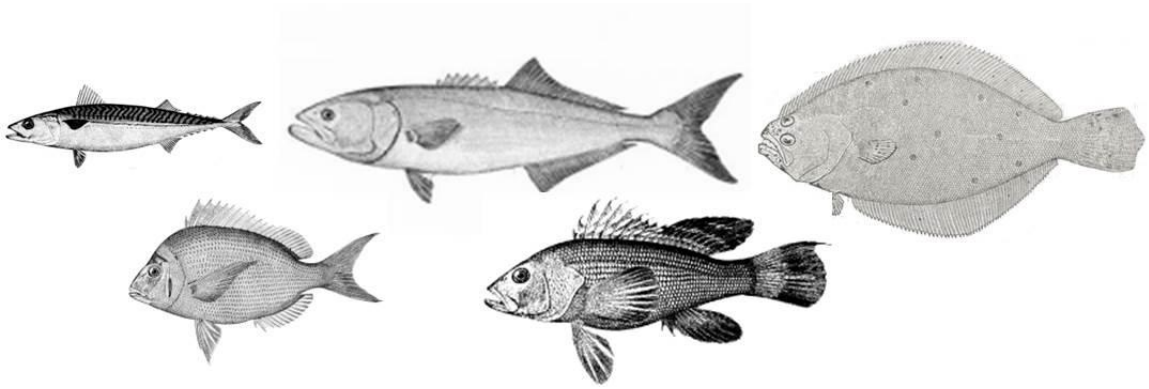
OMNIBUS RECREATIONAL ACCOUNTABILITY MEASURE AMENDMENT

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

Draft adopted by MAFMC: 10 APRIL 2013
Final adopted by MAFMC: 12 JUNE 2013
Draft submitted to NOAA: 19 JUNE 2013
Final approved by NOAA:

A Publication of the Mid-Atlantic Fishery Management Council pursuant to National Oceanic and Atmospheric Administration Award No. NA 10 NMF 4410009

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

		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4C <u>Preferred</u> With Council change and Incorporating 2C	**$B/B_{MSY} > 1$**	**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**	**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.

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

		$C_R > ACL_R < ABC$	$C_R > ACL_R, C_{R+C} > ABC$	$C_R > ACL_R, C_{R+C} > OFL$
Alt 5B	$B/B_{MSY} > 1$	0	0	$O_R/O_{R+C} * C_{R+C} - OFL$
	$1 > B/B_{MSY} > ½$	0	$O_R/O_{R+C} * C_{R+C} - ABC$	$O_R/O_{R+C} * C_{R+C} - ABC$
	$½ > B/B_{MSY}$	$C_R - ACL_R$	$C_R - ACL_R$	$C_R - ACL_R$

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

3.0 TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY II

2.0 LIST OF ACRONYMS XXI

3.0 TABLE OF CONTENTS 1

3.1 LIST OF TABLES 3
3.2 LIST OF FIGURES 3

ENVIRONMENTAL ASSESSMENT 5

4.0 INTRODUCTION AND PURPOSE AND NEED 5

4.1 INTRODUCTION 5

UNDERSTANDING ESTIMATES AND UNCERTAINTY 7

4.2 THE AFFECTED RECREATIONAL FISHERIES 11
4.3 PURPOSE AND NEED FOR ACTION 11

5.0 MANAGEMENT ALTERNATIVES 12

5.1 NO ACTION 12
5.2 PROACTIVE ACCOUNTABILITY MEASURES 12

6.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT AND FISHERIES 42

6.1 DESCRIPTION OF THE MANAGED RESOURCES 42
6.1.1 Existing Accountability Measures *43*
**Estimate may change with subsequent MRIP updates.* *44*
*** Rec ACL does not apply to Atl. mackerel or bluefish - for those species, the RHL is listed.* *44*
6.1.2 Stock Status *45*
6.1.3 Description of Stock Characteristics and Ecological Relationships *46*
6.2 NON-TARGET SPECIES 47
6.3 HABITAT (INCLUDING ESSENTIAL FISH HABITAT) 48
6.4 ENDANGERED AND PROTECTED RESOURCES 48
6.5 HUMAN COMMUNITIES AND ECONOMIC ENVIRONMENT 50
6.5.1 Description of the Fisheries *50*

7.0 ENVIRONMENTAL CONSEQUENCES AND REGULATORY ECONOMIC EVALUATION OF ALTERNATIVES 53

7.1 ACT ALTERNATIVES 53
7.2 IN SEASON CLOSURE ALTERNATIVES 54
7.4 MANAGEMENT RESPONSE ALTERNATIVES 56
7.5 PAYBACK CALCULATION ALTERNATIVES 57
7.6 ACL/ACT POST HOC EVALUATION ALTERNATIVES 58
7.7 Magnitude and Significance of Cumulative Effects *60*
7.7.1 Consideration of the VECs *60*
7.7.2 Geographic Boundaries *60*
7.7.3 Temporal Boundaries *60*
7.7.4 Actions Other Than Those Proposed in this Amendment *60*
7.7.5 Magnitude and Significance of Cumulative Effects *62*
7.7.5.1 Managed Resources 66
7.7.5.2 Non-Target Species or Bycatch 68
7.7.5.3 Human Communities 70
7.7.6 Preferred Action on all the VECS *72*

8.0 APPLICABLE LAWS 73

8.1 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT (MSA) AND NATIONAL STANDARDS 73

