

Mid-Atlantic Fishery Management Council 800 North State Street, Suite 201, Dover, DE 19901-3910 Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org Richard B. Robins, Jr., Chairman | Lee G. Anderson, Vice Chairman Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 23, 2015

To: Council

From: Kiley Dancy and Julia Beaty, Staff

Subject: Black Sea Bass Recreational Measures for 2016

The Council and the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Board (Board) will consider recreational measures for black sea bass in 2016. The following materials are enclosed for Council and Board consideration of this subject:

- 1) Advisory Panel meeting summary for black sea bass from November 17 webinar
- 2) Advisor email comments relevant to black sea bass
- 3) Monitoring Committee recommendations for black sea bass, from November 9-10 meeting
- 4) Black sea bass staff memo dated November 6, 2015

The Council and Board must jointly recommend 2016 federal recreational measures for black sea bass. Because the southern states of Delaware through North Carolina typically adopt the federal measures, this vote is essentially an approval of federal and southern states measures. The Board will need to consider approving Addendum XXVII (ad hoc regional management in state waters) for public comment. Under this addendum, the Commission's Technical Committee would develop proposals for specific state waters measures in early 2016.

A 16% coastwide recreational landings reduction is necessary for 2016. If the Council and Board determine that the reduction should be taken by adjusting state measures, a set of backup measures should be specified, to be implemented on a coastwide basis in the event that the combination of state measures fails to meet the required reduction.



Summer Flounder, Scup, and Black Sea Bass Advisory Panel Meeting Summary 2016 Recreational Measures November 17, 2015, 4PM-7PM

Council Advisory Panel attendees: Monty Hawkins (MD), Skip Feller (VA), Mary Fabrizio (VA), James Fletcher (NC), Harvey Yenkinson (PA), Carl Benson (NJ), Jeff Gutman (NJ), Brady Lybarger (NJ), Greg Hueth (NJ), Mike Plaia* (CT), Jan McDowell (VA), Bob Pride (VA)

Commission Advisory Panel attendees: Marc Hoffman (NY), Jack Conway (CT), Paul Forsberg (NY), Art Smith (NC), Buddy Seigel (MD), Bill Shillingford (NJ), Ken Neill (VA), Victor Bunting (MD), Mike Plaia* (RI), Robert Busby (NY)

Other attendees: Kiley Dancy (Council staff), Kirby Rootes-Murdy (Commission staff), Julia Beaty (Council staff), Delaware Family Fishing, EC Newellman, Angel Willey (MD DNR), Tom Trageser, Frank Kearney

*Serves on both Council and Commission Advisory Panels.

Black Sea Bass

Comment Summary:

Advisors who commented during the black sea bass discussion were in agreement that the current harvest limits are too low relative to the biomass being observed on the water, and that the MRIP catch and landings estimates appear to be very inaccurate. Several advisors gave specific examples of estimates they believe to be unrealistic, and commented that the differences in landings estimates by mode (private vs. party vs. charter) often seem unreasonable. Advisors from New Jersey noted that the fishery in that state is very different from the fishery in the northern states, and they do not believe that New Jersey should be lumped in with the northern states in terms of similar measures or required adjustments. Advisors from several states are frustrated that the fishery is closed during parts of the height of their fishing seasons.

Detailed Comments (paraphrased):

Marc Hoffman: Looking at catch and landings broken down by sector, New York private boaters supposedly caught as much fish as all party/charter boats up and down east coast. The numbers should be thrown out completely.

Mike Plaia: There is no science behind the numbers, the ACL, no science behind anything.

Paul Forsberg: The New York MRIP numbers are hard to believe. They almost doubled in one year. Something isn't right. They almost doubled catch in one state in one season, and other states around us have gone down. The harvest limit is too low to start with.

Marc Hoffman: The MRIP estimates also don't reflect a drop in effort due to Hurricane Sandy. There are too many sea bass out there and they are devastating the environment, wiping out many other species such as juvenile lobsters. We need to increase catch on sea bass rather than decrease.

Jeff Gutman: The overall ACL is too low for the stock that's out there. The only way to stop catching these things is to stop fishing for them. Speaking from New Jersey, we tried to keep the 15 fish bag limit and 12.5" size because our fishing is significantly more similar to the southern states than to the northern states. We don't have the availability of fish close to the beach, the rock bottom, the habitat closer to shore. Consequently we don't see the bigger fish. It's a contentious fight every year and this year will be no different. The past few years the task has been to take major reductions but New York estimates somehow keep going up. It's probably unrealistic and I would certainly question the MRIP numbers. New Jersey does not feel that it's equitable to be lumped in with the northern group and would petition to be lumped in with the southern states instead. Basically we would be paying for New York's overage for another year. New York is allowing their fishermen to fish on large fish and allowing tremendous number of days compared to most other states, because they have a larger size limit, but it's not working. That is pretty unfair to others who have cut back everywhere they can. New York also has a lot of boats who turn in their federal permits to fish in state waters. New Jersey doesn't allow that because they made sure they were closed at the same time as federal waters. We will suggest that New Jersey goes out of compliance with regards to black sea bass.

Mike Plaia: We have to take into account that black sea bass hermaphroditism makes them a much different species, and we are targeting males. The population of black sea bass in the northern states is tremendous. I would bet that a large portion of the overage is due to "release mortality" which really doesn't happen because you're catching sea bass in shallow water.

Jeff Gutman: There are other species closures and regulations to consider. There's nothing left to catch. If people are lumped into a group or region, the group should be able to oversee themselves so when they're trying to make a reduction they don't end up with a drastic increase. New York has to do some policing of itself and its anglers.

Skip Feller: We keep hearing landings in the southern states are low, but it's because the season is closed when the fish are down here. We need it open in January and February. It's closed for months in the height of season in September and October. Why can't the northern states close in height of their season so we don't end up paying back their overage?

Marc Hoffman: The numbers are ridiculous, aren't real, and never have been. The new methodology for estimates hasn't been implemented.

Paul Forsberg: The basic problem is that the harvest limits are too low.

Greg Hueth: New York knew they were going over and continued to fish. That's an issue. This was brought up at several meetings over course of the year. Now New Jersey has to go out of compliance just to stay in business.

Monty Hawkins: Party boats in New York are said to have landed about 10,000 fish. Down here would never happen. Assertion that party boats would have caught much lower than private boats is unrealistic. Reports getting out of NY is that Montauk fishery is good and stable and there are fish in LIS but the south shore isn't on fire at all. Summer is hardest fishing and a lot more people are out fluking than sea bass.

Jeff Gutman: I agree that the catch numbers are totally out of whack as it pertains to private boaters. They are always supposedly catching a bunch of fish even when party/charter numbers are going in opposite direction during same time. Maybe it's time to move toward sector separation. If those are the people catching all the fish, those are the people who have to be constrained.

Monty Hawkins: The New Jersey numbers are ridiculous. The party boat in NJ for May and June is 4,000 fish, while the charter boats supposedly harvested 283,000 fish.

Marc Hoffman: We can't cut everyone's careers and businesses because of ridiculous numbers. All the pros caught nothing compared to the couple of private boaters that go out a few times per week.

Several advisors: We recommend status quo measures until the new assessment comes out.

Jeff Gutman: New Jersey folks are interested in being lumped with the southern region. The current federal measures would be more advantageous regarding the season. Whether it means being put into the southern group or being a standalone region, that may be more for Council and Commission members to decide.

Monty Hawkins: I would love to see the fishery move to stock assessment only based management. Catch estimates are so bad that we should simply use the assessments, which aren't perfect either, and base catch regulations off of stock assessment. We should also certainly move toward habitat based management and productivity based management. Restriction should not be based solely off MRIP estimates. We turn in VTRs every day, yet they are not reflected in the Maryland black sea bass party boat numbers.

Paul Forsberg: Sector separation is looking better and better.

From: Sent: To: Subject: Kirby Rootes-Murdy <krootes-murdy@asmfc.org> Tuesday, November 17, 2015 9:50 AM Dancy, Kiley; Beaty, Julia FW: AP WEBINAR

fyi

From: captain [mailto:rbusby@optonline.net] Sent: Tuesday, November 17, 2015 9:04 AM To: Kirby Rootes-Murdy <krootes-murdy@asmfc.org> Subject: AP WEBINAR

Hi Kirby,

Hope all is well with you folks down there. I met last evening with our local Captains regarding the Monitoring Committee recommendations. Summer Flounder:

1- We are not necessarily opposed to regional management at this time.

2- We understand that there will be reductions although we do not necessarily agree with the reasons for or the need to do so.

3- We would implore that cuts not be made at the front end of the season. These days are vital to our survival as viable businesses.

4- We disagree vehemently with the "45 day rule". We believe it to be unfounded as well as unecessary.

5- We would ask that reductions be made from size and bag limit not length of season which has already been severely reduced. SCUP:

1- We support regional management regarding Scup. Size and bag limit seem reasonable

Black Sea Bass:

1- The stock seems to be prolific at this time. Recruitment would seem to be good. As an anecdote, the boat next to me fishes commercially for lobster and whelk and says he has never seen so many Juvenile sea bass. Regards,

Capt. Bob Busby New York

From: Sent: To: Subject: bob pride <bobpride@gmail.com> Tuesday, November 17, 2015 4:25 PM Dancy, Kiley Sea Bass

Kiley,

I am not able to stay on until 6 pm for the BSB discussion. VA rec harvest is biased toward Federal waters and recent bag limits have dramatically reduced directed BSB recreational trips. Given this, I agree I am therefore highly supportive of leaving recreational measures as status quo and leaving the burden of the over-harvest "penalty" to accrue to the states that have benefited from that over-harvest.

Since the governing legislation requires fair and equitable treatment, it seems forcing a Southern region reduction to correct a Northern region over-harvest would be both unfair and inequitable and not meet the standard set by the law.

