy fish stocks, and that paybacks, which are primarily punitive in nature, may be more suitable

for stocks undergoing rebuilding. None of the Council's recreational fisheries is overfished, nor is overfishing occurring for any of these fisheries.

Given that recreational fishing is generally associated with an outlay of money, as opposed to an economic reward as in commercial fisheries, recreational effort should generally shift toward species with a greater likelihood of being caught. Because of this, recreational catches may exceed catch limits when those limits prove to be established based on underestimates of availability of a species.

Solution

For the reasons above, the Council is reconsidering its former position that paybacks of estimated recreational overages be mandated under all circumstances. The Council is recommending that, given the uncertain nature of recreational fishery data collection and management, that these primarily punitive accountability measures be limited to cases where stock condition and the nature of the overage merit a punitive response. In those circumstances where there is no pound for pound payback, the Council will use its system of adjustments to fish bag, minimum size, and season to be responsive to fishery performance by reducing or increasing fishing opportunity, as needed, to ensure stocks are harvested sustainably.

In developing the initial ACL/AM Omnibus Amendment, the Council asserted that the existing system of adjustments to bag, size, and season was not *in and of itself*[1] a fully consistent accountability measure. The Council may not have stated that today given its current understanding of accountability measure requirements as informed by the range of approved AMs for other Councils' recreational FMPs. This statement reflected the Council's viewpoint that the process for applying AMs should be automatic, rather than require deliberation. While this would tend to suggest that the Council was initially proposing that pre-determined responses to estimated overages be very specifically stipulated such that their implementation required only the simplest calculations, as in the case of paybacks, this assertion was instead meant to indicate that any deliberative process that would delay the implementation of a management response would be inconsistent with MSA mandates. The deliberation involved in responding to an estimated overage through bag, size, and season adjustments would operate on the same schedule as would reduction of ACT through a payback, and would therefore, not delay the management response further.

In addition, the Council specifies catch limits under the operating guidelines of a Risk Policy (MAFMC 2011) that is progressively precautionary. If under some combination

[1] From the Omnibus ACL/AM Amendment: "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 specification setting), or be left to the NMFS Regional Administrator (Regional Administrator) discretion. For example, the current process of adjusting the 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 (Section 4.1)."

of management measures, stock condition were to decline toward an overfished state, the Council's Risk Policy reduces ABC beyond reductions associated with lower stock size to further ensure that overfishing will not occur. Likewise, recreational measures based on these precautionary ABC values would become increasingly precautionary.

Other accountability measure components such as alternatives to existing proactive AMs are also being considered in this amendment. Proactive AMs established through the previous amendment consist of an ACT and the establishment of in-season closure authority for the NERO.

Proposed Actions

Any alternative recommended by the Council and implemented by NMFS would require modification to some portion of the relevant regulatory language. For the sake of clarity, the alternatives to no action/*status quo* in this amendment are described along with the existing regulatory language. The existing language is provided *in italics* and replacement language is indicated by <u>underlining</u>. A separate deeming process, where regulatory language is approved by the Council, will follow adoption of the amendment, so the final regulatory language may be slightly different. Some alternatives under consideration, primarily reactive AM alternatives, are "process alternatives", each of which describes a set of nested management responses that incorporate information about stock condition and the catch threshold that could potentially be exceeded. Because of the interplay between stock condition and catch thresholds, these alternatives are described in table form below.

Proactive AM Alternatives

Proactive AMs are actions intended to prevent a catch limit from being exceeded and, as such, are put in place either before the fishing year starts or, if, within-season data indicate a need, before the fishing year ends. These include limits on bag, size, and season which are intended to constrain or reduce the ability of recreational fishermen to catch a given species; thus constraining catch to a desired level. The exercise of in-season closure authority is a also a proactive accountability measure when its exercise prevents an ACL from being exceeded, but this necessitates adjusting measures or closing the season before the ACL has been reached.

ACT

Alternative 1A. <u>Preferred</u>. (No Action/Status Quo). Current Regulatory Language for Determination of ACT.

Monitoring Committee [for the relevant species] shall identify and review the relevant sources of management uncertainty to recommend ACTs for the recreational fishing sector as part of the specification process. The Monitoring Committee recommendations shall identify the specific sources of management uncertainty that were considered,

technical approaches to mitigating these sources of uncertainty, and any additional relevant information considered in the ACT recommendation process.

The Council chose this alternative because in comparison to the other ACT alternatives, Alternative 1A offers the greatest amount of flexibility. Furthermore, it does not inhibit the consideration or application of a reduction from ACL to ACT that accounts for management uncertainty as envisioned in either Alternatives 1B or 1C.

Alternative 1B. Mandatory Review of ACT = ACL – Uncertainty in Recreational Catch Estimates.

Monitoring Committee [for the relevant species] shall identify and review the relevant sources of management uncertainty to recommend ACTs for the recreational fishing sector as part of the specification process, including explicit consideration of a reduction from the ACL based on uncertainty in recreational catch estimates. The Monitoring Committee recommendations shall identify the specific sources of management uncertainty that were considered, technical approaches to mitigating these sources of uncertainty, and any additional relevant information considered in the ACT recommendation process.

Alternative 1C. Mandatory Setting of ACT = ACL – Uncertainty in Recreational Catch Estimates.

Monitoring Committee [for the relevant species] shall calculate ACTs for the recreational fishing sector as part of the specification process where ACT = ACL – Uncertainty in Recreational Catch Estimates. The Monitoring Committee recommendations shall also identify other specific sources of management uncertainty that were considered, technical approaches to mitigating these sources of uncertainty, and any additional relevant information considered in the ACT recommendation process.

Alternatives 1A-1C address the consideration of measures of uncertainty in setting ACT as part of the specification process. The alternatives basically capture the spectrum of how the Council might deal with uncertainty in recreational catch estimates by being very non-specific (Alternative 1A) to explicitly considering a reduction (1B) to mandating a reduction (1C).

In Season Closure Authority

Alternative 2A. (No Action / Status Quo). In-Season Closure Authority for the Regional Administrator.

The Regional Administrator will monitor recreational landings based on the best available data and shall determine if the recreational harvest limit has been met or exceeded. The determination will be based on observed landings and will not utilize projections of future landings. At such time that the available data indicate that the recreational harvest limit has been met or exceeded, the Regional Administrator shall publish notification in the Federal Register advising that, effective on a specific date, the recreational fishery in the EEZ shall be closed for remainder of the calendar year.

Alternative 2B. Early Closure with In-Season Projections.

The Regional Administrator will monitor recreational landings based on the best available data and shall consider whether projections of future landings indicate that the recreational harvest limit will be met prior to the close of the fishing season. If the recreational harvest limit is projected to be met prior to the close of the season, the Regional Administrator shall publish notification in the Federal Register advising that, effective on a specific date, the recreational fishery in the EEZ shall be closed for remainder of the calendar year.

Alternative 2C. Preferred. Eliminate In-Season Closure Authority. Under this alternative, regulatory language regarding closure of the recreational fisheries will be removed. This alternative, if chosen, would reflect a preference for addressing recreational overages in subsequent fishing years rather than imposing an early closure.

The Council selected this alternative because it considers the regional impacts of an abbreviated season to be a less desirable outcome than the post-season implications of addressing a potential overage. Additionally, by allowing the season to continue without closure, any future reduction in catch as a consequence of the overage would be addressed through coastwide measures so that no particular region would be disproportionately affected.

Alternative 2D. In-Season adjustment to management measures.

The Regional Administrator will monitor recreational landings based on the best available data and shall consider whether landings indicate that the recreational harvest limit has been met prior to the close of the fishing season. If the recreational harvest limit is met prior to the close of the season, the Regional Administrator shall, in

consultation with the Council, adjust management measures according to pre-arranged terms and conditions.

This alternative would limit rather than close further landing of fish in a recreational fishery that has exceeded its RHL. The Council would need to set terms and conditions for the adjustment as part of recreational specifications so that the adjustment by the RA would be automatic. For example, the Council may recommend that the bag limit would be halved for the remainder of the season if the RHL has been determined to have been reached. The specific adjustments would be analyzed at the time the specifications are made. This alternative reflects a viewpoint that the biological costs, if any, associated with RHL being exceeded are outweighed by the socio-economic costs associated with the continual threat of access to the fishery being denied to regions that fish in the EEZ in the latter part of the year.

Reactive AMs

Reactive AMs are triggered when management controls have failed to prevent a catch limit from being exceeded. As such, there are two components to reactive AMs, 1) the trigger, or what has to occur for an accountability measure to be implemented, presented below in Alternatives 3A-3D, and (2) the management response that follows if the trigger condition is met (such as a reduction in a future year's bag limit or ACT), presented below in Alternatives 4A-4D. Finally, the implementation of the management response (that is, how the adjustments are calculated) are presented in Alternatives 5A-5D.

Trigger Conditions

Alternative 3A. No Action / Status Quo for Summer Flounder Scup Black Sea Bass. Maintain Phase-In Comparing Three Year Average of Recreational Catch Estimates to Three Year Average of ACL. *The recreational sector ACL will be evaluated based on a 3-year moving average comparison of total catch (landings and dead discards). Both landings and dead discards will be evaluated in determining if the 3-year average recreational sector ACL has been exceeded. The 3-year moving average will be phased in over the first 3 years, beginning with 2012: Total recreational total catch from 2012 will be compared to the 2012 recreational sector ACL; the average total catch from both 2012 and 2013 will be compared to the average of the 2012 and 2013 recreational sector ACLs; the average total catch from 2012, 2013, and 2014 will be compared to the average of the 2012, 2013, and 2014 recreational sector ACLs and, for all subsequent years, the preceding 3-year average recreational total catch will be compared to the preceding 3-year average recreational sector ACL.*

Alternative 3B. No Action / Status Quo for Atlantic Mackerel and Bluefish Single Year Comparison. *The recreational sector ACL will be evaluated based on an annual comparison of the total catch estimate (landings and dead discards). Both landings and*

dead discard estimates will be evaluated in determining if the recreational sector ACL has been exceeded.

Alternative 3C. Preferred. Confidence Interval. *The recreational sector ACL will be evaluated based on an annual comparison of the appropriate confidence interval of the total catch estimate (landings and dead discards), where the entire confidence interval (i.e., including the lower confidence limit) must be above the recreational ACL to trigger an AM. Both landings and dead discard estimates will be evaluated in determining if the recreational sector ACL has been exceeded. If overfishing is occurring or the stock is overfished in the year for which the overage determination is being made, then the use of the lower confidence limit would not occur and the point estimate of catch would serve for comparison with the ACL.*

At its June 2013 meeting, the Council chose to adopt Alternative 3C and modify the existing regulations only to incorporate the use of the lower confidence limit so that the existing phased-in three year averaging of ACL and the catch estimate as done under Alternative 3A for summer flounder, scup, and black sea bass would continue under this alternative. The only difference would be that the lower confidence limit rather than the point estimate would be used in the averaging. For the bluefish and mackerel FMPs where three year averaging is not specified and the ACL includes commercial catch as well, the lower confidence limit would be used in place of the point estimate to determine if the combined catch (recreational + commercial) exceeded the ACL and single year overage determination would continue.

Alternative 3D. Repeat Overage. *The recreational sector ACL will be evaluated based on an annual comparison of the total catch estimate (landings and dead discards), where the recreational catch estimate must be above the recreational ACL more than once in any four year period to trigger an AM. Both landings and dead discard estimates will be evaluated in determining if the recreational sector ACL has been exceeded.*

Management Response

Unlike the no action/*status quo* alternatives, the action alternatives contemplated as management responses in this amendment take into account stock condition and the different catch thresholds that could be exceeded. These alternatives are illustrated in Tables 1 – 4 below.

Under each management response alternative, stock condition is considered to potentially be in one of three bins relative to the biomass reference points and any potential rebuilding schedule. In other words, the management response could be different if stock biomass is 1) above B_{MSY} and rebuilt, 2) below B_{MSY} but above ½ B_{MSY} and not in rebuilding, or 3) below ½ B_{MSY} or in rebuilding. Additionally, the management response could be different if the recreational catch is 1) above the recreational ACL only, 2) above the recreational ACL and the combined recreational and commercial catch is above ABC, or 3) above the recreational ACL and the combined recreational and commercial catch is above OFL.

The management responses under consideration consist of three tiered components: 1) in-season closure, 2) bag, size, season adjustment, or 3) payback of the overage amount. These are cumulative responses, such that if a tier 2 or 3 response is triggered, then all the responses below that tier are also invoked. For example if an adjustment to the bag, size, and season occurs, so does in-season closure.

It is important to note that adjustments to the bag, minimum size, and season may occur in any given year, even if there is no overage. The management measures are established each year and are a reflection of the previous year's catch compared to the coming year's catch limit. That is, each year, the Monitoring Committees recommend a set of management measures that are expected to achieve, but not exceed, the given catch limit based on how much of that species was caught in the previous year.

The management response discussed here would take into account how well those management measures performed, as compared to the expectation that they would constrain catch to the catch limit. If the catch limit were exceeded, then the management measures performed poorly because they did not constrain catch as anticipated. Knowing this, when the Monitoring Committee makes its recommendation for the subsequent year, adjustments to the measures can be made to increase the likelihood that the measures would perform better in the subsequent year.

Alternative 4A. No Action / Status Quo. Maintain Pound for Pound Payback for any Overage of the Recreational ACL. *If available data indicate that the recreational sector ACL has been exceeded and the landings have exceeded the RHL, the exact poundage of the landings overage will be deducted, as soon as possible, from a subsequent single fishing year recreational sector ACT… In the event that a sector ACL has been exceeded and the overage has not been accommodated through landing-based AMs, then the exact amount by which the sector ACL was exceeded, in pounds, will be deducted, as soon as possible, from the applicable subsequent single fishing year sector ACL.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to an overage of other catch thresholds (ABC, OFL) are not considered. Nevertheless, in order to compare across alternatives, the diagrammatic approach used to illustrate the other process alternatives can be adapted for the no action/*status quo* alternative, as shown in the Table 1 under Alt 4A. This alternative reflects a viewpoint that paybacks of recreational overages are a necessary response to MSA and the NS 1 Guidelines, and this was indeed the Council's viewpoint at the time paybacks were established. That viewpoint has since changed, as discussed in Section 4.0. This alternative represents the most restrictive management response alternative.

Alternative 4B. Payback when Stock is Overfished or when OFL is Exceeded. … *the overage (in pounds) will be deducted, as soon as possible, from a subsequent single fishing year recreational sector ACT <u>only if the stock is overfished and/or OFL has been exceeded. When these conditions are not met, AMs will consist of adjustment to</u>*

bag/size/season and in-season monitoring for early closure when the recreational overage caused ABC to be exceeded, or in-season monitoring only when only the Rec ACL has been exceeded.

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered. The combination of stock condition and overage type in the year when an overage occurred would be taken into account to determine the automatic management response. The combinations that could occur are shown in Table 1 under Alt 4B. For example, under Alternative 4B, if stock biomass is estimated to be above the B_{MSY} target, and the recreational catch only exceeded the recreational ACL, while the combination of commercial and recreational catch did not exceed ABC, then no payback would occur and no additional adjustment to the bag, size or season as a result of the overage would be necessary.

Because in-season monitoring for a closure would be in place under all circumstances, if landings estimates in a subsequent year were to exceed the RHL, then the response under the adopted in-season closure alternative would be applied. As stated above, if in-season closure is eliminated through Alternative 2C, adjustments to bag, size, and season would take its place, since not having a response would be inconsistent with the MSA. If Alternative 3D is adopted and a repeat of an overage within a four year period was to occur, then the management response under this alternative would correspond to the most recent trigger. In other words, if two consecutive overages occur, the stock condition and overage type that determine the management response would be from the second of the two overages. If Alternative 3D is adopted and the overage does not represent a re-occurrence of an overage as described in 3D, then no management response would be necessary. This alternative represents the middle ground among the alternatives with regard to restrictiveness, with Alternatives 4A and 4E being more restrictive, and Alternatives 4C and 4D being less restrictive.

Note, if biological reference points for a stock are unknown, the most conservative set of AMs would apply. That is, the same measures that apply to stocks in a rebuilding plan or for stocks where B/B_{MSY} is less than ½ would apply.

Alternative 4C. Preferred. Payback when Stock is Overfished or when OFL is Exceeded. … *the overage (in pounds) will be deducted, as soon as possible, from a subsequent single fishing year recreational sector ACT only if the stock is overfished and/or OFL has been exceeded AND B/B_{MSY} is <1. When these conditions are not met, AMs will consist of adjustment to bag/size/season and in-season monitoring for early closure when the recreational overage caused OFL to be exceeded, but B/B_{MSY} >1, or caused ABC to be exceeded. In-season monitoring only will occur when only the Rec ACL has been exceeded.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered. The combination of stock condition and overage type in the year when an overage occurred

would be taken into account to determine the automatic management response. The combinations that could occur are shown in Table 1 under Alt 4C. For example, under Alternative 4C, if stock biomass is estimated to be above the B_{MSY} target, and catch exceeded the OFL, then no payback would occur, but adjustments to the bag, size, and/or season would be implemented. Because in-season monitoring for a closure would be in place under all circumstances, if landings estimates in a subsequent year were to exceed the RHL, then the response under the adopted in-season closure alternative would be applied. As stated above, if in-season closure is eliminated through Alternative 2C, adjustments to bag, size, and season would take its place, since not having a response would be inconsistent with the MSA. If Alternative 3D is adopted and a repeat of an overage within a four year period was to occur, then the management response under this alternative would be triggered. If Alternative 3D is adopted and the overage does not represent a re-occurrence of an overage as described in 3D, then no management response would be necessary. This alternative represents the second least restrictive AM management response alternative.

This alternative was selected as the preferred alternative and then modified by the Council at its June meeting to include a recreational payback when, given $B<B_{MSY}$, ABC is exceeded in part or in full by a recreational overage. If $B>B_{MSY}$, and ABC is exceeded, no payback would be needed (see Table 3 -Alt 4C-Modified by Council at June Meeting).

This alternative was also indirectly modified by the Council's choice of 2C under the In-Season Closure alternatives. As stated above, because the Council prefers Alternative 2C, all of the cells in the response alternative table would be modified to reflect the elimination of that response. Furthermore, "bag, size, and season adjustments" would be moved into the "cells" left vacant by the removal of in-season closure (see Table 1 -Alt 4C-With Council Change and Incorporating 2C). Additionally, since the adjusting the bag, size, season is a response alternative, modification of the bag, size and season would be in response to an overage in combination with the proactive function of the adjustment.

If biological reference points for a stock are unknown, the most conservative set of AMs would apply. Therefore, the same measures that apply to stocks in a rebuilding plan or for stocks where B/B_{MSY} is less than ½ would apply.

Alternative 4D. No Payback. … *If the stock is overfished or in rebuilding, or B/B_{MSY} <1 and OFL has been exceeded, then adjustments to bag, size, and season will occur. Otherwise in-season closure only will occur.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered. The combination of stock condition and overage type in the year when an overage occurred would be taken into account to determine the automatic management response. The combinations that could occur are shown in Table 1 under Alt 4D. For example, under Alternative 4D, if stock biomass is estimated to be above the B_{MSY} target, and the catch exceeded the OFL, then no payback, or adjustment to the bag, size or season would be

necessary. Because in-season monitoring for a closure would be in place under all circumstances, if landings estimates in a subsequent year were to exceed the RHL, then the response under the adopted in-season closure alternative would be applied. As stated above, if in-season closure is eliminated through Alternative 2C, adjustments to bag, size, and season would replace that management response since not having a response would be inconsistent with the MSA. If Alternative 3D is adopted and a repeat of an overage within a four year period was to occur, then the management response under this alternative would be triggered. If Alternative 3D is adopted and the overage does not represent a re-occurrence of an overage as described in 3D, then no management response would be necessary. This alternative represents the least restrictive AM management response alternative.

If biological reference points for a stock are unknown, the most conservative set of AMs would apply. Therefore, the same measures that apply to stocks in a rebuilding plan or for stocks where B/B_{MSY} is less than ½ would apply.

Alternative 4E. Payback when the Stock is Overfished or when ABC is Exceeded. … *if the stock is overfished or when the combined recreational and commercial ACL (i.e., ABC) has been exceeded. When these conditions are not met, AMs will consist of adjustment to bag/size/season and in-season monitoring for early closure when the recreational overage caused OFL to be exceeded, but* $B/B_{MSY} > 1$*, or caused ABC to be exceeded. In-season closure only will occur when only the Recreational ACL has been exceeded.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered. The combination of stock condition and overage type in the year when an overage occurred would be taken into account to determine the automatic management response. The combinations that could occur are shown in Table 1 under Alt 4E. For example, under Alternative 4E, if the catch exceeded the ABC, regardless of stock condition, then the full suite of payback, adjustment to the bag, size or season, and in-season closure potential would be implemented. However, if the overage is only for the recreational fishery and ABC is not exceeded, and the stock is not in rebuilding or overfished, then only the response under the adopted in-season closure alternative would be applied. As stated above, if in-season closure is eliminated through Alternative 2C, adjustments to bag, size, and season would replace that management response, since not having a response would be inconsistent with the MSA. If Alternative 3D is adopted and a repeat of an overage within a four year period was to occur, then the management response under this alternative would be triggered. If Alternative 3D is adopted and the overage does not represent a re-occurrence of an overage as described in 3D, then no management response would be necessary. This alternative represents the second most restrictive AM management response alternative, the most restrictive being Alternative 4A.

If biological reference points for a stock are unknown, the most conservative set of AMs would apply. Therefore, the same measures that apply to stocks in a rebuilding plan or for stocks where B/B_{MSY} is less than ½ would apply.

Table 1. Process by which reactive accountability measures will be applied conditional on stock status and the threshold that was exceeded.

Stock Condition		Overage Type		
		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4A	$B/B_{MSY} > 1$	Payback		
	$1 > B/B_{MSY} > ½$ and not in rebuilding			
	$½ > B/B_{MSY}$ or in rebuilding			

		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4B	$B/B_{MSY} > 1$	In-Season Closure	Bag, Size Season	Payback
				Bag, Size Season
			In-Season Closure	In-Season Closure
	$1 > B/B_{MSY} > ½$ and not in rebuilding	In-Season Closure	Bag, Size Season	Payback
				Bag, Size Season
			In-Season Closure	In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	Payback	Payback	Payback
		Bag, Size Season	Bag, Size Season	Bag, Size Season
		In-Season Closure	In-Season Closure	In-Season Closure

Table 1 Continued. Process by which reactive accountability measures will be applied conditional on stock status and the threshold that was exceeded.

	Stock Condition	Overage Type		
		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4C	$B/B_{MSY} > 1$	In-Season Closure[1]	Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$1 > B/B_{MSY} > ½$ and not in rebuilding	In-Season Closure[1]	Bag, Size Season	Payback
				Bag, Size Season
			In-Season Closure	In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	Payback	Payback	Payback
		Bag, Size Season	Bag, Size Season	Bag, Size Season
		In-Season Closure	In-Season Closure	In-Season Closure

		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} <$ OFL	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4C (Modified by Council at June Meeting)	$B/B_{MSY} > 1$	In-Season Closure[1]	Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$1 > B/B_{MSY} > ½$ and not in rebuilding	In-Season Closure[1]	Payback	Payback
			Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	Payback	Payback	Payback
		Bag, Size Season	Bag, Size Season	Bag, Size Season
		In-Season Closure	In-Season Closure	In-Season Closure

Alt 4C <u>Preferred</u> With Council change and Incorporating 2C		**$C_R > ACL_R$, $C_{R+C} < ABC$**	**$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} <$ OFL**	**$C_R > ACL_R$, $C_{R+C} >$ OFL**
	$B/B_{MSY} > 1$	**Bag, Size Season**	**Bag, Size Season**	**Bag, Size Season**
	$1> B/B_{MSY} > ½$ and not in rebuilding	**Bag, Size Season**	**Payback**	**Payback**
			Bag, Size Season	**Bag, Size Season**
	$½ > B/B_{MSY}$ or in rebuilding	**Payback**	**Payback**	**Payback**
		Bag, Size Season	**Bag, Size Season**	**Bag, Size Season**

Alt 4D		**$C_R > ACL_R$, $C_{R+C} < ABC$**	**$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} <$ OFL**	**$C_R > ACL_R$, $C_{R+C} >$ OFL**
	$B/B_{MSY} > 1$	**In-Season Closure**	**In-Season Closure**	**In-Season Closure**
	$1> B/B_{MSY} > ½$ and not in rebuilding	**In-Season Closure**	**In-Season Closure**	**Bag, Size Season**
				In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	**Bag, Size Season**	**Bag, Size Season**	**Bag, Size Season**
		In-Season Closure	**In-Season Closure**	**In-Season Closure**

Table 1 Continued. Process by which reactive accountability measures will be applied conditional on stock status and the threshold that was exceeded.

		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4E	$B/B_{MSY} > 1$	In-Season Closure	Payback	Payback
			Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$1 > B/B_{MSY} > ½$ and not in rebuilding	In-Season Closure	Payback	Payback
			Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	Payback	Payback	Payback
		Bag, Size Season	Bag, Size Season	Bag, Size Season
		In-Season Closure	In-Season Closure	In-Season Closure

Payback Calculation Alternatives

These alternatives address the existing recreational payback provision wherein, for summer flounder, scup, and black sea bass, a phased in three year average of recreational catch is compared to the three year average of the recreational ACL, and a pound-for–pound payback of any overage is calculated. For Atlantic mackerel and bluefish, an overage of the overall ACL (recreational + commercial catch) is paid back pound for pound on an annual basis. In the alternatives contemplated by the Council, the calculation of the overage payback could be conditional on the status of the stock (B/B_{MSY}). The alternatives are provided in Table 2 where O = overage, C = Catch, $_R$ = Recreational, $_C$ = Commercial, C_{R+C} = combined recreational and commercial catch.

Alternative 5A. No Action / Status Quo. Payback Difference between the Catch Estimate and the Recreational ACL. …

Atlantic mackerel: *If the mackerel ACL is exceeded, and the recreational fishery landings are responsible for the overage, then landings in excess of the RHL will be deducted from the RHL for the following year. In addition, if the ACL is exceeded, and that the overage has not been accommodated through other landing-based AMs, but is attributable to the...recreational sector (such as research quota overages, dead discards in excess of those otherwise accounted for in management uncertainty, or other non-landing overages), then the exact amount, in pounds, by which the recreational ACT was exceeded will be deducted from the following year, as a single-year adjustment.*

Bluefish: *If the fishery-level ACL is exceeded and landings from the recreational fishery are determined to be the sole cause of the overage, and no transfer between the*

commercial and recreational sector was made for the fishing year, … then the exact amount, in pounds, by which the ACL was exceeded will be deducted, as soon as possible, from a subsequent single fishing year recreational ACT. If the fishery-level ACL is exceeded and landings from the recreational fishery and/or the commercial fishery are determined to have caused the overage, and a transfer between the commercial and recreational sector has occurred for the fishing year, … then the amount transferred between the recreational and commercial sectors may be reduced by the ACL overage amount (pound-for-pound repayment) in a subsequent, single fishing year if the Bluefish Monitoring Committee determines that the ACL overage was the result of too liberal a landings transfer between the two sectors.

Summer Flounder, Scup, and Black Sea Bass: *If available data indicate that the recreational sector ACL has been exceeded and the landings have exceeded the RHL, the exact poundage of the landings overage will be deducted, as soon as possible, from a subsequent single fishing year recreational sector ACT. In addition, if the recreational ACL has been exceeded and the overage has not been accommodated through landing-based AMs, then the exact amount by which the recreational ACL was exceeded, in pounds, will be deducted, as soon as possible, from the applicable subsequent single fishing year recreational ACL.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to an overage of other catch thresholds (ABC, OFL) are not considered. Instead, the amount of the payback is the difference between the recreational landings and the recreational harvest limit, and then any unaccounted for difference between the recreational catch and the recreational ACL for summer flounder, scup, and black sea bass. For bluefish, it is the difference between the combined recreational and commercial catch and the ACL. For Atlantic mackerel, the payback is the difference between the recreational landings and the RHL.

Alternative 5B. Payback ACL Overage only When Overfished.

Under this alternative, the condition of the stock and the contribution of a perceived recreational overage to overages of other catch thresholds (ABC, OFL) are considered as shown in Table 2 in panel Alt 5B. The combination of stock condition and overage type in the year when a perceived overage occurred would be taken into account to determine the payback calculation. The combinations that could occur are shown in Table 2 under Alt 5B. For example, under Alternative 5B, if stock biomass is estimated to be above the B_{MSY} target, and the perceived overage exceeded the OFL, then the payback would be the contribution of the recreational overage to the OFL overage. If, however, the stock is overfished and OFL has been exceeded, then the payback would be the entire recreational overage above ACL. If Alternative 3D is implemented and a repeat of a perceived overage within a four year period was to occur, then the management response would be triggered and a payback calculation may be necessary. If Alternative 3D is implemented and the perceived overage does not represent a re-occurrence of an overage as described in 3D, then no payback would be necessary and no payback calculation would be needed. This alternative represents the second most restrictive payback calculation alternative.

Alternative 5C. Payback ACL Overage only When Overfished/Overfishing.