8.2 NEPA (FONSI) ... 74
8.3 ENDANGERED SPECIES ACT ... 78
8.4 MARINE MAMMAL PROTECTION ACT ... 78
8.5 COASTAL ZONE MANAGEMENT ACT ... 79
8.6 ADMINISTRATIVE PROCEDURE ACT ... 79
8.8 PAPERWORK REDUCTION ACT (PRA) ... 81
8.9 IMPACTS OF THE PLAN RELATIVE TO FEDERALISM/EO 13132 ... 81
8.10 ENVIRONMENTAL JUSTICE/EO 12898 ... 81
8.11 REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS ... 81
8.11.1 Basis and Purpose for the Action ... 82
8.11 REGULATORY FLEXIBILITY ANALYSIS (RFA/IRFA) ... 82
8.11.2 Evaluation of E.O 12866 Significance ... 82
8.11.2.1 Description of the Management Objectives ... 82
8.11.2.2 Description of the Fishery ... 82
8.11.2.3 A Statement of the Problem ... 82
8.11.2.4 A Description of Each Alternative ... 83
8.11.2.5 Determination of Significance under E.O. 12866 ... 83
8.11.3 Initial Regulatory Flexibility Analysis ... 84
8.11.3.1 Description and Estimate of Number of Small Entities to Which the Action Applies ... 85
8.11.3.2 Economic Impacts on Small Entities ... 85
8.11.3.2.1 Accountability Measures ... 85
8.11.3.3 Criteria Used to Evaluate the Action ... 85
8.11.3.3.1 Significant Economic Impacts ... 85
8.11.3.3.1.1 Disproportionality ... 85
8.11.3.3.1.2 Profitability ... 86
8.11.3.4 Substantial Number of Small Entities ... 86
8.11.3.5 Description of and Explanation of, the Basis for All Assumptions Used ... 86

9.0 EFH ASSESSMENT ... 86

9.1 DESCRIPTION OF ACTION ... 86
9.2 ANALYSIS OF POTENTIAL ADVERSE EFFECTS ON EFH ... 86

10.0 LITERATURE CITED ... 87

11.0 LIST OF PREPARERS OF THE ENVIRONMENTAL ASSESSMENT ... 91

12.0 LIST OF AGENCIES AND PERSONS CONSULTED ... 91

GLOSSARY ... 92

3.1 LIST OF TABLES

TABLE 1. PROCESS BY WHICH REACTIVE ACCOUNTABILITY MEASURES WILL BE APPLIED CONDITIONAL ON STOCK STATUS AND THE THRESHOLD THAT WAS EXCEEDED. XIII
TABLE 2. PROCESS BY WHICH THE OVERAGE PAYBACK WILL BE CALCULATED CONDITIONAL ON STOCK STATUS AND THE THRESHOLD THAT WAS EXCEEDED. XIX
TABLE 3. AVERAGE PSE (2003-2012) FOR LANDINGS ESTIMATES FOR RECREATIONAL SPECIES AFFECTED BY THIS AMENDMENT. 11
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. 20
TABLE 5. PROCESS BY WHICH REACTIVE ACCOUNTABILITY MEASURES WILL BE APPLIED CONDITIONAL ON STOCK STATUS AND THE THRESHOLD THAT WAS EXCEEDED. 31
TABLE 6. PROCEDURES FOR ESTABLISHING SUMMER FLOUNDER RECREATIONAL MANAGEMENT MEASURES UNDER CONSERVATION EQUIVALENCY. 36
TABLE 7. PROCESS BY WHICH THE OVERAGE PAYBACK WILL BE CALCULATED CONDITIONAL ON STOCK STATUS AND THE THRESHOLD THAT WAS EXCEEDED. 38
TABLE 8. EXAMPLE OF PAYBACK CALCULATION USING BLACK SEA BASS OVERAGE FOR 2012 THAT WOULD AFFECT ACT IN 2014. 39
TABLE 9. CATCH LEVELS AND THRESHOLDS IN 2012 ASSOCIATED WITH THE FIVE RECREATIONAL FISHERIES ADDRESSED IN THIS AMENDMENT. ALL VALUES ARE IN M LB. 44
TABLE 10. STOCK STATUS BASED ON NMFS FOURTH QUARTER STATUS OF STOCKS REPORT TO CONGRESS. 45
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. 49
TABLE 12. THE TOTAL NUMBER OF ANGLER TRIPS TAKEN FROM MAINE THROUGH FLORIDA'S EAST COAST BY FISHING MODE IN 2012. 51
TABLE 13. AVERAGE NOMINAL DAILY TRIP EXPENDITURES BY RECREATIONAL FISHERMEN IN THE NORTHEAST REGION BY MODE IN 2006. 52
TABLE 14. INDIRECT IMPACTS ON VALUED ECOSYSTEM COMPONENTS 59
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). 63
TABLE 16. SUMMARY OF THE EFFECTS OF PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS ON THE MANAGED RESOURCE. 67
TABLE 17. SUMMARY OF THE EFFECTS OF PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS ON THE NON-TARGET SPECIES. 69
TABLE 18. SUMMARY OF THE EFFECTS OF PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS ON HUMAN COMMUNITIES. 71
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. 72

3.2 LIST OF FIGURES

FIGURE 1. TIME SERIES OF RECREATIONAL LANDINGS FOR SUMMER FLOUNDER (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. 6
FIGURE 2. A GRAPHIC THAT BRIEFLY ADDRESSES THE INFORMATION PROVIDED IN A RECREATIONAL CATCH ESTIMATE. 8
FIGURE 3. INTERRELATED SOURCES OF UNCERTAINTY ASSOCIATED WITH RECREATIONAL PAYBACKS. 10
FIGURE 4. PROCESS FOR DETERMINING ATLANTIC MACKEREL ACTS AND OTHER CATCH LIMITS. 14
FIGURE 5. PROCESS FOR DETERMINING ATLANTIC BLUEFISH ACTS AND OTHER CATCH LIMITS. 15

FIGURE 6. PROCESS FOR DETERMINING SUMMER FLOUNDER ACTS AND OTHER CATCH LIMITS. THIS PROCESS ALSO APPLIES TO SCUP AND BLACK SEA BASS. 16
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. 20

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.