Bob Pride

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From:	Kirby Rootes-Murdy <krootes-murdy@asmfc.org></krootes-murdy@asmfc.org>
Sent:	Wednesday, November 18, 2015 8:58 PM
То:	Dancy, Kiley
Subject:	FW: AP webinar for 2016 rec. measures: Tues. Nov. 17th, 4-7 pm

fyi

From: Conway, John D SIK [mailto:JConway@sikorsky.com]
Sent: Wednesday, November 18, 2015 4:59 PM
To: Kirby Rootes-Murdy <krootes-murdy@asmfc.org>
Subject: RE: AP webinar for 2016 rec. measures: Tues. Nov. 17th, 4-7 pm

I enjoyed the late afternoon conference call.

From a CT perspective I would like to submit the following comments.

- 1. Summer Flounder the recreational fishing community in CT will be somewhat relieved to hear that the 2016 regulations will remain status quo. The CT fishing experience over the past several years has been that the fishery is better early in the year and rapidly degrades. A somewhat strong run of fish in May and June with a poor July/August fishery and September is even worse. In somewhat interesting news, I have new friends that fish summer flounder tournaments in multiple states, their overall comment is that the winning fish are much smaller, typical winning fish used to weigh in excess of 10 pounds (even as high as 13 pounds), 2015 winners in multiple tournaments were all under 10 pounds. (just something to ponder)
- 2. Scup as I stated during the call, the scup fishery in LIS over the past several years has been somewhat poor (and this is reflected in the landing data). It's actually concerning, if the stock assessment is correct I can't understand why CT is not having a banner scup fishery. The deep water reefs that are popular for tautog in Central LIS used to be loaded with scup in early tautog season, over the past several years this fishery has been very poor. In addition, to the poor fall fishery, the overall summer fishery has also been poor. There are short periods of good fishing followed by long periods of very poor fishing. CT is not landing scup due to the simple fact the fishery in LIS is a shadow of what it used to be.
- 3. Sea Bass in CT the sea bass fishery has exploded and many anglers that used to target striped bass (including charter boats) are heavily targeting black sea bass. They have become the new target species for many CT anglers, in some respects the modest bag limit is a good thing if this fishery becomes the "new normal". With poor striped bass fishing, a summer flounder fishery that peaks and ends early and a somewhat troubling scup fishery, sea bass have become a very important component of the recreational fishery in LIS from a CT perspective. They are also providing relief related to a tautog fishery that is experiencing overfishing. In short, sea bass can provide a "relief valve" and provide angling opportunity as other species become less available.

Thanks- Jack

From:	Michael Plaia <makomike3333@yahoo.com></makomike3333@yahoo.com>
Sent:	Wednesday, November 18, 2015 11:31 AM
То:	Dancy, Kiley; Amory, C. Meade; Beirnes Jr, James R.; Benson, Carl L.; Berko, Joan M.;
	Brady, Bonnie; Dobbins, Denny; Doernte, Harry L.; Fabrizio, Mary C.; Feller, Skip;
	Fletcher, James; Gutman, Jeffrey; Hawkins, Monty; Hodges, Mark L.; Hueth, Gregory;
	Lackner, Hank; Lybarger, Brady; Martin, Samuel; McDowell, Jan; Pearsall, A. Ross; Poyer,
	Lisa; Pride, Robert; Reese Jr, James Patrick; Risi, Paul; Ruhle, Robert; Siciliano, Thomas;
	Townsend, Wes; Witthuhn, Steven R.; Yenkinson, Harvey
Cc:	krootes-murdy@asmfc.org; Beaty, Julia; Luisi, Michael; Robins, Rick
Subject:	Re: AP webinar for 2016 rec. measures: Tues. Nov. 17th, 4-7 pm
Attachments:	Comments on fishery specifications for scup and black sea bass.docx

Kiley,

I would like to reiterate my comments from yesterday's meeting. In addition I have attached my comments on the fishery specifications published in the Federal register.

Scup:

Given the fishery performance over the past several years, the council and board should adopt less stringent size and bag limits in the northern region. It is important to demonstrate to the fishing public that more and more stringent regulations are not a "one way" street, and that when the stocks increase and the fishery does not perform up to expectations that regulation will be relaxed when warranted.

Sea Bass:

There is no "science" behind the SSC's recommendations. Logic dictates that the "best available science" would be the ACLs which produced the current bumper crop of sea bass in the northern region.

Comments on fishery specifications for scup and black sea bass

[Docket No. 150903814-5814-01]

Scup: The ABC (and therefore all of the other specifications that rely on the ABC, e.g. ACLs, ACTs and the regulations designed to meet those specifications) is tremendously understated. The SSC substituted its own precautionary factor (CV) of 60% for the recommendations of the SAW/SARC of a 30% CV. The SAW/SARC recommendations result from a very recent peer reviewed stock assessment and as such represent the "best available science" required by the Magnesson-Stevens Act (MSA). The SSC's bald assertions that its recommendations are the "best available science" should not accepted by NOAA/NMFS when there is substantial contrary authority. Some unit of NOAA/NMFS must ensure that the recommendations of the SSC are, in truth, the best available science and since the councils are required to accept the SSC's recommendations are the best available science are indeed true. As a practical matter, given the fishery's recent performance, a rejection of the council's preferred alternative for this reason should have no effect on the actual catch levels, but would send a powerful message to all of the SSC's serving all of the councils. The use of the best available science is the lynchpin of the current version of the MSA and the public needs to be assured that our fisheries and their related specifications are indeed based on the best available science.

Black sea bass: The situation with the black sea bass ABC is less clear than scup. Anecdotal evidence suggests that banner 2011 year class, which is now spawning, is saturating the northeast region with small sea bass. Even the notice of proposed rulemaking notes that this is "making it difficult to avoid black sea bass and leading to increasingly restrictive management measures." The fact of the situation is that there is no best available science on which to base management measures. Of course this will not be true once the benchmark stock assessment is done at the end of next year, presumably in time for the 2017 specifications. In the meantime I would suggest that the best scientific evidence is the ABCs and related regulations that produced this banner 2011 and subsequent year classes.

In summary, I believe that it is the NOAA/NMFS' responsibility to verify that any council recommendations are indeed based on the best available science and that this proposed rulemaking not be adopted and the recommendations sent back to Mid-Atlantic fishery management council with instructions to reformulate their recommendations based on the true best available science.

From:	Monty Hawkins <capt.montyhawkins@gmail.com></capt.montyhawkins@gmail.com>
Sent:	Tuesday, November 17, 2015 9:13 PM
То:	Dr. Kathy Sullivan; nmfs.recfishpolicy@noaa.gov; Russell Dunn NOAA Rec-Fish; Bullard,
	John; Kevin Chu; Chris Moore; Carrie Selberg; Beal, Robert; Robins, Rick; Goshorn,
	David; King, Howard; Michael Luisi; Anderson, Lee; Deem, Jeff; Young, Leroy; Saveikis,
	David; Marty Gary; Elliott, G. Warren; DiLernia, Tony; Steve Heins; McMurray, John;
	Zeman, Christopher; Rick Bellavance; Pate, Preston; Bill Goldsborough; Batsavage, Chris;
	Rob O'Reilly; Danielle Rioux; Tom Bigford; Dave Sikorski; Beth Kerttula
Cc:	John Boreman; Karp, Bill; Dr. Rich Langton; Brown, Russ; Gary Shepherd; John
	Manderson; Jon Hare; Angel Willey; Carrie Kennedy; Erik Zlokovitz; Lynn Fegley; Jim
	Uphoff; Didden, Jason; Dancy, Kiley; Alexei Sharov -DNR-; Bennie_Williams@fws.gov;
	Laney, Wilson; Coakley, Jessica; Kirby Rootes-Murdy
Subject:	Try to spot it

Greetings in Fisheries!

Fantastic beyond belief - I offer you but one from among many, many sets of MRIP estimates created so far this year that no manager could possibly pass the red-face test with.

MRIP is lying.

"..but we have to use the estimates!"

Really?

What a waste of science's potential. What a waste of economic potential.

Here's your "Best Science Available."

(2015's preliminary, I know. See further below for a wave three MD BSB estimate I can personally testify to having sent in thousands of VTR-reported sea bass. "**Fish Report 5/31/10: Some Limits of Sea Bass.**" It too was "just preliminary" when I first alerted the management community - but the table was drawn from MRIP's website as I was writing this evening..)

Today - Right Now - Management is marching ahead with MRIP clutched firmly to heart; death of our fisheries meaning much less to NOAA than having followed protocol. Could there be any truth in NY's catch estimates either? I doubt it.. OVERFISHING ALERT - KILL THIS FISHERY!!

See if you can spot it (I'll make it easy.) It's a large part sea bass "overfishing" for 2015.. And, 'Oh Look! NJ's charter boats only catch 2 pound sea bass. Everyone else in NJ's are just a pound.. It must be true! Look at the PSEs!'

My kingdom that you'd instead manage sea bass for production. Exponential population growth witnessed from 1995 to 2002 has been traded in for a lemon - for MRIP. The simplest fishery ever repaired - squandered today by bad data. Did I mention sea bass seem to like our temperate corals? What a waste.

"Huxley's Folly" is taught in every fisheries text. *"Any tendency to over-fishing will meet with its natural check in the diminution of the supply ... this check will always come into operation long before anything like permanent exhaustion has occurred."*

-- Thomas Huxley, 1883 address to the International Fisheries Exhibition in London <u>http://faculty.washington.edu/cemills/Oceanquotes.html</u>

What unkindness shall history refer to today's reliance on MRIP?

Another quote from the same page:

The sea! the sea! the open sea!

The blue, the fresh, the ever free!