Under this alternative, the condition of the stock and the contribution of a perceived recreational overage to overages of other catch thresholds (ABC, OFL) are considered as shown in Table 2 in panel Alt 5C. The combination of stock condition and overage type in the year when a perceived overage occurred would be taken into account to determine the payback calculation. This alternative only envisions paybacks of the entire ACL overage when overfishing has occurred and the stock is overfished. The combinations that could occur are shown in Table 2 under Alt 5C. For example, under Alternative 5C, if stock biomass is estimated to be above the B_{MSY} no payback calculation would be necessary unless the management response (Alternative Set 4) calls for a payback. If, the stock is overfished and ABC has been exceeded, then the payback would be the entire recreational overage above ABC. If Alternative 3D is implemented and a repeat of a perceived overage within a four year period was to occur, then the management response would be triggered and a payback calculation may be necessary. If Alternative 3D is implemented and the perceived overage does not represent a re-occurrence of an overage as described in 3D, then no payback would be necessary and no payback calculation would be needed. This alternative represents the second least restrictive payback calculation alternative.

Alternative 5D. <u>Preferred</u>. Scaled Payback of the ACL Overage.

Under this alternative, the condition of the stock (B/B_{MSY}) scales the payback amount. If B/B_{MSY} is greater than 1, then the payback is zero. If $1 \geq B/B_{MSY} \geq ½$, then the payback is the product of the overage and the payback coefficient based on B/B_{MSY}. If B/B_{MSY} is less than one-half, then the payback is pound for pound. The formula below would be applied for those scenarios where $B/B_{MSY} > ½$ to generate a payback coefficient. The product of the overage and the payback coefficient would constitute the payback:

$$\text{Overage}* \frac{(Bmsy - B)}{\frac{1}{2}Bmsy}$$

The effective payback coefficient for black sea bass, the only species for which there is an estimated overage and pending payback, would be approximately 0.04. Therefore, because there was a 1.3 M lb overage in 2012, the payback that would be applied to the RHL in 2014 is approximately 52,000 lb.

Alternative 5E. No Payback.

This alternative would eliminate paybacks of overages. The basis for this is the general absence of biological processes and conditions considered in administering paybacks.

Table 2. Process by which the overage payback will be calculated conditional on stock status and the threshold that was exceeded.

Alt 5A

	$C_R > ACL_R < ABC$	$C_R > ACL_R, C_{R+C} > ABC$	$C_R > ACL_R, C_{R+C} > OFL$
$B/B_{MSY} > 1$	$C_R - ACL_R$*		
$1 > B/B_{MSY} > ½$			
$½ > B/B_{MSY}$			

Alt 5B

	$C_R > ACL_R < ABC$	$C_R > ACL_R, C_{R+C} > ABC$	$C_R > ACL_R, C_{R+C} > OFL$
$B/B_{MSY} > 1$	0	0	$O_R/O_{R+C} * C_{R+C} - OFL$
$1 > B/B_{MSY} > ½$	0	$O_R/O_{R+C} * C_{R+C} - ABC$	$O_R/O_{R+C} * C_{R+C} - ABC$
$½ > B/B_{MSY}$	$C_R - ACL_R$	$C_R - ACL_R$	$C_R - ACL_R$

Alt 5C

	$C_R > ACL_{R<} < ABC$	$C_R > ACL_R, C_{R+C} > ABC$	$C_R > ACL_R, C_{R+C} > OFL$
$B/B_{MSY} > 1$	0	0	0
$1 > B/B_{MSY} > ½$	0	0	$O_R/O_{R+C} * C_{R+C} - OFL$
$½ > B/B_{MSY}$	0	$O_R/O_{R+C} * C_{R+C} - ABC$	$C_R - ACL_R$

* The C_R value is shown to generalize the net effect of accounting for total recreational catch overages. The existing (no action/*status quo*) regulatory language splits the accounting processes between landings and non-landings overages for summer flounder, scup, and black sea bass. For Atlantic mackerel and bluefish, landings above the RHL that contribute to an overall ACL overage are the basis for the payback because the ACL is for both commercial and recreational catch.

Alternative 6A <u>Preferred</u>. No Action / Status Quo - No ACL/ACT Post Hoc Evaluation.

Under Alternative 6A, the ACL that was specified for a given year based on projections or other methods such as constant catch, among others, would remain as the reference for any overage determination. Any improvement in the estimation of abundance or biomass for the specification year through an assessment update or benchmark assessment that may indicate that a larger ACL would have been more appropriate would not be considered in evaluating the likelihood of a potential overage. As such, under Alternative 6A, management triggers and management responses would all use the original ACL based on the original characterization of stock conditions for determining the nature and magnitude of a reactive AM. Although the Council was supportive of the spirit of Alternative 6B below, the Council was unsure of how it would be implemented. As a result, the Council chose Alternative 6A, and will further consider modifications such as 6B in the future.

Alternative 6B[2]. ACL/ACT Post Hoc Evaluation. *The ACL/ACT that was set for a given fishing year is re-evaluated based on an updated assessment.*

In considering Alternative 6B, the Council was exploring opportunities to make improved management responses to recreational fishery behavior. A review of the appropriateness of the ACL for the completed fishing year would occur as part of the subsequent year's stock status update and would include a determination as to whether an overage may have occurred because the ACL was set at a level that was inappropriately low given the addition of information on stock abundance in that year. A more informed ACL estimate would then provide the basis for determining the response to the recreational catch estimate. Specifically, if the updated information indicates that catches equal to or above realized catch resulted in no departure from desired stock condition, then no management response to the nominal overage would be indicated.

Overall Impacts of the Preferred Alternatives

The alternatives being recommended in this amendment are largely administrative in nature. There are no direct impacts on the human environment; however, indirect impacts, primarily on the socio-economic components of the human environment. These impacts are generally positive in that the recommended action would restrict the implementation of overage paybacks to situations where, in the opinion of the Council, the condition of the stock and the magnitude of the overage merit a more punitive response. In other cases, catches that deviate from specified limits will be addressed through modification of the bag, size, and season limits which takes into account past overages or underages in adjusting to a specified ACT. Additionally, the removal of in-season closure will prevent disproportionate reductions in access to recreational fisheries for regions (primarily states in the southern range of the region) where recreational fishing toward the end of the calendar year occurs primarily in the EEZ.

Cumulative Impacts

The biological, 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.

[2] This Alternative was formerly numbered 1D.

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
BSB	Black Sea Bass
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
MMPA	Marine Mammal Protection Act
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
OFL	Overfishing limit
OY	Optimal Yield
PRA	Paperwork Reduction Act
RA	Regional Administrator
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

Accountability measures are a necessary component of Federal FMPs according to the MSA. According to the Guidelines, "AMs are management controls to prevent ACLs, including sector-ACLs, from being exceeded, and to correct or mitigate overages of the ACL if they occur." The recreational AMs currently in place involve both proactive and reactive components. Proactive AMs function to prevent the ACL from being exceeded. Reactive AMs are a response to catch exceeding the ACL, and are intended to address the operational issue that caused the overage.

The current reactive AMs for the Council's recreational fisheries include a pound-for-pound reduction from a subsequent year ACT when the recreational catch estimate exceeds the ACL, regardless of stock condition. This is a more punitive AM approach than may be necessary under the Guidelines, which suggest, but do not require, that a payback be considered for stocks undergoing rebuilding. None of the Council's recreational fisheries is overfished or in rebuilding, nor is overfishing occurring for any of these fisheries. The general approach in this amendment is to propose that reactive AMs be scaled to the severity of the management error. Additionally, it is proposed that the conditions that trigger reactive AMs incorporate the uncertainty inherent in recreational fishery catch estimates and recreational management controls.

The development of a management framework for recreational AMs that takes into account the fundamental differences between commercial and recreational fisheries reflects an improvement in recreational management from current practices because it reconciles management with the realities of catch estimation and management controls. For this reason, the improvements proposed in this amendment represent a departure from the previous approach contemplated in the Omnibus ACL/AM Amendment that treated recreational and commercial fisheries as operationally consistent, such that identical AMs were established for each sector in the form of pound-for-pound paybacks. That approach was initially supported because it was automatic (i.e., did not require further deliberation) and appeared to maintain the integrity of the Council's established limits. While there is no argument that paybacks are an automatic response, they may not be the most appropriate approach given the numerous sources of uncertainty associated with recreational fisheries. This is further discussed below.

Additionally, pound for pound recreational paybacks may appear on the surface to serve the purpose of constraining the recreational fishery to established catch thresholds; however, the history of the relationship between recreational fishery landings and recreational harvest limits demonstrates that there are limits to the effectiveness of recreational management controls and these are not eliminated by the institution of paybacks. Recreational management measures appear to have constrained recreational landings to the overall range of historic RHLs which has likely contributed to success in constraining overall catches to sustainable levels. Year-to-year recreational catches, however, rarely track established RHLs. A comparison of historic

recreational fishery behavior and hypothetical future behavior under paybacks is not problematic. Paybacks simply adjust the effective RHL such that more restrictive management measures would be put in place in an attempt to limit harvest to the RHL. Therefore, the history of realized (estimated) harvest relative to past RHL levels is illustrative of likely future correspondence to future RHLs. In other words, except for cases where a payback would be extreme, management measures associated with a given payback are likely to result in as much correspondence between landings and RHLs as without paybacks. As shown in Figure 1, compared to the tight correspondence between commercial landings and the commercial quota, recreational landings and the RHL are rather loosely related. While the overall range of RHLs for a given species approximates the range of landings estimates, landings and the RHL do not follow the same year to year patterns. As discussed below, given the low likelihood that recreational landings will converge on a specified RHL in a given year, a more suitable framework would be to make allowances for fluctuations in recreational fishing when stock conditions appear to be favorable (not overfished, no overfishing) while exerting punitive management responses when stock conditions support a more aggressive approach.

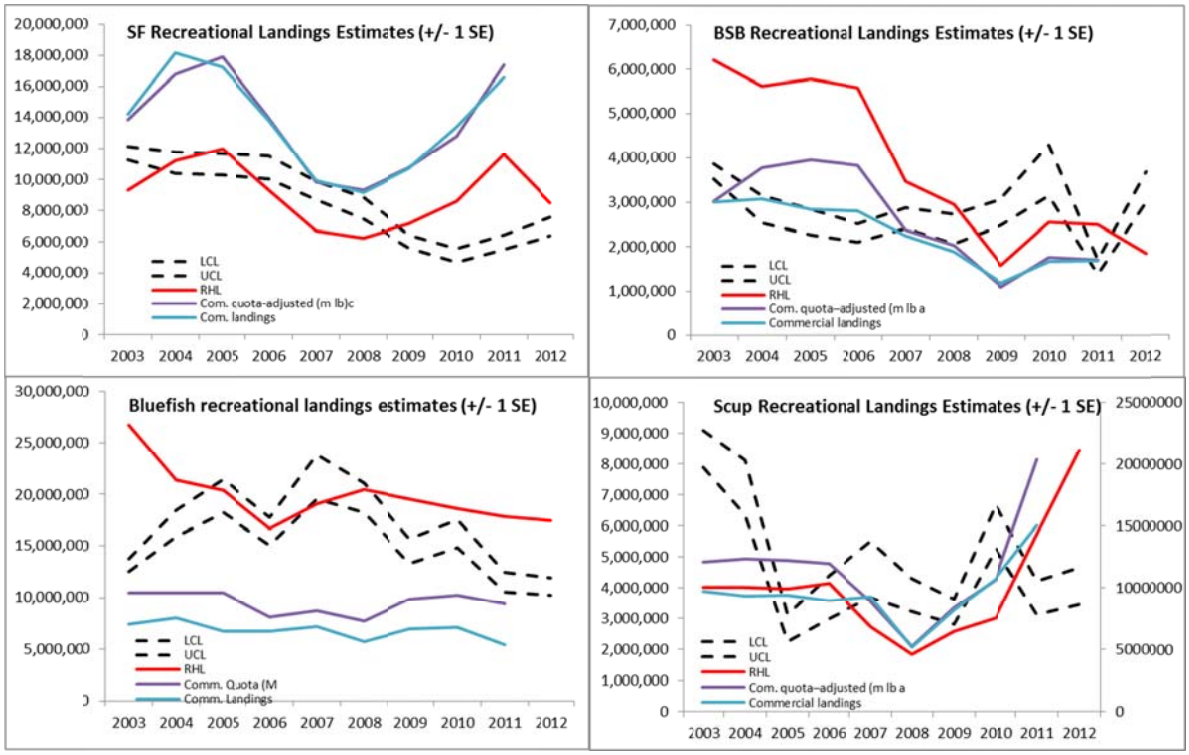

Figure 1. Time series of recreational landings for summer flounder ("SF" top left), black sea bass ("BSB" top right), bluefish (bottom left) and scup (bottom right) relative to established recreational harvest limits for the past ten years (2003-2012). Shown for comparison is the time series of commercial landings and commercial quotas. Recreational landings are expressed as a range of estimates whose upper and lower confidence limits are indicated by the dashed lines.

Uncertainty in Recreational Catch Estimates

Recreational catches estimates provided via the Marine Recreational Information Program (MRIP) are estimated through a statistical survey methodology. The following text along with Figure 2 is taken from the NOAA Office of Science and Technology website (http://www.st.nmfs.noaa.gov/index):

> Understanding Estimates and Uncertainty
>
> All survey estimates include some amount of statistical error and uncertainty. Being able to decipher this error is critical to understanding a catch estimate.
>
> Every MRIP estimate is made up of two parts: The point estimate and the percent standard error (PSE). The point estimate is the estimated number of fish caught at a given place over a specified period of time. When using MRIP queries to examine the data, you will see a number on a table or a point on a graph that indicates the "point estimate." Even though it is a specific number, it's important to remember that this number is an estimate. It is impossible to have 100% certainty with any type of sample survey. To indicate how unsure we are about a point estimate, we use the PSE.
>
> The PSE is similar to the "margin of error" that is frequently used in public opinion surveys. It is the measure of how precise an estimate is. The lower the PSE, the greater the precision. Accurately calculating PSEs is important because a full understanding of what we don't know – and how we can better fill gaps in our knowledge – is an essential component in making prudent, sustainable fisheries management decisions.

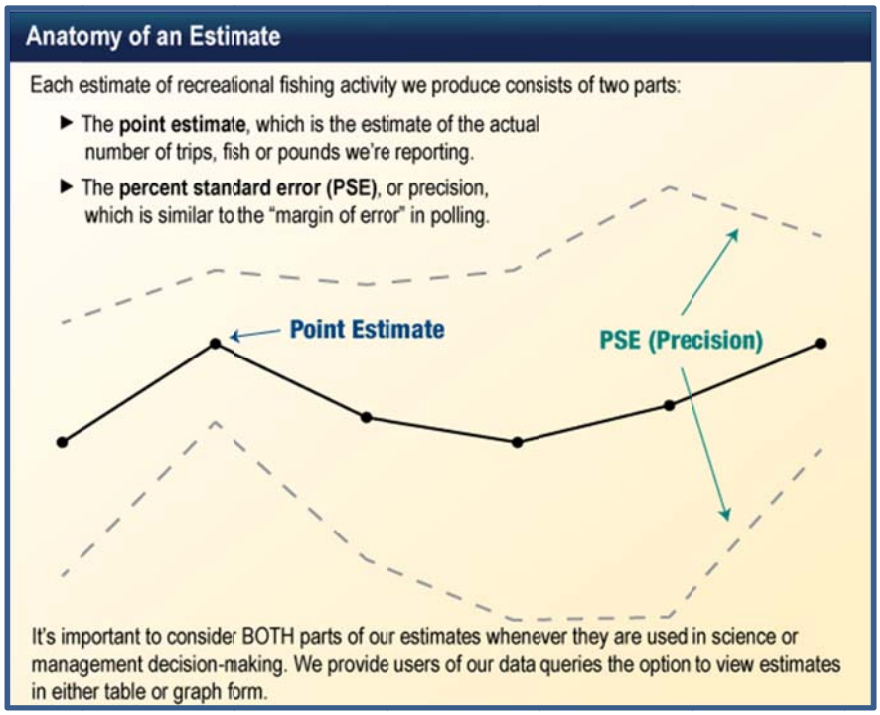

Figure 2. A graphic that briefly addresses the information provided in a recreational catch estimate.

The MRIP statistical methodology couples catch data acquired from intercepts of recreational anglers by survey personnel and effort data from telephone interviews of randomly selected households. As stated above, the uncertainty is typically reported as a percent standard error (Table 3 below), where standard error is the average error or difference in estimates from the central value. A large PSE such as for Atlantic mackerel (Table 3) corresponds to a more uncertain catch estimate than an estimate with a smaller PSE such as for summer flounder (Table 3). Ignoring the PSE and treating the central value as completely accurate is an inappropriate use of the statistically derived estimates (pers. comm. Jay Breidt, Statistics Dept., Colorado State University).

Federal commercial fishery landings data, by contrast, are obtained through mandatory dealer and vessel reports that are submitted as a condition of being permitted to participate in the commercial harvest and sale of seafood. There are no statistics involved in the reporting of these data. Every pound of fish is required to be reported. These data are assumed to be 100% accurate, occasional audits and corrections withstanding. Additionally, and importantly, commercial landings are reported in a timely manner (weekly, as opposed to a six week lag in the generation of recreational landings estimates) so that the accumulation of landings relative to the establish quota can allow managers to shut down a fishery much closer to the time when it has reached the quota.

Figure 1 illustrates the disparate behavior of recreational and commercial fisheries relative to their landings limits for all the recreational species except Atlantic mackerel. In the figure, commercial landings closely approximate the commercial quota time series. The recreational

fishery, on the other hand, while operating within the general range of recreational harvest limits, shows indications that management constraints have limited ability to constrain landings to specified levels. Although year-to-year correspondence between recreational landings estimates and the RHLs is poor, the net effect of the recreational measures, which have kept landings within the long-term range of established limits, has apparently been sustainable. None of these stocks are overfished, nor is overfishing occurring.

If the uncertainty in the landings estimates is considered, it will be noted that for all of these recreational fisheries, across the same ten year time period, the lower confidence limit for the recreational landings estimate exceeded the RHL in 0/10 years for Atlantic mackerel, 1/10 years for bluefish, 3/10 years for summer flounder, 3/10 years for black sea bass, and 6/10 years for scup. Additionally, in any year when the point estimate of the landings exceeded the RHL, the lower confidence limit also exceeded the RHL. In other words, it would not have made a difference if the point estimate or lower confidence limit for the recreational landings estimate had been used as a test for a landings overage. None of these recreational fishery stocks is characterized as overfished.

Paybacks Assume Accuracy

Under the Council's current recreational management procedures, a payback is prescribed for any pounds of catch above an established ACL. The ACLs are specific to the recreational fishery for summer flounder, scup, and black sea bass, while the ACLs for Atlantic mackerel and bluefish include commercial catch. The current determination that catch is above the ACL assumes the recreational catch estimate as completely accurate. The PSE is ignored. In other words, an ACL that has been specified (to the pound) is compared to the central value from recreational catch estimation and any difference in catch above the ACL is subject to payback. This treatment of the data is inappropriate in the face of uncertainty in the recreational catch estimates. Given the tendency for recreational landings estimates to occasionally exceed the specified RHL, additional uncertainty is added when it is presumed that a specific overage, precisely known, will be precisely paid back. More specifically, this is as unlikely as it is the RHL would be achieved in any year. Finally, further uncertainty is associated with the expectation that any biological benefit to the stock will be achieved by the payback. This uncertainty can be thought of as the product of the uncertainties associated with the probability of 1) achieving the payback, and 2) the retention of those fish in the population contributing to increased biomass through growth and production such that an offset of those factors from the overage is achieved.

In accounting for the various sources of uncertainty that have been discussed thus far - the catch estimate itself, the appropriateness of the ACL, the ability to constrain catches to a specified level, the ability to achieve the payback - another source of uncertainty arises which is the amount of biological value the payback returns to the affected stock. Figure 3 below reflects the accumulation of these sources of uncertainty as the process of specifying catch limits and management measures proceeds.

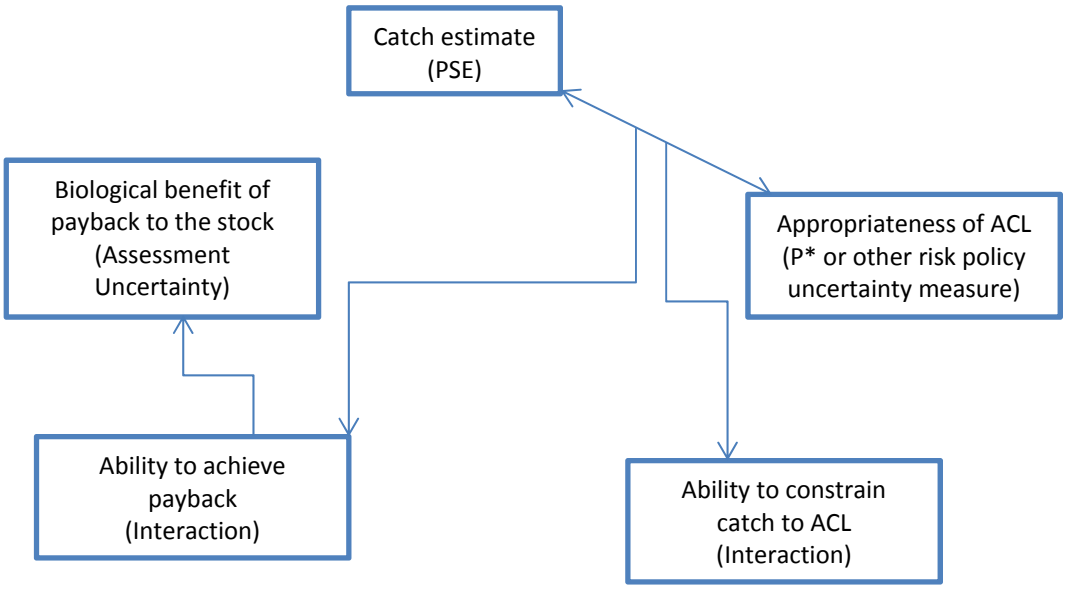

Figure 3. Interrelated sources of uncertainty associated with recreational paybacks.

Table 3. Average PSE (2003-2012) for landings estimates for recreational species affected by this amendment showing the range of uncertainty in the catch estimates for these species.

Species	Ave PSE
Summer Flounder	6.99
Bluefish	7.78
Black Sea Bass	10.43
Scup	14.29
Atlantic Mackerel	21.34

Managing with Uncertainty

A central premise to this amendment that represents a departure from the approach taken in the Omnibus ACL and AM Amendment is that, in the recreational accountability system, recreational catch estimates will not be treated the same as commercial catch reports. Improvements in the accuracy of recreational catch estimates may occur as MRIP methodology evolves, however, until catches are no longer estimated there will always be uncertainty associated with those estimates.

A general approach in this amendment is to require, under favorable stock conditions, a greater degree of evidence than for commercial fisheries that catches have deviated from desired threshold levels (i.e., above the specified ACL) before a management response is invoked. While this appears to set different standards for the recreational fishery, it must be understood that recreational and commercial fisheries, though they both result in the removal of fish from a population, are in fact very different and require different management approaches.

4.2 The Affected Recreational Fisheries

This amendment addresses only fisheries managed by the Council for which recreational ACLs and AMs have been established. These include recreational fisheries for Atlantic mackerel, bluefish, summer flounder, scup, and black sea bass.

4.3 Purpose and Need for Action

The purpose of this action is to evaluate and implement AMs that consider the biological cost of any catch overage and that recognize the generally uncertain nature of recreational fishery catch estimates and recreational management controls. The need for this action is to consider other accountability measures, in addition to the current pound-for-pound reductions and in-season closures.

5.0 MANAGEMENT ALTERNATIVES

Each suite of alternatives in this section consists of a no action/*status quo* alternative, and one or more action alternatives that the Council considered when identifying preferred alternatives.

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 Proactive Accountability Measures

Proactive AMs are actions intended to prevent a catch limit from being exceeded and, as such, are put in place either before the fishing year starts or if within-season data indicate a need, before the fishing year ends. These include limits on, bag, size, and season which are intended to constrain or reduce the ability of recreational fishermen to catch a given species; thus, constraining catch to a desired level, which is typically an ACT. The exercise of in-season closure authority is also a pro-active accountability measure when its exercise prevents an ACL from being exceeded, but this necessitates adjusting measures or closing the season before the ACL has been reached.

Annual Catch Target

ACTs are specified for all five species as part of the current specifications process. There are differences among the FMPs as to how this is done. Figures 4-6 illustrate the ACT specification process for each FMP. Figure 6, which illustrates the process for summer flounder, applies to scup and black sea bass as well. Note that for the current fishing year (2013) the recreational ACT is equal to the recreational ACL for summer flounder, scup, and black sea bass, and the ACL is equal to the sum of the commercial and recreational ACTs for bluefish. In 2013, only Atlantic mackerel has an ACT that is reduced from the ACL.

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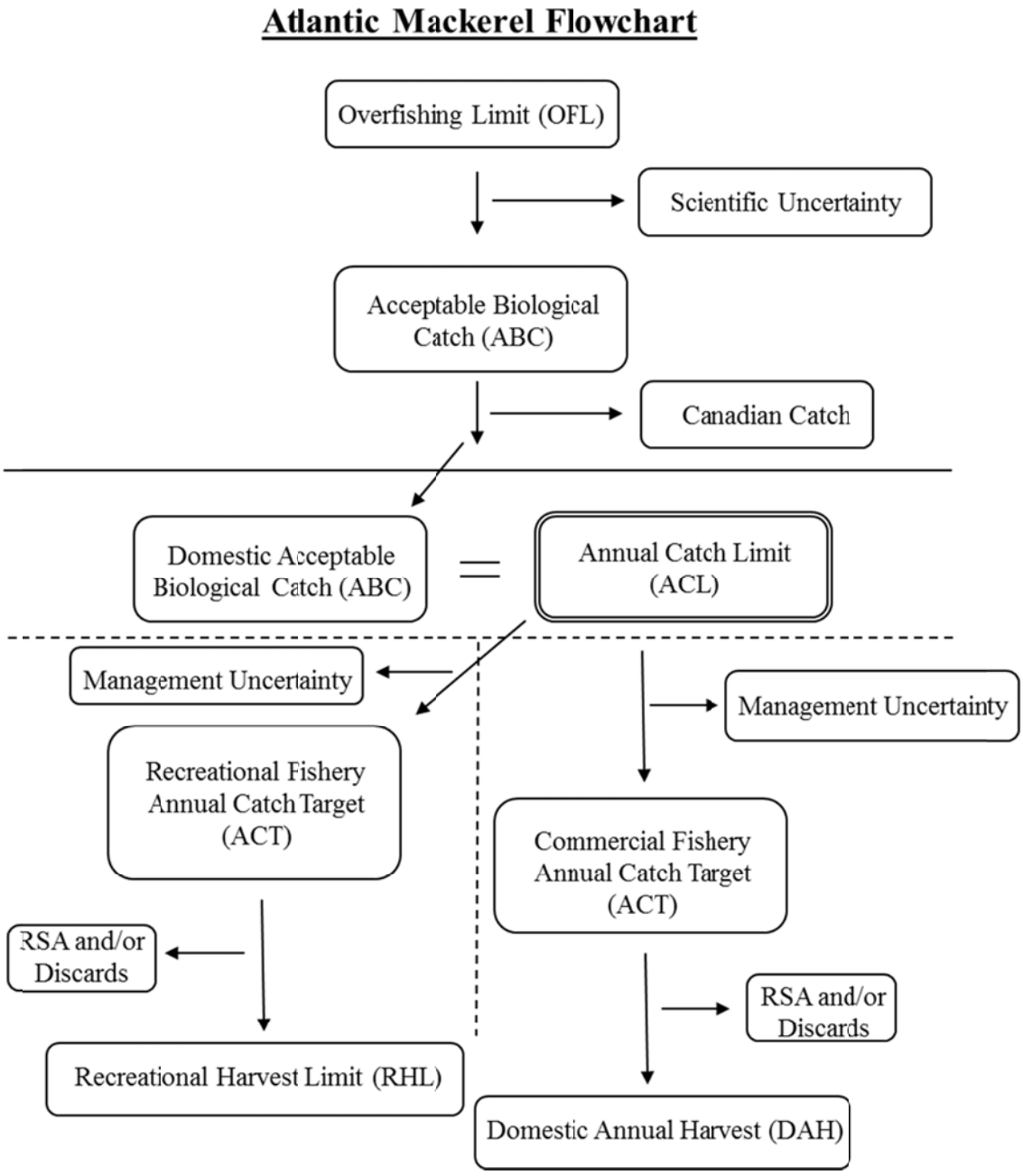

Figure 4. Process for determining Atlantic mackerel ACTs and other catch limits.