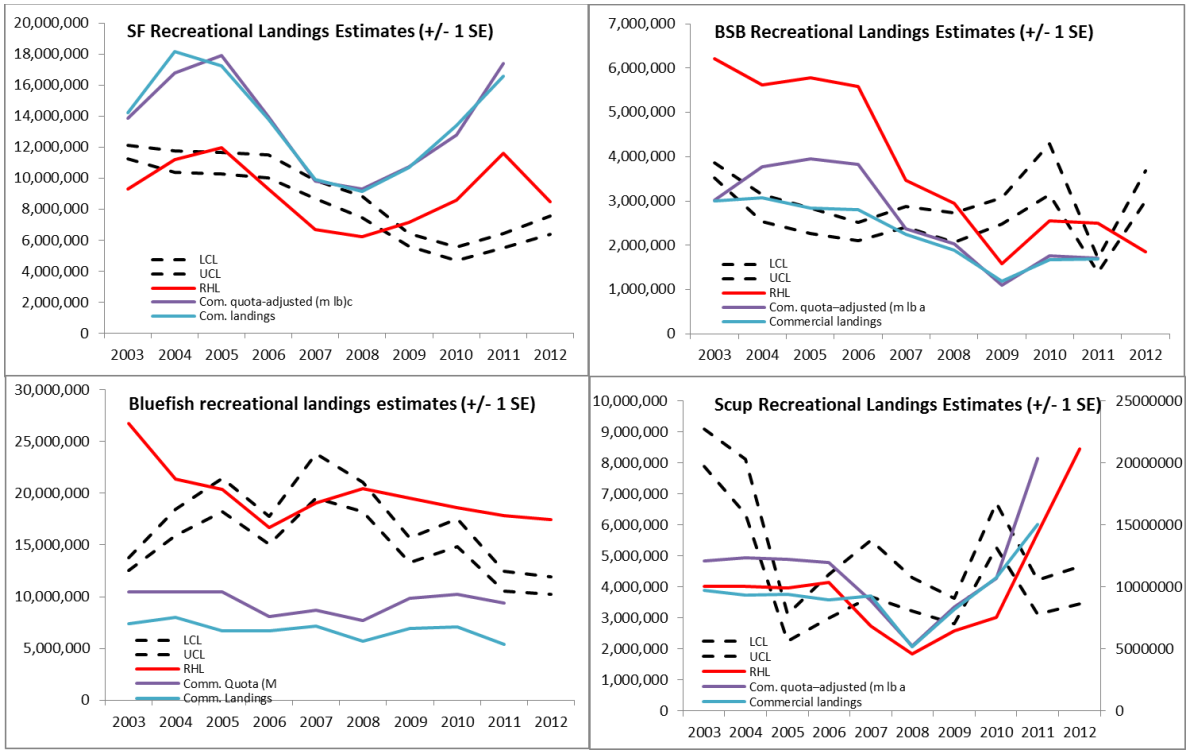


Figure 1. Time series of recreational landings for summer flounder ("SF" top left), black sea bass ("BSB" top right), bluefish (bottom left) and scup (bottom right) relative to established recreational harvest limits for the past ten years (2003-2012). Shown for comparison is the time series of commercial 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.

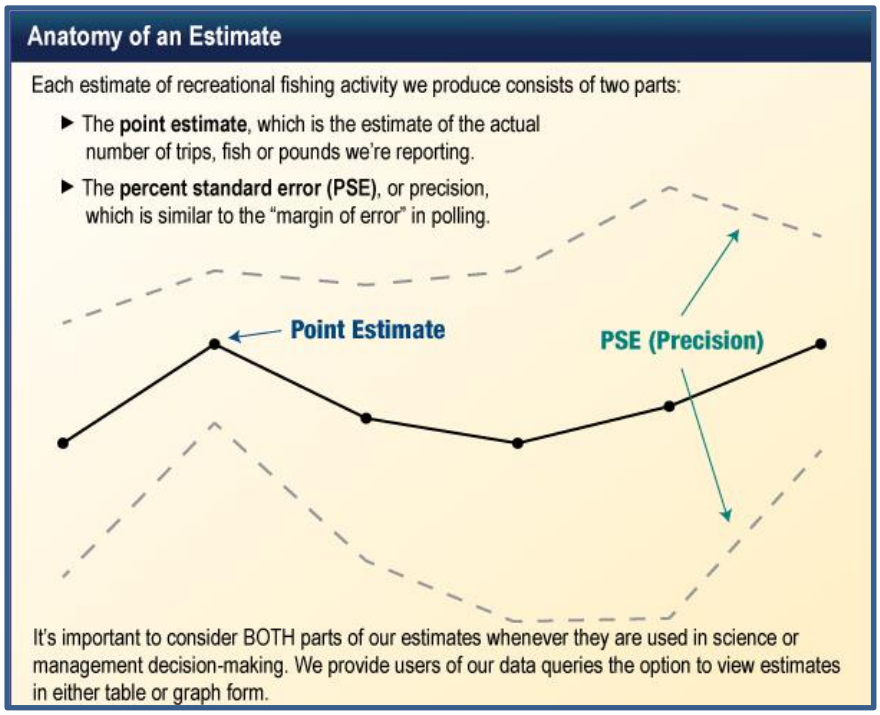


Figure 2. A graphic that briefly addresses the information provided in a recreational catch estimate.

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.