While NOAA was chained to MRIP, the ocean turned green. Are we really going to lose? Shall this entire effort be so distracted by the ridiculous that basic biology goes unconsidered?

Seafloor Habitat Discovery, Restoration & Creation || Habitat Fidelity's Demand Of Regionalized Quota & Controls || Management's Control Of Age at Maturity: Such powerful tools ...squandered.

We have MRIP. How I wish I could have foreseen government's willingness to disregard previous success in favor of "*We have to use the estimates*." Regards, Monty

Capt. Monty Hawkins capt.montyhawkins@gmail.com Partyboat Morning Star <u>http://morningstarfishing.com</u> Ocean City, MD

Your Query Parameters:

MRIP CATCH TIME SERIES
2015 - 2015
3 MAY/JUN
BLACK SEA BASS
NEW JERSEY
ALL MODES BY MODE
ALL AREAS COMBINED
HARVEST (TYPE A + B1)
NUMBERS OF FISH
WEIGHT OF FISH (POUNDS)

**Review the glossary for a description of how the for-hire survey methods have changed over time.

Return to Query Page

Estimate Status	Year	Wave	Common Name	Fishing Mode	Total Harvest (A+B1)	PSE	Harvest (A+B1) Total Weight (Ib)	PSE
PRELIMINARY	2015	MAY/JUNE	BLACK SEA BASS	SHORE	0		0	
PRELIMINARY	2015	MAY/JUNE	BLACK SEA BASS	PARTY BOAT	4,070	69.2	4,790	73.5
PRELIMINARY	<mark>2015</mark>	MAY/JUNE	<mark>BLACK SEA</mark> BASS	CHARTER BOAT	<mark>282,719</mark>	<mark>34.7</mark>	<mark>444,970</mark>	<mark>34.3</mark>
PRELIMINARY	2015	MAY/JUNE	BLACK SEA BASS	PRIVATE/RENTAL BOAT	4,207	81.7	5,138	82.3

Your Query Parameters:

Query:	MRIP CATCH TIME SERIES
Year:	2010 - 2010
Wave:	3 MAY/JUN
Species:	BLACK SEA BASS
Geographic Area:	MARYLAND
Fishing Mode:	ALL MODES BY MODE
Fishing Area:	ALL AREAS COMBINED
Type of Catch:	HARVEST (TYPE A + B1)
Information:	NUMBERS OF FISH
	WEIGHT OF FISH (POUNDS)

**Review the glossary for a description of how the for-hire survey methods have changed over time.

Return to Query Page

Estimate Status	Year	Wave	Common Name	Fishing Mode	Total Harvest (A+B1)	PSE	Harvest (A+B1) Total Weight (Ib)	PSE	Landings (no.) without Size Information
FINAL	2010	MAY/JUNE	BLACK SEA BASS	SHORE	0	-	0	-	0
FINAL	2010	MAY/JUNE	BLACK SEA BASS	PARTY BOAT	0	-	0		0
FINAL	2010	MAY/JUNE	BLACK SEA BASS	CHARTER BOAT	0		0		0



Summer Flounder, Scup, and Black Sea Bass Monitoring Committee 2016 Recreational Measures Recommendations

Attendees: Mike Bednarski (MA DMF), Greg Wojcik (CT DEEP), John Maniscalco (NY DEC), Peter Clarke (NJ F&W), Rich Wong (DNREC), Steve Doctor (MD DNR), Katie May Laumann (VMRC), Holly White (NC DMF), Kiley Dancy (MAFMC Staff), Julia Beaty (MAFMC Staff), Kirby Rootes-Murdy (ASMFC Staff), Moira Kelly (NMFS GARFO), Mark Terceiro (NEFSC; via webinar)

The Monitoring Committee met on Monday, November 9 and Tuesday, November 10, 2015 in Providence, RI to recommend 2016 recreational management measures for summer flounder, scup, and black sea bass.

Black Sea Bass

After reviewing projected landings for 2015 as described in the staff memo, the Committee determined that the landings projection for Virginia (117,000 fish) was unrealistic. The Committee believes that the projection was inflated by a much higher than average wave 3 estimate in 2015 and a higher than average percentage of landings from wave 5 in 2014, resulting in a 2015 wave 5-6 projection that is not expected to be realized. The Committee revised the projections for Virginia using the average proportion of landings by wave from 2010-2014 (a period of consistent size limits and relatively consistent seasons), instead of 2014 alone as was used in the original projection. This results in revised 2015 projected Virginia landings of 103,891 lb or 63,650 fish, which the Committee believes is a more realistic, though conservative, projection.

As a result, the 2015 coastwide projected landings are revised to 3.35 million lb or 2.02 million fish. Based on these projections, a coastwide reduction of 15.8% would be required in order to constrain landings to the 2016 recreational harvest limit.

Extremely high availability of black sea bass in the northern states (New Jersey through Massachusetts) is resulting in recreational overages despite very restrictive management measures. For the past few years, catch and harvest limits have been set at levels that are not reflective of current abundance, placing undue stress on the fisheries. The Committee recognizes that the Scientific and Statistical Committee's new methodology for recommending catch limits is a positive step toward reconciling this disconnect, in that it incorporates important indices of abundance. The Committee expects that this will reduce recreational management uncertainty in 2016. The Committee hopes that a revised stock assessment will provide abundance estimates that can be fully utilized in the catch limit setting process. Under the constraints of the current system, the Monitoring Committee is being forced to recommend severely restrictive measures to constrain landings to the harvest limit.

The Committee notes that the 2011 year class of black sea bass is much larger than any other recent year class, and is contributing significantly to high availability in the northern states. There has

been no indication of high recruitment after 2011, and the Committee expects the 2011 year class to be fully recruited to the fishery at this time. The Committee noted that this year class is currently being fished down quickly, with no indication of similarly large year classes coming in behind it.

The Committee recommends continuing with the ad-hoc regional approach, but encourages the development of more consistent regulations between states within the regions. The Monitoring Committee notes that the difficulty of analyzing the effects of new regulations increases with management complexity and hyper-customization of measures. One of the intended benefits of ad-hoc regional management was to have similar regulations by region. Complex sets of measures, including splits by mode, season, and sector, continue to be implemented, contrary to previous recommendations of the Monitoring and Technical Committees. Additionally, MRIP data for state, wave, and mode combinations is typically associated with very high PSEs that often are higher than the percentage of the landings adjustment required. The Monitoring Committee also notes that MRIP has undergone many changes in recent years, including changes to sampling, statistical design, and effort surveys (yet to be implemented). The effects of these changes do not appear to be consistent across states or regions.

The Committee disagrees with the staff recommendation to split the necessary reduction (15.8%) between the northern and southern states/federal waters. The Committee recognizes that as a species managed on a coastwide basis, a shared reduction would be equitable; however, only about 4-5% of the harvest has originated from the southern states (Delaware through North Carolina) in recent years. A 15.8% reduction in the southern region would be equivalent to approximately 16,000 fish, and would have a minimal impact on reducing harvest on a coastwide basis. Given the continued low harvest in the southern region, the Committee recommends that the required reduction be taken in the northern states (New Jersey through Massachusetts). This would require a 16.6% reduction in harvest from the northern states in order to result in a 15.8% reduction on a coastwide basis.

A low percentage of black sea bass landings come from federal waters in the north, while the opposite is true in the south. Because anglers would be bound by the more restrictive state waters measures in the north, the Monitoring Committee recommends keeping federal and southern states regulations *status quo* to allow reductions to be taken where the vast majority of harvest is occurring.

Landings projections and the required reduction should be re-evaluated once wave 5 data becomes available. If the wave 5 landings in the southern states are substantially higher than projected, the Committee recommends reconsidering maintaining *status quo* measures in the southern states.

When crafting state regulations in the northern region, the Committee recommends that particular attention be paid to modes and waves that result in particularly volatile harvest estimates, in order to comply with the Council's Accountability Measures (AMs) by more fully considering the performance of previous recreational measures and taking into account the conditions that have precipitated recent overages.

The Committee discussed changes in the average weight of black sea bass (see staff memo), and notes that the Technical Committee's current adjustments under ad-hoc regional management are typically made in numbers of fish and don't necessarily account for changes in fish weight. This has implications for a species managed with a weight-based harvest limit. The Technical

Committee intends to explore a more quantitative treatment of changes in weight when crafting state measures for 2016.

The Monitoring Committee held a workshop in October 2015 to review methods, datasets, and considerations for recommending and evaluating recreational management measures.¹ The Committee identified several recommendations and additional tools that could be used to improve the current process of evaluating recreational measures, and will continue to explore these in the short and long term.

If the adjustments to the northern states measures **do not** address the required reduction, a backup set of measures would need to be implemented that would be expected to constrain landings to the RHL. If the ad-hoc regional measures developed through the Commission's process do not address the required reduction, the Committee recommends backup coastwide measures including a 14-inch TL minimum size, a 3 fish possession limit, and an open season from July 15-September 15. These measures represent some of the most restrictive size, possession, and seasonal limit across all states.

The National Standard 1 guidelines state that if an Annual Catch Limit (ACL) is exceeded more than once in a four year period, the "system of ACLs and AMs should be re-evaluated, and modified" to "improve its performance and effectiveness."² The recreational black sea bass ACL has been exceeded in each of the past 3 years by an average of approximately 38 percent; therefore, the Council should consider changes to the ACL and AM system to comply with this provision of the National Standard guidelines. The Monitoring Committee recommends that the Council and Board pursue an amendment to the FMP to explore alternative approaches to managing the recreational black sea bass fishery, in order to simplify and clarify the recreational process and regulatory framework for black sea bass, and reconcile inconsistencies in the Council and Commission FMPs.

¹ A summary of this workshop will be posted on the Council's website at www.mafmc.org.