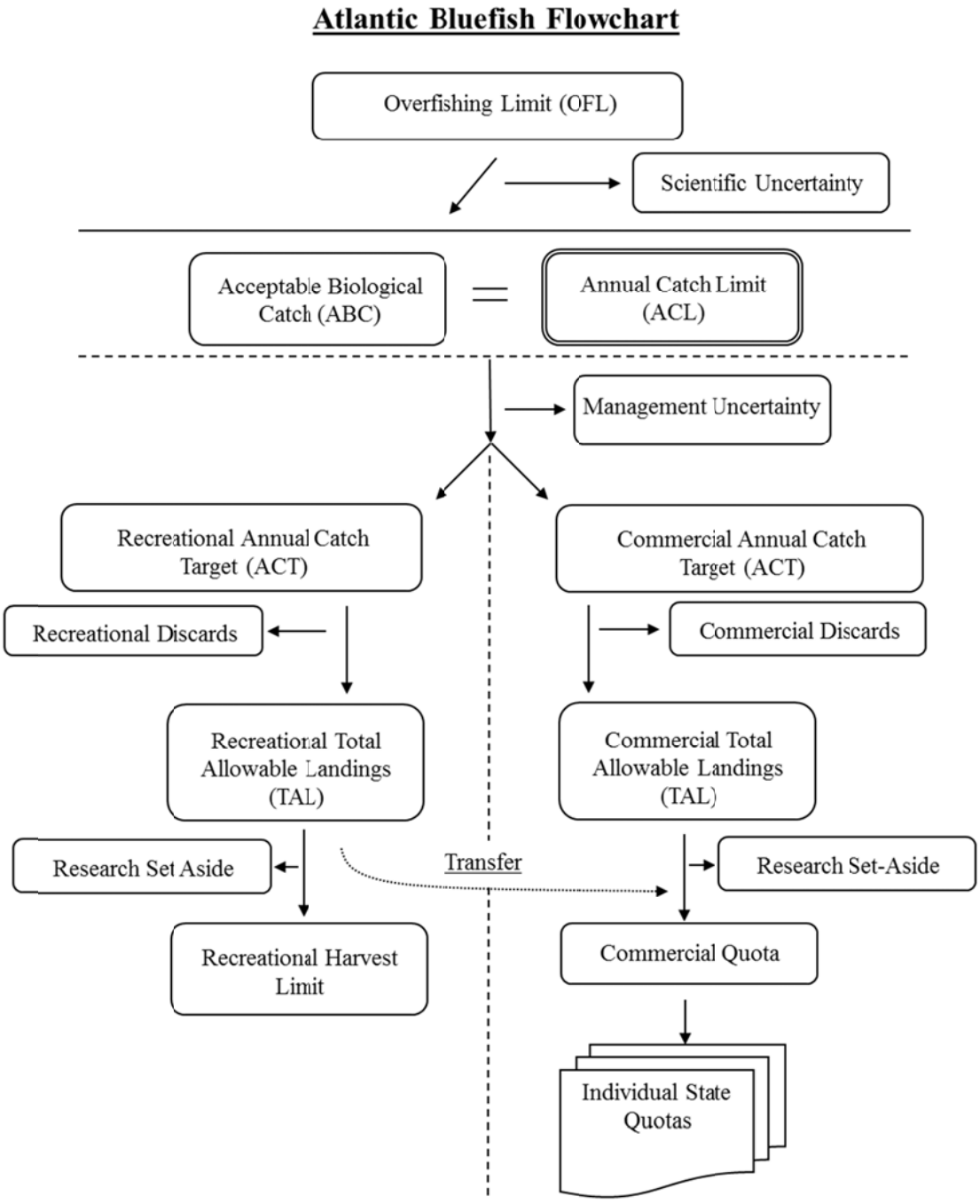

Figure 5. Process for determining Atlantic bluefish ACTs and other catch limits.

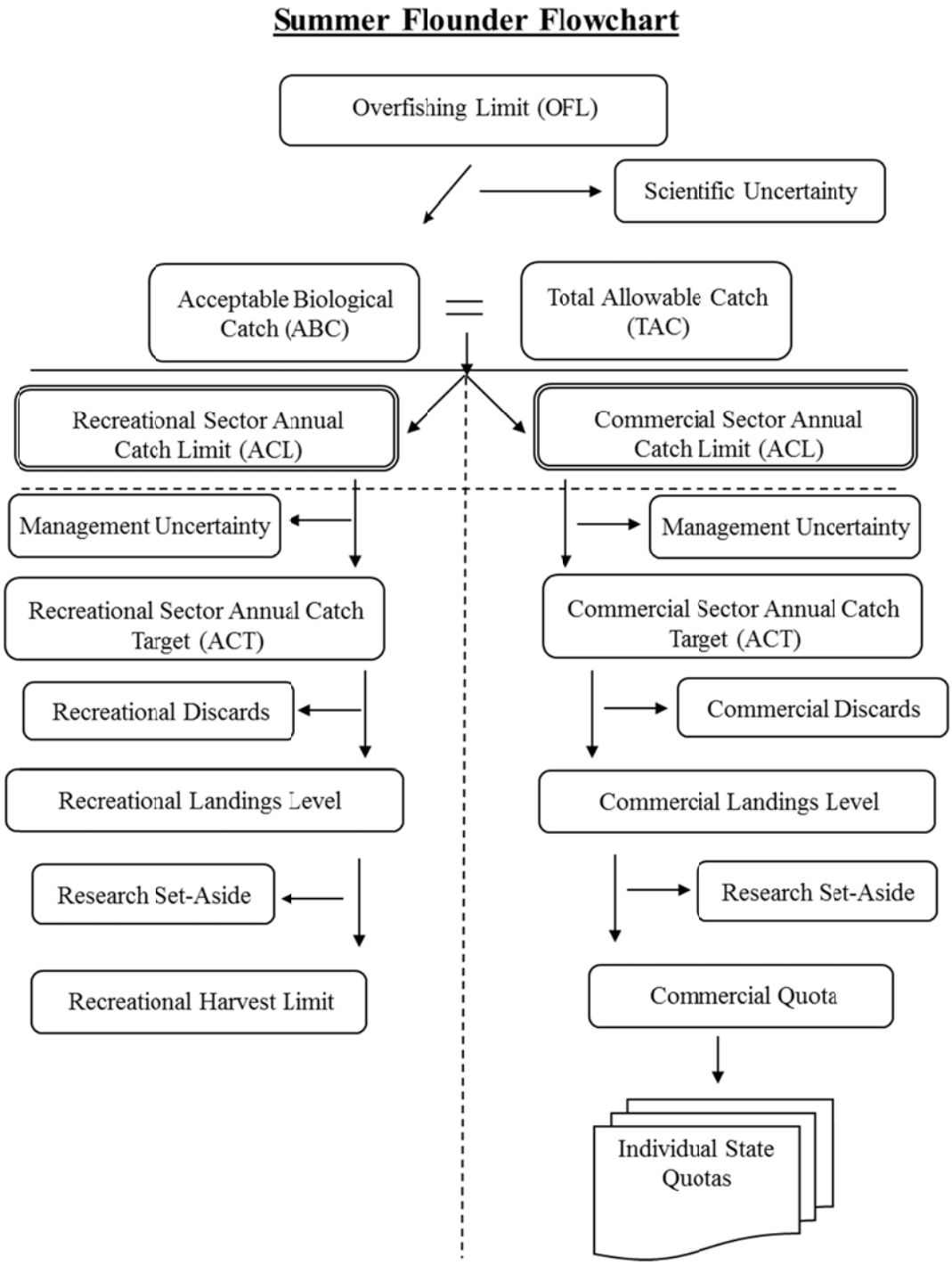

Figure 6. Process for determining summer flounder ACTs and other catch limits. This process also applies to scup and black sea bass.

In considering modifications to ACTs, the Council is not considering changes to the processes established in the Omnibus ACL and AM Amendment, but rather to how ACT might be alternatively calculated, once the process has arrived at the point where ACT is calculated. As seen in Figures 4-6, the step from ACL to ACT involves consideration of management uncertainty. There is no official guidance on how management uncertainty should be characterized or considered. Nevertheless, any reduction from ACL to ACT is meant to "aim low" at a target that may be exceeded due to uncertainty in the ability of management to control landings. Generally speaking, the history of landings relative to landings limits is examined to make a more informed decision about the level of reduction, if any, necessary to reduce the likelihood that ACL will be exceeded. The language below includes existing and alternative regulatory language for specifying an ACT. The same general language is used for all five recreational fisheries.

Alternative 1A. <u>Preferred</u>. No Action/Status Quo. Maintain Current Regulatory Language for Determination of ACT. *Monitoring Committee [for the relevant species] shall identify and review the relevant sources of management uncertainty to recommend ACTs for the recreational fishing sector as part of the specification process. The Monitoring Committee recommendations shall identify the specific sources of management uncertainty that were considered, technical approaches to mitigating these sources of uncertainty, and any additional relevant information considered in the ACT recommendation process.*

Under the current regulatory language, the Monitoring Committee and Council are given substantial discretion in how management uncertainty is considered and applied. For fishing year 2013, the recreational ACTs for summer flounder, scup, and black sea bass, were set equal to the recreational ACLs. For the 2013 bluefish specifications, the recreational ACT plus the commercial ACT are equal to the combined ACL. Setting ACT (or the combined ACTs) equal to the ACL results in management uncertainty essentially being zero for the current fishing year. The 2013 recreational ACT for Atlantic mackerel incorporates a 10 percent buffer for management uncertainty. As stated above, the discretion to set management uncertainty to zero has been exercised for the current fishing year for four out of five of the recreational species and that would be maintained under this alternative.

Alternative 1B. Mandatory Review of ACT = ACL – Uncertainty in Recreational Catch Estimates. *Monitoring Committee [for the relevant species] shall identify and review the relevant sources of management uncertainty to recommend ACTs for the recreational fishing sector as part of the specification process, <u>including explicit consideration of a reduction from the ACL based on uncertainty in recreational catch estimates</u>. The Monitoring Committee recommendations shall identify the specific sources of management uncertainty that were*

considered, technical approaches to mitigating these sources of uncertainty, and any additional relevant information considered in the ACT recommendation process.

This alternative obligates the Monitoring Committees to communicate the magnitude of the uncertainty in the recreational catch estimates to the Council for consideration during specification setting. The uncertainty in the recreational catch estimates could be used as a reduction from ACL to ACT. In contrast to the no action/*status quo* alternative (Alternative 1A), which does not explicitly call out the uncertainty in the recreational catch estimate, this alternative would require the monitoring committee to present an estimate of the amount of uncertainty in the catch estimate for the Council. The Council could then choose to reduce the ACT from the ACL by that amount, or some other estimate of management uncertainty, including zero.

Alternative 1C. Mandatory Setting of ACT = ACL – Uncertainty in Recreational Catch Estimates. *Monitoring Committee [for the relevant species] shall calculate ACTs for the recreational fishing sector as part of the specification process where ACT = ACL – Uncertainty in Recreational Catch Estimates – Additional Sources of Uncertainty (as needed). The Monitoring Committee recommendations shall also identify other specific sources of management uncertainty that were considered, technical approaches to mitigating these sources of uncertainty, and any additional relevant information considered in the ACT recommendation process.*

This alternative would establish that the uncertainty in the recreational catch estimates be used as a reduction from ACL to ACT regardless of any other mitigating circumstances such as stock condition or underperformance of the commercial fishery. It would not prevent the application of additional measures of management uncertainty to further reduce from ACL to ACT; however, the greatest value ACT could take on would be ACL - a measure of recreational catch uncertainty. In contrast to Alternative 1B, this alternative would obligate the Council to reduce the ACT from the ACL by at least the uncertainty estimate specified by the Monitoring Committee regarding uncertainty in the recreational catch estimate. Because the uncertainty comes from the data, the Council could also have additional sources of management uncertainty that would reduce ACT further.

In Season Closure Authority

These proactive accountability measures attempt to prevent the ACL from being exceeded by closing down the recreational fishery as soon as data are available that indicate the RHL has been landed. In order for this to be successful, fishing would have to cease as soon as the RHL is achieved. Since the data for a given recreational fishing wave (two-month period) are typically not available until several weeks after the wave ends, this is rarely the case. Given the timing

constraints and uncertainty in the recreational landings estimates, in-season closure may not be appropriate for these fisheries.

Alternative 2A. No Action / Status Quo. Maintain Current In Season Closure Authority for the Regional Administrator. *The Regional Administrator will monitor recreational landings based on the best available data and shall determine if the recreational harvest limit has been met or exceeded. The determination will be based on observed landings and will not utilize projections of future landings. At such time that the available data indicate that the recreational harvest limit has been met or exceeded, the Regional Administrator shall publish notification in the Federal Register advising that, effective on a specific date, the recreational fishery in the EEZ shall be closed for remainder of the calendar year.*

Alternative 2B. Early Closure with In Season Projections. *The Regional Administrator will monitor recreational landings based on the best available data and shall consider whether projections of future landings indicate that the recreational harvest limit will be met prior to the close of the fishing season. If the recreational harvest limit is projected to be met prior to the close of the season, the Regional Administrator shall publish notification in the Federal Register advising that, effective on a specific date, the recreational fishery in the EEZ shall be closed for remainder of the calendar year.*

Under this alternative, the RA would be able to use a projection of recreational landings to determine if the RHL has been harvested as the basis for closing a recreational fishery. This can result in an earlier closure than under Alternative 2A and is more likely than Alternative 2A to prevent the ACL from being exceeded. Recreational landings estimates are grouped in to two month waves (January-February are wave 1, March-April are wave 2, etc.) and wave data are available approximately six weeks after the end of a wave. Projections would allow the RA to determine if it is likely that the recreational harvest limit is exceeded in the current wave. For example, and as illustrated in Figure 7 for 2012, when black sea bass landings estimates through wave 3 were approximately 90 percent of the recreational harvest limit, the current regulations prevented the RA from taking any action. Had Alternative 2B been in place, on the other hand, this would have allowed the RA to close the fishery at least two months earlier. Compared to the no action/*status quo*, Alternative 2B would be more likely to prevent excessive recreational overages that would then trigger reactive AMs from being implemented.

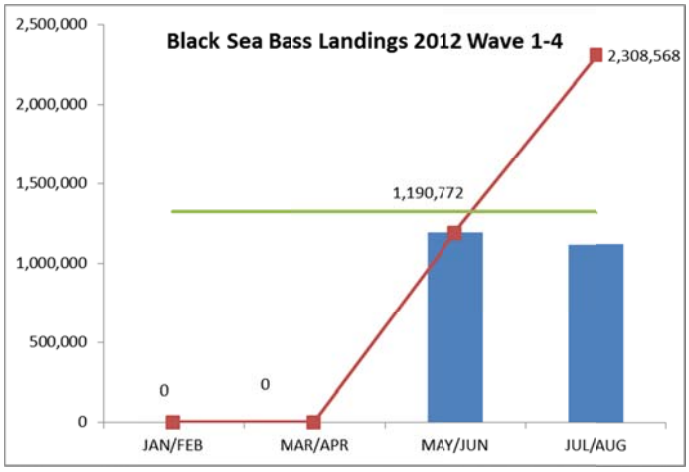

Figure 7. Black sea bass landings by wave in 2012. Under Alternative 2B, a projection of landings based on the increase from wave 2 to wave 3 could have resulted closure of the fishery in wave 4.

Alternative 2C. Preferred. Eliminate in-season closure authority. Regulatory language regarding closure of the recreational fisheries would be removed. This alternative, if chosen, would reflect a preference for addressing recreational overages in subsequent fishing years rather than imposing an early closure.

As described above, there is a delay in receiving the in-season recreational landings estimates. In addition to the uncertainty and the delay, there may be seasonal differences in a fishery that would result in in-season closures disproportionately impacting anglers in a particular state or region. For example, if the primary two-month wave for a particular species is May-June in one state and November-December in another state, year to year closures of the fishery in November-December would disproportionately impact anglers in the second state (Table 4).

Table 4. Total 2009-2012 landings (N) of black sea bass in North Carolina and New York illustrating the relative importance of two-month recreational waves in the two states.

	NC	NY
JANUARY/FEBRUARY	75,634	0
MARCH/APRIL	13,514	0
MAY/JUNE	155,890	384,539
JULY/AUGUST	84,919	612,500
SEPTEMBER/OCTOBER	67,193	593,076
NOVEMBER/DECEMBER	18,879	67,462

Alternative 2D. In-Season adjustment to management measures. *The Regional Administrator will monitor recreational landings based on the best available data and shall consider whether*

landings indicate that the recreational harvest limit has been met prior to the close of the fishing season. If the recreational harvest limit is met prior to the close of the season, the Regional Administrator shall, in consultation with the Council, adjust management measures according to pre-arranged terms and conditions.

This alternative would limit rather than close further landing of fish in a recreational fishery that has exceeded its RHL. The Council would submit for approval terms and conditions for the adjustment as part of recreational specifications so that the adjustment by the RA would be automatic. For example, the Council may recommend that the bag limit be halved for the remainder of the season if the RHL has been determined to have been reached.

5.3 Reactive AM Alternatives

Reactive AMs are triggered when management controls have failed to prevent a catch limit from being exceeded. As such, there are two components to reactive AMs, 1) the trigger, or what has to occur for an accountability measure to be implemented, and (2) the actual AM, or the action that follows if the trigger condition is met (such as a reduction in a future year's bag limit or ACT).

Trigger Conditions

Alternative 3A. No Action / Status Quo for Summer Flounder, Scup, Black Sea Bass. Maintain Phase-In Comparing Three-Year Average of Recreational Catch Estimates to Three-Year Average of ACL. *The recreational sector ACL will be evaluated based on a 3-year moving average comparison of total catch (landings and dead discards). Both landings and dead discards will be evaluated in determining if the 3-year average recreational sector ACL has been exceeded. The 3-year moving average will be phased in over the first 3 years, beginning with 2012: Total recreational total catch from 2012 will be compared to the 2012 recreational sector ACL; the average total catch from both 2012 and 2013 will be compared to the average of the 2012 and 2013 recreational sector ACLs; the average total catch from 2012, 2013, and 2014 will be compared to the average of the 2012, 2013, and 2014 recreational sector ACLs and, for all subsequent years, the preceding 3-year average recreational total catch will be compared to the preceding 3-year average recreational sector ACL.*

Although this alternative represents no action/*status quo* for the Summer Flounder, Scup, and Black Sea Bass FMP, the Council is not considering this alternative for the Atlantic mackerel and bluefish FMPs.

Alternative 3B. Compare Single Year Recreational Catch Estimate to Same Year ACL (No Action / Status Quo for Atlantic Mackerel and Bluefish). *The [recreational sector] ACL will be evaluated based on an annual comparison of the total catch estimate (landings and dead discards). Both landings and dead discard estimates will be evaluated in determining if the [recreational sector] ACL has been exceeded.*

This alternative would remove the three-year averaging of the ACL and the catch estimates from the accountability procedures for summer flounder, scup, and black sea bass. Instead, a single year ACL would be measured against that same year's catch estimate for determination of an overage. Because three year averaging is only in place for summer flounder, scup, and black sea bass, this alternative represents the no action/*status quo* for Atlantic mackerel and bluefish.

Alternative 3C. Preferred. Compare Confidence Interval of Single Year Recreational Catch Estimate to Same Year ACL. *The recreational sector ACL will be evaluated based on an annual comparison of the appropriate confidence interval of the total catch estimate (landings and dead discards), where the entire confidence interval (i.e., including the lower confidence limit) must be above the recreational ACL to trigger an AM. Both landings and dead discard estimates will be evaluated in determining if the recreational sector ACL has been*

exceeded. If overfishing is occurring or the stock is overfished in the year for which the overage determination is being made, then the use of the lower confidence limit would not occur and the point estimate of catch would serve for comparison with the ACL.

Alternative 3C attempts to incorporate statistical theory into management by acknowledging the uncertainty that is an explicit component of MRIP catch estimates. Under the no action/*status quo*, a recreational catch estimate is treated the same as commercial fishery data from dealer reports. Dealer reports are not estimates, however, and should be in error only if there is accidental or intentional misreporting. The reports are based on transactions that are traceable and there are significant penalties in place to enforce misreporting.

A confidence interval of +/- one PSE corresponds to a roughly 68% of the total distribution of catch estimates for a given year. This alternative would allow, when stock conditions are favorable (not overfished, no overfishing) the use of the lower confidence limit (central value minus one standard error as a trigger for AMs. This would appear to introduce some additional level of risk, thus the requirement that stock condition be favorable in order to use the confidence interval. If the stock is overfished or overfishing has been determined to have occurred, then the point estimate would be used as done currently. As has been discussed above; the use of a lower confidence limit in place of the point estimate in the past would likely not have made any difference in determining whether an overage had occurred. In other words, the performance of the fisheries relative to, at least the RHL, suggests that the deviation away from that limit is typically greater than one standard error. This alternative would accommodate a situation where the point estimate is only slightly above the limit, but the lower confidence limit is below it. As has been stated above, the retention of recreational catches to the general range of recreational limits has resulted in healthy stock conditions. The risk to stock health associated with not declaring an overage because of the occurrence of a point estimate above the limit and a lower confidence limit below the limit is likely minimal.

At its June meeting, the Council chose to modify the existing regulations only to incorporate the use of the lower confidence limit so that the existing phased-in three year averaging of ACL and the catch estimate as done under Alternative 3A for summer flounder, scup, and black sea bass would continue under this alternative. The only difference would be that the lower confidence limit rather than the point estimate would be used in the averaging. For the bluefish and mackerel FMPs, where three year averaging is not specified and the ACL includes commercial catch as well, the lower confidence limit would be used in place of the point estimate to determine if the combined catch (recreational + commercial) exceeded the ACL and single-year overage determination would continue.

Alternative 3D. Repeat of Recreational Catch Estimate Exceeding ACL. *The recreational sector ACL will be evaluated based on an annual comparison of the total catch estimate (landings and dead discards), where the recreational catch estimate must be above the recreational ACL more than once in any four year period to trigger an AM. Both landings and dead discard estimates will be evaluated in determining if the recreational sector ACL has been exceeded.*

Alternative 3D represents an additional approach for dealing with the potential for recreational catch to expand beyond a specified threshold. Limiting trigger conditions to the repeat of an overage within a four year period allows for the occasional departure of recreational fishery behavior from desired limits while preventing this, through the invocation of response measures, from becoming a chronic occurrence. It is unlikely that a single year overage would have a deleterious effect on a healthy fish stock when surrounded by three years on either side.

Management Response

Unlike the no action/*status quo* alternative, the action alternatives contemplated as management responses in this amendment take into account stock condition and the different catch thresholds that may be exceeded. These alternatives are illustrated in Table 5 below.

In each management response alternative, stock condition is considered to potentially be in one of three bins relative to the biomass reference point and any rebuilding schedule. In other words the management response could be different if stock biomass is: 1) above B_{MSY} and rebuilt, 2) below B_{MSY} but above ½ B_{MSY} and not in rebuilding, or 3) below ½ B_{MSY} or in rebuilding. Additionally, the management response could be different if the recreational catch is: 1) above the recreational ACL only, 2) above the recreational ACL and the combined recreational and commercial catch is above ABC, or 3) above the recreational ACL and the combined recreational and commercial catch is above OFL. Note that if B or BMSY is unknown, then the same process as for stocks in a rebuilding plan would be applied.

The management responses under consideration consist of three tiered components: 1) monitoring for in-season closure, 2) bag, size, season adjustment, or 3) payback of the estimated overage. These are cumulative responses, such that if a tier 2 or 3 response is triggered, then all the responses below that tier are also invoked. For example if a bag, size, or season adjustment occurs, so does catch monitoring for in-season closure. If the alternative to eliminate in-season closure authority is chosen under Alternative 2C, it would eliminate in-season closure from these management response alternatives.

In order to differentiate itself from the payback response, the bag, size, season response is not prescriptive in that it would not have to achieve a reduction in catch by the exact overage amount. The adjustment would take into account expected stock condition in the year where the AM would be applied such that changes in stock condition would correspond to a different adjustment than would occur under an assumption of equilibrium conditions as is used currently. If payback and bag/size/season adjustment apply in the same year, then bag/size/season would be adjusted to achieve the ACT as reduced by the payback.

Additionally, the bag, size, and season adjustment is comprised of two parts which are separately proactive and reactive. The pro-active component of a bag, size, and season adjustment will always occur for the affected species, to the extent that they are addressed as part of the year-to-year activity of the species' Monitoring Committees. These adjustments typically take into account fishery performance relative to previously established measures; however, that would not necessarily occur if a management response alternative is chosen that would require in-

season monitoring for a closure, only. If in-season closure is removed, then the two components would operate as currently practiced under the no action/*status quo*.

1) Proactive: For a given year's ACT, an adjustment to bag, size, and season modifies those variables to move from the existing ACT to the future ACT. If the ACTs are the same and catch achieved, but did not exceed, the ACT, then no adjustment is needed. If the new ACT is larger, then a liberalization of one or more components may be made; and if the new ACT is smaller, then more restrictive measures are identified that correspond to the ACT. This is how the Council has managed the recreational fisheries to date.

2) Reactive: If the estimated recreational catch exceeds the ACL in a given year, the "inefficiency" or "overefficiency" of the bag, size, season limits for that year would factor into a subsequent adjustment. For example, if an estimated overage occurred, then the percent overage would be applied so that some combination of bag, size, and season adjusts for that overage. Nevertheless, the existence of a payback presents a different scenario than that described here since the catch target (ACT) would actually be explicitly reduced by the overage amount, as opposed to the overage being considered among other factors (e.g., changes in abundance of the resource from the overage year to the specification year) in the calculation of an appropriate bag, size, season combination.

The separation of these two functions of the bag, size, and season management measures is needed in case a response alternative is chosen such that at some combination of stock condition and overage type (e.g. $B/B_{MSY}>1$ and ACL only is exceeded under Alternative 4B, below) no adjustment to the bag, size, and season would be implemented. If the new ACT is different from the prior year ACT, an adjustment would be made, but that adjustment would not be "responsive" to any overage. In other words, if the ACT in the subsequent year is 10% greater, but a 5% overage occurred and only in-season monitoring for a closure is called for under the response, then bag, size, and season would be adjusted to account for the increase in catch limit, but the overage (or any other measure of the inefficiency of the previous bag, size, and season) would not be factored in. If, however, bag, size, and season are part of the management response, then both the adjustment from the old to the new ACT would be made as well as the overage. In this case it may be that bag, size, and season are liberalized less than the otherwise would have been. This is to incorporate the review of the performance of the measures. That is, when the management measures were established, they were expected to achieve, but not exceed, the RHL. Because the measures were unable do so, the expectation that subsequent measures would meet, but not exceed, a given RHL needs to be adjusted.

If an alternative were chosen whereby in-season closure was the only "management response" in a given year (e.g., only ACL is exceeded for stock above B_{MSY} under Alternative 4B) then only the pro-active function of the bag, size, and season adjustment would have to occur. As such, the splitting of these two functions is moot if in-season closures are eliminated, because the responsive component of the bag, size, and season adjustment would have to remain. Such an outcome would be consistent with the general practice that has been used in the past for the summer flounder, scup, and black sea bass recreational fisheries by adjusting bag, size, and season limits to achieve a new catch target as informed by the performance of past measures.

For all of the action alternatives (4B-4E) the measure of stock condition would be for within the year that the overage occurred. Stock condition in a given fishing year is generally characterized in the following year. If stock condition is unknown or is not updated for some reason, then the best estimate of stock condition from the most recent stock status update from the Northeast Fisheries Science Center or other acceptable source for stock assessment and stock status information would be used.

Timing of the Response

Because all of the alternatives depend on the collection of information from a fishing year that has been completed, the management response could not be applied to the following fishing year, but rather to the next year after that. This is consistent with the current application of accountability response measures.

Resolution to Conflicts with In-Season Closure Alternative 2C

Because the approach in this suite of alternatives includes an in-season response, the selection of Alternative 2C (remove in-season closure authority) would conflict with these alternatives. These alternatives could accommodate Alternatives 2A (no action/*status quo*), 2B (in-season closure based on projection), and 2D (in-season adjustment to bag, size, season). If Alternative 2C is implemented, the in-season closure component in any of the alternatives below would be removed and only paybacks and adjustments to bag, size, and season would remain. The alternatives would therefore be modified from their description below such that "in-season closure" would be struck from each alternative. The problem with this is that it would render no accountability response for alternatives where in-season closure is the only response indicated for a particular combination of stock condition and overage type. This would be particularly egregious for Alternative 4D, below, which contemplates only an in-season closure response when OFL is exceeded if biomass is above B_{MSY}. Because this is highly inconsistent with MSA mandates, if Alternative 2C is implemented, the alternatives below would be modified by extending the bag, size and season adjustment to any "cell" in Table 5 where "in-season closure" is the only response.

Alternative 4A. No Action / Status Quo. Maintain Pound for Pound Payback for any Overage of the Recreational ACL. *If available data indicate that the recreational sector ACL has been exceeded and the landings have exceeded the RHL, the exact poundage of the landings overage will be deducted, as soon as possible, from a subsequent single fishing year recreational sector ACT… In the event that a sector ACL has been exceeded and the overage has not been accommodated through landing-based AMs, then the exact amount by which the sector ACL was exceeded, in pounds, will be deducted, as soon as possible, from the applicable subsequent single fishing year sector ACL.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to an overage of other catch thresholds (ABC, OFL) are not considered. Nevertheless, in order to compare across alternatives, the diagrammatic approach used to illustrate the other process

alternatives can be adapted for the no action/*status quo* alternative, as shown in the Table 5 under Alt 4A. This alternative reflects a viewpoint that paybacks of recreational overages are a necessary response to MSA and the Guidelines, and this was indeed the Council's viewpoint at the time paybacks were established. That viewpoint has since changed, as discussed above in Section 4.0. This alternative represents the most restrictive management response alternative.