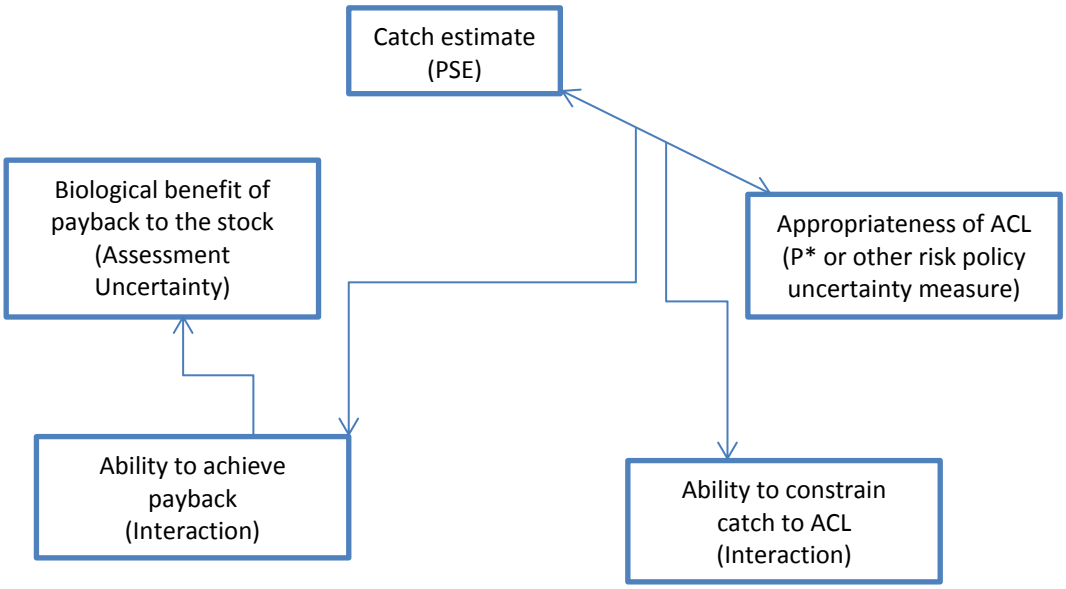


Figure 3. Interrelated sources of uncertainty associated with recreational paybacks.

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.

Intentionally Left Blank

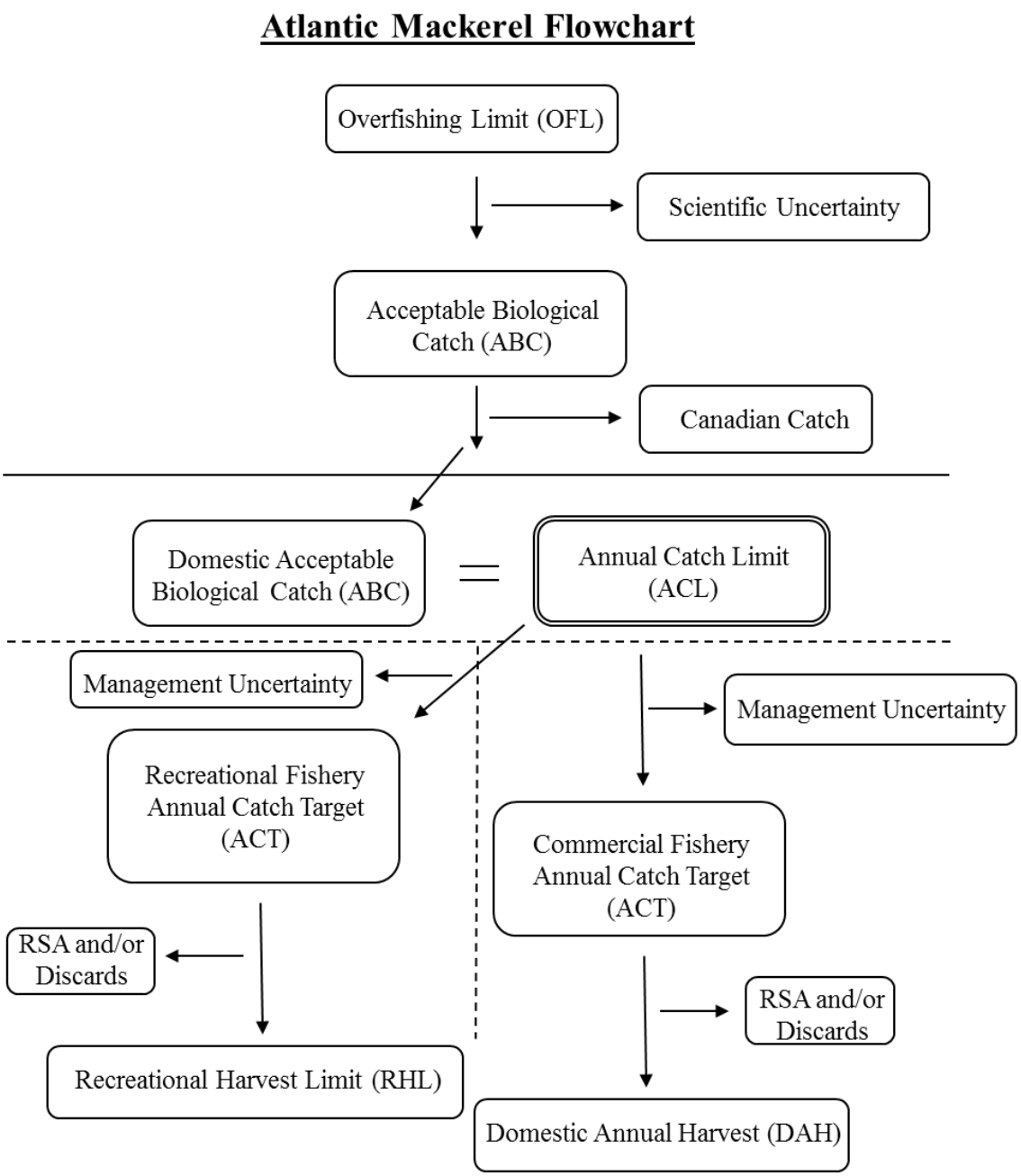


Figure 4. Process for determining Atlantic mackerel ACTs and other catch limits.