² 50 CFR 600.310(g)(4)



Mid-Atlantic Fishery Management Council

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MEMORANDUM

Date: November 6, 2015

To: Chris Moore, Executive Director

From: Kiley Dancy and Julia Beaty, Staff

Subject: Black Sea Bass Recreational Management Measures for 2016

In August 2015, the Council and the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Board (Board) recommended commercial quotas and recreational harvest limits for black sea bass for the 2016 fishing year, based on advice given by the Scientific and Statistical Committee (SSC) and Monitoring Committee in July 2015. However, the SSC revised their recommendations at their September 2015 meeting, based on development of a new method of recommending catch limits for stocks for which an overfishing limit cannot be specified. In October 2015, the Council revisited their previous recommendations for catch and landings limits based on this revised advice from the SSC. The Council approved an increase in the overall Acceptable Biological Catch (ABC) to 6.67 million lb.

The final rule implementing the 2016 commercial quota and recreational harvest limit (RHL) has not yet published. The proposed 2016 recreational harvest limit for black sea bass is <u>2.82 million lb</u>.

The Monitoring Committee must recommend recreational management measures for 2016 that will constrain landings to the recreational harvest limit. Additionally, these measures must address the average 2012-2014 recreational overage, consistent with the Council's recreational accountability measures (AMs) as revised in 2013. The following is a review of recreational catch and landings data for the black sea bass fishery to aid in the Monitoring Committee's deliberations, as well as a staff recommendation.

Recreational Catch and Landings

Recreational catch of black sea bass has fluctuated since 1981, from a peak of 28.9 million fish in 1986 to a low of 3.4 million fish in 1984. Landings have fluctuated from a peak of 12.39 million lb in 1986 to a low of 1.15 million lb in 1998. Landings were estimated to be 3.61 million lb in 2014 (Table 2), approximately 60% above the 2014 RHL of 2.26 million lb.

Marine Recreational Information Program (MRIP) data for 2015 are incomplete and preliminary. To date, only the first four waves (January through August) of catch and landings data for the current year are available. The Monitoring Committee reviews the MRIP data once wave 4 data are available because the Council and Commission have agreed that recommendations need to be made late in the current year (i.e.,



2015) to give the states enough time to enact changes in their regulations for the upcoming year (i.e., 2016). Preliminary data indicate that 6.20 million black sea bass have been caught and 1.43 million black sea bass have been landed through wave 4 in 2015 (north of Cape Hatteras, NC). By weight, landings through wave 4 were 2.49 million lb, with the mean weight at approximately 1.75 lb per landed fish (Table 3). These preliminary estimates indicate that the 2015 RHL of 2.33 million lb has already been exceeded by approximately 7%.

Preliminary wave 1-4 data for 2015 can be used to project catch and landings for the entire year, by assuming the same proportion of catch and landings by wave in the previous year. Because prior year proportions are used in this method, if seasonal adjustments are not taken into account, landings will tend to be overestimated for states with more restrictive seasons in the current year, and for those with less restrictive seasons, landings are likely to be underestimated. For 2015 projections, adjustments were made for the states of Massachusetts, Connecticut, and New Jersey to account for adjustments to their open seasons between 2014 and 2015. For Massachusetts, zero harvest was assumed for waves 5 and 6 in 2015 given a recreational closure for those waves. For Connecticut, additional harvest in wave 3 was accounted for in the wave proportions due to the addition of 20 open days in that wave. For New Jersey, the projected harvest using 2014 proportions by wave was divided in half to account for a 50% reduction in the number of open days in waves 5 and 6 between 2014 and 2015. As a result, projected catch for 2015 is 10.71 million fish, and projected landings are 3.48 million lb or 2.07 million fish (Table 2).

Past Harvest Limits and Management Measures

Recreational harvest limits for black sea bass have ranged from a high of 4.13 million lb in 2005 to a low of 1.14 million lb in 2009. The 2015 RHL is 2.33 million lb. The proposed RHL for 2016 is 2.82 million lb (Table 7).

Until 2010, the black sea bass recreational fishery was managed with coastwide measures as dictated by the FMP, which included an identical minimum fish size, possession limit, and an open season that were implemented in both state and federal waters. Since 2011, the Commission has developed addenda which have enabled "ad hoc regional management," essentially resulting in state-specific measures implemented in state waters for Massachusetts through New Jersey. These measures have varied substantially among the states and from the measures implemented in federal waters. Measures in the southern states (Delaware through North Carolina) have typically been the "federal regulations" in recent years.

In 2015, federal and southern states measures included a 12.5-inch TL minimum size, a 15 fish possession limit, and an open season of May 15-September 18 and October 22-December 31 (Table 7; Table 8). Northern states implemented state-specific measures in 2015 with minimum fish sizes ranging from 13 to 14 inches TL, possession limits from 1 to 10 fish, and various seasons (Table 8).

In August 2014, the Council considered modifications to the black sea bass recreational season through a Framework action. This included consideration of opening wave 1 (January and February) to the recreational fishery, as well as modifying the start date of the federal recreational season in May.¹ The

¹For more information, see <u>http://www.mafmc.org/briefing/august-2014</u> under "Black Sea Bass Opening Framework Meeting 2."



Council did not take action to open the wave 1 fishery, but did approve moving the opening date for black sea bass in federal waters from May 19 to May 15, 2015. These additional 4 open days in May were accounted for with an adjustment to the federal open season in wave 5, 2015.

Accountability Measures

In 2013, the Council modified the recreational accountability measures (AMs) for Mid-Atlantic species through an Omnibus Recreational Accountability Measures Amendment. This amendment removed the in-season closure authority for the black sea bass recreational fishery that was previously held by the NMFS Regional Administrator. Additionally, in the event of an Annual Catch Limit (ACL) overage, recreational AMs will no longer necessarily include a direct pound-for-pound payback of the overage amount in a subsequent fishing year. Instead, AMs are now tied to stock status, and though paybacks may be required in some circumstances, any potential payback amounts would be scaled relative to biomass, as described below.

The modified recreational AMs are as follows: the 3-year recreational sector ACL is evaluated against a 3-year moving average of total catch. Both landings and dead discards are evaluated in determining if the 3-year average recreational sector ACL has been exceeded. If the recreational ACL is exceeded, the appropriate AM will be determined based on the following criteria:

- 1. If the stock is overfished ($B < \frac{1}{2} B_{MSY}$), under a rebuilding plan, or the stock status is unknown: The exact amount, in pounds, by which the most recent year's recreational ACL has been exceeded, will be deducted in the following fishing year, or as soon as possible once catch data are available.
- 2. If biomass is above the threshold, but below the target ($\frac{1}{2} B_{MSY} < B < B_{MSY}$), and the stock is not under a rebuilding plan:
 - a. If only the recreational ACL has been exceeded, then adjustments to the recreational management measures (bag, size, and seasonal limits) would be made in the following year, or as soon as possible once catch data are available. These adjustments would take into account the performance of the measure and conditions that precipitated the overage.
 - b. If the Acceptable Biological Catch (ABC = recreational ACL + commercial ACL) is exceeded in addition to the recreational ACL, then a single year deduction will be made as a payback, scaled based on stock biomass. The calculation for the payback amount in this case is: (overage amount) * $(B_{msy}-B)/\frac{1}{2} B_{msy}$.
- 3. <u>If biomass is above the target (B > B_{MSY})</u>: Adjustments to the recreational management measures (bag, size, and seasonal limits) would be made in the following year, or as soon as possible once catch data are available. These adjustments would take into account the performance of the measure and conditions that precipitated the overage.

<u>Recreational AMs have been triggered for black sea bass</u> based on a comparison of the 3-year average ACL to the 3-year average of catch, as described above. The 2012-2014 average recreational catch (3.82 million lb) exceeded the 2012-2014 average recreational ACL (2.77 million lb; Table 1).



	2012	2013	2014	3-year average
Rec ACL (mil lb)	2.52	2.90	2.90	2.77
Total rec. catch (mil lb)	4.04	3.13	4.30	3.82
Landings	3.18	2.45	3.60	3.08
Discards	0.85	0.68	0.69	0.74
Overage percent	60.2%	8.1%	48.3%	37.9%
Overage amount (mil lb)	1.52	0.23	1.40	1.05

Table 1: Recreational AM evaluation for black sea bass, comparing 3-year average total catch to the 3-year average ACL.

Because the most recent estimate of black sea bass biomass is above the target biomass, the AM triggered includes required adjustments to the recreational management measures (bag, size, and season). The Monitoring Committee will need to take into account the performance of past measures and conditions that precipitated the overage. The Monitoring Committee should consider updating the data and methodology used to calculate effective recreational measures and reductions as a way to take into consideration the performance of past measures and improve understanding of how adjustments have effected recent recreational performance.

Methodology

The Monitoring Committee must consider and recommend measures that will ensure the proposed RHL of 2.82 million lb will not be exceeded in 2016. Based on the projected landings estimate for 2015 of 3.48 million lb, and assuming similar fishery conditions and angler success in 2016, landings would have to be reduced by 19% to avoid exceeding the RHL in 2016.

Table 9 provides the distribution of landings by wave in 2014 from the southern region of Delaware through Cape Hatteras, North Carolina. Previously, a similar table with 2006-2008 landings was used on a coastwide basis to calculate the expected effects of seasonal adjustments on landings. Data from 2006-2008 were used because it is the most recent period when the minimum size, season, and possession limit were consistent across all states and federal waters. The Monitoring Committee has determined that the data used to calculate seasonal adjustments should be updated in order to more effectively predict the effects of recreational adjustments. However, updating this table for the northern states would not be informative given confounding effects of recent northern states regulations, which are complex and variable by state, wave, and fishing mode. Therefore, the table has been updated for the southern region only. The Monitoring Committee should continue to improve on the methods of calculating seasonal adjustments, using recent data and taking into consideration the variations in measures by state and fishing mode.