Alternative 4B. Payback when Stock is Overfished or when OFL is exceeded. … *the overage (in pounds) will be deducted, as soon as possible, from a subsequent single fishing year recreational sector ACT only if the stock is overfished and/or OFL has been exceeded. When these conditions are not met, AMs will consist of adjustment to bag/size/season and in-season closure when the recreational overage caused ABC to be exceeded, or in-season closure only when only the recreational ACL has been exceeded.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered. The combination of stock condition and overage type in the year when an overage occurred would be taken into account to determine the automatic management response. The combinations that could occur are shown in Table 5 under Alt 4B. For example, under Alternative 4B, if stock biomass is estimated to be above the B_{MSY} target, and the recreational catch only exceeded the recreational ACL, while the combination of commercial and recreational catch did not exceed ABC, then no payback would occur and no adjustment to the bag, size, or season would be necessary as a result of the overage.

Because in-season monitoring for a closure would be in place under all circumstances, if landings estimates in a subsequent year were to exceed the RHL, then the response under the adopted in-season closure alternative would be applied. As stated above, if in-season closure is eliminated through Alternative 2C, adjustments to bag, size, and season would take its place, since not having a response would be inconsistent with the MSA. If Alternative 3D is adopted and a repeat of an overage within a four year period was to occur, then the management response under this alternative would correspond to the most recent trigger. In other words, if two consecutive overages occur, the stock condition and overage type that determine the management response would be from the second of the two overages. If Alternative 3D is adopted, and the overage does not represent a re-occurrence of an overage as described in Alternative 3D, then no management response would be necessary. This alternative represents the middle ground among the alternatives with regard to restrictiveness, with Alternatives 4A and 4E being more restrictive, and Alternatives 4C and 4 D being less restrictive.

Alternative 4C. Preferred. Payback when Stock is Overfished or when OFL is Exceeded. *… the overage (in pounds) will be deducted, as soon as possible, from a subsequent single fishing year recreational sector ACT only if the stock is overfished and/or OFL has been exceeded AND B/B_{MSY} is <1. When these conditions are not met, AMs will consist of adjustment to bag/size/season and in-season monitoring for early closure when the recreational overage caused OFL to be exceeded, but B/B_{MSY} >1, or caused ABC to be exceeded. In-season closure of recreational landings only will occur when only the recreational ACL has been exceeded.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered. The combination of stock condition and overage type in the year when an overage occurred would be taken into account to determine the automatic management response. The combinations that could occur are shown in Table 5 under Alt 4C. For example, under Alternative 4C, if stock biomass is estimated to be above the B_{MSY} target, and catch exceeded the OFL, then no payback would occur, but adjustments to the bag, size, and/or season would be implemented. Because in-season monitoring for a closure would be in place under all circumstances, if landings estimates in a subsequent year were to exceed the RHL, then the response under the adopted in-season closure alternative would be applied. As stated above, if in-season closure is eliminated through Alternative 2C, adjustments to bag, size, and season would take its place, since not having a response would be inconsistent with the MSA. If Alternative 3D is adopted and a repeat of an overage within a four year period was to occur, then the management response under this alternative would be triggered. If Alternative 3D is adopted and the overage does not represent a re-occurrence of an overage as described in 3D, then no management response would be necessary. This alternative represents the second least restrictive AM management response alternative.

This alternative was modified by the Council at its June meeting to include a recreational payback when, given $B<B_{MSY}$, ABC is exceeded in part or in full by a recreational overage. If $B>B_{MSY}$, and ABC is exceeded, no payback would be needed (see Table 3 -Alt 4C-Modified by Council at June Meeting).

This alternative was further modified by the Council's choice of Alternative 2C under the In-Season Closure alternatives. As stated above, if the Council were to choose Alternative 2C, which eliminates the in-season closure authority for the Regional Administrator, then all the cells in the response alternative table would be modified to reflect the elimination of that response. Furthermore, bag, size, and season adjustments would be moved into the "cells" left vacant by the removal of in-season closure.

Alternative 4D. No Payback. … *If the stock is overfished or in rebuilding, or $B/B_{MSY}<1$ and OFL has been exceeded, then adjustments to bag, size, and season will occur. Otherwise in-season closure only will occur.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered. The combination of stock condition and overage type in the year when an overage occurred would be taken into account to determine the automatic management response. The combinations that could occur are shown in Table 5 under Alt 4D. For example, under Alternative 4D, if stock biomass is estimated to be above the B_{MSY} target, and the catch exceeded the OFL, then no payback, or adjustment to the bag, size or season would be necessary. Because in-season monitoring for a closure would be in place under all circumstances, if landings estimates in a subsequent year were to exceed the RHL, then the response under the adopted in-season closure alternative would be applied. As stated above, if in-season closure is eliminated through Alternative 2C, adjustments to bag, size, and season would replace that management response since not having a response would be

inconsistent with the MSA. If Alternative 3D is adopted and a repeat of an overage within a four year period was to occur, then the management response under this alternative would be triggered. If Alternative 3D is adopted and the overage does not represent a re-occurrence of an overage as described in 3D, then no management response would be necessary. This alternative represents the least restrictive AM management response alternative.

Alternative 4E. Payback when the Stock is Overfished or when ABC is Exceeded. … *if the stock is overfished or when the combined recreational and commercial ACL (i.e., ABC) has been exceeded. When these conditions are not met, AMs will consist of adjustment to bag/size/season and in-season monitoring for early closure when the recreational overage caused OFL to be exceeded, but B/B_{MSY} >1, or caused ABC to be exceeded. In-season closure only will occur when only the Recreational ACL has been exceeded.*

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered. The combination of stock condition and overage type in the year when an overage occurred would be taken into account to determine the automatic management response. The combinations that could occur are shown in Table 5 under Alt 4E. For example, under Alternative 4E, if the catch exceeded the ABC, regardless of stock condition, then the full suite of payback, adjustment to the bag, size or season, and in-season closure potential would be implemented. However, if the overage is only for the recreational fishery and ABC is not exceeded, and the stock is not in rebuilding or overfished, then only the response under the adopted in-season closure alternative would be applied. As stated above, if in-season closure is eliminated through Alternative 2C, adjustments to bag, size, and season would replace that management response, since not having a response would be inconsistent with the MSA. If Alternative 3D is adopted and a repeat of an overage within a four year period was to occur, then the management response under this alternative would be triggered. If Alternative 3D is adopted and the overage does not represent a re-occurrence of an overage as described in 3D, then no management response would be necessary. This alternative represents the second most restrictive AM management response alternative, the most restrictive being Alternative 4A.

Table 5. Process by which reactive accountability measures will be applied conditional on stock status and the threshold that was exceeded.

Stock Condition		Overage Type		
		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4A	$B/B_{MSY} > 1$	Payback		
	$1 > B/B_{MSY} > ½$ and not in rebuilding			
	$½ > B/B_{MSY}$ or in rebuilding			

		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4B	$B/B_{MSY} > 1$	In-Season Closure[1]	Bag, Size Season	Payback
				Bag, Size Season
			In-Season Closure	In-Season Closure
	$1 > B/B_{MSY} > ½$ and not in rebuilding	In-Season Closure[1]	Bag, Size Season	Payback
				Bag, Size Season
			In-Season Closure	In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	Payback	Payback	Payback
		Bag, Size Season	Bag, Size Season	Bag, Size Season
		In-Season Closure	In-Season Closure	In-Season Closure

Table 5 Continued. Process by which reactive accountability measures will be applied conditional on stock status and the threshold that was exceeded.

Stock Condition		Overage Type		
		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4C (Original)	$B/B_{MSY} > 1$	In-Season Closure	Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$1 > B/B_{MSY} > ½$ and not in rebuilding	In-Season Closure	Bag, Size Season	Payback
				Bag, Size Season
			In-Season Closure	In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	Payback	Payback	Payback
		Bag, Size Season	Bag, Size Season	Bag, Size Season
		In-Season Closure	In-Season Closure	In-Season Closure

		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4C (Modified by Council at June Meeting)	$B/B_{MSY} > 1$	In-Season Closure[1]	Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$1 > B/B_{MSY} > ½$ and not in rebuilding	In-Season Closure[1]	Payback	Payback
			Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	Payback	Payback	Payback
		Bag, Size Season	Bag, Size Season	Bag, Size Season
		In-Season Closure	In-Season Closure	In-Season Closure

Table 5 Continued. Process by which reactive accountability measures will be applied conditional on stock status and the threshold that was exceeded.

	Stock Condition	Overage Type		
Alt 4C With Council change and Incorporating 2C		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
	$B/B_{MSY} > 1$	Bag, Size Season	Bag, Size Season	Bag, Size Season
	$1 > B/B_{MSY} > ½$ and not in rebuilding	Bag, Size Season	Payback	Payback
			Bag, Size Season	Bag, Size Season
	$½ > B/B_{MSY}$ or in rebuilding	Payback	Payback	Payback
		Bag, Size Season	Bag, Size Season	Bag, Size Season

		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4D	$B/B_{MSY} > 1$	In-Season Closure[1]	In-Season Closure[1]	In-Season Closure[1]
	$1 > B/B_{MSY} > ½$ and not in rebuilding	In-Season Closure[1]	In-Season Closure[1]	Bag, Size Season
				In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	Bag, Size Season	Bag, Size Season	Bag, Size Season
		In-Season Closure	In-Season Closure	In-Season Closure

Table 5 Continued. Process by which reactive accountability measures will be applied conditional on stock status and the threshold that was exceeded.

	Stock Condition		Overage Type	
		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4E	$B/B_{MSY} > 1$	In-Season Closure[1]	Payback	Payback
			Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$1 > B/B_{MSY} > ½$ and not in rebuilding	In-Season Closure[1]	Payback	Payback
			Bag, Size Season	Bag, Size Season
			In-Season Closure	In-Season Closure
	$½ > B/B_{MSY}$ or in rebuilding	Payback	Payback	Payback
		Bag, Size Season	Bag, Size Season	Bag, Size Season
		In-Season Closure	In-Season Closure	In-Season Closure

[1]"In-Season Closure" would be replaced by "Bag, Size, Season" in these cells, if Alternative 2C is selected.

Conservation Equivalency - Summer Flounder

This amendment affects only the Federal process for recreational management measures under an accountability system. For summer flounder, a procedure called "conservation equivalency" that was established in in Framework 2 to the Summer Flounder, Scup, and Black Sea Bass FMP allows individual states to recommend measures to NMFS that are conservationally equivalent (i.e., expected to achieve the same conservation goals) to coastwide recreational measures. The development of conservational equivalency measures occurs through the ASMFC and is followed by submission of measures by states to NMFS for adoption.

To constrain recreational landings to the coastwide recreational harvest limit, the Commission established conservation equivalency guidelines that require each state to determine and implement appropriate possession limits, size limits, and closed seasons to achieve the landings target for each state. The state-specific measures are adjusted to account for the past effectiveness of the regulations in each state, consistent with the spirit of reactive accountability measures, although state water fisheries are not thought of as having true accountability measures. In addition, under Framework 6, regional conservation equivalency could be applied. This involves states forming voluntary regions and pooling their recreational harvest limits and landings such that they develop identical regulations for all the states within the region that meet the pooled regional recreational harvest limit.

The Commission requires each state to submit its conservation equivalency proposal by January 15 (Table 6). The Commission's Summer Flounder Technical Committee then evaluates the

proposals and advises the Board of each proposal's consistency with respect to achieving the coastwide recreational harvest limit. After the Technical Committee evaluation, the Board meets to approve or disapprove each state's proposal. During the comment period for the proposed rule, the Commission notifies NMFS as to which state proposals have been approved or disapproved. If, at the final rule stage, the Commission recommends and NMFS accepts conservation equivalency, then NMFS waives the Federal recreational measures that would otherwise apply in the Exclusive Economic Zone (EEZ). Federally permitted vessels, as well as vessels fishing in the EEZ, would then be subject to the recreational fishing measures implemented by the state in which they land.

The Summer Flounder, Scup, and Black Sea Bass FMP requires that the Council and Commission specify precautionary default measures when conservation equivalency is recommended as a preferred alternative. These would be the measures required to be implemented by a state that either does not submit a summer flounder management proposal or for states whose measures do not achieve the required reduction. The precautionary default measures need to be set at or below the level of reduction needed for the state with the highest reduction level to ensure it is constraining for all states. The Commission would allow states that had been assigned the precautionary default measures to resubmit revised management measures. Afterwards, NMFS would publish a notice in the *Federal Register* to notify the public of any changes to a state's management measures. The Council also recommends the "non-preferred" coast-wide measures, which are intended to achieve the recreational harvest limit. These measures would be implemented if the Commission could not certify conservation equivalency overall or if the Council recommended not implementing conservation equivalency in any given year. These measures become the regulations at the beginning of the fishing year when conservation equivalency expires.

There is nothing in this amendment that would prevent or alter the exercise of conservation equivalency. The Federal FMP is not empowered to impose paybacks in state waters. However, if a payback is invoked, the reduction would be from the coastwide catch limit, which is the basis for setting management measures. The management measures established by the states are conservationally equivalent to the coastwide measures if, collectively, they would achieve, but not exceed, the recreational catch limit. If the overage occurred because a particular state overharvested its recreational allocation, then the conservation equivalency process would more heavily penalize that state through the Commission. The analysis that contributes to the identification of approvable conservation equivalency measures considers past performance of bag, size, and season combinations and makes adjustments to achieve new catches such that the under- or over-efficiency of past combinations is accounted for.

Table 6. Procedures for establishing summer flounder recreational management measures under conservation equivalency.

August
Council/Commissions's Board recommend recreational harvest limit.

October
MRFSS data available for current year through wave 4.

November
Monitoring Committee meeting to develop recommendations to Council:
Overall % reduction required.
Use of coastwide measures or state conservation equivalency.
**Precautionary default measures.
**Coastwide measures.

December
Council/Board meeting to make recommendation to NMFS
State Conservation Equivalency
or
Coastwide measures.

State Conservation Equivalency Measures

Late December
Commission staff summarizes and distributes state-specific and multi-state conservation equivalency guidelines to states.

Early January
Council staff submits recreational measure package to NMFS. Package includes:
- Overall % reduction required.
- Recommendation to implement conservation equivalency and precautionary default measures (Preferred Alternative).
-Coastwide measures (Non-preferred Alternative).

States submit conservation equivalency proposals to ASMFC.

January 15
ASMFC distributes state-specific or multi-state conservation equivalency proposals to Technical Committee.

Late January
ASMFC Technical Committee meeting:
-Evaluation of proposals.
-ASMFC staff summarizes Technical Committee recommendations and distributes to Board.

February
Board meeting to approve/disapprove proposals and submits to NMFS within two weeks, but no later than end of February.

March 1 (on or around)
NMFS publishes proposed rule for recreational measures announcing the overall % reduction required, state-specific or multi-state conservation equivalency measures and precautionary default measures (as the preferred alternative), and coastwide measures as the non-preferred alternative.

March 15
During comment period, Board submits comment to inform whether conservation equivalency proposals are approved.

April
NMFS publishes final rule announcing overall % reduction required and one of the following scenarios:
-State-specific or multi-state conservation equivalency measures with precautionary default measures, or -Coastwide measures.

Coastwide Measures

Early January
Council staff submits recreational measure package to NMFS. Package includes:
-Overall % reduction required.
-Coastwide measures.

February 15
NMFS publishes proposed rule for recreational measures announcing the overall % reduction required and Coastwide measures.

April
NMFS publishes final rule announcing overall % reduction required and Coastwide measures.

**Precautionary default measures - measures to achieve at least the % required reduction in each state, e.g., one fish possession limit and 15.5 inch bag limit would have achieved at least a 41% reduction in landings for each state in 1999.
**Coastwide measures - measure to achieve % reduction coastwide.

Payback Calculation Alternatives

These alternatives address the existing recreational payback provision. For summer flounder, scup, and black sea bass, a phased-in three-year average of recreational catch is compared to the three-year average of the ACL. Any landings overage of the RHL is paid back pound for pound from a subsequent year's ACT, and any additional overage of the ACL is deducted from a subsequent year's ACL. For bluefish and mackerel, a single year catch is compared to a single year ACL. In the case of bluefish and mackerel, however, the ACL comprises the commercial and recreational catch limit. In the alternatives contemplated by the Council, the calculation of the overage payback could be conditional on the status of the stock (B/B_{MSY}). The alternatives are summarized in Table 7 where O = overage, C = Catch, $_R$ = Recreational, $_C$ = Commercial, C_{R+C} = combined recreational and commercial catch.

The interaction between the management response and payback alternatives is complicated and certain combinations are not compatible (e.g., Alternatives 4A and 5D). In the event that the Council chooses one of the payback action alternatives (i.e., not Alternative 5A), the Council's choice of management response alternative would determine the use or nonuse of a payback where any conflict might occur.

Alternative 5A. No Action / Status Quo. Payback Difference between the Catch Estimate and the Recreational ACL.

Atlantic mackerel: *If the mackerel ACL is exceeded, and the recreational fishery landings are responsible for the overage, then landings in excess of the RHL will be deducted from the RHL for the following year. In addition, if the ACL is exceeded, and that the overage has not been accommodated through other landing-based AMs, but is attributable to the...recreational sector (such as research quota overages, dead discards in excess of those otherwise accounted for in management uncertainty, or other non-landing overages), then the exact amount, in pounds, by which the recreational ACT was exceeded will be deducted from the following year, as a single-year adjustment.*

Bluefish: *If the fishery-level ACL is exceeded and landings from the recreational fishery are determined to be the sole cause of the overage, and no transfer between the commercial and recreational sector was made for the fishing year, … then the exact amount, in pounds, by which the ACL was exceeded will be deducted, as soon as possible, from a subsequent single fishing year recreational ACT. If the fishery-level ACL is exceeded and landings from the recreational fishery and/or the commercial fishery are determined to have caused the overage, and a transfer between the commercial and recreational sector has occurred for the fishing year, … then the amount transferred between the recreational and commercial sectors may be reduced by the ACL overage amount (pound-for-pound repayment) in a subsequent, single fishing year if the Bluefish Monitoring Committee determines that the ACL overage was the result of too liberal a landings transfer between the two sectors.*

Summer Flounder, Scup, and Black Sea Bass: *If available data indicate that the recreational sector ACL has been exceeded and the landings have exceeded the RHL, the exact poundage of*

the landings overage will be deducted, as soon as possible, from a subsequent single fishing year recreational sector ACT. In addition, if the recreational ACL has been exceeded and the overage has not been accommodated through landing-based AMs, then the exact amount by which the recreational ACL was exceeded, in pounds, will be deducted, as soon as possible, from the applicable subsequent single fishing year recreational ACL.

Under this alternative, the condition of the stock and the contribution of a recreational overage to an overage of other catch thresholds (ABC, OFL) are not considered. Instead, the amount of the payback is the difference between the recreational landings and the recreational harvest limit, and then any unaccounted for difference between the recreational catch and the recreational ACL for summer flounder, scup, and black sea bass. For bluefish, it is the difference between the combined recreational and commercial catch and the ACL. For Atlantic mackerel, the payback is the difference between the recreational landings and the RHL.

Alternative 5B. Payback ACL Overage only When Overfished.

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered as shown in Table 7 in panel Alt 5B. This would result in a payback equal of the difference between the point estimate of catch and the ACL only when the stock is overfished or in rebuilding. If the stock is not overfished but is below B_{MSY}, then the payback would be the ABC overage if catch is above ABC, including when the catch is above OFL. If the stock is above B_{MSY} then the only payback would be the OFL overage when catch is above OFL.

Alternative 5C. Payback ACL Overage only When Overfished/Overfishing.

Under this alternative, the condition of the stock and the contribution of a recreational overage to overages of other catch thresholds (ABC, OFL) are considered as shown in Table 7 in panel Alt 5C. This would result in a payback equal of the difference between the point estimate of catch and the ACL only when the stock is overfished or in rebuilding. If the stock is not overfished but is below B_{MSY}, then the only payback would be the OFL overage if catch is above OFL. If the stock is not overfished but is below B_{MSY} and the catch is below OFL, no payback is necessary. Additionally, if the stock is above B_{MSY}, and no payback is necessary, then the only payback would be the OFL overage when catch is above OFL.

Table 7. Process by which the overage payback will be calculated conditional on stock status and the threshold that was exceeded.

		$C_R > ACL_R > ABC$	$C_R > ACL_R, C_{R+C} > ABC$	$C_R > ACL_R, C_{R+C} > OFL$
Alt 5A	$B/B_{MSY} > 1$	$C_R - ACL_R$	$C_R - ACL_R$	$C_R - ACL_R$
	$1 > B/B_{MSY} > ½$	$C_R - ACL_R$	$C_R - ACL_R$	$C_R - ACL_R$
	$½ > B/B_{MSY}$	$C_R - ACL_R$	$C_R - ACL_R$	$C_R - ACL_R$

Alt 5B

	$C_R > ACL_R > ABC$	$C_R > ACL_R, C_{R+C} > ABC$	$C_R > ACL_R, C_{R+C} > OFL$
$B/B_{MSY} > 1$	0	0	$O_R/O_{R+C} * C_{R+C}$ - OFL
$1 > B/B_{MSY} > ½$	0	$O_R/O_{R+C} * C_{R+C}$ - ABC	$O_R/O_{R+C} * C_{R+C}$ - ABC
$½ > B/B_{MSY}$	$C_R - ACL_R$	$C_R - ACL_R$	$C_R - ACL_R$

Alt 5C

	$C_R > ACL_R > ABC$	$C_R > ACL_R, C_{R+C} > ABC$	$C_R > ACL_R, C_{R+C} > OFL$
$B/B_{MSY} > 1$	0	0	0
$1 > B/B_{MSY} > ½$	0	0	$O_R/O_{R+C} * C_{R+C}$ - OFL
$½ > B/B_{MSY}$	$C_R - ACL_R$	$C_R - ACL_R$	$C_R - ACL_R$

Alternative 5D. <u>Preferred</u>. Scaled Payback of the ACL Overage.

Under this alternative, the condition of the stock (B/B_{MSY}) scales the payback amount. If $B/B_{MSY} \geq 1$, no payback is needed. If $1 \geq B/B_{MSY} \geq ½$, then the payback is the product of the overage (where the overage is Catch – Recreational ACL) and the payback coefficient based on B/B_{MSY}. If $B/B_{MSY} \leq ½$, then the payback is pound for pound. The formula below would be applied for those scenarios where $B/B_{MSY} > ½$ to generate a payback coefficient. The product of the payback and the payback coefficient would constitute the payback:

$$\text{Overage} * \frac{(Bmsy - B)}{\frac{1}{2}Bmsy}$$

The effective payback coefficient for black sea bass, the only species for which there is an estimated overage and pending payback would be approximately 0.04. Therefore, because there was a 1.3 M lb overage in 2012, the payback that would be applied to the black sea bass RHL in 2014 is approximately 52,000 lb

Table 8. Example of payback calculation using black sea bass overage for 2012 that would affect ACT in 2014.

Stock Status	Payback	Example
$B/B_{MSY} > ½$ Not in rebuilding	Scaled to B/B_{MSY}	BSB: 12,700/12,978, Overage coefficient = 0.04 Overage ~ 1.3 M lb

$B/B_{MSY} \leq ½$, In rebuilding, or B or B_{MSY} unknown	1:1	Payback ~ 1.3 M lb*.04 ~ 52 k lb

Alternative 5E. No Payback.

This alternative would eliminate paybacks of overages and reflects a viewpoint that the biological benefit of paybacks is thought to be limited. As discussed in Section 4.0, the linkage between estimating with any precision the biological cost of an overage event and then precisely delivering a return of that cost to the affected fish population through a payback is highly tenuous. Nevertheless, an overage payback can serve a punitive function, albeit delayed by a year. In eliminating any paybacks, this alternative would rely on in-season closures and/or bag, size, and season adjustments as the sole means of accounting for recreational overages.

Alternative 6A. Preferred. No Action / Status Quo - No ACL/ACT Post Hoc Evaluation.

Under Alternative 6A, the ACL that was specified for a given year based on projections or other methods such as constant catch, among others, would remain as the reference for any overage determination. Any improvement in the estimation of abundance or biomass for the specification year through an assessment update or benchmark assessment that may indicate that a larger ACL would have been more appropriate would not be considered in evaluating the likelihood of a potential overage. As such, under Alternative 6A, management triggers and management responses would all use the original ACL based on the original characterization of stock conditions for determining the nature and magnitude of a reactive AM. Although the Council was supportive of the spirit of Alternative 6B below, the Council was unsure of how it would be implemented. As a result, the Council chose Alternative 6A and will further consider modifications such as Alternative 6B in the future.

Alternative 6B. ACL/ACT Post Hoc Evaluation. *The ACL/ACT that was set for a given fishing year is re-evaluated based on an updated assessment.* (Note that this Alternative was numbered 1D in prior drafts.)

Expectations about future population size are the basis for setting ABC and ACL/ACT in a given year. These expectations are often based on population projections that include assumptions about future recruitment of year classes into the fishery. An assessment update, on the other hand, is informed by observed catches and fishery-independent measures of year class strength. Because the assessment update is based on observed data, it tends to be more stable and less speculative than a projection of future conditions. Additionally, as data accumulate about the relative size of year classes in a fishery, the assessment stabilizes even further. In order to evaluate whether the operational issue that caused an overage was an underestimate of future

population abundance in a projection, the ACL that was set based on a projection can be re-evaluated after an assessment update has been done. If the availability of additional information in an assessment update indicates that the ACL could have been set a level such that realized landings would not have produced an overage, then no adjustment to management measures may be needed. A metric for assessing this could be a determination that overfishing did not occur. If abundance estimates remain reasonably consistent, then increased effort will be determined as the cause of the overage such that more restrictive effort controls will be considered.

In considering Alternative 6B, the Council was exploring opportunities to make improved management responses to recreational fishery behavior. A review of the appropriateness of the ACL for the completed fishing year would occur as part of the subsequent year's stock status update and would include a determination as to whether an overage may have occurred because the ACL was set at a level that was inappropriately low given the addition of information on stock abundance in that year. A more informed ACL estimate would then provide the basis for determining the response to the recreational catch estimate. Specifically, if the updated information indicates that catches equal to or above realized catch resulted in no departure from desired stock condition, then no management response to the nominal overage would be indicated.

Because the re-evaluation of ACL is based on a desire to more accurately align a subsequent year's management response to stock condition the discovery that an inappropriately high ACL had been established would also need to be considered. In other words, if ACL should have been lower and the realized catch from the MRIP estimates exceeded that ACL, then a reactive AM could potentially be triggered.

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 and non-target species
2) Habitat including EFH
3) Endangered and protected resources
4) Human Communities

The managed resources VEC includes Atlantic mackerel, Atlantic bluefish, summer flounder, scup, and black sea bass which are managed under the Atlantic Mackerel, Squid, and Butterfish FMP, Bluefish FMP, and Summer Flounder, Scup, and Black Sea Bass FMP, respectively. Changes to the FMPs, 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

For the recreational fisheries addressed in this amendment, AMs were established through the Omnibus ACL/AM Amendment. Recreational fishery performance in 2012 is the first to be

subjected to AMs under that amendment. There are differences in how the AMs are administered through the different FMPs as described below and associated values are provided in Table 9.

6.1.1 Existing Accountability Measures

Atlantic Mackerel
For mackerel, there is a single ACL that is equal to the U.S. ABC (Total ABC – Canadian allocation). The recreational catch allocation is 6.2% of the ACL and the recreational ACT is a further reduction based on management uncertainty. Components of the ACT include the RHL, RSA, and dead discards. In order for AMs to be triggered, the entire ACL (i.e., commercial and recreational catch) must be exceeded. If the ACL is exceeded and recreational landings are responsible for the overage, then landings in excess of the RHL are deducted from the RHL in the following year, as a single-year adjustment. In 2012, the recreational catch was approximately 1.735 M lb compared to the recreational ACT of 5.386 M lb. Combined recreational and commercial catch was approximately 13.855 M lb compared to ACL of 96.521 M lb. No AMs would be applied based on 2012 recreational fishery performance.

Bluefish
For bluefish, there is a single ACL that is equal to ABC. The recreational catch allocation (Recreational ACT) is 83% of the ACL, after a reduction based on management uncertainty. Components of the recreational ACT include the RHL, RSA, and dead discards. In order for AMs to be triggered, the entire ACL must be exceeded. An important difference for the bluefish fishery is that after the initial allocation of 83% of the ACL to the recreational fishery, a transfer provision allows for some of the recreational catch to be moved to the commercial fishery, if the recreational fishery is not expected to catch the entire 83%. Therefore, if the ACL is exceeded and the recreational fishery caused the overage, and a transfer occurred, then the amount transferred in a subsequent year can be reduced by the overage amount. If there was no transfer, then the overage (catch – ACL) is deducted from a subsequent year's recreational ACT. In 2012, the recreational catch was approximately 14.244 M lb compared to the recreational ACT of 26.597 M lb. Combined recreational and commercial catch was approximately 18.649 M lb compared to ACL of 32.045 M lb. No AMs would be applied based on 2012 recreational fishery performance.