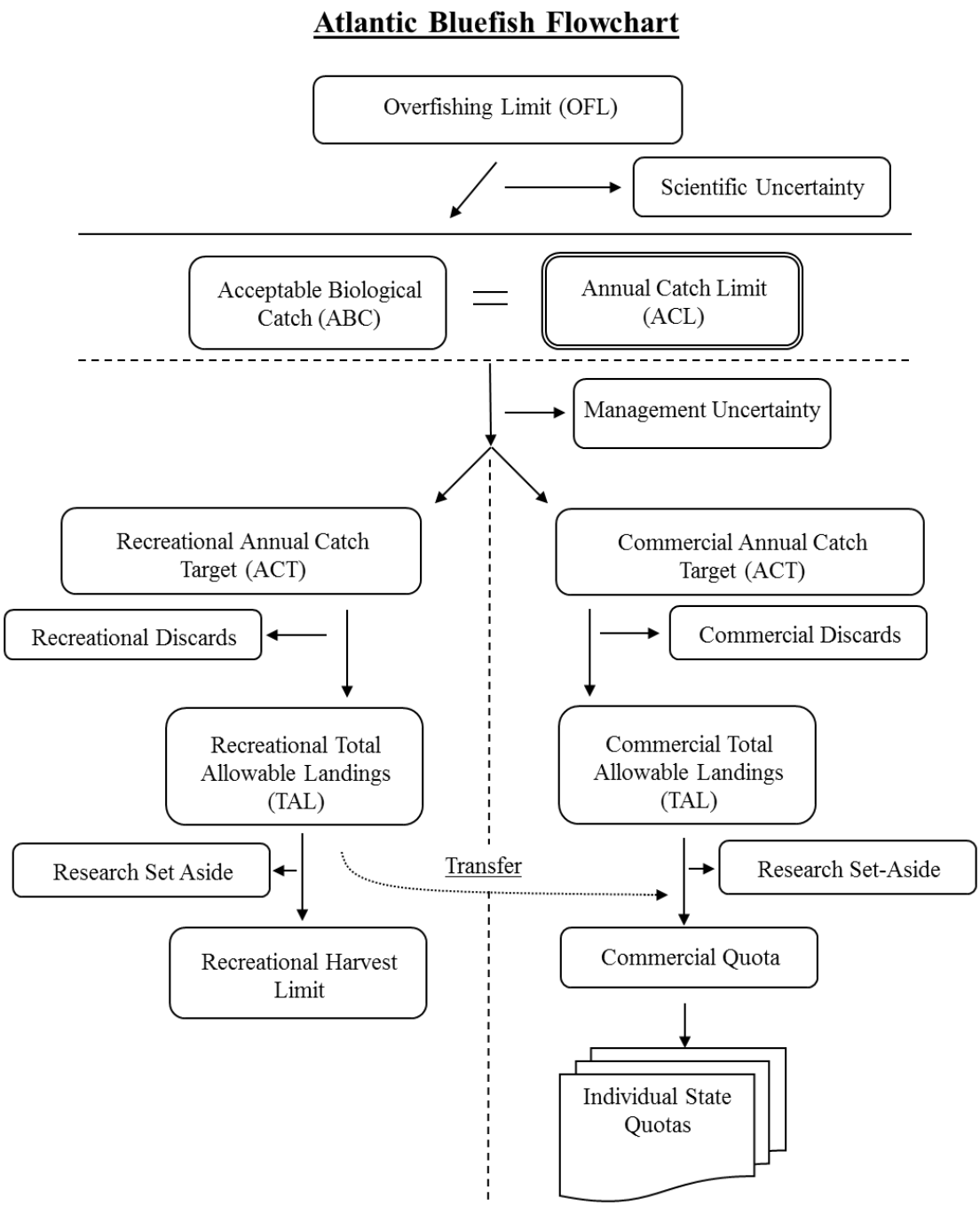


Figure 5. Process for determining Atlantic bluefish ACTs and other catch limits.