Fishing Trips and Year Class Effects

Predicting the number of trips that might be taken in 2016 is complicated (Table 10). Changes in fishing site characteristics (travel costs, catch rates, available species, water quality, etc.), fishery management policies (possession limits, size restrictions, closed seasons), and angler demographics can affect the demand for angler fishing trips. Changes in angler behavior may result in a violation of the assumptions associated with specific sets of regulations and their anticipated results.



Year-class effects in terms of fish availability can influence the expected impacts of management measures and should be considered. The Monitoring Committee noted in November 2014 that the 2011 year class of black sea bass is much larger than any other recent year class, and is contributing significantly to high availability in the northern states. At the time there was no indication of high recruitment after 2011, and the Committee noted the 2011 year class to be fully recruited to the fishery by the spring of 2015. The Committee noted that this year class was being fished down quickly, with no similarly large year classes coming in behind it.

2016 Staff Recommendation

Based on preliminary data through wave 4, landings would have to be reduced in 2016 by 19% compared to 2015 projections, in order to constrain harvest to the 2016 recreational harvest limit of 2.82 million lb.

For the past several years, the Commission has developed addenda to allow for "ad hoc regional management." A new addendum has been initiated for continuing this approach in 2016. This process essentially results in two regions: the northern states of Massachusetts through New Jersey, which set state-specific measures, and the southern states of Delaware through North Carolina (north of Cape Hatteras), which typically set measures consistent with federal measures given that a majority of landings from southern states are taken in the EEZ (Table 4). Where state and federal measures differ, federal party/charter permit holders and private anglers fishing in federal waters are bound by whichever regulations are more restrictive. Many federal for-hire permit holders drop their federal permits during periods when state waters are open but federal waters are closed, allowing them to fish in state waters during this time. Most reapply for the permit once this period of inconsistency is complete. In practice under ad hoc regional management, landings in the northern states are constrained by state measures rather than federal. As such, any adjustments to the federal recreational measures should be considered primarily adjustments to the measures for the southern region.

Staff recommend that the necessary reduction in landings be taken primarily by adjusting measures for the northern states (Massachusetts through New Jersey), with some additional minor adjustments to the federal/southern states measures. This approach would allow the flexibility to address the reductions where most of the harvest is occurring. In 2014, 95% of the landings in number of fish and 96% of the landings in pounds originated from the states of Massachusetts through New Jersey. For 2015, 93% of the landings in numbers of fish and 92% of the landings in pounds are projected to come from these northern states (Figure 1; Table 4). Staff recommend using the 2015 projected proportion of landings in weight by region (92% and 8% for the northern and southern regions, respectively) to split the 19% reduction. Specifically, this would result in the northern states of Massachusetts through New Jersey taking a reduction of 17.5%, and the federal/southern region taking a reduction of 1.5% from 2015 levels.

To take this 1.5% reduction in the southern states, staff recommend that the federal and southern states season be adjusted by closing two days in wave 5, based on the percentages associated with closing one day per wave shown in Table 9. Specifically, staff recommend federal seasons of May 15-September 17 and October 23-December 31.

Staff do not recommend increasing the minimum fish size in federal waters above the current 12.5 inch TL minimum fish size. For a species such as black sea bass with an unusual life history (protogynous



hermaphrodite), where the very large fish tend to be dominant males, a high minimum fish size may result in skewed or unbalanced sex ratios for this species with potential implications for stock productivity. Instead, staff recommend adjustments be made to the seasons and possession limits for the northern states to achieve the required reduction in landings. Staff recommend the federal minimum size be maintained at 12.5 inches. The expanded length frequency of landed black sea bass from 2013 and 2014, based on MRIP data, is shown in Figure 3.

In summary, staff recommend that the federal and southern states measures be adjusted to result in a 1.5% reduction in landings for the 2016 fishing year, with the remaining reduction taken in the northern states of New Jersey through Massachusetts. Federal and southern states measures would include a 12.5 inch minimum fish size, a 15 fish possession limit, and an open season from May 15-September 17 and October 23-December 31.

Table 2: Black sea bass recreational catch and landings by year, 1981 to 2014, and projected catch and landings for 2015, Maine to Cape Hatteras, NC. The number of fish released is presented as a proportion of the total catch (% Released).

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Year	Catch ^a ('000 fish)	Landings ^a ('000 fish)	Landings ^a ('000 lb)	% Released	Mean weight of landed fish (lb)
1981	3 681	1 886	1 232	49%	0.65
1982	11.386	10.045	9.894	12%	0.98
1983	7.561	4.537	4.079	40%	0.90
1984	3,428	1,780	1.447	48%	0.81
1985	6.047	3,388	2,097	44%	0.62
1986	28,946	21,742	12,392	25%	0.57
1987	5,052	2,883	1,924	43%	0.67
1988	8,186	3,088	2,869	62%	0.93
1989	6,427	4,239	3,289	34%	0.78
1990	9,135	3,881	2,761	58%	0.71
1991	10,829	5,269	4,186	51%	0.79
1992	7,722	3,592	2,706	53%	0.75
1993	9,023	6,007	4,842	33%	0.81
1994	7,166	3,430	2,948	52%	0.86
1995	14,059	6,747	6,207	52%	0.92
1996	8,143	3,624	3,993	55%	1.10
1997	10,646	4,739	4,268	55%	0.90
1998	5,146	1,148	1,152	78%	1.00
1999	7,400	1,378	1,664	81%	1.21
2000	16,927	3,629	3,988	79%	1.10
2001	13,869	2,841	3,421	80%	1.20
2002	14,703	3,351	4,349	77%	1.30
2003	12,128	3,251	3,289	73%	1.01
2004	7,238	1,531	1,973	79%	1.29
2005	7,041	1,263	1,883	82%	1.49
2006	7,602	1,286	1,800	83%	1.40
2007	8,727	1,528	2,175	82%	1.42
2008	10,653	1,294	2,031	88%	1.57
2009	9,224	1,806	2,558	80%	1.42
2010	9,964	2,207	3,190	78%	1.45
2011	4,737	817	1,171	83%	1.43
2012	12,536	1,874	3,185	85%	1.70
2013	9,797	1,281	2,460	87%	1.92
2014	10,674	2,078	3,605	81%	1.73
2015 (proj.) ^b	10,705	2,073	3,481	81%	1.68

^a 1981-2003 data are from MRFSS, 2004-2015 data are from MRIP. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 20, 2015.

^b Projected using proportion by wave from 2014 MRIP data and 2015 MRIP wave 1-4 data, with adjustments for MA and NJ to account for seasonal closures between 2014 and 2015 (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 20, 2015).



Year	Catch ('000 fish)	Landings ('000 fish)	Landings ('000 lb)	Mean Weight (lb)
2004	2,791	637	881	1.38
2005	3,628	824	1,308	1.59
2006	3,491	710	1,075	1.51
2007	4,440	1,090	1,547	1.42
2008	6,261	618	996	1.61
2009	6,765	1,470	2,030	1.38
2010	4,693	1,284	1,897	1.48
2011	2,524	478	689	1.44
2012	7,534	1,252	2,280	1.82
2013	5,916	921	1,783	1.94
2014	6,334	1,288	2,455	1.91
2015	6,202	1,426	2,489	1.75

Table 3: Black sea bass recreational catch and landings for waves 1-4, Maine through Cape Hatteras, North Carolina, 2004-2015.^a

^a Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 20, 2015 and November 4, 2015.

Table 4: Landings of black sea bass (in lb) by state and area (state vs. federal waters), 2013 and 2014, Maine through North Carolina, and projected landings for 2015 by state. Area information is self-reported based on the area where the majority of fishing activity occurred per angler trip.

State	2013 Landings (lb)	2014 Landings (lb)	Avg. % of Coastwide Landings (in lb) 2013-2014	2015 projected landings (lb)	Proj. % of coastwide landings in 2015	% from State Waters (<= 3 mi), 2013-2014	% from EEZ (> 3 mi), 2013-2014
NH	19,228	0	0.4%	0	0.0%	100%	0%
MA	660,797	1,087,848	28.5%	757,433	21.8%	91%	9%
RI	145,161	370,534	8.1%	359,350	10.3%	76%	24%
СТ	258,016	599,860	13.6%	369,116	10.6%	93%	7%
NY	734,728	777,979	25.7%	1,079,436	31.0%	71%	29%
NJ	515,175	631,457	19.2%	631,881	18.2%	31%	69%
DE	44,363	30,962	1.3%	13,870	0.4%	5%	95%
MD	39,170	87,086	2.0%	35,022	1.0%	0%	100%
VA	33,660	17,963	0.9%	231,961	6.7%	40%	60%
NC	9,597 ^a	1,180 ^a	0.2% ^a	2,789	0.1%	20% ^b	80% ^b
Total	2,459,895	3,604,869	100.0%	3,480,857	100.0%	<u>69</u> %	31%

^a Through Cape Hatteras, NC.

^b All of North Carolina, both north and south of Cape Hatteras.



State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ME	-	-	-	-	-	-	-	-	-	-
NH	-	-	-	-	-	-	3	12	-	-
MA	63	69	154	367	641	159	454	190	349	347
RI	16	11	12	23	133	12	55	51	110	98
СТ	3	1	60	0	15	3	87	96	196	125
NY	133	265	111	429	227	105	271	256	270	474
NJ	253	614	203	483	210	129	314	243	308	323
DE	84	77	18	34	16	14	33	34	18	9
MD	75	32	22	24	18	38	31	25	32	12
VA	69	14	29	109	17	13	3	12	4	36
NC	14	7	9	2	7	6	2	8	<1	1

Table 5: Black sea bass recreational landings (in thousands of fish) by state for waves 1-4, Maine through Cape Hatteras, NC, 2006-2015.

Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 20, 2015.

Table 6: Black sea bass recreational landings (in thousands of fish) by state for all waves, Maine through Cape Hatteras, NC, 2006-2015.^a

State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (proj.) ^b
ME	-	-	-	-	-	-	-	-	-	-
NH	-	-	-	-	-	-	3	12	-	-
MA	105	149	246	431	702	195	520	292	457	347
RI	41	44	52	36	160	50	103	75	214	191
СТ	3	24	60	0	16	8	111	108	407	229
NY	269	410	260	566	543	274	322	353	423	743
NJ	531	725	580	583	687	148	735	345	468	407
DE	114	93	23	37	21	43	40	37	24	12
MD	121	39	26	33	36	47	33	30	68	26
VA	83	36	38	115	30	19	4	21	14	117
NC	19	9	9	3	11	31	4	8	<1	1

^a Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 20, 2015.

^b Projected using proportion by wave from 2014 MRIP data and 2015 MRIP wave 1-4 data, with adjustments for MA and NJ to account for seasonal closures between 2014 and 2015 (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 20, 2015).



Measure	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
ABC (m lb)	-	-	-	-	-	-	-	-	-	-
Recreational ACL (m lb)	-	-	-	-	-	-	-	-	-	-
Harvest Limit (m lb)	-	3.15	3.15	3.15	3.15	3.43	3.43	4.01	4.13	3.99
Landings (m lb) ^a	4.3	1.2	1.7	4.0	3.4	4.4	3.3	2.0	1.9	1.8
Possession Limit	-	_b	_b	_b	25	25	25	25	25	25
Size Limit (TL in)	9	10	10	10	11	11.5	12	12	12	12
Open Season	1/1- 12/31	1/1-7/30 and 8/16- 12/31	1/1-12/31	1/1-12/31	1/1-2/28 and 5/10- 12/31	1/1-12/31	1/1-9/1 and 9/16-11/30	1/1-9/7 and 9/22-11/30	1/1-9/7 and 9/22- 11/30	1/1-12/31
Measure	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 °
ABC (m lb)				4.50	4.50	4.50	5.50	5.50	5.50	6.67
ABC (m lb) Recreational ACL (m lb)	-	-	-	4.50	4.50	4.50	5.50 1.86	5.50 2.90	5.50 2.90	6.67 3.52
ABC (m lb) Recreational ACL (m lb) Harvest Limit (m lb)	- 2.47	- 2.11	- 1.14	4.50 - 1.83	4.50 - 1.84	4.50 - 1.32	5.50 1.86 2.26	5.50 2.90 2.26	5.50 2.90 2.33	6.67 3.52 2.82
ABC (m lb) Recreational ACL (m lb) Harvest Limit (m lb) Landings (m lb) ^a	- 2.47 2.17	- 2.11 2.03	- 1.14 2.56	4.50 - 1.83 3.19	4.50 - 1.84 1.17	4.50 - 1.32 3.19	5.50 1.86 2.26 2.46	5.50 2.90 2.26 3.61	5.50 2.90 2.33	6.67 3.52 2.82
ABC (m lb) Recreational ACL (m lb) Harvest Limit (m lb) Landings (m lb) ^a Possession Limit	- 2.47 2.17 25	- 2.11 2.03 25	- 1.14 2.56 25	4.50 - 1.83 3.19 25	4.50 - 1.84 1.17 25	4.50 - 1.32 3.19 20 or 25	5.50 1.86 2.26 2.46 20	5.50 2.90 2.26 3.61 15	5.50 2.90 2.33 - 15	6.67 3.52 2.82 - -
ABC (m lb) Recreational ACL (m lb) Harvest Limit (m lb) Landings (m lb) ^a Possession Limit Size Limit (TL in)	- 2.47 2.17 25 12	- 2.11 2.03 25 12	- 1.14 2.56 25 12.5	4.50 - 1.83 3.19 25 12.5	4.50 - 1.84 1.17 25 12.5	4.50 - 1.32 3.19 20 or 25 12.5	5.50 1.86 2.26 2.46 20 12.5	5.50 2.90 2.26 3.61 15 12.5	5.50 2.90 2.33 - 15 12.5	6.67 3.52 2.82 - -

Table 7: Summary of management measures for the black sea bass recreational fishery, 1997-2016.

^a Landings for Maine through Cape Hatteras, NC. 1996-2003 data are from MRFSS, 2004-2014 data are from MRIP. ^b There was no federal possession limit but some states implemented a 20 fish possession limit in these years. ^c Proposed.



Table 8: Black sea bass recreational management measures by state, 2014 (a) and 2015 (b).

a) 2014 measures by state.

State	Minimum Size (inches)	Possession Limit	Open Season
New Hampshire	13	10 fish	January 1-December 31
Massachusetts	14	8 fish	May 17-September 15
Massachusetts For-Hire vessels with	14	8 fish	May 17-May 31
MA DMF Letter of Authorization	14	20 fish	September 1-September 30
Phodo Island	13	3 fish	June 29- August 31
	15	7 fish	September 1-December 31
Connecticut (private & shore)	13	3 fish	June 21-August 31
Connecticut (private & shore)	15	8 fish	September 1-December 31
CT Authorized Party/Charter Monitoring Program Vessels	13	8 fish	June 21-December 31
New York	13	8 fish	July 15-December 31
		3 fish	July 1-August 31
New Jersey	12.5	15 fish	May 19-June 30; September 1- 6; October 18-December 31
Delaware	12.5	15 fish	May 19-September 21; October 18-December 31
Maryland	12.5	15 fish	May 19-September 21; October 18-December 31
Virginia	12.5	15 fish	May 19-September 21; October 18-December 31
North Carolina, North of Cape Hatteras (N of 35° 15'N)	12.5	15 fish	May 19-September 21; October 18-December 31



b) 2015 measures by state.

State	Minimum Size (inches)	Possession Limit	Open Season
Maine	13	10 fish	May 19 - September 18
New Hampshire	13	10 fish	January 1 - December 31
Massachusetts	14	8 fish	May 23 - August 27
Rhode Island	14	1 fish	July 2 - August 31
Kilode Island	14	7 fish	September 1 - December 31
		3 fish	June 1 - August 31
Connecticut	14	5 fish	September 1- December 31
Connecticut authorized party/charter monitoring program vessels	14	8 fish	June 21-December 31
New York	14	8 fish	July 15 - October 31
	14	10 fish	November 1 - December 31
		2 fish	July 1 - July 31
New Jersey	12.5	15 fish	May 27 - June 30; October 22- December 31
Delaware	12.5	15 fish	May 15 - September 18 and October 22 - December 31
Maryland	12.5	15 fish	May 15 - September 18 and October 22 - December 31
Potomac River Fisheries Commission	12.5	15 fish	May 15 - September 18 and October 22 - December 31
Virginia	12.5	15 fish	May 15 - September 18 and October 22 - December 31
North Carolina (north of Cape Hatteras)	12.5	15 fish	May 15 - September 18 and October 22 - December 31



Table 9: a) Average percent of black sea bass landed (in number) by wave in 2014 for Delaware through Cape Hatteras, North Carolina, and b) projected percent reduction in black sea bass landings (in number) associated with closing one day per wave for the federal/southern states measures, based on 2014 MRIP landings data and the number of open days in each wave for 2014.

<u>a.</u>						
State	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
DE	0.000%	0.000%	58.698%	16.727%	16.689%	7.886%
MD	0.000%	0.000%	26.297%	21.074%	26.259%	26.370%
VA	0.000%	0.000%	5.310%	25.202%	57.217%	12.270%
NC ^a	0.000%	55.296%	3.531%	30.056%	11.117%	0.000%
Total : Southern Region	0.000%	0.358%	30.545%	20.718%	28.175%	20.204%

^a North of Hatteras.

b.

N •						
State	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
DE	0.000%	0.000%	1.365%	0.270%	0.477%	0.129%
MD	0.000%	0.000%	0.612%	0.340%	0.750%	0.432%
VA	0.000%	0.000%	0.123%	0.406%	1.635%	0.201%
NC ^a	0.000%	0.000%	0.082%	0.485%	0.318%	0.000%
Total: Southern Region	0.000%	0.000%	0.710%	0.334%	0.805%	0.331%

^a North of Hatteras.





Figure 1: Percentage of coastwide black sea bass landings (in number of fish) by state, 2006-2015 (2015 is projected) for New Hampshire-New Jersey.



Figure 2: Percentage of coastwide black sea bass landings (in number of fish) by state, 2006-2015 (2015 is projected) for Delaware-North Carolina.



Year	Number of Directed Fishing Trips ^a	Percentage of Directed Trips relative to Total Trips ^b	Recreational Harvest Limit (million lb) ^c	Recreational Landings of BSB (million lb) ^{d,e}	Percentage Overage (+%)/ Underage (-%)
1995	313,537	1.2	None	6.34	None
1996	231,090	0.8	None	3.99	None
1997	310,898	1.0	None	4.26	None
1998	137,734	0.5	3.15	1.14	-64%
1999	136,452	0.5	3.15	1.64	-48%
2000	255,789	0.7	3.15	3.98	+26%
2001	293,191	0.8	3.15	3.41	+8%
2002	283,537	0.9	3.43	4.37	+27%
2003	285,861	0.8	3.43	3.30	-4%
2004	149,670	0.4	4.01	1.97	-51%
2005	199,603	0.5	4.13	1.88	-54%
2006	253,040	0.7	3.99	1.80	-55%
2007	368,042	1.0	2.47	2.18	-12%
2008	256,341	0.7	2.11	2.03	-4%
2009	393,389	1.3	1.14	2.56	+125%
2010	417,663	1.4	1.83	3.19	+74%
2011	193,655	0.7	1.83	1.17	-36%
2012	267,932	1.0	1.32	3.19	+142%
2013	239,580	1.0	2.26	2.46	+9%
2014	403,624	2.9	2.26	3.61	+60%
2015	NA	NA	2.33	NA	NA
2016	NA	NA	2.82	NA	NA

Table 10: Number of coastwide black sea bass recreational fishing trips, recreational harvest limits, recreational landings, and fishery performance from 1995 to 2016.