Summer Flounder, Scup, and Black Sea Bass
For these species, separate commercial and recreational ACLs are specified based on a percentage of the ABC. The recreational sector ACL is evaluated using a comparison of the 3-year moving average of both recreational catch and recreational ACLs. If the 3-year average of the recreational ACLs has been exceeded because of the 3-year averaged recreational landings, then the exact poundage of the landings overage is deducted from a subsequent single fishing year recreational sector ACT. If there is an overage that was not accounted for under the landings based deduction (that is, if the Catch – ACL is greater than Landings – RHL), then any additional overage would be deducted from a subsequent single fishing year recreational ACL.

Summer Flounder
In 2012, the recreational catch was approximately 7.303 M lb compared to the recreational ACL of 11.580 M lb. Combined recreational and commercial catch was approximately 13.895 M lb compared to the ABC of 25.580 M lb. No AMs would be applied based on 2012 recreational fishery performance.

Scup
In 2012, the recreational catch was approximately 4.290 M lb compared to the recreational ACL of 8.990 M lb. Combined recreational and commercial catch was approximately 19.213 M lb compared to the ABC of 40.880 M lb. No AMs would be applied based on 2012 recreational fishery performance.

Black Sea Bass
In 2012, the recreational catch was approximately 3.623 M lb (Lower Confidence Limit = 3.314) compared to the recreational ACL of 2.520 M lb, resulting in a recreational ACL overage of 1.103 M lb. Recreational landings were approximately 2.96 M lb; compared to the RHL of 1.32 M lb. This results in a landings overage of approximately 1.64 M lb. Combined recreational and commercial catch was approximately 5.585 M lb compared to the ABC of 4.500 M lb resulting in an ABC overage of 1.085 M lb. Under the existing AMs, the black sea bass landings overage would trigger a payback of approximately 1.64 M lb, which would be deducted from the 2014 recreational ACT. Because the landings overage is greater than the catch overage, no additional deduction from the ACL would be required. The fishing year 2014 recreational ACT is 2.90 M lb. The payback AM that was established in the Omnibus ACL/AM Amendment would reduce the 2014 recreational ACT to 1.26 M lb.

Table 9. Catch levels and thresholds in 2012 associated with the five recreational fisheries addressed in this amendment. All values are in M lb.

	Atl. Mack	Bluefish	Sum. Flounder	Scup	Black Sea Bass
Rec Landings*	1.661	11.184	6.972	4.057	3.071
Rec Discards	0.074	3.060	0.331	0.232	0.552
Rec Catch	1.735	14.244	7.303	4.290	3.623
Rec ACL**	5.386	26.597	11.580	8.990	2.520
Rec ACL Overage	-3.651	-12.353	-4.277	-4.700	1.103
Rec +Com Catch	13.855	18.649	21.197	19.213	5.585
ABC	96.521	32.045	25.580	40.880	4.500
ABC Overage	-82.666	-13.396	-4.383	-21.667	1.085
OFL	N/A	38.627	29.813	47.796	7.000
OFL Overage		-19.978	-8.616	-28.583	-1.415

*Estimate may change with subsequent MRIP updates.
** Rec ACL does not apply to Atl. mackerel or bluefish - for those species, the RHL is listed.

6.1.2 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 10 summarizes information from the 2012 fourth quarter NMFS status of the stocks report to Congress. Based on the fourth quarter update, none of the managed resources are experiencing overfishing. Except for bluefish, all of the managed resources have stock biomass (either total or spawning stock biomass) above biomass target (B_{MSY}). None of the stock is in rebuilding. Bluefish was declared rebuilt in 2009 and summer flounder was declared rebuilt in 2011.

Table 10. Stock Status based on NMFS fourth 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/B_{MSY} or B/B_{MSY} proxy
Atlantic Mackerel, Squid and Butterfish	Atlantic mackerel	No	No	N/A	N/A	3.57
Bluefish	Bluefish	No	No	N/A	N/A	0.90
Summer Flounder, Scup and Black Sea Bass	Black sea bass	No	No	N/A	N/A	1.02
Summer Flounder, Scup and Black Sea Bass	Scup	No	No	N/A	N/A	2.07
Summer Flounder, Scup and Black Sea Bass	Summer flounder	No	No	N/A	N/A	?

6.1.3 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/.

Atlantic mackerel
Atlantic mackerel, *Scomber scombrus*, is a fast swimming, pelagic, schooling species distributed in the Northwest Atlantic between Labrador and North Carolina. There are two major spawning components in the population: a southern group that spawns primarily in the Mid-Atlantic Bight during April and May, and a northern group that spawns in the Gulf of St. Lawrence in June and July. Both groups winter between Sable Island (off Nova Scotia) and Cape Hatteras in waters generally warmer than 7°C (45°F), with extensive northerly (spring) and southerly (autumn) migrations to and from spawning and summering grounds. The two groups are managed as a unit stock. Maximum observed size in recent years is about 42 cm (16.5 in) in length and 1.0 kg (2.2 lb) in weight. Sexual maturity begins at age 2 and is usually complete by age 3. Maximum age is about 20 years.

Bluefish
The bluefish, *Pomatomus saltatrix*, is a migratory, pelagic species found throughout the world in most temperate coastal regions, except the eastern Pacific. Bluefish may reach ages of 12 years and sizes in excess of 100 cm (39 in.) and 14 kg (31 lb). Along the U.S. Atlantic coast, bluefish are found from Maine to Florida and mix extensively during seasonal coastal migrations. During winter, large bluefish tend to remain in the Mid-Atlantic Bight, moving south to North Carolina by March. Small fish move farther south in winter with some fish wintering off the coast of Florida. As water temperatures increase, the spring migration north begins and spawning occurs in the South Atlantic Bight at this time. By summer, bluefish move north into the Mid-Atlantic Bight, although some medium size fish may remain off Florida. A second spawning occurs in the offshore waters of the Mid-Atlantic Bight during summer.

Summer Flounder
The summer flounder or fluke, *Paralichthys dentatus*, is a demersal flatfish distributed from the southern Gulf of Maine to South Carolina. Important commercial and recreational fisheries exist from Cape Cod, Massachusetts to Cape Hatteras, North Carolina. The resource is managed as a unit stock from North Carolina to Maine. Summer flounder are concentrated in bays and estuaries from late spring through early autumn, when an offshore migration to the outer continental shelf is undertaken. Spawning occurs during autumn and early winter, and the larvae are transported toward coastal areas by prevailing water currents. Development of post larvae and juveniles occurs primarily within bays and estuarine areas, notably Pamlico Sound and Chesapeake Bay. Most fish are sexually mature by age 2. Female summer flounder live to at least 14 years, and males to at least 12 years. Growth rates differ appreciably between the sexes with females reported to have attained lengths to 97 cm (38 inches) and weights to 11.0 kg (24.3 lb).

Scup
Scup or porgy, *Stenotomus chrysops*, is a demersal, schooling species distributed in the Mid-Atlantic Bight from Cape Cod, MA to Cape Hatteras, NC. Previous tagging studies have indicated the possibility of two stocks; one in Southern New England waters and the other extending south from New Jersey. However, the lack of definitive tag return data from these studies, coupled with distributional information from NEFSC trawl surveys, support the concept of a single unit stock from New England to Cape Hatteras. A new industry-cooperative tagging study for scup, designed to evaluate fish movement and estimate mortality rates, was initiated in 2005. Scup undertake extensive migrations between coastal waters in summer and offshore waters in winter, migrating north and inshore to spawn in spring. Sexual maturity is essentially complete by age 3 at a total length of 21 cm. Scup attain a maximum fork length of about 40 cm, and ages of up to at least 14 years.

Black Sea Bass
Black sea bass, *Centropristis striata*, are distributed in the Northwest Atlantic from Maine to Florida with Cape Hatteras, NC serving as a geographic boundary between northern and southern stocks. Black sea bass are members of the family *Serranidae*, which includes groupers commonly found in tropical and sub-tropical waters. Structures such as reefs, wrecks or oyster beds are preferred habitats. Black sea bass may attain sizes up to 60 cm (23.5 in) and 3.6 kg (8 lbs) with maximum age of 10-12 years. Sexual maturity is attained between ages 2 to 4 for females. Black sea bass are protogynous hermaphrodites, meaning that they change sex from female to male. Born as females, most fish will change sex to males between ages 2 to 5. The factors that lead to the sex change have not been proven although it has been speculated that the relative scarcity of males in a spawning group may be the stimulus for a female to switch sex. Spawning in the northern stock generally occurs from April to June after fish have migrated into coastal habitats.

6.2 Non-target Species

Non-target species includes species either landed or discarded (bycatch) as part of fisheries activities used to harvest the target species. 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. While recreational fishing often involves targeting a particular species, it also may be practiced in a general manner where the catch of any species is associated with success. The term "bycatch," as defined by the MSA, means fish that are captured in a fishery, but that are not sold (as in commercial fisheries) or kept for personal use. Bycatch includes the discard of whole fish at sea or elsewhere, including economic and regulatory discards, and fishing mortality 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.

6.3 Habitat (Including Essential Fish Habitat)

The use of recreational hook and line gear, the primary gear used in these recreational fisheries, has minimal impacts on marine habitat. Recreational fisheries can be a source of debris, a potentially habitat-damaging influence in the marine environment (O'Hara et al. 1988). Although recreational fishing affects marine species, nothing in this document would modify the manner in which the Council's recreational fisheries are prosecuted. Because no impacts are expected, habitat is not carried through for analysis in the document.

6.4 Endangered and Protected Resources

Recreational fisheries have limited direct interaction with species listed under the Endangered Species Act (ESA) or species protected under the Marine Mammal Protection Act (MMPA). Anecdotal information suggests recreational anglers can potentially hook Atlantic sturgeon while fishing for striped bass, but this is likely an infrequent occurrence that does not affect their survival (Damon-Randall, NMFS, Protected Resources Division, pers. comm.).

There are numerous species protected by the ESA and MMPA that inhabit the area within the management units for the recreational species. Table 11 provides species formally listed as threatened or endangered under the ESA, with four additional candidate species, that occur within the management units for Atlantic mackerel, Atlantic bluefish, summer flounder, scup, and black sea bass.

On February 6, 2012, NMFS issued two final rules listing five Distinct Population Segments (DPS) of Atlantic sturgeon as threatened or endangered. As a result of this listing, NMFS reinitiated consultation on seven commercial fisheries, including those for the species affected by this amendment. In a draft biological opinion dated May 20, 2013, NMFS concluded that the action considered would not jeopardize the continued existence of any ESA- listed species.

Table 11. Species endangered and threatened under the ESA that are found in the environment utilized by Atlantic mackerel, bluefish, summer flounder, scup, and black sea bass.

Species	Common name	Scientific Name	Status
Cetaceans	North Atlantic 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*	Threatened
	Hawksbill	*Eretmochelys imbricata*	Endangered
	Loggerhead1	*Caretta caretta*	Threatened
Fishes	Shortnose sturgeon	*Acipenser brevirostrum*	Endangered
	Atlantic salmon	*Salmo salar*	Endangered
	Atlantic sturgeon	*Acipenser oxyrinchus*	
	Gulf of Maine DPS		Threatened
	New York Bight DPS		Endangered
	Chesapeake Bay DPS		Endangered
	Carolina DPS		Endangered
	South Atlantic DPS		Endangered
	Cusk	*Brosme brosme*	Candidate
	Alewife	*Alosa pseudoharengus*	Candidate
	Blueback herring	*Alosa aestivalis*	Candidate
	Scalloped hammerhead	*Sphyrna lewini*	Candidate

[1] Northwest Atlantic distinct population segment (DPS) of loggerhead turtles.

Four species (cusk, blueback herring, alewife, and scalloped hammerhead) are candidate species for listing under the ESA (Table 11). 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. Any conservation measures deemed appropriate for these species will follow the information from these reviews.

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 ESA-listed or MMPA protected species. Anecdotal information indicates that recreational anglers periodically foul hook Atlantic sturgeon while in pursuit of other recreational species such as striped bass, but these impacts are believed to be infrequent occurrences, and thought to be well below the level which would impact the continued survivability of Atlantic sturgeon (Damon-Randall, NMFS, Protected Resources Division, pers. comm.)

Recreational fishermen do contribute to difficulties for ESA-listed and MMPA protected 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 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 ESA-listed and MMPA protected species, such as sea turtles and large whales, may become entangled in the discarded fishing line. Although the recreational fishery may impact these marine species, nothing in this action would modify the manner in which the fishery is prosecuted. Because no impacts are expected, protected species are not carried through for analysis in the document.

6.5 Human Communities and Economic Environment

6.5.1 Description of the Fisheries

Detailed descriptions of the economic aspects of the recreational fisheries for the managed resources, as well as the management regimes, are available in their respective FMPs and recent specifications documents available at http://www.mafmc.org.

Bluefish, summer flounder, scup, and black sea bass continue to be important components of the recreational fishery, with 2012 recreational landings of about 11.184 M lb, 6.972 M lb, 4.057 million lb, and 3.352 M lb, respectively. This represents approximately 81% of total recreational landings from the mid- through north Atlantic in 2012. Atlantic mackerel is a less frequently landed recreational species, with 2012 landings of 1.661 million lb. In 2012, 37.966 million

recreational angler trips on the Atlantic coast occurred, with about 25.599 million of those trips taken in the Northeast (i.e., Maine through North Carolina; Table 12).

Table 12. The total number of angler trips taken from Maine through Florida's East coast by fishing mode in 2012.

	Mode		
Year	**Shore**	**Party/Charter**	**Private/Rental**
Maine	405,255	18,550	212,204
New Hampshire	80,509	54,727	163,479
Massachusetts	1,151,202	203,083	1,470,662
Connecticut	575,173	40,329	461,111
Rhode Island	474,677	26,780	824,786
New York	1,491,724	209,518	1,908,164
New Jersey	2,071,587	207,152	2,579,808
Delaware	374,306	9,775	480,635
Maryland	816,919	79,778	1,281,218
Virginia	1,050,572	41,194	1,425,992
North Carolina	3,082,394	160,046	2,060,989
South Carolina	992,277	24,662	1,189,444
Georgia	376,251	19,920	496,246
East Florida	4,218,549	143,663	5,028,191
Total	17,161,395	1,239,177	19,582,929

Source: Marine Recreational Information Program.

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 13). The surveys were conducted as part of the Marine Recreational Fisheries Statistical Survey (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 13. 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

7.0 ENVIRONMENTAL CONSEQUENCES AND REGULATORY ECONOMIC EVALUATION OF ALTERNATIVES

This section focuses on potential impacts to managed resources and non-target species and human communities and the characterization of impacts to these VECs is given in the sections below. Given the minimal interaction between the recreational fisheries and habitat and protected resources, no significant impacts are expected for these VECs and these VECs are not carried through for analysis. The managed resource and non-target species VECs are expected to be primarily affected by increased catches (negative impacts from increased mortality) or decreased catches (positive impacts from decreased mortality) relative to the no action/*status quo*. Human communities are expected to be affected by increased or decreased fishing opportunities and associated benefits whether monetary (as for the recreational charter/party fishing industry), consumptive (as for recreational anglers who retain catch for food), or intangible (as for the pleasure derived from recreational fishing). The actions proposed in this amendment are largely administrative in the sense that they do not have immediate impacts, but rather affect the management framework for future accountability actions. Indirect impacts that are anticipated are described in the sections that follow.

An evaluation of indirect impacts of the alternatives considers the potential for increased or decreased recreational catches and recreational fishing opportunities relative to no action being taken. For example, a more restrictive alternative to the current ACT specification process (i.e., Alternative 1C) would reduce future catch levels and fishing opportunities. Alternatives that would reduce pending payback of observed catch overages (i.e., Alternatives 4A and 5A) would tend to increase catch opportunity relative to no action being taken. Because a reduction in fishing opportunity for black sea bass is a pending future event should no action be taken (black sea bass is the only recreational species with a pending accountability action), that outcome represents the impact of the no action/*status quo* alternative for the black sea bass and affected human community VECs. Any alternative, whether no action or action, that would maintain the current or reasonably foreseeable future condition of a VEC is considered to result in a null impact. Black sea bass is the only stock for which an AM is expected in the near future. The impacts of the alternatives on VECs associated with the other fisheries are largely hypothetical. Nevertheless, a discussion of the potential impacts is offered for these fisheries, if in the reasonably foreseeable future if an AM is triggered.

7.1 ACT Alternatives

Managed and Non-Target Species and Human Communities

Currently, ACTs are reduced from the ACL for Atlantic mackerel by 10 percent. Fishery underperformance (i.e., failure to achieve the catch targets) obviated reductions from ACL for summer flounder, scup, and bluefish; therefore ACT was set equal to ACL. For black sea bass, a reduction from ACL was implemented for 2012, but not in 2013.

Alternative 1A (no action/*status* quo; preferred) would maintain current constraints on ACT specification and would maintain the current process of accounting for management uncertainty in the specifications setting process. Alternative 1B, which would require that a reduction from ACL to ACT be more specifically considered, would still be expected to result in the same (null) impacts to all VECs as under Alternative 1A because there would be no obligation by the Council to actually reduce ACT. Alternative 1B may increase the likelihood that the Council would select lower ACTs, but that is largely speculative, and as such, these alternatives are considered indistinguishable, in terms of impacts. Alternative 1C, on the other hand, would be expected to result in lower ACTs in the long term than either Alternatives 1A or 1B, which would tend to be associated with positive impacts for the managed resources (through lower catches) and negative impacts for human communities (through decreased fishing opportunities (Table 14)). Under Alternative 1C, the discretionary use of a reduction from ACL to ACT would be removed. This could result in the imposition of bag, size and season limits that might be unnecessarily restrictive because they would be designed to achieve a smaller ACT than may be necessary.

7.2 In Season Closure Alternatives

Managed and Non-Target Species and Human Communities

Alternative 2A (no action/*status quo*) is associated with positive impacts to the managed and non-target species (reduced catches) and negative impacts with the human communities (reduced opportunities). By allowing the Regional Administrator to close a recreational fishery based on a projection before the RHL has been achieved, Alternative 2B would tend to decrease catches and fishing opportunity in that year relative to the no action/*status quo* alternative (Alternative 2A). Conversely, Alternative 2C (preferred), which would eliminate the in-season closure authority, would potentially allow catches to continue after the RHL is achieved. Assuming that there is biological justification in closing the fishery as triggered by landing (or projecting to land) the RHL, catches above that level would negatively affect managed and non-target species. Because data indicating that the RHL has been exceeded are not available for several weeks after that event, closure of the fishery would seldom cap landings exactly at the RHL. For this reason, Alternative 2B, which would likely close the fishery before Alternative 2A, is associated with positive to null impacts on managed and non-target species and null to negative impacts to human communities, when compared to the no action/*status quo* alternative. On the other hand, Alternative 2C (preferred) would result in positive impacts to the human communities, and potentially null to negative impacts on the managed and non-target species, if landings cause the overall catch limits to be exceeded.

Alternative 2D, which would result in changes to the bag limit or minimum size, would be expected to reduce but not eliminate catches. Compared to a closure (i.e., Alternatives 2A and 2B) this alternative is associated with slightly negative impacts to managed and non-target resources, but more positive than compared to Alternative 2C which would allow fishing to continue. For human communities, this alternative is associated with more positive impacts than Alternatives 2A and 2B, but slightly negative impacts compared to Alternative 2C.

7.3 Trigger Condition Alternatives

Managed and Non-Target Species and Human Communities

Among the trigger condition action alternatives, Alternative 3D is the only one associated with positive impacts to human communities, but null impacts to the managed resource and non-target VECs. Alternatives 3A (no action/*status quo*), 3B, and 3C (preferred) are associated with null impacts for all VECs. This is because, at least in the foreseeable future, Alternative 3D would obviate the pending implementation of any AM as a result of the 2012 black sea bass overage. Note that none of these alternatives specify the nature of any management response, so none are associated with direct impacts. Alternatives 3A, 3B, and 3C, would all maintain that an AM was necessary because of the overage in 2012, while Alternative 3D would result in no AMs being triggered since it would require the re-occurrence of ACL being exceeded. This would result in potentially negative impacts to the managed and non-target species because it could allow increased catches beyond what is recommended.

Alternative 3C (preferred) would require that the lower confidence limit (for the 2012 black sea bass fishery, 3.314 M lb) be above the recreational ACL (2.520 M lb, for 2012 black sea bass) for an overage to be considered to have occurred. Since the lower confidence limit of the recreational catch in 2012 is above the 2012 recreational ACL for black sea bass, Alternative 3C would result in a null impact relative to the effects of no action/*status quo*. Administratively, Alternative 3B would only affect the summer flounder, scup and black sea bass fisheries in that a single year comparison is already in place for Atlantic mackerel and bluefish. Additionally, the three-year averaging under Alternative 3A is being phased in so that for AMs that would be applied in fishing year 2014 as a result of fishery performance in fishing year 2012, Alternatives 3A and 3B are essentially equivalent.

From the standpoint of maximizing benefits to human communities and minimizing costs to managed and non-target species, the merits of the different approaches are debatable and are related to whether paybacks are being invoked compared to other AMs, such as bag, size, and season adjustments. There are theoretical events that could make a single year comparison more appealing from a human community impact perspective than a three year average. For example, if an overage is such that it causes the three year average (Alternative 3A) to be above the comparison threshold (e.g., ACL) for more than one year, then the AMs could be triggered over a longer period than if a single year comparison (Alternative 3B) is made. However, if paybacks are being invoked, the magnitude of the overage may be such that the catch reduction is much greater in a single year (Alternative 3B) than spread over a number of years (Alternative 3A). This would result in larger short term benefits to biological resources (reduced catches) as well as negative impacts to the human communities (decreased fishing opportunities) for Alternative 3B as compared to the no action/*status quo*. As acknowledged in Section 5, there is some marginal risk to managed resources associated with Alternative 3C, but that is at least somewhat mitigated by the requirement that stock conditions be “favorable” in order to invoke the use of a confidence interval. If stock conditions are not favorable (stock is overfished or overfishing is

occurring), then the use of the point estimate would be maintained under Alternative 3C and the impacts to all VECs would be indistinguishable from no action/*status quo*. Likewise, Alternative 3C would have impacts to all VECs that are indistinguishable from the no action/*status quo* when catches exceed the threshold by a large amount. In the long term, Alternative 3C is more likely to prevent continual adjustments to recreational management measures, which is associated with negative impacts to human communities because of confusion, potential violations of regulations, etc., if catch estimates are reasonably close to but occasionally exceed catch thresholds.

7.4 Management Response Alternatives

Managed and Non-Target Species and Human Communities

Among the management response alternatives, Alternatives 4B and 4C (preferred) are associated with positive impacts on human communities and null impacts otherwise. The positive impacts to human communities are related to the prevention of punitive paybacks in both 2014, in real terms for the black sea bass fishery, or any future year, theoretically, for any fishery. It could be argued that the lower likelihood of paybacks under these alternatives could be associated with negative impacts to the managed and non-target species; however; these alternatives are intended to scale the AMs to stock conditions such that long term negative impacts are avoided. Alternative 4D would do this without any paybacks and is associated with the greatest short-term benefit to human communities; however, it also has the greatest potential to delay bag, size, and season adjustments to the point where a stock could be fished to very close to an overfished condition. For that reason it is associated with negative impacts to the managed and non-target species. The no action/*status quo* alternative (Alternative 4A) is associated with null to positive impacts to managed resources, and negative impacts to the human communities.

Paybacks have limited biological relevance (i.e., null to positive impacts to managed resources but highly uncertain in terms of magnitude, if positive) in that once fish from a given year class have been removed, no amount of future payback is going to replace them. Nevertheless, when a fish population has been significantly reduced by fishing mortality such that a sustained period of lower catches is needed to rebuild the stock, then reduced catches should contribute to stock expansion. If the stated management goal is to grow the stock, which can only occur over time, catch targets would be set that would accomplish that goal rather than use of overage paybacks. In other words, because paybacks are a punitive response associated with overages in specific years, and a rebuilding plan addresses long-term catch reductions needed for stock recovery, it should not be expected that paybacks will achieve stock rebuilding goals. Additionally, because of the cascading nature of these alternatives, a payback on top of bag, size, and season adjustment would by definition be punitive since the other measures would be developed to achieve, but not exceed, the target catch.

Black Sea Bass in Fishing Year 2014
If the ACT for black sea bass in 2014 is reduced by the payback, as under Alternative 4A (the no action/*status quo*), more restrictive limits (i.e., lower possession limits, higher minimum size

limits, and/or shorter open seasons) would be required. It is possible that Alternative 4A would decrease recreational satisfaction for the black sea bass recreational fishery, relative to 2012. However, it is likely that anglers would be able to keep some of the fish they catch and could also engage in catch and release fishing. Anglers that choose to reduce their black sea bass effort in 2014 may be likely to transfer this effort to alternative species (i.e., summer flounder, scup, spot, bluefish, weakfish, striped bass, tautog, pelagics, etc.), resulting in less change in overall fishing effort. In addition, recreational measures for many of the alternative species in the Northeast are becoming more restrictive each year, resulting in fewer substitute landing opportunities, particularly for anglers fishing aboard headboats where passengers are primarily limited to bottom fishing.

Steinback at al. (2009) estimate that only up to about 28% of marine anglers fishing in the Northeast US fish to bring home fish to eat. The remaining 72% of anglers were found to fish purely for recreational purposes and, therefore, likely place little importance on being able to keep fish. Findings of this study generally concur with previous studies that found non-catch reasons for participating in marine recreational fishing were rated much higher than keeping fish for food. In combination with alternative target species available to anglers, the findings of the Steinback et al. (2009) and many other peer-reviewed studies suggest that at least some of the potentially affected anglers would not reduce their effort when faced with the proposed landings restrictions.

7.5 Payback Calculation Alternatives

Managed and Non-Target Species and Human Communities

Paybacks have limited biological value to managed resources in terms of contribution to biomass growth and stock productivity compared to long-term effort reduction associated with rebuilding. The impacts of the payback alternatives can generally be characterized as increasingly positive to human communities, with inversely increasing, albeit small, biological costs as the size of the payback decrease. Conversely, the impacts from these alternatives are generally increasingly negative to managed and non-target species as they become less restrictive. The OFL and ABC paybacks are necessarily smaller than the ACL paybacks because they represent the difference between the catch and a larger catch threshold than ACL, with OFL being the greatest. Alternative 5A (no action/*status quo*) is associated with null to positive impacts to the managed resources and negative impacts to the human communities (Section 7.4.) Both Alternatives 5B and 5C would restrict ACL overage paybacks to instances when the stock is overfished or in rebuilding. Alternative 5C, however, would have no paybacks if the stock is above B_{MSY}, while Alternative 5B would call for a payback of the OFL overage when biomass is above B_{MSY}. For that reason, Alternative 5C is less restrictive than Alternative 5B and is associated with greater short term benefits to human communities than is Alternative 5B.

Alternative 5D (preferred) is different from the other alternatives because the amount of the payback would be scaled by the ratio of B to B_{MSY}, resulting in a smaller payback than a straight pound-for-pound approach. That is, if biomass is close to, but not over B_{MSY}, then the payback

would be relatively small. This alternative is between Alternatives 5B and 5C in terms of benefits to human communities and costs to managed and non-target resources because, while Alternative 5B would require a payback of the OFL overage when the stock is above B_{MSY}, Alternative 5D would not. Alternative 5C would not require a payback of the ACL or ABC overage if biomass is below B_{MSY}, but not overfished, while Alternative 5D would. All of the other alternatives are more restrictive than Alternative 5E, which would eliminate paybacks altogether. The elimination of paybacks has the greatest short term benefit to human communities and greatest short term cost to managed and non-target resources. The risk to the managed and non-target resources associated with the elimination of payback is mitigated because of the bag, size, and season adjustments that would continue to be made to respond to overages. In addition, the Council's Risk Policy, which explicitly reduces ABC as stock condition declines, would make it very unlikely that any stock would be allowed to decline into an overfished condition.

7.6 ACL/ACT Post Hoc Evaluation Alternatives

Managed and Non-Target Species and Human Communities

Alternative 6B could result in an increase or decrease to catch levels and fishing opportunity, relative to the no action/*status quo* alternative, depending on the results of the ACL/ACT evaluation. This is associated with mixed positive and negative impacts for all three VECs. If the ACL/ACT is determined to have been underestimated in the projection, such that any potential AM is unjustified, and; therefore, reduced or eliminated, then catch levels and fishing opportunities would be greater than if the exercise was not conducted. If, however, an evaluation of ACL/ACT indicates that effort, potentially disproportionate to changes in stock size, was the cause of the overage, then more restrictive measures could be put in place and catches and fishing opportunities could decrease. Regardless of the outcome of the analysis, catch opportunities in the future specification year would be set according to the best available scientific information about stock condition. Alternative 6A (no action/*status quo*; preferred) would not allow for the previously determined ACL to be re-estimated for consideration by the Council regarding the application of AMs. This means that if the operational issue causing an overage was an overly restrictive ACL (as determined by updated stock information) that would otherwise preclude a reactive AM response, then AMs may be applied that are excessively restrictive, at least from a biological basis. This would be associated with benefits to managed resources and non-target species and costs to human communities through decreased catches. On the other hand, if an ACL was too liberal, based on updated stock information, the cost to human communities from an AM that would otherwise have been invoked under Alternative 6B, will be avoided (positive impact) and any benefit to the managed and non-target resources that would have come from an AM response would be forgone. As such, Alternative 6A is also associated with both positive and negative impacts to all VECs.