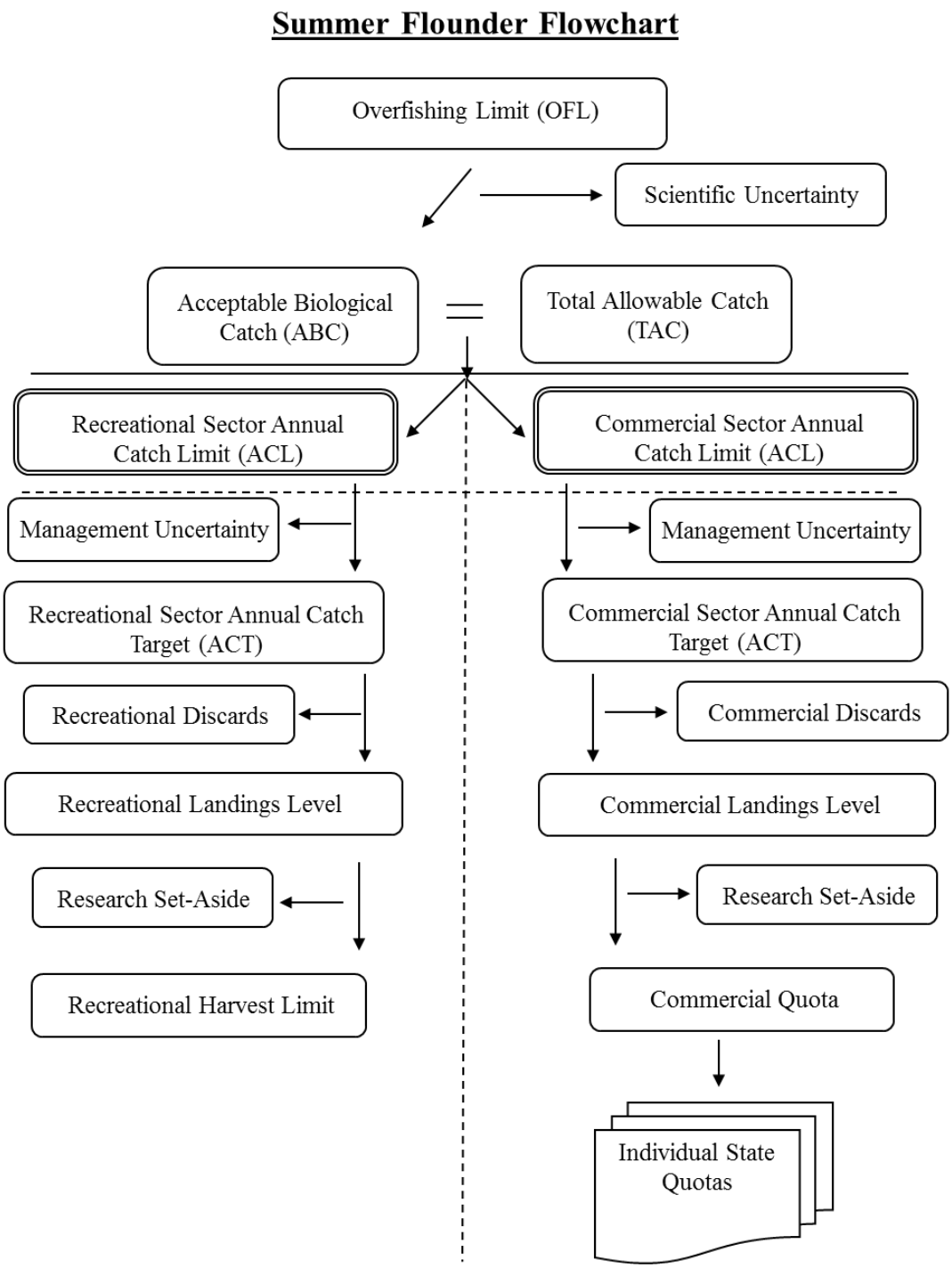


Figure 6. Process for determining summer flounder ACTs and other catch limits. This process also applies to scup and black sea bass.

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.

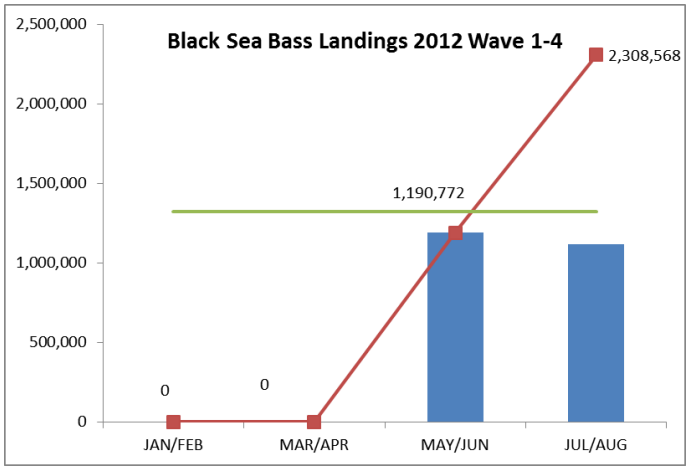


Figure 7. Black sea bass landings by wave in 2012. Under Alternative 2B, a projection of landings based on the increase from wave 2 to wave 3 could have resulted closure of the fishery in wave 4.

Alternative 2C. <u>Preferred</u>. 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 <u>and shall consider whether</u>*

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		
		$C_R > ACL_R$, $C_{R+C} < ABC$	$C_R > ACL_R$, $C_{R+C} > ABC$, $C_{R+C} < OFL$	$C_R > ACL_R$, $C_{R+C} > OFL$
Alt 4C With Council change and Incorporating 2C	$B/B_{MSY} > 1$	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. <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 Alternative 6B in the future.

Alternative 6B. ACL/ACT Post Hoc Evaluation. *<u>The ACL/ACT that was set for a given fishing year is re-evaluated based on an updated assessment.</u>* (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	Unknown	Unknown	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
	Loggerhead[1]	*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
	Scalloped hammerhead	*Sphyrna lewini*	Candidate

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

Two species (cusk, 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. 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. 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 insignificant 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 and were found to be insignificant. 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 insignificant 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: 11/18/13

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. A review of the subject fisheries concluded that the continuation summer flounder, scup, black sea bass, Atlantic bluefish, and Atlantic mackerel recreational fisheries, until such time as a final Biological Opinion for Atlantic sturgeon could be completed, would not jeopardize the continued existence of any DPS. In the final Biological Opinion, an additional evaluation will be included to describe any impacts of these fisheries on Atlantic sturgeon, and define any measures needed to mitigate those impacts, if necessary.

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/ 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/RFA)

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 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 standard of $7 million for charter/party vessels.

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

[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.

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

8.11.3.3.1.2 Profitability

As noted above, none of the elements of this proposed action are associated with economic impacts on small entities. This is the case for 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).

10.0 LITERATURE CITED

(Literature cited in the appendices only can be found in the respective appendix).

ASMFC TC (Atlantic States Marine Fisheries Commission Technical Committee). 2007. Special Report to the Atlantic Sturgeon Management Board: Estimation of Atlantic sturgeon bycatch in coastal Atlantic commercial fisheries of New England and the Mid-Atlantic. August 2007. 95 pp.