^a Estimated number of recreational fishing trips (expanded) where the primary target species was black sea bass, Maine through North Carolina. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 20, 2015.

^b Source of total trips (Maine through North Carolina) for all species combined: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 20, 2015.

^c Harvest limits for 2002 through 2014 are adjusted for research set-aside. Harvest limit for 2016 is proposed.

^d Maine through Cape Hatteras, NC.

^e 1994-2003 data are from MRFSS, 2004-2014 data are from MRIP. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 20, 2015.

NA = Data not available.





Figure 3: Expanded length frequencies of landed black sea bass from 2013 and 2014 MRIP data, as a percent of total landed fish, for a) New Hampshire through New York (13 or 14 inch size limits) and b) New Jersey through North Carolina (12.5 inch size limit). Each length bin contains fish from X.0 to X.99 inches. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 1, 2015.



Mid-Atlantic Fishery Management Council 800 North State Street, Suite 201, Dover, DE 19901-3910 Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org Richard B. Robins, Jr., Chairman | Lee G. Anderson, Vice Chairman Christopher M. Moore, Ph.D., Executive Director

M E M O R A N D U M

Date: November 25, 2015

To: Chris Moore, Executive Director

From: Kiley Dancy, Staff

Subject: Initiation of a Black Sea Bass Amendment

At the October Council meeting, the Executive Committee indicated that the Council should prioritize a black sea bass amendment for development in 2016, in place of a scup amendment. Further Council discussion is needed to formally initiate an amendment and to identify potential issues for inclusion. Ideally, the Council should address this issue while jointly convened with the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Board (Board).

The Executive Committee discussed the issue of perceived conflict and inconsistencies between the Council and Commission management plans with regard to management of commercial black sea bass quota. The commercial quota is currently approved by both the Council and Board on a coastwide basis, and monitored by the Greater Atlantic Regional Fisheries Office (GARFO) on a coastwide basis. However, the Commission FMP contains state-by-state commercial quota allocations, and individual states manage their quota in very different ways. Federal accountability measures, as required under the Magnuson Stevens Act, have the potential to result in a coastwide fishery closure if the coastwide quota is exceeded. A coastwide overage may be caused by some individual states substantially exceeding their state quotas, even if other states have not approached their state quotas. Several Council and Board members have expressed concern about this system.

During this discussion, GARFO representatives indicated that it may be helpful for the Council to review alternatives explored in Amendment 13 to the FMP (2003), which established the current commercial quota system for black sea bass. An excerpt from Amendment 13 is attached, including the executive summary, purpose and need, and range of alternatives.¹

Another issue briefly discussed by the Executive Committee was regional management for the recreational black sea bass fishery. The Monitoring Committee also discussed this issue at their November 2015 meeting. As described in their recommendations, the National Standard 1 guidelines state that if an Annual Catch Limit (ACL) is exceeded more than once in a four year period, the "system of ACLs and AMs should be re-evaluated, and modified" to "improve its

¹ The full amendment document is available at: <u>http://www.mafmc.org/fisheries/fmp/sf-s-bsb</u>.

performance and effectiveness."² The recreational black sea bass ACL has been exceeded in each of the past 3 years by an average of approximately 38 percent; therefore, the Monitoring Committee recommended that the Council consider changes to the ACL and AM system to comply with this provision of the National Standard guidelines. The Monitoring Committee recommended that the Council and Board pursue an amendment to the FMP to explore alternative approaches to managing the recreational black sea bass fishery, in order to simplify and clarify the recreational process and regulatory framework for black sea bass, and reconcile inconsistencies in the Council and Commission FMPs.

At their December meeting, the Council and Board should discuss formal initiation of an amendment and whether to include commercial issues, recreational issues, or both. To the extent possible, the Council and Board should identify specific issues to be addressed in the amendment.

² 50 CFR 600.310(g)(4).

AMENDMENT 13

TO THE

SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS

FISHERY MANAGEMENT PLAN

(Includes Environmental Impact Statement, Regulatory Impact Review, Regulatory Flexibility Analysis, and Essential Fish Habitat Assessment)

VOLUME 1

August 2002

Mid-Atlantic Fishery Management Council

and the

the Atlantic States Marine Fisheries Commission,

in cooperation with

the National Marine Fisheries Service,

the New England Fishery Management Council,

and

the South Atlantic Fishery Management Council

Draft adopted by MAFMC: August 8, 2001 Final adopted by MAFMC: June 12, 2002 Final approved by NOAA: March 4, 2003



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EXECUTIVE SUMMARY

Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP), prepared by the Mid-Atlantic Fishery Management Council (Council) and Atlantic States Marine Fisheries Commission (Commission), is intended to manage the summer flounder (Paralichthys dentatus), scup (Stenotomus chrysops) and black sea bass (Centropristis striata) fishery pursuant to the Magnuson-Stevens Fishery Conservation and Management Act of 1976 (MSFCMA), as amended by the Sustainable Fisheries Act (SFA) in 1996. This amendment could: 1) revise the quarterly commercial quota system for black sea bass implemented in Amendment 9 to the Summer Flounder, Scup, and Black Sea Bass Fisheries Management Plan; 2) remove permit restrictions for fishermen that have both a Northeast Region Black Sea Bass (NER BSB) Permit and a Southeast Region Snapper/Grouper (SER S/G) Permit and fish for black sea bass north and south of Cape Hatteras, North Carolina; 3) address the potential problems related to the wet storage of black sea bass pots/traps; 4) establish de minimus specifications for black sea bass under the Atlantic State Marine Fisheries Commission Interstate Fisheries Management Program Charter; 5) implement tag requirements for black sea bass pots/traps; 6) limit the number of black sea bass pots/traps fished by fishermen; and 7) implement management alternatives for summer flounder, scup and black sea bass to prevent, mitigate or minimize adverse effects from fishing to bring the FMP into compliance with Section 303(a)(7) of the SFA.

The Council is required to prepare an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) to assess the potential effects of the proposed actions on the human environment. Because the prior EIS was prepared in 1992 for summer flounder and in 1996 for scup and black sea bass, NMFS advised the Council to draft a completely new EIS for these species. This new EIS, which is part of this document, would replace the information presented in Amendments 2, 8, and 9 for summer flounder, scup, and black sea bass, respectively.

The management units for summer flounder, scup and black sea bass remain unchanged in this amendment. Specifically, the management unit is summer flounder in US waters in the western Atlantic Ocean from the southern border of North Carolina northward to the US-Canadian border, and scup and black sea bass in US waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the US-Canadian border.

The objectives of the FMP are:

1. Reduce fishing mortality in the summer flounder, scup and black sea bass fishery to assure that overfishing does not occur.

2. Reduce fishing mortality on immature summer flounder, scup and black sea bass to increase spawning stock biomass.

3. Improve the yield from these fisheries.

4. Promote compatible management regulations between state and federal jurisdictions.

5. Promote uniform and effective enforcement of regulations.

6. Minimize regulations to achieve the management objectives stated above.

A number of alternatives have been identified by the Council and Commission for consideration by the public. These alternatives are discussed in further detail in section 2.0 of this document.

A. Black Sea Bass Commercial Management Alternatives (Note that Alternatives 1 through 8 relate to the black sea bass commercial quota and Alternatives 9 through 12 detail other black sea bass commercial management measures.)

1. Status quo: the quarterly quota system currently in effect (Alternative 1).

2. A quarterly quota system with a rollover provision (Alternative 2).

a. A quarterly quota system with a change in the allocation formula based on 1988-1997 landings data and a rollover provision (Alternative 2a).

b. A quarterly quota system with a change in the allocation formula based on 1993-1997 landings data and a rollover provision (Alternative 2b).

3. Quota allocation by permit category (Alternative 3).

a. Quota allocation by permit category - 3 separate categories based on landings data from 1988-1997 (Alternative 3a).

b. Quota allocation by permit category - 3 separate categories based on landings data from 1993-1997 (Alternative 3b).

c. Quota allocation by permit category - 2 separate categories based on landings data from 1988-1997 (Alternative 3c).

d. Quota allocation by permit category - 2 separate categories based on landings data from 1993-1997 (Alternative 3d).

4. Quota allocation to separate subregions (Alternative 4).

a. Quota allocation to separate subregions based on 1988-1997 landings data with additional period allocations January through April and May through December (Alternative 4a).
b. Quota allocation to separate subregions based on 1993-1997 landings data with additional period allocations January through April and May through December (Alternative 4b).

5. State-by-state allocations (Alternative 5).

a. State-by-state allocations based on 1988-1997 landings data (Alternative 5a).

b. State-by-state allocations based on 1993-1997 landings data (Alternative 5b).

c. State-by-state allocations based on the best five landing years for each state during the period 1988 to 1997 (Alternative 5c).

d. State-by-state allocations based on the best five landing years for each state during the period 1980 to 1997 (Alternative 5d).

e. De minimus specifications (Alternative 5e).

f. Coastwide quota to facilitate state-by-state allocations implemented by the Commission (Alternative 5f: preferred alternative).

6. A hybrid quota system: coastwide quota from January through April and state-by-state quotas from May through December (Alternative 6).

a. A hybrid quota system based on 1988-1997 landings data: coastwide quota from January through April and state-by-state quotas from May through December (Alternative 6a).

b. A hybrid quota system based on 1993-1997 landings data: coastwide quota from January through April and state-by-state quotas from May through December (Alternative 6b).

c. A hybrid quota system based on 1980-1997 landings data: coastwide quota from January through April and state-by-state quotas from May through December (Alternative 6c).