Legend	
0 null	
(-) slight negative	(+) slight positive
- negative	+ positive
-- highly negative	++ highly positive

Table 14. Indirect Impacts on Valued Ecosystem Components

	Preferred	ACT Alternatives	Managed and Non-Target Species	Human Communities
1A	X	Maintain Existing ACT Process (No Action/Status Quo)	0	0
1B		Mandatory Review ACT = ACL – Uncertainty	0	0
1C		Mandatory Setting ACT = ACL – Uncertainty	+	-
		In-Season Closure Alternatives		
2A		In-Season Closure; Known Information (No Action/Status Quo)	+	-
2B		In-Season Closure with In Season Projections	0/+	0/-
2C	X	Eliminate In-Season Closure Authority	0/-	+
2D		In-Season Adjustment to Management Measures	(-)	+
		Trigger Alternatives		
3A		Three Year Ave. Comparison (No Action / Status Quo for SF/Scup/BSB)	0	0
3B		Single Year Comparison (No Action/Status Quo for Mackerel, Bluefish	0	0
3C	X	Confidence Interval	0	0
3D		Repeat Overage	-	+
		Management Response Alternatives		
4A		Payback if ACL is exceeded (No Action/Status Quo)	0/+	-
4B		Payback only when B<½ B_{MSY} or F>F_{MSY}	0	+
4C	X	Payback only when B<½ B_{MSY} or F>F_{MSY} and B<B_{MSY}	0	+
4D		No Payback	-	++
		Payback Calculation Alternatives		
5A		Pound-for-Pound Payback (No Action/Status Quo)	+	0/+
5B		Payback ACL Overage When Overfished	0	+
5C		Payback ACL Overage When Overfished/Overfishing	0	+
5D	X	Scaled Payback	0	+
5E		No Payback	-	++
		ACL Post Hoc Evaluation Alternatives		
6A	X	No Action/Status Quo	+/-	+/-
6B		ACL Post Hoc Evaluation	+/-	+/-

7.7 Magnitude and Significance of Cumulative Effects

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 all five recreational fisheries.

7.7.1 Consideration of the VECs

In section 6.0 (Description of the Affected Environment), the VECs that exist within the recreational fisheries environment are identified. Therefore, the significance of the cumulative effects will be discussed in relation only to the VECs listed below.

1. Managed resources (Atlantic mackerel, bluefish, summer flounder, scup, black sea bass)
2. Non-target species
3. Human communities

7.7.2 Geographic Boundaries

The core geographic scope for each of the VECs is focused on the Western Atlantic Ocean (section 6.0). The core geographic scopes for the managed resources are the range of the management units (section 6.1). For non-target species, those ranges may be expanded and would depend on the biological range of each individual non-target species in the Western Atlantic Ocean. For human communities, the core geographic boundaries are defined as those U.S. fishing communities directly involved in the harvest of the managed resources, which were found to occur in coastal states from Maine through North Carolina (section 6.4).

7.7.3 Temporal Boundaries

The temporal scope of past and present actions for VECs is primarily focused on actions that have occurred after FMP implementation (1978 for Atlantic mackerel, 1988 for summer flounder, 1990 for Atlantic bluefish, and 1996 for scup and black sea bass). The temporal scope of future actions for all three VECs extends about five years into the future. 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 ACL/AM Amendment 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.

7.7.4 Actions Other Than Those Proposed in this Amendment

The impacts of each of the alternatives considered in this specifications document are given in section 7.1 through 7.6. 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 specifications document. 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 have resulted in positive impacts on the health of the stocks (section 6.1). Actions have been taken to manage the commercial and recreational fisheries for these species through amendment actions. In addition, the annual specifications process is intended to provide the opportunity for the Council and NMFS to regularly assess the status of these fisheries and to make necessary adjustments to ensure that there is a reasonable expectation of meeting the objectives of the FMPs. 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 socioeconomic 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 stocks.

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 nearshore 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 its habitat on a population level is unknown, but likely neutral to low negative, since a large portion of these species has 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

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 endangered and protected resources whose management units are under NMFS' jurisdiction.

7.7.5 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 specifications 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 to the FMPs	Established commercial and recreational management measures	**Indirect Positive** Regulatory tool available to rebuild and manage stocks	**Indirect Positive** Reduced fishing effort	**Indirect Positive** Reduced fishing effort	**Indirect Positive** Reduced fishing effort	**Indirect Positive** Benefited domestic businesses
P, Pr Species Specifications	Establish annual quotas, RHLs, other fishery regulations (commercial and recreational)	**Indirect Positive** Regulatory tool to specify catch limits, and other regulation; 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	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
Pr, RFF Omnibus Amendment ACLs/AMs Implemented	Establish ACLs and AMs for all five species	**Potentially Indirect Positive** Pending full analysis	**Potentially Indirect Positive** Pending full analysis	**Potentially Indirect Positive** Pending full analysis	**Potentially Indirect Positive** Pending full analysis	**Potentially Indirect Positive** Pending full analysis
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 specifications 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, RFF 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 specifications 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 (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

7.7.5.1 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 15. The indirectly negative actions described in Table 15 are localized in nearshore areas and marine project areas where they occur. Therefore, the magnitude of those impacts on the managed resource 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 7.5.4), 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 annual specification process have had a positive cumulative effect on the managed resource. 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 productivity depends. The 2012 fishing year was the first year of ACLs/AMs and catch accountability. This represented a major change to the management program and is expected to 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.

Catch limits, commercial quotas, and recreational harvest limits for the managed resource have been specified to ensure the stock is managed in a sustainable manner, and measures are consistent with the objectives of the FMPs under the guidance of the MSA. The impacts from annual specification of management measures established in previous years on the managed resource are largely dependent on how effective those measures were in meeting their intended objectives (i.e., preventing overfishing, achieve OY) and the extent to which mitigating measures were effective. The proposed action in this document would positively reinforce the past and anticipated positive cumulative effects on the stocks, by achieving the objectives specified in the FMPs. Therefore, the proposed action would not have any significant effect on the managed resources individually or in conjunction with other anthropogenic activities (see Table 16).

Table 16. Summary of the effects of past, present, and reasonably foreseeable future actions on the managed resource.

Action	Past to the Present	Reasonably Foreseeable Future
Original FMP and subsequent Amendments and Frameworks to the FMP	**Indirect Positive**	
Specifications	**Indirect Positive**	
Developed and Implement Standardized Bycatch Reporting Methodology	**Neutral**	
Amendment to address ACLs/AMs implemented		**Potentially Indirect Positive**
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**
Summary of past, present, and future actions excluding those proposed in this specifications document	**Overall, actions have had, or will have, positive impacts on the managed resources**	

7.7.5.2 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 15. The effects of indirectly negative actions described in Table 15 are localized in nearshore 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 7.7.4), 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 FMPs and annual specification processes 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 resources 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.

Catch limits, commercial quotas, and recreational harvest limits for the managed resource have been specified to ensure the stock is managed in a sustainable manner, and measures are consistent with the objectives of the FMPs under the guidance of the MSA. The proposed actions in this document have impacts that range from neutral to positive or negative impacts, and would not change the past and anticipated positive cumulative effects on non-target species and thus, would not have any significant effect on these species individually or in conjunction with other anthropogenic activities (Table 17).

Table 17. Summary of the effects of past, present, and reasonably foreseeable future actions on the non-target species.

Action	Past to the Present	Reasonably Foreseeable Future
Original FMP and subsequent Amendments and Frameworks to the FMP	**Indirect Positive**	
Specifications	**Indirect Positive**	
Developed and Implement Standardized Bycatch Reporting Methodology	**Neutral**	
Amendment to address ACLs/AMs implemented	**Potentially Indirect Positive**	
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**
Summary of past, present, and future actions excluding those proposed in this specifications document	**Overall, actions have had, or will have, positive impacts on the non-target species**	

7.7.5.3 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 15. The indirectly negative actions described in Table 15 are localized in nearshore 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 7.7.4), 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 FMPs and annual specification processes have had both positive and negative cumulative effects on human communities 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 18, 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.

Catch limits, commercial quotas, and recreational harvest limits for the managed resource have been specified to ensure the stock is managed in a sustainable manner, and measures are consistent with the objectives of the FMPs under the guidance of the MSA. The impacts from annual specification measures established in previous years on the managed resources are largely dependent on how effective those measures were in meeting their intended objectives and the extent to which mitigating measures were effective. Overages may alter the timing of commercial fishery revenues (revenues realized a year earlier), and there may be impacts on some fishermen caused by unexpected reductions in their opportunities to earn revenues in the commercial fisheries in the year during which the overages are deducted. Similarly recreational fisheries may have decreased harvest opportunities due to reduced harvest limits as a result of overages, or more restrictive recreational management measures that must be implemented (i.e., minimum fish size, possession limits, fishing seasons).

Despite the potential for neutral to positive 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 (Table 18).

Table 18. Summary of the effects of past, present, and reasonably foreseeable future actions on human communities.

Action	Past to the Present	Reasonably Foreseeable Future
Original FMP and subsequent Amendments and Frameworks to the FMP	**Indirect Positive**	
Specifications	**Indirect Positive**	
Developed and Implement Standardized Bycatch Reporting Methodology	**Potentially Indirect Negative**	
Amendment to address ACL/AMs implemented	**Potentially Indirect Positive**	
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 Negative**
Summary of past, present, and future actions excluding those proposed in this specifications document	**Overall, actions have had, or will have, positive impacts on human communities**	

7.7.6 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 document can be considered to make a determination if significant cumulative effects are anticipated from the preferred action.

The direct and indirect impacts of the proposed action on the VECs are described in sections 7.1 through 7.6. 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 7.7. The action proposed in this Omnibus Amendment builds off action taken in the original FMPs and subsequent amendments and framework documents, including the Omnibus ACL/AM Amendment in 2011. 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 (Table 19).

Table 19. Magnitude and significance of the cumulative effects; the additive and synergistic effects of the preferred action, as well as past, present, and future actions.

VEC	Status in 2012	Net Impact of P, Pr, and RFF Actions	Impact of the Preferred Action	Significant Cumulative Effects
Managed Resource	Complex and variable (Section 6.1)	Positive (Section 7.7.5.1)	Neutral (Sections 7.1-7.6)	**None**
Non-target Species	Complex and variable (Section 6.2)	Positive (Section 7.7.5.2)	Slight negative to slight positive (Section s 7.1-7.6)	**None**
Human Communities	Complex and variable (Section 6.5)	Positive (Section 7.7.5.3)	Negative to short-term Positive (Section s 7.1-7.6)	**None**

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 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.

This action was developed to amend recreational accountability measures implemented to comply with the revised National Standard 1 guidelines; therefore, the Council has identified new management measures, when taken in conjunction with existing measures, would maintain compliance with all National Standards while being more closely aligned with the requirements for accountability measures under the MSA. The avoidance of overfishing these managed resources is not diminished by these actions and OY can be achieved in these fisheries. The Council uses the best scientific information available (National Standard 2) and by explicitly taking into account measures of uncertainty that are provided with recreational catch estimates, the Council is addressing those estimates in a manner that is more consistent with their statistical basis and, therefore, more consistent with National Standard 2. 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 maintained and 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 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 implementing accountability responses for these fisheries. This action is not associated with unnecessary duplication (National Standard 7). 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) in that in-season closures are eliminated which would reduce any regional bias in reductions in access to recreational resources during the latter months of the fishing season. The actions would provide greater social and economic benefits to fishery participants and fishing communities. The proposed actions are consistent with National Standard 9, because the proposed measures consider all components of the

catch, including bycatch. Finally, this action does not propose any measures that would affect safety at sea (National Standard 10).

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 ensure 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 would amend the process for addressing accountability for recreational catch (landings and discards) of the managed resources, which is expected to result in an increase in the likelihood of sustainability of the target species. As such, the impacts of these alternatives are largely 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, which would amend the process for addressing accountability in these five recreational fisheries, 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 that may be affected by the measures are largely 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 FMPs. In general, recreational gear does not adversely affect EFH. The proposed action would amend the process for addressing accountability for recreational catch (landings and discards) of the managed resources. There are no significant habitat impacts associated with the preferred alternatives (section 7.0).

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

The proposed action, which would amend the process for addressing accountability in these five recreational fisheries, would not alter the manner in which the industry conducts fishing activities in a way that would affect safety. 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, which would amend the process for addressing accountability in these five recreational fisheries, 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 7.7.2). The proposed action would amend the process for addressing accountability for recreational catch (landings and discards) 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 proposed action would amend the process for addressing accountability for recreational catch (landings and discards) 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 proposed action would amend the process for addressing accountability for recreational catch (landings and discards) of the managed resources. These measures are administrative in nature and build on measures contained in the FMPs 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?

It is possible that historic or cultural resources such as shipwrecks could be present in the area where these recreational fisheries are prosecuted. However, it is unlikely that recreational gear (rod and reel) would become entangled or otherwise interact with these sites. Therefore, it is not likely that the proposed action would result in substantial impacts to unique areas.

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. T he proposed action would amend the process for addressing accountability for recreational catch (landings and discards) of the managed resources. These measures are administrative in nature and build on measures contained in the FMPs 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?

The proposed action, which would amend the process for addressing accountability in these five recreational fisheries, 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?

Although, there are shipwrecks present in areas where these fisheries occur, including some registered on the National Register of Historic Places, it is unlikely that recreational gear (rod and reel) would become entangled or otherwise interact with these sites. Therefore, it is not likely that the proposed action, which would amend the process for addressing accountability in these five recreational fisheries, would adversely affect historic resources.

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

The proposed action would amend the process for addressing accountability for recreational catch (landings and discards) 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 would amend the process for addressing accountability for recreational catch (landings and discards) 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 would amend the process for addressing accountability for recreational catch (landings and discards) of the managed resources. The proposed 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 8.3-8.10 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 to 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 amendment 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. A public comment period was held for the Omnibus Amendment from April 12 to May 15, 2013, as advertised in the *Federal Register* (78 FR 21914) during which written comments were accepted for consideration. Those comments are provided in the Appendix. Additionally, during the public comment period, five public hearings occurred as listed below.

Date	Location
29-Apr	Warwick, RI
30-Apr	Riverhead, NY
1-May	Manahawkin, NJ
2-May	Ocean City, MD
3-May	Virginia Beach, VA

Finally, as with all Council actions, the public had the opportunity to review and comment on this action at the February, April, and June Mid-Atlantic Council meetings in 2013.

8.7 Section 515 (Data Quality Act)

Utility of Information Product

The action contained within this document was developed to be consistent with the FMPs, 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 *Federal Register*.

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 and 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, Atlantic bluefish, summer flounder, scup, and black sea bass fisheries.

The review process for this document involves the Council, the Northeast Fisheries Science Center (NEFSC), the Northeast Regional Office (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 Council 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, Atlantic bluefish, summer flounder, scup, and black sea bass 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.

8.11 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.

8.11.1 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 requirements for ACLs and AMs and other provisions regarding preventing and ending overfishing. The purpose of this action is to evaluate and implement AMs that consider the biological consequences of any catch overage and that recognize the generally uncertain nature of recreational fishery catch estimates and recreational management controls. The need for this action is to consider other accountability measures in addition to the current pound-for-pound reductions.

8.11 Regulatory Flexibility Analysis (RFA/IRFA)

8.11.2 Evaluation of E.O 12866 Significance

8.11.2.1 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.

8.11.2.2 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).

8.11.2.3 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.

8.11.2.4 Description of Each Alternative

A full description of the alternatives analyzed in this section is presented in section 5.0.

Description of the Affected Entities

A description of the affected entities is provided in section 8.11.3.1 of the IRFA. As noted in earlier sections (see sections 7.1 to 7.4), this action would amend the established accountability measures for the 5 recreational fisheries in the Mid-Atlantic. 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 National Standard 1, there are 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.

8.11.2.5 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 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 would provide greater assurance that the current and future flow of commercial and recreational economic benefits from the managed fisheries will be maintained.

The Council has determined that, given the information presented above, there would be 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.

8.11.3 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.

8.11.3.1 Description and Estimate of Number of Small Entities to Which the Action Applies

The implementation of this action would amend the process for addressing accountability for the recreational catch (including both landings and discards), for the managed resources identified in this document. This action would indirectly affect the recreational fishing sector only. The impacts are speculative because they only establish an accountability framework that functions off of recreational catch estimates. It is likely that the Council's preferred alternatives would prevent a large scale reduction in the black sea bass ACT for 2014. Nevertheless the action applies to all recreational anglers that may participate in fishing for the managed resources as well as all federally licensed party/charter vessels that fish for those species.

A total of 714 vessels were issued at least one recreation party/charter permit for the managed resources during fishing year 2012. Vessels ranged in length from 14 to 125 ft (average = 40 ft) and employed crew ranging from 1 to 8 persons (average = 3). Based on average passenger fees of $65.78[4], none of the participating party/charter operators exceeded $1.238 million; therefore, all participating entities were determined to be small entities under the SBA size standards.

8.11.3.2 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.

8.11.3.2.1 Accountability Measures

The proposed action addresses accountability for catch for each of the managed resources. Because the actions proposed in this Amendment are administrative in nature, there are no marginal changes to the economic impacts on small entities associated with this action (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.

8.11.3.3 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

Since all party/charter operators were determined to be small entities the disproportionality standard does not apply.

[4] The 2006 party/charter average expenditure (per angler, per trip) estimate ($57.76) was adjusted to its 2012 equivalent using the Bureau of Labor's Consumer Price Index.

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 small regulated entities engaged in 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 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 Council, 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 amend established recreational accountability measures. 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 administrative scope of this document, and the fact that any future actions will be taken in a manner that is consistent with the current regulations implementing the FMPs and the MSA, the effects of fishing on EFH have not been re-evaluated and no alternatives to minimize adverse effects on EFH are presented.

9.2 Analysis of Potential Adverse Effects on EFH

Recreational fisheries in general are not associated with significant impacts on habitat (including EFH).

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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: James Armstrong. In addition, input throughout Omnibus Amendment development was provided by the AM Amendment Fishery Management Action Team (FMAT): Moira Kelly, Sarah Beigel, Scott Steinback, and Anthony Wood.

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.

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.

B_{MSY}. Long-term average exploitable biomass that would be achieved if fishing at a constant rate equal to FMSY. For most stocks, B_{MSY} is about ½ of the carrying capacity. Overfishing definition control rules usually call for action when biomass is below ¼ or ½ B_{MSY}, 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.

F_{MSY}. 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).

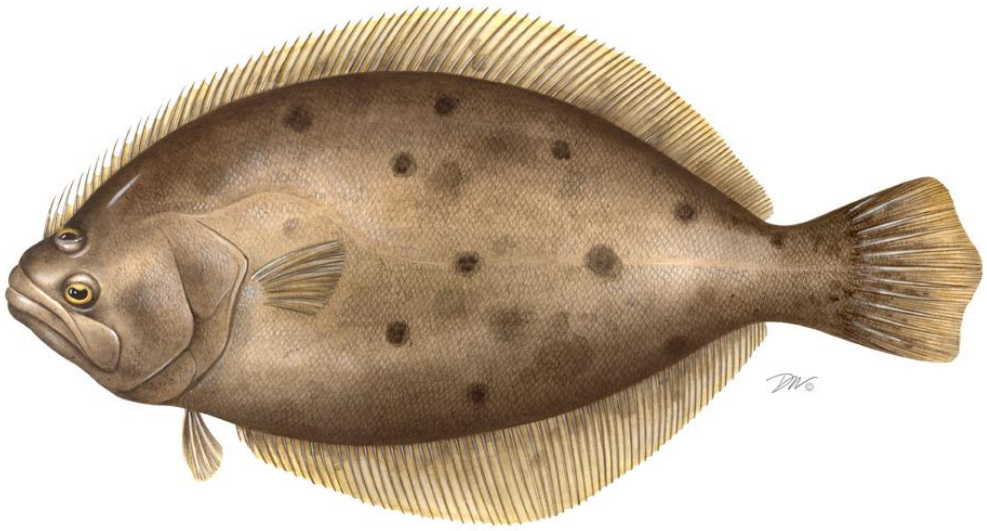
Sector. A grouping of similar fish harvesting entities participating under a specified ACL. Examples include recreational fishery participants (i.e., recreational sector), commercial fishery participants (i.e., commercial sector) or smaller sub-components of each such as party/charter vessels (i.e., 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).

2013 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR THE 2012 SUMMER FLOUNDER FISHERY

SUMMER FLOUNDER
(Paralichthys dentatus)



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2010 REVIEW OF THE ASMFC FISHERY MANAGEMENT PLAN FOR SUMMER FLOUNDER *(Paralichthys dentatus)*

I. Status of the Fishery Management Plan

The summer flounder (*Paralichthys dentatus*) fishery of the Atlantic Coast is managed jointly by the ASMFC and the Mid-Atlantic Fishery Management Council (MAFMC). The original ASMFC Fishery Management Plan, established in 1982, recommended a 14 inch minimum size. The MAFMC Plan, prepared in 1988 and based on the ASMFC plan, established a 13" minimum size. Since then, fourteen amendments have been developed and approved, except Amendment 1 which would have required a 5–1/2" minimum mesh size in the codend of trawls and Amendment 11 which would have reallocated commercial quota shares.

Amendment 2 (approved in August 1992) provided a strategy for reducing fishing mortality to Fmax, balanced against reasonable impacts on the fishermen. Management measures included a federal (EEZ) moratorium on entry into the commercial fishery, vessel and dealer permitting and reporting requirements, an annual commercial quota, and minimum mesh requirements with an exemption program. Recreational fishery measures include size limits, possession limits, and seasonal closures.

The management system established under Amendment 2 has been modified by the following amendments. Amendment Three (approved in July 1993) revised the mesh requirement exemption program. Amendment Four (approved in September 1993) revised the state-specific shares of the coastwide quota allocation in response to a reporting issue in Connecticut. Amendment Five (approved in December 1993) allows states to transfer or combine their commercial quota shares. Amendment Six (approved in May 1994) allows properly stowed nets with a cod end mesh size less than that stipulated in the plan to be aboard vessels in the summer flounder fishery. Amendment 7 (approved May 1995) adjusted the stock rebuilding schedule and capped the 1996-1997 commercial quotas at 18.51 million pounds. There is no Amendment 8 or 9 to the ASMFC FMP. The MAFMC adopted Scup management measures as Amendment 8 and Black Sea Bass measures as amendment 9, while the ASMFC adopted separate Scup and Black Sea Bass Management Plans.

Amendment 10, approved by the ASMFC in May 1997, initially sought to examine the commercial quota management system. Its scope was expanded to address a number of federal and state issues in the fishery, including: 1) allow framework adjustments to the minimum mesh for any portion of the net; 2) require 5.5" diamond mesh between the wings and the codend of trawls; 3) continue the federal moratorium on entry; 4) remove the requirement that federally permitted vessels must land summer flounder every year; 5) modify the federal vessel replacement criteria; 6) implement state *de minimis* criteria; 7) prohibit transfer at sea; 8) require states to report summer flounder landings from state waters to the NMFS; and 9) allow states to implement a summer flounder filet at sea permit system. The amendment also proposed alternative commercial quota schemes, including 1) a trimester quota with state-by-state shares during summer, 2) a trimester coastwide quota of equal periods, and 3) a revision to the allocation formula. Ultimately, the Board and Council decided to maintain the current state-by-state quota allocation system.

Amendment 12, approved by the Commission in October 1998, was developed to bring the Summer Flounder, Scup, and Black Sea Bass Fishery management Plan in to compliance with the new and revised National Standards and other required provisions of the Sustainable Fisheries Act. Specifically, the amendment revised the overfishing definitions (National Standard 1) for summer flounder, scup and black sea bass and addressed the new and revised standards relative to the existing management measures (National Standard 8-consider effects on fishing communities, National Standard 9-reduce bycatch, National Standard 10-promote safety at sea). The Amendment also identified essential habitat for summer flounder, scup and black sea bass. Finally, Amendment 12 added a framework adjustment procedure that

allows the Council to add or modify management measures through a streamlined public review process. Amendment 12 was partially approved by NMFS on April 28, 1999.

Framework Adjustment 2 to the Summer Flounder, Scup and Black Sea Bass FMP, adopted in January 2001, provided the information and analyses necessary to implement a system of conservation equivalency for the recreational summer flounder fishery. Based on a coastwide recreational harvest limit, Framework 2 allows states to customize summer flounder recreational management measures in order to address issues associated with the availability of summer flounder on spatial and temporal scales.

Addenda III and IV were approved on January 29, 2001. Addendum IV provides that, upon the recommendation of the relevant monitoring committee and joint consideration with the Council, the Board will make a decision concerning what state regulations will be rather than forward a recommendation to NMFS. The states will then be responsible for implementing the Board's decision. Addendum III established specifications for the 2001 recreational summer flounder fishery.

In December 2000, the Commission approved Amendment 13. Although there were some management alternatives included in public hearing drafts of the document that could have resulted in changes to summer flounder management measures, none were approved for implementation. As a result, Amendment 13 will have no impact on the summer flounder fishery.

The commission approved Addendum VIII in December of 2003. Under this addendum, state-specific targets for recreational landings are derived from the coastwide harvest limit based on each state's proportion of landings reported in 1998.

The commission approved Addendum XIII in August of 2004. This addendum modifies the FMP so that, within a given year, TALs for the summer flounder, scup, and/or black sea bass can be specified for up to three years. Multi-year TALs do not have to be constant from year to year, but instead are based upon expectations of future stock conditions as indicated by the best available scientific information during the year in which specifications are set.

The commission approved Addendum XV in December of 2004. This Addendum has been developed to allow for a change in the allocation scheme for the increase commercial quota from 2004 to 2005, approximately 1.3 million pounds, as well as the additional quota from 2004 to 2006, approximately 1.6 million pounds. For the fishing years 2005 and 2006, the associated quota increases will be allocated to the following states as a bycatch allocation. 75,000 pounds of summer flounder will be allocated each to Maryland, New York, Connecticut, and Massachusetts; 15,000 lbs to Delaware; 5,000 lbs to Maine; and 90 lbs to New Hampshire.

The commission approved Addendum XVII in August of 2005. Addendum XVII establishes a program wherein the board could sub-divide the recreational summer flounder coastwide allocations into voluntary regions. This is an addition management tool in the management toolbox. This addendum also allows the averaging or combination of multiple years of data (i.e. landings-per-angler, length-frequency distributions) in analyses to determine the impacts of proposed recreational management programs. These programs may include minimum fish sizes, possession limits, and fishing seasons. The averaging of annual harvest estimates will not be allowed.

The commission approved Addendum XVIII in February of 2006. The addendum seeks to stabilize fishing rules as close to those that existed in 2005, in part, to minimize the drastic reductions

facing three states. The addendum allows the three states (NY, CT, and MA) facing large reductions in their harvest targets to capitalize on harvest opportunities that are foregone by states that choose to maintain their 2005 recreational fishing rules in 2006.

The objectives of the FMP have not changed and are to: 1) reduce fishing mortality of summer flounder to assure overfishing does not occur; 2) reduce fishing mortality on immature summer flounder to increase spawning stock biomass; 3) improve 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 stated objectives.

The management unit includes summer flounder in US waters in the western Atlantic Ocean from the southern border of North Carolina northward to the US - Canadian border. States and jurisdictions with a declared interest in the summer flounder FMP include all those from North Carolina through Massachusetts except Pennsylvania and the District of Columbia, as well as NMFS and USFWS. An ASMFC plan review team, Technical Committee, and species board, and the MAFMC Demersal Species Committee are actively working on this plan. A joint ASMFC-MAFMC Technical Monitoring Committee provides annual framework adjustment advice.

Addendum XIX, approved in August 2007, broadens the descriptions of stock status determination criteria contained within the Summer Flounder, Scup, and Black Sea Bass FMP to allow for greater flexibility in those definitions, while maintaining objective and measurable status determination criteria for identifying when stocks or stock complexes covered by the FMP are overfished. It establishes acceptable categories of peer-review for stock status determination criteria. When these specific peer-review metrics are met and new or updated information is available, the new or revised stock status determination criteria may be incorporated by the Commission directly into the annual management measures for each species.

II. Status of the Stock

The most recent peer review of the summer flounder assessment was the June 2010 Stock Assessment Update. The working group updated the statistical catch at age model, ASAP, with the current years data.

Relative to the reference points the stock is not overfished and overfishing is not occurring, but is it not rebuilt. F has been declining since the 90s. In 1996 it dropped below 1.0 for the first time since management began. F is estimated to be 0.241 in 2012, below the threshold. SSB declined in the 80s and began to increase in the 90s. In 2012, SSB is estimated to be 125.7 million pounds or 95% of its target. Average recruitment (the number of juvenile fish that will be able to reproduce that year) since 1982 is 42 million fish. Previously, the largest class was in 1983 at 81.6 million fish and the lowest was in 1988 at 12.8 million fish. The 2009 year class is estimated to be about 82 million fish, about 40% above average, and its largest since 1986.