ASSRT (Atlantic Sturgeon Status Review Team). 2007. Status review of Atlantic sturgeon (Acipenser oxyrinchus oxyrinchus). National Marine Fisheries Service. February 23, 2007. 188 pp.

Bass, R.E., A.I. Herson, and K.M. Bogdan. 2001. The NEPA book: A step-by-step guide on how to comply with the National Environmental Policy Act, 2nd ed. Solano Press Books, Point Arena, CA, 475 pp.

Beanlands, G.E., and P. N. Duinker. 1984. Ecological framework adjustment for environmental impact assessment. Journal of Environmental Management. 8:3

Braun-McNeill, J., and S.P. Epperly. 2004. Spatial and temporal distribution of sea turtles in the western North Atlantic and the U.S. Gulf of Mexico from Marine Recreational Fishery Statistics Survey (MRFSS). Mar. Fish. Rev. 64(4):50-56.

Cargnelli, L., S. Griesbach, D. Packer, and E. Weissberger. 1999a. Essential Fish Habitat Source Document: Atlantic Surfclam, Spisula solidissima, Life History and Habitat Characteristics. NOAA Tech. Memo. NMFS-NE-142.

Cargnelli, L.,S. Griesbach, D. Packer, and E. Weissberger. 1999b. Essential Fish Habitat Source Document: Ocean Quahog, Arctica islandica, Life History and Habitat Characteristics. NOAA Tech. Memo. NMFS-NE-148.

CEQ 1997. Considering Cumulative Effects Under the National Environmental Policy Act. Council on Environmental Quality. Executive Office of the President. January 1997. 129 pp.

Cross JN, Zetlin CA, Berrien PL, Johnson DL, McBride C. 1999. Essential fish habitat source document: Butterfish, *Peprilus triacanthus*, life history and habitat characteristics. NOAA Tech Memo NMFS NE 145; 42 p.

Dadswell, M. 2006. A review of the status of Atlantic sturgeon in Canada, with comparisons to populations in the United States and Europe. Fisheries 31: 218-229.

Drohan AF, Manderson JP, Packer DB. 2007. Essential fish habitat source document: Black sea bass, *Centropristis striata*, life history and habitat characteristics, 2nd edition. NOAA Tech Memo NMFS NE 200; 68 p.

Dovel, W. L. and T. J. Berggren. 1983. Atlantic sturgeon of the Hudson River estuary, New York. New York Fish and Game Journal 30: 140-172.

Dunton, K.J., A. Jordaan, K.A. McKown, D.O. Conover, and M.G. Frisk. 2010. Abundance and distribution of Atlantic sturgeon (Acipenser oxyrinchus) within the Northwest Atlantic Ocean determined from five fishery-independent surveys. Fish. Bull. 108:450-465.

Gentner, B. and S.Steinback. 2008. The economic contribution of marine angler expenditures in the United States, 2006. U.S. Dep. Commerce, NOAA Technical Memo. NMFS-F/SPO-94, 301 p.

Holland, B.F., Jr., and G.F. Yelverton. 1973. Distribution and biological studies of anadromous fishes offshore North Carolina. Division of Commercial and Sports Fisheries, North Carolina Dept. of Natural and Economic Resources, Special Scientific Report No. 24. 130pp.

Freeman, B.L. and S.C. Turner. 1977. Biological and fisheries data on tilefish, *Lopholatilus chamaeleonticeps* Goode and Bean. U.S. Natl. Mar. Fish. Serv., Northeast Fisheries Sci. Cent. Sandy Hook Lab. Tech. Ser. Rep. No. 5. 41 p.

James, M.C., R.A. Myers, and C.A. Ottenmeyer. 2005a. Behaviour of leatherback sea turtles, *Dermochelys coriacea*, during the migratory cycle. Proc. R. Soc. B, 272: 1547-1555.

Katona, S.K., V. Rough, and D.T. Richardson. 1993. A field guide to whales, porpoises, and seals from Cape Cod to Newfoundland. Smithsonian Institution Press, Washington, D.C. 316pp.

Keinath, J.A., J.A. Musick, and R.A. Byles. 1987. Aspects of the biology of Virginia's sea turtles: 1979-1986. Virginia J. Sci. 38(4): 329-336.

Kynard, B. and M. Horgan. 2002. Ontogenetic behavior and migration of Atlantic sturgeon, Acipenser oxyrinchus oxyrinchus, and shortnose sturgeon, A. brevirostrum, with notes on social behavior. Environmental Behavior of Fishes 63: 137-150.

Laney, R.W., J.E. Hightower, B.R. Versak, M.F. Mangold, W.W. Cole Jr., and S.E. Winslow. 2007. Distribution, habitat use, and size of Atlantic sturgeon captured during cooperative winter tagging cruises, 1988-2006. In Anadromous sturgeons: habitats, threats, and management (J. Munro, D. Hatin, J.E. Hightower, K. McKown, K.J. Sulak, A.W. Kahnle, and F. Caron (eds.)), p. 167-182. Am. Fish. Soc. Symp. 56, Bethesda, MD.

MAFMC. 1999. Amendment 1 to the Bluefish Fishery Management Plan. Dover, DE. 408 p. + append.

MAFMC. 1999. Spiny Dogfish Fishery Management Plan. Dover, DE. 494 p. + append.

MAFMC. 2000. Tilefish Fishery Management Plan. Dover, DE. 443 p. + appends.

MAFMC. 2002. Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan. Dover, DE. 552 p. + append.
MAFMC. 2003. Amendment 13 to the Atlantic Surfclam and Ocean Quahog Fishery Management Plan. Dover, DE. 344 p. + append.

MAFMC. 2004. Bluefish Specifications, Environmental Assessment, Regulatory Impact Review, and Initial Regulatory Flexibility Analysis. Dover, DE. 108 p. + append.