III. Status of the Fishery

During the late 1980's landings declined dramatically, reaching a low of 9.3 million pounds in the commercial fishery in 1990 and 3.2 million pounds in the recreational fishery in 1989. Following this record low, the commercial landings showed an increasing trend through 1995, but have varied without trend through 2009. For the past three years commercial landings have been over 10 million pounds, with last two years being over 15 million pounds (16.5 and 18.7 in 2010 and 2011). In 2012 commercial landings declined to 11.8 million pounds. The principle gear used in the fishery is the otter trawl.

Commercial discard losses in the otter trawl and scallop dredge fisheries are estimates from observer data and recently account for 5 to 10% of the total commercial catch.

Recreational landings in 1997 were 11.9 million pounds, double the estimate for 1995. The landings continued to increase through till 2000 when landings reached 16.5 million pounds. Since then landings have varied with a slight decreasing trend, with landings stable at 6.3 million pounds in 2012. Recreational losses have recently accounted for 15 to 20% of the total catch.

IV. Status of Assessment Advice

The summer flounder stock assessment model had historically exhibited a retrospective pattern of underestimation of F and overestimation of SSB; the causes of this pattern hav not been determined. A recent pattern of overestimation in recruitment is also evident. Over the last 7 years, the annual internal model retrospective error in F has ranged from +11% in the 2006 terminal year to -35% in 2003, while the annual internal model retrospective error in SSB has ranged from -13% in 2006 to =45% in 2003. Over the last 3 terminal years, the annual internal model retrospective error in recruitment has ranged from +54% for the 2008 year class to +80% for the 2006 year class. Comparison of the estimates for SSB, R, and F over the last three assessments indicates consistency of those estimates in line with the most recent internal retrospective pattern of the 2012 assessment update.

Landings that correspond to fishing at or near the threshold F rate (FMSY=F35%=0.310) may result in overfishing if the previous retrospective pattern of underestimation of F occurs in the future.

Biological Reference Points

- F Threshold=$F_{35\%}$ = 0.31
- F Target= $F_{40\%}$ = 0.255
- Current (2012) F=0.241 overfishing is not occurring
- Spawning Stock Biomass (SSB) threshold = 66.2 million lbs
- SSB target = 132.4 million lbs
- Current SSB (2012) =125.7 million lbs stock is not overfished

V. Status of Research and Monitoring

Several states and NMFS conduct seasonal sampling cruises using an otter trawl to assess the condition of summer flounder populations inshore and in the Exclusive Economic Zone (EEZ). Massachusetts collects sex and maturity samples and local abundance indices from spring and fall otter trawl surveys, as well as young of the year information in its winter flounder juvenile seine survey The Commonwealth monitored the commercial fishery through the observation of six directed trawl fishery trips, as well as through dealer Integrated Voice Response (IVR) systems and mandatory fishermen's logbook. Rhode Island monitors the commercial quota for summer flounder using an automated IVR system and dealers are required to provide weekly reports through the IVR of summer flounder landings. Connecticut commercial summer flounder landings are monitored through monthly commercial fishermen logbooks, and weekly and monthly dealer reports. These reports contain daily records of fishing and dealer purchase activity. There was no sea sampling or port sampling activity for summer flounder in 2004. New York conducts a survey of anglers on open boats on Great South Bay to collect data on age and size composition from which mortality rates are calculated. New Jersey collects data from the commercial trawl fishery and conducts an ocean trawl survey from which data on summer flounder are collected and catch-per-unit-of-effort and distribution information are generated for juveniles and adults. Delaware's commercial landings are monitored through a mandatory monthly harvest report from all state-licensed fishermen. Maryland constructs a juvenile index from trawl data collected in the ocean side bays and is also compiling data on population age, sex, and size from summer flounder taken in pound nets. A statewide voluntary angler survey is conducted and records location, time spent fishing, number of fish

caught, number kept, and lengths of the first 20 fish caught. Virginia prepares a young-of-the-year index from data collected from beach seine and trawl surveys. North Carolina conducts two otter trawl surveys for juvenile fluke, conducts tagging programs to determine migrations and to assess mortality, and collects information on age and growth and catch-per-unit-of-effort for the winter trawl fishery, the estuarine gill net fishery, pound net fisheries, the ocean sink net fishery and the long haul seine fishery.

VI. Status of Management Measures and Issues

Management measures imposed upon harvesters of summer flounder include an annual commercial quota and recreational harvest limit, minimum sizes, minimum mesh requirements for trawls, permits and administrative fees for dealers and vessels, a moratorium on entry into the fishery, mandated use of sea samplers, monitoring of sea turtles in the southern part of the management unit, and collection of data and record keeping by dealers and processors. Fishing mortality has been controlled by a Total Allowable Landings (TAL) since 1983, allocated into a commercial quota (60% of the TAL) and a recreational harvest limit (40% of the TAL). The commercial quota is allocated to each state based on landings during a baseline period, and any overages are subtracted from a state's quota for the following year.

Summer Flounder Compliance Criteria

The PRT found no compliance issues.

De Minimis

Delaware requests de minimis status. The PRT notes that they meet the requirement of de minimus.

COMMERCIAL FISHERY

The following measures may change annually. The 2012 measures are indicated.

Minimum size: 14"
Minimum mesh and threshold: 5.5 diamond, 6" square
Regulation of mesh beyond the codend: 5.5" throughout the mesh
2012 Commercial quota: 13.1 million pounds, 13.03 million lbs after adjustment for the research set a-sides.

In 1998 the Summer Flounder, Scup, and Black Sea Bass Management Board recommended that 15% of each state allocation must be set aside to mitigate discards after closure of the directed summer flounder commercial fishery. To be eligible to land this 15%, the state must adopt appropriate trip limits sufficiently restrictive to allow bycatch landings for the entire year without exceeding the state quota. Additionally, either the state or the fishermen must participate in collection of additional discard data.

The following measures are not subject to annual adjustment.

Quota management provisions: States are required to adopt appropriate measures to manage their quota shares. States may transfer or combine their quota shares as specified in Amendment 5. States must document through a vessel and dealer reporting system all landings that are not otherwise included in the federal monitoring of permit holders. States are required to forward all landings information to the NMFS for inclusion in quota reporting.

Transfer at Sea: States must prohibit permitted summer flounder vessels from transferring summer flounder from one vessel to another at sea. (As specified in Amendment 10)

De minimis status: States having commercial landings less than 0.1% of the coastwide total will be eligible for *de minims* status. (As specified in Amendment 10).

Delaware has requested de minimis status and meets the requirements.

RECREATIONAL FISHERY

The Management Board chose to adopt conservation equivalency for the 2012 recreational fishery under the provisions of Framework 2 (see table 3for state measures). The following measures are the coastwide non-preferred alternative that the Council recommended to NMFS as required by the FMP:

Minimum size of possession: 20"
Possession limit: 2
Season: May 1-September 30

The Board and Council also recommended precautionary default measures of an 21.5" minimum size and 2 fish possession limit, and a season from May 1-September 30 in the event that any state failed to implement conservation equivalent measures.

2012 recreational quota: 8.75 million pounds, 8.48 million lbs after adjustment for the research set a-sides.

OTHER MEASURES

Filet at sea permit: Party or charter vessels in state waters will be allowed to filet at sea if they obtain a state issued permit allowing such activity. (As specified in Amendment 10)

Reporting:

1. States must submit a commercial fishery management proposal by October 1 of each year. The proposal must detail the specific management measures that the state intends to use to manage their commercial quota allocation. The proposal must be reviewed and approved by the Management Board.

2, States must submit an annual compliance report to the Chairman of the Summer Flounder Plan Review Team by June 1 of each year. The report must detail the state's management program for the current year and establish proof of compliance with all mandatory management measures and all framework changes specified for the current year. It should include landings information from the previous year, and the results of any monitoring or research program.

This summary of compliance criteria is intended to serve as a quick reference guide. It in no way alters or supersedes compliance criteria as contained in the Summer Flounder FMP and Amendments thereto.

VII. Current State-by-State Implementation of FMP Requirements

1997 - 2012 Summer Flounder FMP Compliance Schedule

COMMERCIAL:

14" minimum size	3/1/97
5.5" codend mesh	1/1/98
Ability to regulate mesh in any portion of the net	1/1/98
5.5" mesh, body	6/3/98
Prohibition of transfer at sea	1/1/98

Mandatory reporting to NMFS of landings from state waters	1/1/98
RECREATIONAL	
Conservation Equivalency to achieve a 40% reduction	TBD
GENERAL	
Submission of annual commercial management plan	10/1/97, annually thereafter
Submission of annual landings and compliance report	6/1/98, annually thereafter

Table 1. Summer Flounder Commercial Landings by State (2000-2012) in pounds.

Source: National Marine Fisheries service Commercial Landings Data & State Compliance Reports (2012)

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MA	706,782	811,640	788,998	693,982	1,009,472	925,686	1,192,602	1,274,429	920,549	659,784	644,404	731,174	851,889	1,132,192	891,495
RI	1,711,987	1,635,323	1,703,593	1,798,740	2,286,421		3,084,560	2,925,365	2,122,528	1,515,684	1,473,439	1,793,891	2,289,379	2,824,032	2,064,076
CT	262,732	245,219	245,148	247,099	356,685	316,845	406,038	448,594	316,533	205,115	220,510	256,768	308,341	401,377	
NY	821,500	801,361	811,917	751,778	1,052,839		1,594,345	1,798,830	1,219,842	941,790	855,830	1,139,872	1,363,543	1,517,032	1,237,120
NJ	1,862,798	1,916,964	1,848,119	1,745,488	2,406,904	2,385,157	2,629,895	2,349,091	2,379,801	1,696,817	1,540,812	1,798,731	2,165,325	2,830,688	2,269,375
DE	11,205	7,541	12,345	7,483	2,707	5,516	7,565	5,427	4,376	2,261	1,213	2,952	1,858	836	677
MD						329,343	262,492	337,652	247,743	228,809	208,219	213,564	263,302	259,392	139,824
VA	2,615,750	2,195,832	2,206,715	2,659,586	2,970,267	3,521,899	3,906,048	3,869,171	2,756,952	1,853,693	1,651,575	1,978,754	2,589,786	4,050,998	4,111,708
NC	2,983,133	2,870,331	3,386,592	2,784,751	4,129,133	3,572,462	4,844,136	4,064,474	3,981,430	2,670,122	2,406,611	2,859,048	6,622,004	5,708,254	1,087,427
Total	10,975,887	10,484,211	11,003,427	10,688,907	14,214,428	11,056,908	17,927,681	17,073,033	13,949,754	9,774,075	9,002,613	10,774,754	16,455,427	18,724,801	11,801,702

Table 2. Recreational Landings by State (1998-2012) in numbers of fish.

Source: "Personal Communication with National Marine Fisheries Division July 2013"

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ME	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NH	0	0	147	0	0	364	0	0	717	0	562	0	0	0	0
MA	383,447	174,720	378,720	152,132	155,377	177,449	224,729	267,081	238,970	138,071	232,285	50,382	45,156	58,372	75,803
RI	394,907	432,087	807,170	268,244	190,741	205,435	248,988	164,909	264,142	175,778	203,745	71,739	118,455	161,125	103,102
CT	261,401	215,311	371,611	152,813	93,366	165,808	216,154	156,724	137,521	112,227	145,661	44,944	35,028	47,071	62,501
NY	1,230,402	759,640	1,671,470	699,625	696,343	1,539,115	1,024,670	1,163,329	752,388	865,957	608,925	298,634	334,491	376,198	509,123
NJ	2,728,286	1,502,689	3,022,809	2,070,234	988,878	1,784,356	1,616,811	1,300,223	1,556,151	1,067,404	761,843	824,887	552,401	736,848	1,130,407
DE	218,933	180,562	335,664	145,786	106,837	105,743	111,362	72,696	88,149	108,264	35,227	87,232	53,512	66,820	45,474
MD	206,057	226,912	258,211	139,392	68,891	41,201	42,261	117,021	37,471	103,849	57,895	64,647	25,215	15,347	22,617
VA	1,164,527	378,283	580,517	1,338,134	772,265	451,348	674,552	684,272	762,597	397,041	260,221	289,075	260,050	317,674	259,973
NC	391,136	236,791	374,756	327,249	189,458	87,851	156,967	101,212	112,176	138,989	43,510	74,641	77,157	60,422	63,135
Total	6,979,096	4,106,995	7,800,928	5,293,609	3,262,156	4,558,306	4,316,494	4,027,467	3,949,565	3,107,580	2,349,312	1,806,181	1,501,465	1,839,877	2,272,135

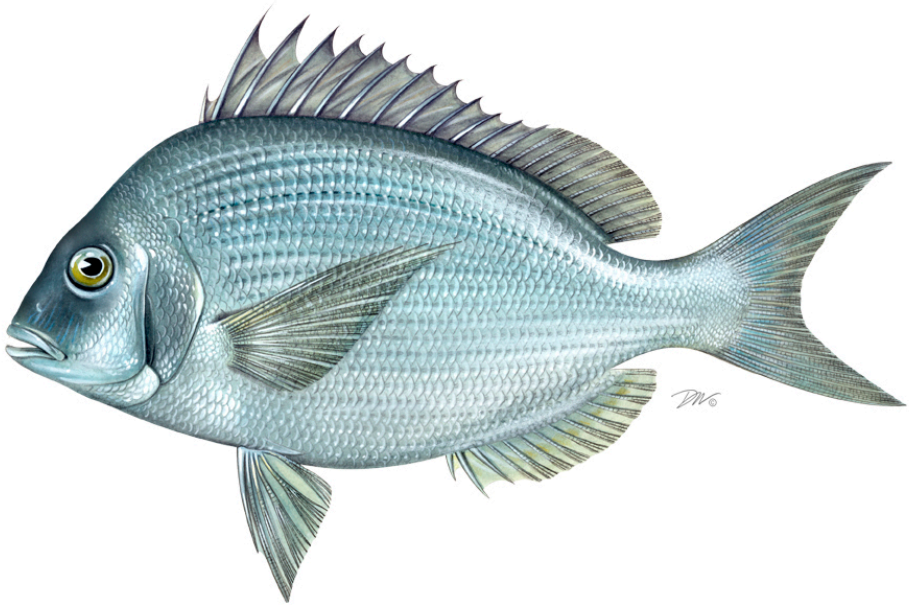
Table 3. 2012 recreational management measures for summer flounder by state.

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	16.5	5 fish	May 22-September 30
Rhode Island	18.5	8 fish	May 1-December 31
Connecticut*	18	5 fish	May 15-October 31
*At 44 designated shore sites	16		
New York	19.5	4 fish	May 1-September 30
New Jersey	17.5	5 fish	May 5-September 28
Delaware	18	4 fish	January 1-October 23
Maryland	17	3 fish	April 14-December 16
PRFC	16.5	4 fish	All year
Virginia	16.5	4 fish	All year
North Carolina	15	6 fish	All Year

Table 4. 2013 Summer flounder recreational regulations.

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	16	5 fish	May 22-September 30
Rhode Island	18	8 fish	May 1-December 31
Connecticut*	17.5	5 fish	May 15-October 31
*At 42 designated shore sites	16		
New York	19	4 fish	May 1-September 29
New Jersey	17.5	5 fish	May 18-September 16
Delaware	17	4 fish	All year
Maryland	16	4 fish	March 28-December 31
PRFC	16	4 fish	All year
Virginia	16	4 fish	All year
North Carolina	15	6 fish	All Year

2013 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN for the 2012 Scup Fishing Year
SCUP *(Stenotomus chrysops)*



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2013 Review of the Atlantic States Marine Fisheries Commission

Fishery Management Plan for Scup for the 2012 Fishing Year

I. Status of the Fishery Management Plan

ASMFC management of scup was initiated as one component of a multi-species FMP addressing summer flounder, scup and black sea bass. The Commission approved the Fishery Management Plan for Scup in March 1996. Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass FMP, which established revised overfishing definitions, identification and description of essential fish habitat, and defined the framework adjustment process, was approved by the Commission in October 1998.

The FMP included a seven-year plan for reducing fishing effort and restoring the stock. The primary concerns are excessive discarding of scup and near collapse of the stock. Management measures implemented in the first year of the plan (1996) included: dealer and vessel permitting and reporting, 9-inch commercial minimum size, 4-inch mesh restriction for vessels retaining over 4,000 pounds of scup, and a 7-inch recreational minimum size. The biological reference point to define overfishing is F_{MAX}, or F=0.25. To allow flexibility in addressing unforeseen conditions in the fishery, the plan contains framework provisions that allow implementation of time and area closures. Changes in the recreational minimum size and bag limit, or implementation of a seasonal closure, may also be established on an annual basis. Amendment 12 to the multi-species management plan changed the overfishing definition, with F_{MAX} serving as a proxy for F_{MSY}.

Addendum 1 to the Summer Flounder, Scup, and Black Sea Bass FMP explains the quota management procedure for management and distribution of the coastwide commercial quota that was approved in September 1996 and implemented as a coastwide Total Allowable Catch (TAC) in 1997. Addendum 1 to the Summer Flounder, Scup, and Black Sea FMP also details the state-by-state quota system for the summer period (May through October) that was implemented in 1997. Each state receives a share of the summer quota based on historical commercial landings from 1983-1992.

In June 1997, the Commonwealth of Massachusetts filed a lawsuit against the Secretary of Commerce stating that the historical data used to determine the quota shares underestimated the commercial landings of scup. Massachusetts also stated that the resulting quota share discriminated against Commonwealth of Massachusetts residents. On April 27, 1998, the U.S. District Court voided the state-by-state quota allocations for the summer quota period in the federal fishery management plan, and ordered the Secretary of Commerce to promulgate a regulation that sets forth state-by state quotas in compliance with the National Standards. The court order does not technically affect the state-by-state quota allocations that are included in the ASMFC Addendum 1 to the Summer Flounder, Scup, and Black Sea Bass FMP. The Summer Flounder, Scup, and Black Sea Bass Management Board developed three Emergency Rules to address the quota management during the summer quota period during 1999, 2000 and 2001.

Amendment 12 to the Summer Flounder, Scup and Black Sea Bass FMP established a biomass threshold for scup based on the maximum value of the 3-year moving average of the NEFSC spring bottom trawl survey index of spawning stock biomass (2.77 kg/tow, 1977-1979). The scup stock is overfished when the spawning stock biomass index falls below this value. Amendment 12 also defined overfishing for scup to occur when the fishing mortality rate exceeds the threshold fishing mortality of F_{MAX}=0.26.

In 2002, the Board developed Addendum V to the FMP in order to avoid the necessity of developing annual Emergency Rules for summer period quota management. Addendum V established state shares of the summer period quota based on historical commercial landings from 1983-1992, including additional landings from Massachusetts added to the NMFS database in 2000. State shares implemented by this addendum will remain in place until the Board takes direct action to change them.

Another significant change to scup management occurred with the approval of Addendum VII in February 2002. This document established a state specific management program for the 2002 recreational scup fishery based on the average landings (in number of fish) for 1998-2001. Only Massachusetts through New York (inclusive) were permitted to develop individual management programs. Due to the extremely limited data available, the Board developed specific management measures for the states of New Jersey, Delaware, Maryland, Virginia, and North Carolina. The addendum had no application after 2002.

Addendum IX established a state specific management program for the 2003 recreational scup fishery based on the average landings (in number of fish) for 1998-2001. Only Massachusetts through New York (inclusive) were permitted to develop individual management programs. Due to the extremely limited data available, the Board developed specific management measures for the states of New Jersey, Delaware, Maryland, Virginia, and North Carolina. The addendum had no application after 2003.

Addendum X allows for any unused quota from the winter I scup fishery to be rolled over into the winter II fishery period. It also increased the possession limit by 500 lbs per 500,000 pounds of scup that are rolled over. The addendum also establishes an alternative to the start date of the summer period. States can allow for landings of scup by state permit holders beginning on April 15th. If there is a closure prior to April 15th, state permit holders can land and sell scup caught exclusively in state waters to state and federally permitted dealers after April 15th and prior to the Federal opening of the summer period on May 1st.

Addendum XI, approved in January 2004, allows states to customize scup recreational management measures in order to deal with burden issues associated with the implementation of coastwide measures. It also sets a management process that minimizes the administrative burden when implementing conservation equivalency.

Addendum XIX, approved in August 2007, broadens the descriptions of stock status determination criteria contained within the Summer Flounder, Scup, and Black Sea Bass FMP to allow for greater flexibility in those definitions, while maintaining objective and measurable status determination criteria for identifying when stocks or stock complexes covered by the FMP are overfished. It establishes acceptable categories of peer-review for stock status determination criteria. When these specific peer-review metrics are met and new or updated information is available, the new or revised stock status determination criteria may be incorporated by the Commission directly into the annual management measures for each species.

Addendum XX sets policies to reconcile quotas overages to address minor inadvertent quota overages. It was approved in November 2009. It streamlines the quota transfers process and establishes clear policies and administrative protocols to guide the allocation of transfers from states with underages to states with overages. It also allows for quota transfers to reconcile quota overages after the year's end.

Addendum XXI approved in March 2011, established state-by-state measures, requiring states from Massachusetts to New Jersey, plus North Carolina to cut harvest by 37% to 43% to meet the coastwide recreational harvest.

Addendum XXII, approved in February 2012, establishes a regional management approach which allows the northern region states (Massachusetts to New Jersey) to collectively liberalize up to 57%. The southern region states (Delaware to North Carolina) have committed to implementing measures consistent with those recommended for federal waters (the 25 fish, 12.5 inches TL minimum fish size, and an open season from May 19 to October 14 and November 1 to December 31).

States with a declared interest in the Scup FMP are Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina. The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board serves as the species management board, and the Demersal Species Committee guides plan development for the MAFMC. The Summer Flounder, Scup, and Black Sea Bass Technical Committee addresses technical issues. Industry advice is solicited through the Scup and Black Sea Bass Advisory Panel, and annual review and monitoring is the responsibility of the Scup Plan Review Team.

II. Status of the Stock

The assessment model for scup changed in 2008 from a simple index-based model to a complex statistical catch at age model. The new model incorporates a broader range of fishery and survey data than was used previously.

Recruitment at age 0 averaged 91.4 million fish during 1963-1983, during this period recruitment estimates are influenced mainly by the assessment model stock-recruitment relationship. Since 1984, recruitment estimates from the model are influenced mainly by the fishery and survey catches at age. Recruitment at age 0 averaged 104 million fish from 1984-2009. The 1999 and 2000 year classes are estimated to be the largest of the time series, at 207 and 184 million age 0 fish. With greatly improved recruitment and low fishing mortality rates since 1998, spawning

stock biomass (those fish that can reproduce) has steadily increased since to about 157,000 and155,000 mt in 2008 and 2009, respectively.

The new reference points are F target =$F_{40\%}$ = 0.177. $F_{40\%}$ is the rate of fishing that will result in 40% of the spawning potential of an unfished stock. The spawning stock biomass target is equal to $SSB_{40\%}$ = 92,044 mt or 202.92 million pounds. The 2012 stock assessment update indicates the current F is 0.040 and SSB is 410 million pounds, therefore overfishing is not occurring and the stock is rebuilt.

III. Status of the Fishery

The reduced landings of scup in recent years are a reflection of low stock abundance and the effect of quota management. Commercial scup landings, which had declined by over 33% to 8.8 million pounds in 1998, increased to 15.6 million pounds in 1991, then dropped to the lowest value in the time series, 2.7 million pounds in 2000. Commercial landings then increased to almost 7 million pounds in 2002. Total landings have increased slightly each year to about 8.2 million pounds in 2001. The 2002 commercial landings of 3.8 million pounds were only about 15% of the over 48.5 million pound peak observed in 1960. For several years Rhode Island and New Jersey have harvested the largest share of the total commercial landings of scup. Landings were stable from 2003-2007 between 9.8 -9.0 million pounds, and declined to 5 year low of 5.2 million pounds in 2008. Since then landings have increased to 14 million pounds in 2011 and 10.9 million pounds in 2012.

The recreational fishery for scup is significant. Recreational fishermen accounted for 17 to 67% of total annual catches from 1985–2001. Recreational landings declined steadily from a 1986 value of 11.6 million pounds to 0.9 million pounds in 1998, the lowest value in the time series. Recreational landings then increased to 8.5 million pounds in 2003 and decreased in 2004 and 2005, 4.4 million pounds and 2.4 million pounds respectively. Since then landings have increased to 5.1 million pounds in 2010 with declining landings in 2011 and 2012 (3.1 and 3.6 million pounds).

IV. Status of Assessment Advice

Technical advice to managers has cautioned rapid increases in quota to meet the revised maximum sustainable yield given uncertainties in recruitments. They advised a more gradual increase in quotas is a preferred approach reflective of the uncertainty in the model estimates and stock status.

A between assessment comparison provided another measure of assessment uncertainty due to historical changes in model estimates. The 2010 assessment estimates of SSB and F are intermediate with respect to the 2008 assessment and the 2009 update for the same years, while the size of the 2007 year class was overestimated in the 2008 assessment compared to the 2010 update.

The next assessment update will be in the 2014, with a full benchmark assessment tentatively for 2015 .

V. Status of Research and Monitoring

Commercial landings data are collected by the NMFS Vessel Trip Report system and by state reporting systems. The NEFSC sea sampling program collects commercial discard information. Biological samples (age, length) of the commercial fishery are collected through NEFSC weighout system and by the state of North Carolina. Recreational landings and discard information is obtained through the Marine Recreational Fisheries Statistics Survey. The Commonwealth of Massachusetts collected length frequency information for the recreational fishery in 2001 as part of a federally funded effort to monitor the recreational and commercial directed fisheries. One non-directed fishery assumed to have substantial scup bycatch was also monitored. This monitoring effort decreased substantially in 2002 as the study received funding for one year. Fishery independent abundance indices are available from surveys conducted by the NEFSC, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and the Virginia Institute of Marine Science.

VI. Management Measures and Developing Issues

Addendum 1 to the Scup FMP specifies the commercial quota management scheme. The annual coastwide quota is divided among three periods. The Winter I period is January through April, the summer period is May through October, and November and December make up Winter II. During the winter periods, the quota is coastwide and is limited by trip limits. The summer allocation is divided into state shares. When a winter period allocation is landed, the states and the NMFS must prohibit landings. When a state lands it summer allocation it is expected to close its fishery and the NMFS will close that state for landings by federally permitted vessels. The quota, as well as accompanying trip limits, will be set annually. [Note: The Federal FMP currently contains a coastwide commercial quota during the summer period due to the court decision described in Section I]. The Board has expressed interest in exploring alternative quota programs for scup.

Scup FMP Compliance Criteria:

COMMERCIAL FISHERY for 2012

The following management measures may change annually.

Minimum size of possession: 9” Total Length
Minimum mesh and threshold: for large nets, no more than 25 meshes of 5 inch mesh in the codend, with at least 100 meshes f 5.0 inch mesh forward of the 5 inch mesh; and for small nets with codends (including an extension) less than 125 meshes, the entire net must have 4.5 inch mesh or larger throughout after 500 pounds in the winter period and 100 pounds in the summer. Otter trawls must have a minimum mesh size of 5” for the first 75 meshes from the terminus of the net and a minimum mesh size of 5” throughout the net for codends constructed with fewer than 75 meshes.
Threshold to Trigger Minimum Mesh Requirements: 500 pounds of scup from November 1 through April 30 and 200 pounds or more of scup from May 1 through October 31.

Maximum roller rig trawl roller diameter: 18”
Pot and trap escape vents: 3.1” round, 2.25” square
Pot and trap degradable fastener provisions: a) untreated hemp, jute, or cotton string 3/16” (4.8 mm) or smaller; b) magnesium alloy timed float releases or fasteners; c) ungalvanized, uncoated iron wire of 0.094” (2.4mm) or smaller
Commercial quota: 27.91 million pounds (adjusted for overages and research set-asides)
Winter I and II landing limits: Winter I = 12,589,558 lbs, 1,000 @ 80%; Winter II = 2,484,470 lbs

The following required measures are not subject to annual adjustment:

Vessel and dealer permitting requirements: States are required to implement a permit for fishermen fishing exclusively in state waters, and for dealers purchasing exclusively from such fishermen. In addition, states are expected to recognize federal permits in state waters, and are encouraged to establish a moratorium on entry into the fishery.

Vessel and dealer reporting requirements: States are required to implement reporting requirements for state permitted vessels and dealers and to report landings from state waters to the NMFS.

Scup pot or trap definition: A scup pot or trap will be defined by the state regulations that apply to the vessels principal port of landing.

Quota management requirements:
Winter I and II: States are required to implement landing limits as specified annually, States are required to notify state and federal permit holders of initial period landing limits, in-period adjustments, and closures. States are required to prohibit fishing for, and landing of, scup when a period quota has been landed, based on projections by NMFS. States must report landings from state waters to the NMFS for counting toward the quota

Summer: States are required to implement a plan of trip limits or other measures to manage their summer share of the scup quota. States are required to prohibit fishing for, and landing of, scup when their quota share is landed. States may transfer or combine quota shares. States must report all landings from state waters to the NMFS for counting toward the state shares.

RECREATIONAL FISHERY for 2012

Addendum IX established a state-specific management program for Massachusetts through New York (inclusive), and specific management measures for the states of New Jersey, Delaware, Maryland, Virginia, and North Carolina.