MAFMC. 2008. Amendment 9 to the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan. Dover, DE. 415 p. + append.

MAFMC. 2009. Amendment 1 to the Tilefish Fishery Management Plan. Dover, DE. 496 p. + append.

MAFMC. 2011. Omnibus Annual Catch Limit and Accountability Measure Amendment. Dover, DE. 238 p. + append.

Morreale, S.J. and E.A. Standora. 1998. Early life stage ecology of sea turtles in northeastern U.S. waters. U.S. Dep. Commer. NOAA Tech. Mem. NMFS-SEFSC-413, 49 pp.

Morreale, S.J. and E.A. Standora. 2005. Western North Atlantic waters: Crucial developmental habitat for Kemp's ridley and loggerhead sea turtles. Chel. Conserv. Biol. 4(4):872-882.

Murray K.T. 2006. Estimated Average Annual Bycatch of Loggerhead Sea Turtles (*Caretta caretta*) in U.S. Mid-Atlantic Bottom Otter Trawl Gear, 1996-2004. U.S. Dep. Commer., Northeast Fish. Sci. Cent. Ref. Doc. 06-19; 26 p.

Murray K.T. 2007. Estimated bycatch of loggerhead sea turtles (Caretta caretta) in U.S. Mid-Atlantic scallop trawl gear, 2004-2005, and in sea scallop dredge gear, 2005. U.S. Dep. Commer., Northeast Fish. Sci. Cent. Ref. Doc. 07-04; 30 p.

Murray K.T. 2008. Estimated average annual bycatch of loggerhead sea turtles (Caretta caretta) in U.S. Mid-Atlantic bottom otter trawl gear, 1996-2004 (Second Edition). US Dept Commer, Northeast Fish Sci Cent Ref Doc. 08-20; 32p.

Murray K.T. 2009. Proration of estimated bycatch of loggerhead sea turtles in U.S. mid-Atlantic sink gillnet gear to vessel trip report landed catch, 2002-2006. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 09-19; 7 p.

Musick, J.A. and C.J. Limpus. 1997. Habitat utilization and migration in juvenile sea turtles. Pp. 137-164 In: Lutz, P.L., and J.A. Musick, eds., The Biology of Sea Turtles. CRC Press, New York. 432 pp.

O'Hara K.J., S. Iudicello, and R. Bierce. 1988. A citizens guide to plastic in the ocean: more than a litter problem. Center for Environmental Education, Washington, D.C. 131 p.

Packer, D. B, S. J. Griesbach, P. L. Berrien, C. A. Zetlin, D. L. Johnson, and W.W. Morse. 1999. Essential Fish Habitat Source Document: Summer Flounder, *Paralichthys dentatus*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-151

Shepherd, G. R. and D. B. Packer. 2006. Essential Fish Habitat Source Document: Bluefish, *Pomatomus saltatrix*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-198

Shoop, C.R. and R.D. Kenney. 1992. Seasonal distributions and abundance of loggerhead and leatherback sea turtles in waters of the northeastern United States. Herpetol. Monogr. 6: 43-67.

Stehlik, L. L. 2007. Essential Fish Habitat Source Document: Spiny Dogfish, *Squalus acanthias*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-203

Steimle FW, Zetlin CA, Berrien PL, Chang S. 1999. Essential fish habitat source document: Black sea bass, *Centropristis striata*, life history and habitat characteristics. NOAA Tech Memo NMFS NE 143; 42 p.

Steimle, F.W, C. A. Zetlin, P. L. Berrien, D. L. Johnson, and S. Chang. 1999. Essential Fish Habitat Source Document: Scup, *Stenotomus chrysops*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-149

Steimle, F.W, C. A. Zetlin, P. L. Berrien, D. L. Johnson, S. Chang. 1999. Essential Fish Habitat Source Document: Tilefish, *Lopholatilus chamaeleonticeps*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-152, Highlands, NJ.

Stein, A. B., K. D. Friedland, and M. Sutherland. 2004a. Atlantic sturgeon marine bycatch and mortality on the continental shelf of the Northeast United States. North American Journal of Fisheries Management 24: 171-183.

Stein, A.B., K. D. Friedland, and M. Sutherland. 2004b. Atlantic sturgeon marine distribution and habitat use along the northeastern coast of the United States. Transaction of the American Fisheries Society 133:527-537.

Studholme AL, Packer DB, Berrien PL, Johnson DL, Zetlin CA, Morse WW. 1999. Essential fish habitat source document: Atlantic mackerel, *Scomber scombrus*, life history and habitat characteristics. NOAA Tech Memo NMFS NE 141; 35 p.

Thunberg, Eric. 2010. Personal communication. NMFS Northeast Fisheries Science Center. Woods Hole, Massachusetts.

USDC (US District Court For the District of Columbia) (1999) National Resoruces Defense Council, Inc., et al. V. William M. Daley. Civil Action No. 99cv221. January 29, 1999.

Waldman, J. R., J. T. Hart, and I. I. Wirgin. 1996. Stock composition of the New York Bight Atlantic sturgeon fishery based on analysis of mitochondrial DNA. Transactions of the American Fisheries Society 125: 364-371.

Wallace, D.H., and T.B.Hoff. 2004. Minimal bycatch in the Northeast Atlantic surfclam and ocean quahog fishery. *In*: Bycatch in Northeast Fisheries: Moving Forward. NMFS. Gloucester, MA. page 83.

Waring, G.T., E. Josephson, C.P. Fairfield, and K. Maze-Foley, Editors. 2006. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments-2005. NOAA Tech Memo. NMFS-NE-194, 352pp.

Waring GT, Josephson E, Fairfield-Walsh CP, Maze-Foley K, editors. 2009. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments -- 2008. NOAA Tech Memo NMFS NE 210; 440 p.

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).