The following measures may change annually:

2012 Recreational Measures
2012 Minimum size, possession limits and seasonal closure: Table 4
2012 Recreational Harvest Limit: 7.55 million pounds.

2013 Recreational Measures
2013 Minimum size, possession limits and seasonal closure: Table 5
2013 Recreational Harvest Limit: 8.52 million pounds

OTHER MEASURES

Reporting: States are required to submit an annual compliance report to the Chairman of the ASMFC Scup Plan Review Team by June 1 of each year. This report should detail the state's management program for the current year and establish proof of compliance with all mandatory management measures. It should include landings information from the previous year, and the results of any monitoring or research programs.

De minimis: States having commercial landings during the summer period that are less than 0.1% of the summer period quota are eligible for *de minimis* consideration. States desiring *de minimis* classification must make a formal request in writing through the Plan Review Team for review and consideration by the Scup Management Board.

This summary of compliance criteria is intended to serve as a quick reference guide. It in no way alters or supersedes compliance criteria as contained in the Scup FMP and any Amendments thereto.

Compliance Issues

The PRT found no compliance issues.

De Minimis

The state of Delaware request *de minimis* status. The PRT notes Delaware meets the *de minimis* requirements.

VII. State Compliance with Required Measures

Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina are required to comply with the provisions of the Scup FMP. All states implemented regulations in compliance with the requirements approved by the Board.

Scup FMP Compliance Schedule

1996 and 1997 initial FMP compliance dates:

Commercial Fishery

Quota Management Measures

ability to implement and enforce period landing limits	1/1/97
ability to notify permit holders of landing limits and closures	5/1/97
ability to close the summer fishery once the state share is harvested	5/1/97
ability to close the winter fisheries once the period quota is harvested	5/1/97
Size limit	6/30/96
Minimum mesh	1/1/97
Pot and trap escape vents, degradable fasteners	6/30/96
Roller diameter restriction	6/30/96
Vessel permit and reporting requirements, state	1/1/97
Dealer permit and reporting requirements, state	1/1/97

Recreational Fishery

Quota Management Measures

Size limit	6/30/96

General

States submit annual monitoring and compliance report	6/1 annually

2005 Annual Specifications

Commercial

Winter I Landing Limits	1/1/05
Winter II Landing Limits	11/1/05

Recreational

Massachusetts– New York (inclusive)

State specific minimum size, possession limit and season	11/1/05

New Jersey – North Carolina (inclusive)

Board-established regulations	3/1/05

Table 1. Summary of Scup management measures, 1998-2012.

Management measures		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
TAC (m lbs)	-	7.28	5.92	5.92	8.37	12.92	18.65	18.65	18.65	19.79	13.97	9.9	15.54	17.09	31.92	40.88
Commercial TAC (m lbs)	-	5.68	4.62	4.62	6.53	10.08	14.55	14.55	14.55	15.44	10.9	7.72	12.12	13.33	24.92	31.89
Commercial quota–initial (m lbs)	-	4.57	2.53	2.53	4.44	8	12.47	12.47	12.47	12.08	9.18	5.46	8.54	11.01	20.67	28.35
Commercial quota–adjusted (m lbs)	-	-	-	1.75	3.53	7.25[a]	12.10[d]	12.34[e]	12.23[f]	11.93	8.9	5.24	8.37	10.68	20.36	27.91
Commercial. Landings (m lbs)		4.17	3.32	2.66	4.07	7.28	9.75	9.05	9.56	8.96	9.25	5.18	8.2	10.3	14.8	14.8
Recreational TAC (m lbs)	-	1.6	1.3	1.3	1.84	2.84	4.1	4.1	4.1	4.35	3.07	2.18	3.42	3.76	7.02	8.99
Recreational harvest limit-initial (m lbs)	-	1.55	1.24	1.24	1.77	2.77	4.03	4.03	4.02	4.19	2.82	1.88	2.64	3.1	5.83	10.85
Recreational harvest limit-adjusted (m lbs)	-	-	-	-	-	2.71[b]	4.01[d]	4.01[e]	3.96[f]	4.15	2.74	1.83	2.59	3.01	5.74	7.55
Recreational landings (m lbs)		0.88	1.89	5.44	4.26	3.62	9.33	4.38	2.38	2.95	3.65	4.04	2.94	5.9	3.6	4.1
Commercial fish size (in)		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Min. mesh size (in, diamond)		4.5	4.5	4.5	4.5	4.5/5.0	4.5/5.0	4.5/5.0	5	5	5	5	5	5	5	5
Mesh threshold	4000/1000	4000/1000	200/100	200/100	500/100	500/100	500/100	500/100	500/200	500/200	500/200	500/200	500/200	500/200	500/200	500/200

Table 2. Scup commercial landings by state 1998-2012 in thousands of pounds.

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Maine	20				469		2								
Massachusetts	958,808	661,581	355,403	462,124	727,183	897,168	775,940	1,134,759	1,088,148	1,104,316	527,725	718,751	1,030,688	1,044,854	2,346,406
Rhode Island	794,585	1,280,491	1,016,959	1,617,373	3,674,789	3,813,811	3,425,242	3,423,611	3,642,943	3,932,503	2,151,504	3,618,677	4,298,595	4,322,108	2,015,703
Connecticut	97,652	96,347	142,415	220,319	313,827	292,346	255,569	327,861	297,912	255,884	283,101	147,146	323,757	644,030	905,060
New York	621,428	454,663	633,712	655,203	1,557,601	1,849,957	1,906,889	2,185,836	2,423,179	2,324,887	1,213,776	1,848,002	2,689,703	3,729,032	4,306,616
New Jersey	1,670,866	796,423	510,769	1,055,954	923,084	2,306,257	1,891,086	1,914,358	1,392,868	1,575,144	773,829	1,528,545	1,550,249	1,966,479	978,531
Delaware	2						2							9	1
Maryland	11,753	568	109				47,200	927				9,000	27,183	54,229	8,263
Virginia	9,185	28,137	1,091	53,503	54,298	557,694	448,574	287,891	80,292		96,194	211,576	371,376	620,480	339,868
North Carolina	14,937	564	615	665	7,657	143,004	523,554	352,422	140,062	66,979	205,868	244,337	102,853	308,907	3,903
Coastwide	4,179,236	3,318,774	2,661,073	4,065,141	7,258,908	9,860,237	9,274,058	9,627,665	9,065,404	9,259,713	5,251,997	6,587,817	10,394,404	14,902,366	10,904,351

Source: Fisheries Statistics Division of the National Marine Fisheries Service (NMFS) web query July 2013

Table 3. Scup recreational landings, 1998-2012, by state in numbers of fish.

Source: "Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division. [July 2013]"

State	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MA	383,447	174,720	378,720	152,132	155,377	177,449	280,938	203,201	218,996	75,860	150,031	48,311	925,222	785,205	1,587,006
RI	394,907	432,087	807,170	268,244	190,741	205,435	288,428	187,983	263,716	232,495	206,501	51,293	398,178	567,697	497,505
CT	261,401	215,311	371,611	152,813	93,366	165,808	217,031	213,131	107,479	108,528	115,821	61,625	1,087,681	932,637	868,475
NY	1,230,402	759,640	1,671,470	699,625	696,343	1,539,115	937,016	1,147,019	801,938	710,514	565,456	264,508	1,990,340	714,789	592,238
NJ	2,728,286	1,502,689	3,022,809	2,070,234	988,878	1,784,356	1,887,193	1,395,626	1,560,505	1,327,567	851,447	1,012,806	739,901	44,813	119,961
DE	218,933	180,562	335,664	145,786	106,837	105,743	123,714	90,659	110,222	117,734	32,953	92,039	0	40	86
MD	206,057	226,912	258,211	139,392	68,891	41,201	65,949	85,192	58,386	157,360	89,729	89,660	18	11	0
VA	1,164,527	378,283	580,517	1,338,134	772,265	451,348	583,664	584,478	862,309	479,211	228,898	231,991	5,284	10,413	1,800
NC	391,136	236,791	374,756	327,249	189,458	87,851	172,736	128,926	152,683	184,476	53,090	58,093	1,653	607	1,425
Total	**6,979,096**	**4,106,995**	**7,800,928**	**5,293,609**	**3,262,156**	**4,558,306**	**4,556,669**	**4,036,215**	**4,136,234**	**3,393,745**	**2,293,926**	**1,910,326**	**5,148,276**	**3,056,211**	**3,668,513**

Table 4. 2012 Scup recreational management measures by state.

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts For Hire	11	20 fish from May 1-10 and June 25-Dec 31; 45 fish from May 11-June 24	May 1- December 31
Private Angler	10.5	20 fish; private vessels with 6 or more persons aboard are prohibited from possessing more than 100 scup per day	May 1- December 31
Rhode Island For Hire	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 40 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10.5 and 9" for shore mode at 44 designated sites	20 fish	May 1- December 31
Connecticut For Hire	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 40 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10.5	20 fish	May 1- December 31
New York For Hire	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 40 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10.5	20 fish	May 1- December 31
New Jersey	9	50 fish	Jan 1-Feb 28 and July 1 – December 31
Delaware	8	50 fish	All Year
Maryland	8	50 fish	All Year
Virginia	8	50 fish	All Year
North Carolina	8	50 fish	All Year

Table 5. 2013 State Scup Recreational Measures

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts For Hire	10	45 fish from May 1- June 30; 30 fish from July 1- Dec 31	July 1- December 31
Private Angler	10	30 fish; private vessels with 6 or more persons aboard are prohibited from possessing more than 150 scup per day	May 1- December 31
Rhode Island For Hire	10	30 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10"; and 9" or greater for shore mode at 3 designated sites	30 fish	May 1- December 31
Connecticut For Hire	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10.5; and 9" for shore mode at 46 designated sites	20 fish	May 1- December 31
New York For Hire	10	30 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10	30 fish	May 1- December 31
New Jersey	9	50 fish	Jan 1-Feb 28 and July 1 – December 31
Delaware	8	50 fish	All Year
Maryland	8	50 fish	All Year
Virginia	8	50 fish	All Year
North Carolina	8	50 fish	All Year

Table 6. Scup Landings by period.

Year	Period	Commercial Quota	Trip Limits	Landings (lbs)	Date Closed	% of Quota Landed
2002	Winter I	3,517,300	10,000/1,000	3,063,836	--	87.1
	Summer	2,556,595	--	1,223,202	--	47.8
	Winter II	1,179,502	2,000	1,135,769	2-Dec	96.3
2003	Winter I	5,602,495	15,000/1,000	3,752,176	--	66.9
	Summer	4,521,879	--	4,407,785	--	97.5
	Winter II	1,979,689	1,500	1,592,624	--	80.4
2004	Winter I	5,568,920	15,000/1,000	3,587,841	--	65.5
	Summer	4,808,455	--	4,055,207	--	84.5
	Winter II	1,967,825	1,500	1,407,733[f]	--	82.2
2005	Winter I	5,518,367	15,000/1,000	3,684,768	--	66.8
	Summer	4,764,806	--	4,001,662	--	89.5
	Winter II	1,987,718	1,500	1,380,444	--	74.6
2006	Winter I	3,554,991	30,000/1,000	3,626,237	--	102
	Summer	4,647,569	--	3,219,929	--	69.3
	Winter II	3,729,581	2,000/1,000	2,115,323	--	56.7
2007	Winter I	4,012,895	30,000/1,000	3,400,934	--	84.8
	Summer	3,464,914	--	4,254,987	21-Sep	122.8
	Winter II	1,417,991	2,000/1,000	1,590,747	--	112.2
2008	Winter I	2,291,699	30,000/1,000	2,356,716	--	102.8
	Summer	1,437,558	--	1,935,074	16-Jul	134.6
	Winter II	940,948	2,000/1,000	892,318	--	94.8
2009	Winter I	3,777,443	30,000/1,000	3,774,583	--	99.9
	Summer	2,930,733	--	3,072,340	--	104.8
	Winter II	1,334,791	2,000/1,000	1,356,961	--	101.7
2010	Winter I	4,964,716	30,000/1,000	4,740,681	--	95.4
	Summer	4,286,759	--	4,175,206	--	97.4
	Winter II	1,754,325	2,000/1,000	1,482,669	--	84.5
2011	Winter I	6,897,648	30,000/1,000	5,648,867	--	81.9
	Summer	7,930,504	--	6,349,749	--	80.1
	Winter II	3,245,500	2,000/1,000	2,556,214	--	78.8
2012	Winter I	12,589,558	50,000/1,000	5,190,370	--	41.2
	Summer	10,870,390	--	6,326,576	--	58.2
	Winter II	11,635,321	8,000	2,484,470	--	21.4

2013 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR the 2012 Black Sea Bass Fishery
Black Sea Bass *(Centropristis striata)*

Prepared by:

Kirby Rootes-Murdy (ASMFC)

Black Sea Bass Plan Review Team
Kirby Rootes-Murdy, Chair
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July 2013

2013 Review of the Atlantic States Marine Fisheries Commission
Fishery Management Plan for Black Sea Bass

I. Status of the Fishery Management Plan

ASMFC management of black sea bass was initiated as one component of a multi-species fishery management plan (FMP) addressing summer flounder, scup, and black sea bass. In 1990, summer flounder was singled out for immediate action under a joint ASMFC and Mid-Atlantic Fishery Management Council (MAFMC) plan. Further action on the scup and black sea bass plan was delayed until 1992 to expedite the summer flounder FMP and subsequent amendments. The joint Black Sea Bass FMP was completed and approved in 1996. The MAFMC approved regulations for black sea bass as Amendment 9 to the Summer Flounder FMP in May 1996.

The management unit of the Black Sea Bass FMP includes all black sea bass in U.S. waters in the western Atlantic Ocean from Cape Hatteras, North Carolina north to the Canadian border. Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina have declared an interest in black sea bass. The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board and the MAFMC Demersal Species Committee guide development of the FMP. Technical issues are addressed through the Summer Flounder, Scup, and Black Sea Bass Technical Committee and the Black Sea Bass Monitoring Committee. The Black Sea Bass Plan Review Team conducts annual reviews and monitors compliance and the Scup and Black Sea Bass Advisory Panel provide industry input and advice.

The objectives of the FMP are to reduce fishing mortality to assure overfishing does not occur, reduce fishing mortality on immature black sea bass to increase spawning stock biomass, improve yield from the fishery, promote compatible regulations among states and between federal and state jurisdictions, promote uniform and effective enforcement, and to minimize regulations necessary to achieve the stated objectives. The FMP currently defines overfishing as fishing in excess of $F_{MSY=}F_{40\%,}$ or F=0.42. It defines overfished as the spawning stock biomass being below $SSB_{MSY=}$ $SSB_{40\%}$ =12,537 mt. The FMP intends to reduce fishing mortality by a coastwide commercial quota allocated by state, and a recreational harvest limit constrained through the use of minimum size, possession limit, and seasonal closures.

Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass FMP was approved by the Commission in October 1998 and established revised overfishing definitions, identification and description of essential fish habitat, and defined the framework adjustment process.

Addendum IV, approved on January 29, 2001, provides that upon the recommendation of the relevant monitoring committee and joint consideration with the Council, the Board will decide the state regulations rather than forward a recommendation to NMFS. Addendum IV also made the states responsible for implementing the Board's decision on regulations.

Starting in 1998, the fishery was subject to lengthy closures and had some significant quota overages. Fishery closures occurring as a result of exceeded quotas resulted in increased discards of legal sized black sea bass in mixed fisheries for the remainder of the closed period. A

significant financial hardship for the fishing industry resulted from a decrease in market demand caused by a fluctuating supply. To address these issues, the Management Board enacted a series of Emergency Rules in 2001 that established initial possession limits, triggers, and adjusted possession limits. These measures helped reduce the length of fishery closures, but the rapidly changing regulations confused fishermen and added significant administrative burden to the states. To simplify the process for all parties, the Board approved Addendum VI to provide a mechanism for initial possession limits, triggers, and adjusted possession limits to be set during the annual specification setting process without the need for further Emergency Rules.

Amendment 13, approved by ASMFC in May 2002, implemented a federal, coastwide annual quota that is managed by ASMFC using a state-by-state allocation system. The Amendment was implemented in 2003 and 2004. State-specific shares are listed in Table 1.

Amendment 13 also removed the necessity for fishermen who have both a NER BSB permit and a SER S/G permit to relinquish their permits for a six-month period prior to fishing south of Cape Hatteras during a northern closure.

Addendum XII, approved in 2004, continues the use of a state-by-state allocation system, managed by the ASMFC on an annual coastwide commercial quota.

Addendum XIII modifies the FMP so that, within a given year, TALs for the summer flounder, scup, and/or black sea bass can be specified for up to three years.

Addendum XIX continues the state-by-state black sea bass commercial management measures, without a sunset clause. This addendum also broadens the descriptions of stock status determination criteria contained within the Summer Flounder, Scup, and Black Sea Bass FMP to allow for greater flexibility in those definitions, while maintaining objective and measurable status determination criteria for identifying when stocks or stock complexes covered by the FMP are overfished. It establishes acceptable categories of peer-review for stock status determination criteria. When these specific peer-review metrics are met and new or updated information is available, the new or revised stock status determination criteria may be incorporated by the Commission directly into the annual management measures for each species.

Addendum XX sets policies to reconcile quotas overages to address minor inadvertent quota overages. It was approved in November 2009. It streamlines the quota transfers process and establishes clear policies and administrative protocols to guide the allocation of transfers from states with underages to states with overages. It also allows for quota transfers to reconcile quota overages after year's end.

II. Status of the Stock

The assessment model for black sea bass changed in 2008 from a simple index-based model to a complex statistical catch at length model incorporating a broad range of fishery and survey data. The fishery catch is modeled as a single fleet with indices of stock abundance from NEFSC winter, spring, and autumn surveys. A model averaging approach was adopted using the average

of results from ten candidate models. There appears to be some consistent retrospective bias in F and SSB estimates but less so in recruitment.

Recruitment at age 1 averaged 26.4 million fish during 1968-1999 and in 2000, peaked at 56.0 million fish. The 2000 and 2002 year classes are estimated to be the largest of the time series, at 56.0 and 39.3 million age 1 fish. With greatly improved recruitment and declining fishing mortality rates since 2000, SSB has steadily increased since to about 11,158 mt in 2011. The inter-model variation bounds the biological reference point and suggests that black sea bass has reached or exceeded SSB_{MSY}.

The new reference points are $F_{MSY} = F_{40\%} = 0.44$ and $SSB_{MSY} = SSB_{40\%} = 10{,}886$ mt = 24 million lbs. The stock biomass threshold of ½ SSB_{MSY} = ½ $SSB_{40\%}$ = 5,443 mt = 12 million lbs. The current F is 0.21 and SSB is 24.6 million lbs, therefore overfishing is not occurring and the stock is rebuilt.

III. Status of the Fishery

The commercial fishery is allocated 49% of the total allowable landings (TAL) for black sea bass. The principle gears used in the fishery are pots, otter trawl and handline. After peaking at 218 million pounds in 1952, commercial landings markedly decreased in the '60s and have since ranged from 1.3 to 4.4 million pounds. From 1988 to 1997 landings averaged 2.86 million pounds. In 1998 a quota system was incorporated into management and state-by-state share were introduced in 2003, since 1998 landings have ranged from 2.86 to 3.53 million pounds with a decrease in landings in 2009, 2010, and 2011, followed by an increase to 5.3 million pounds in 2012(Table 2 and 3). Commercial discards are generally less than 441,000 pounds per year.

The recreational fishery is allocated 51% of the TAL for black sea bass. After peaking in 1985 at 12.35 million pounds, recreational harvest averaged 3.75 million pounds annually from 1988 to 1997. Recreational harvest limits were put in place in 1998 and harvest ranged from 1.1 to 4.4 million pounds from 1998 to 2012 (Table 4). Recreational discard are somewhat higher than commercial ranging from 220,500 to 1,764,000 pounds per year.

IV. Status of Research and Monitoring

Commercial landings information is collected by the Vessel Trip Reporting system and dealer reports. States are also required to collect and report landings data. Sea sampling data from the NEFSC sea sampling program are used to estimate discards. The NEFSC weigh-out program provides commercial age and length information. Recreational landings and discards were estimated through the Marine Recreational Fisheries Statistics Survey until 2008, with the Marine Recreational Information Program (MRIP) replacing it for all data collected from 2008 to present.

Fishery-independent surveys are conducted in Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Maryland, Virginia, and North Carolina. The Virginia Game Fish Tagging Program has targeted black sea bass since 1997. Data from the tagging program will be used to develop an analytical, age-based model. Recruitment and stock abundance data are provided by the NEFSC spring, autumn, and winter trawl surveys.

V. Status of Assessment Advice

The new reference points and stock status determinations should be used with caution due to the uncertainty in the natural mortality estimate, the model input parameters, residuals patterns in model fit, and significant uncertainty associated with managing a protogynous species (i.e. individuals change sex from female to male)

The next assessment update will be in fall of 2014.

VI. Status of Management Measures and Developing Issues

Currently there are no developing black sea bass FMPs.

VII. Black Sea Bass Compliance Criteria

2012 Commercial Fishery Requirements

Minimum size of possession: 11”
Minimum mesh: larger nets are required to possess a minimum of 75 meshes of 4.5” diamond mesh in the codend or the entire net must have a minimum mesh size of 4.5” throughout; smaller nets must have 4.5" mesh or larger throughout
Mesh Threshold: 500 lbs for January-March and 100 lbs for April-December
Maximum roller rig trawl roller diameter: 18”
Pot and trap escape vents: 2 ½” for circular, 2" for square, and 1-3/8 x 5-3/4" for rectangular. Must be 2 vents in the parlor portion of the trap
Pot and trap degradable fastener provisions: a) untreated hemp, jute, or cotton string 3/16” (4.8 mm) or smaller; b) magnesium alloy timed float releases or fasteners; c) ungalvanized, uncoated iron wire of 0.094” (2.4mm) or smaller. The opening covered by a panel affixed with degradable fasteners would be required to be at least 3” x 6”.
Commercial quota: 1.71 million pounds
Pot and trap definition: A black sea bass pot or trap is defined as any pot or trap used by a fisherman to catch and retain black sea bass.

2013 Recreational Fishery Requirements

See Table 6.
Recreational harvest limit: 1.85 million pounds

Other Measures

Reporting: States are required to submit an annual compliance report to the Chair of the Black Sea Bass Plan Review Team by June 1st. The report must detail the state’s management program for the current year and establish proof of compliance with all mandatory management measures. It should include landings information from the previous year, and the results of any monitoring or research programs.

This summary of compliance criteria is intended to serve as a quick reference guide. It in no way alters or supersedes compliance criteria as contained in the Black Sea Bass FMP and any Amendments thereto. Also please note that the management measures may change annually.

VII. Compliance

States and jurisdictions required to comply with the provisions of the Black Sea Bass FMP are: Massachusetts**,** Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Potomac River Fisheries Commission, Virginia, and North Carolina. All states implemented regulations in compliance with the requirements approved by the Board.

All states appear in compliance with the FMP provisions for fishing year 2012.

Black Sea Bass FMP Compliance Schedule

Commercial

9" Size Limit	1/1/97
10" Size Limit	1/1/98
11" Size Limit	1/1/02
Minimum mesh and threshold provisions	1/1/02
Pot and trap escape vents and degradable fasteners	1/1/97
Roller diameter restriction	1/1/97
States must report to NMFS all landings from state waters	1/1/98

Recreational

Size Limit	1/1/97
Harvest Limit	1/1/98
Ability to implement possession limits and seasonal closures	1/1/98

General

Annual compliance report	Annually, 7/1

VIII. Recommendations

Table 1. State by state allocation for annual quota.

State	% Allocation
Maine	0.50%
New Hampshire	0.50%
Massachusetts	13%
Rhode Island	11%
Connecticut	1%
New York	7%
New Jersey	20%
Delaware	5%
Maryland	11%
Virginia	20%
North Carolina	11%

Table 2. Black Sea Bass Commercial Landings by State (2002-2012) in thousands of pounds.

Source: National Marine Fisheries Service Commercial Landings Data (7/18/2013)

State	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MA	962,312	415,077	382,389	510,162	596,480	442,136	316,722	148,470	260,181	287,666	248,463
RI	341,508	368,301	435,733	293,976	273,161	356,542	226,925	128,053	241,892	185,709	187,806
CT	29,863	22,376	24,867	17,522	10,445	10,123	15,554	17,854	21,422	20,485	
NY	287,231	227,381	240,517	244,074	315,700	270,392	201,887	123,806	201,717	183,423	153,173
NJ	620,153	667,989	697,085	543,733	494,352	480,112	424,667	204,213	305,294	293,609	310,427
DE	12,414	97,535	83,728	72,931	87,381	63,431	60,700	5,843	2,989	3,524	81,976
MD	279,889	312,903	283,605	336,662	350,385	170,909	159,453	125,643	203,088	182,711	140,861
VA	771,401	507,149	498,204	475,356	327,281	189,396	215,390	164,389	263,565	274,699	4,111,708
NC*	591,857	850,562	881,261	690,043	777,659	472,931	484,507	614,734	400,879	272,189	61,187
Coastwide	3,896,628	3,469,273	3,527,725	3,184,459	3,232,844	2,455,972	2,105,805	1,533,005	1,901,027	1,704,015	5,295,601

** Landings are from both north and south of Hatteras*

Table 3. 2012 Commercial Allocation and Landings in pounds

State	2012 ASMFC Quota (including transfer)	2012 Landed (as of July 2013)	2013 ASMFC Quota
ME	8,536		8,900
NH	8,536		8,900
MA	221,936	248,463	231,400
RI	187,931	187,806	195,800
CT	17,072	17,677	17,800
NY	119,504	153,173	124,600
NJ	341,440	310,427	356,000
DE	85,360	81,976	89,000
MD	187,792	140,861	195,800
VA	460,541	411,708	356,000
NC	68,552	61,187	195,800
Coastwide	1,707,200	1,613,278	1,780,000

Table 4. Black Sea Bass Recreational Landings by State (2002-2012) in thousands of pounds.

Source: National Marine Fisheries Service MRFSS Online Query (2001-2003); MRIP (2004-present)

State	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MA	365,060	146,990	81,519	337,112	161,388	190,363	330,562	445,122	702,138	194,752	519,910
RI	132,322	74,877	79,926	39,700	67,194	81,912	83,047	48,071	160,427	50,203	102,548
CT	29,096	7,948	24,517	161	5,392	2,985	36,766	465	15,682	8,378	110,858
NY	587,579	375,657	143,899	312,398	401,464	433,867	364,793	711,568	543,243	274,473	321,516
NJ	1,877,455	1,726,003	1,065,920	898,505	921,265	1,237,777	572,508	821,703	687,451	148,487	107,650
DE	636,261	278,172	59,152	71,275	121,048	110,316	30,029	52,441	21,028	42,961	40,141
MD	484,659	265,996	155,722	85,715	118,940	68,852	48,071	35,703	36,018	47,445	33,080
VA	211,659	390,424	63,836	120,554	157,117	90,966	79,868	180,927	29,718	18,964	4,076
NC*	118,219	182,594	274,340	229,893	151,075	196,134	90,977	145,208	138,961	95,004	75,638
Coastwide	4,442,310	3,448,661	1,948,831	2,095,313	2,104,883	2,413,172	1,636,621	2,441,162	2,704,231	1,122,368	2,162,986

*NC harvest is reported for the full coast, therefore it will also include landing south of Hatteras which is outside of the management unit.

Table 5. 2012 recreational management measures for black sea bass by state.

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	14	10 fish	May 22-June 24
		20 fish	June 25-October 31
Rhode Island	13	15 fish	June 15-December 31
Connecticut	13	15 fish	June 15-December 31
New York	13	15 fish	June 15-December 31
New Jersey	12.5	25 fish	May 19 to October 14 and November 1 to December 31
Delaware	12.5	25 fish	May 19 to October 14 and November 1 to December 31
Maryland	12.5	25 fish	May 19 to October 14 and November 1 to December 31
PRFC	12.5	25 fish	May 19 to October 14 and November 1 to December 31
Virginia	12.5	25 fish	May 19 to October 14 and November 1 to December 31
North Carolina (North of Cape Hatterass 35° 15'N Latitude)	12.5	25 fish	May 19 to October 14 and November 1 to December 31

Table 6. 2013 recreational management measures for black sea bass by state.

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts (Private and For-hire)	14	4 fish	May 11- October 31
Massachusetts (For-hire with Letter of Authorization from MA DMF)	14	10 fish	May 11- June 14
		20 fish	July 1- August 11 September 1- October 10
Rhode Island	13	3 fish	June 15- August 31
		7 fish	September 1- December 31
Connecticut (Private and Shore)	13	3 fish	June 15- August 31
		8 fish	September 1- October 29
For-hire*		8 fish	June 15-November 30
New York	13	8 fish	July 10- December 31
New Jersey	12.5	20 fish	May 19- August 8; September 27- October 14; November 1- December 31
Delaware	12.5	15 fish	January 1- February 28
		20 fish	May 19 - October 14 and November 1 - December 31
Maryland	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31
PRFC	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31
Virginia	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31
North Carolina (North of Cape Hatterass 35° 15'N Latitude)	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31

*Party/Charter Vessels enrolled In Monitoring Program