7. A hybrid quota system: coastwide quota from January through April and subregional quotas from May through December (Alternative 7).

a. A hybrid quota system based on 1988-1997 landings data: coastwide quota from January through April and subregional quotas from May through December (Alternative 7a).

b. A hybrid quota system based on 1993-1997 landings data: coastwide quota from January through April and subregional quotas from May through December (Alternative 7b).

8. Allocations by gear type.

a. Quota allocation by gear type based on 1988-97 landings data (Alternative 8a).

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b. Quota allocation by gear type based on 1993-97 landings data (Alternative 8b).

9. Permit requirements for fishermen that have both a Northeast Black Sea Bass Commercial Permit and a Southeast Snapper/Grouper Permit (Alternative 9).

a. Status quo (Alternative 9a).

b. Remove the permit requirement that restricts fishermen from using a Southeast Snapper/Grouper Permit during a northern closure (Alternative 9b: preferred alternative).

10. Prohibit the wet storage of black sea bass pots/traps during a closure (Alternative 10).

a. Status quo: allow wet storage of black sea bass pots/traps during a closure (Alternative 10a: preferred alternative).

b. Prohibit the wet storage of black sea bass pots/traps during a closure of longer than two weeks (Alternative 10b).

c. Prohibit the wet storage of black sea bass pots/traps during a closure of longer than four weeks (Alternative 10c).

11. A black sea bass pot/trap tag program.

a. Status quo: no tag program (Alternative 11a: preferred alternative).

b. A tag requirement for black sea bass pots/traps (Alternative 11b).

- 12. A limit on the number of pots/traps used by fishermen.
 - a. Status quo: no limit on the number of pots/traps (Alternative 12a: preferred alternative).
 - b. A limit of 400 pots/traps (Alternative 12b).
 - c. A limit of 800 pots/traps (Alternative 12c).

B. Summer Flounder, Scup, and Black Sea Bass EFH Alternatives

1. Status quo: current management measures (EFH Alternative 1: preferred alternative).

2. Prohibit bottom tending mobile gear from the nearshore areas surrounding estuaries (EFH Alternative 2).

3. Prohibit bottom tending mobile gear in the area surrounding the Hudson Canyon (EFH Alternative 3).

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- 4. Roller rig and rock hopper gear restrictions (EFH Alternative 4).
- 5. Prohibit street-sweeper gear (EFH Alternative 5).

In the final deliberations on Amendment 13, and after a review of public comment, the Council and Commission considered all the alternatives and comments and chose the following preferred alternatives: a) a federal coastwide quota to facilitate the state-by-state allocation system implemented by the Commission (Alternative 5f; section 2.1.5.6); b) removal of the permit requirement that restricts fishermen from using a SER S/G Permit during a northern closure (Alternative 9b; section 2.1.9.2); c) no additional regulations regarding wet storage of black sea bass pots/traps during a closure (Alternative 10a: status quo; section 2.1.10.1); d) no initiation of a pot/trap tag program (Alternative 11a: status quo; section 2.1.11.1); e) no restrictions on the numbers of pots/traps used by fishermen (Alternative 12a: status quo; section 2.1.12.1); and f) rely on current management measures to minimize adverse effects of fishing on EFH (EFH Alternative 1: Status Quo; section 2.2.1).

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A. SUPPLEMENTARY ANALYSIS

B. AMENDMENT 1 TO THE BLACK SEA BASS FISHERY MANAGEMENT PLAN (ASMFC 2002) **ATTACHED DOCUMENT**

C. "THE EFFECTS OF FISHING ON MARINE HABITATS OF THE NORTHEASTERN UNITED STATES" (NMFS 2001)

D. "WORKSHOP ON THE EFFECTS OF FISHING GEAR ON MARINE HABITATS OFF THE NORTHEASTERN UNITED STATES OCTOBER 23-25, 2001, BOSTON, MASSACHUSETTS" (NER EFH SC 2002)

E. EFH FOR OVERLAPPING SPECIES

F. "ECONOMIC IMPACTS AND PROTECTING ESSENTIAL FISH HABITAT: AMENDMENT 13 TO THE SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS FISHERY MANAGEMENT PLAN" (HICKS *ET AL.* 2001)

G. PUBLIC HEARING SUMMARIES

H. COMMENT LETTERS AND COUNCIL RESPONSE

*Note that (EIS) identifies sections of the FMP required for the Environmental Impact Statement.

1.0 PURPOSE AND NEED FOR ACTION (EIS)*

The summer flounder, scup and black sea bass fisheries are managed under the Summer Flounder (*Paralichthys dentatus*), Scup (*Stenotomus chrysops*) and Black Sea Bass (*Centropristis striata*) Fishery Management Plan (FMP) that was prepared cooperatively by the Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission (Commission).

This amendment, Amendment 13 to the Summer Flounder, Scup and Black Sea Bass FMP, could: 1) revise the quarterly commercial quota system for black sea bass implemented in Amendment 9 to the Summer Flounder, Scup, and Black Sea Bass Fisheries Management Plan; 2) remove permit restrictions for fishermen that have both a Northeast Region Black Sea Bass (NER BSB) permit and a Southeast Region Snapper/Grouper (SER S/G) permit and fish for black sea bass north and south of Cape Hatteras, North Carolina; 3) address the potential problems related to the wet storage of black sea bass pots/traps; 4) establish *de minimus* specifications for black sea bass under the Atlantic State Marine Fisheries Commission Interstate Fisheries Management Program Charter; 5) implement tag requirements for black sea bass pots/traps; 6) limit the number of black sea bass pots/traps fished by fishermen; and 7) implement management alternatives for summer flounder, scup and black sea bass to prevent, mitigate or minimize adverse effects from fishing to bring the FMP into compliance with Section 303(a)(7) of the Sustainable Fisheries Act (SFA).

These management alternatives have been proposed to remedy a number of problems related to the commercial management system currently in place for black sea bass. Specifically, the quarterly quota system implemented in Amendment 9 was designed to allow for black sea bass to be landed during the entire 3 months in each quarter. However, the black sea bass fishery experienced early closures during the last three quarters in 1999 and 2000. In fact, in quarters 3 and 4 of 2000 the quarterly allocation was harvested within one month leaving the fishery closed for the remaining two months of those quarters. In 2001, the quarters 1 through 4 also experienced early closures and quarter 3 of 2001 was closed in less than three weeks.

Long closures have obvious economic consequences to fishermen and processors. A market glut at the beginning of the quarter allows for a drop in prices as a large number of fish flood the market. After a short landings period, the fishery is closed and fishermen, especially those that fish primarily for black sea bass, are faced with the additional economic concerns of no or reduced income.

In addition to early closures, the quota in the first quarter was not taken in 1998, 1999, and 2000. This relates to the fact that the allocation percentages are based on historic landings during a period of time when the mesh size for summer flounder was smaller and the fishery was mixed, i.e., fishermen targeting summer flounder with 4" mesh landed significant quantities of black sea bass as bycatch from January through March. As a result of the quota system and minimum mesh sizes for summer flounder, the flounder fishery is now very direct and fewer sea bass were landed in the winter fishery in 1999 and 2000.

Possible inequities have also been created by the current management system as landings have shifted to the north. In fact, preliminary data for quarter 4 in 2000 indicate that 41% of the

landings for that quarter occurred in one state, Massachusetts. A shift in abundance of black sea bass to the north may account for these higher landings. However, some fishermen have also indicated that more restrictive possession limits have favored fishing operations in the north where black sea bass are caught closer to shore.

Some states have no or little associated landings of black sea bass. As such, this amendment addresses the need to establish *de minimus* specifications under the Commission's Interstate Fisheries Management Program Charter. *De minimus* status is granted when, under existing conditions of the stock and scope of the fishery, conservation and enforcement actions taken by an individual state would not be expected to contribute significantly to a coastwide conservation program required by an FMP or amendment. Any state that has commercial landings of less than 0.1% of the total coastwide commercial landings in the last preceding year for which data are available is eligible for *de minimus* status.

This amendment also addresses permit restrictions for fishermen that have both a NER BSB permit and a SER S/G permit and fish for black sea bass north and south of Cape Hatteras, North Carolina. Current regulations restrict fishermen with the Northeast permit from fishing south of Cape Hatteras during a northern closure unless they relinquish their permits for a period of 6 months. These fishermen have indicated that this requirement is unnecessarily burdensome, given the fact that only a few fishermen have both permits and the reporting system in North Carolina can accurately track landings north and south of Cape Hatteras.

This amendment also addresses the potential problems related to the wet storage of black sea bass pots/traps. Wet storage is a practice where commercial black sea bass pot/trap fishermen allow their pots/traps to remain in the water during periods when the black sea bass fishery is closed. This practice allows the pots/traps to continue to attract and capture fish. Anecdotal reports have indicated that when the fishery is closed and black sea bass cannot be landed, they die in the pots/traps.

This amendment also explores the need to limit the number of pots/traps and implement a pot/trap tagging program to reduce effort in the black sea bass fishery. The Council and Commission are concerned that pot/trap fishermen have continued to fish with a large number of pots/traps even though their landings are controlled by possession (landing) limits. This level of effort may be associated with an increased level of discards and mortality of black sea bass that die in traps before they can be harvested.

Finally, this amendment addresses the disapproved portions of Amendment 12 relating to the potential impacts of fishing gear on summer flounder, scup, and black sea bass EFH. Pursuant to Section 303(a)(7) of the SFA, the Councils shall minimize to the extent practicable adverse effects on EFH caused by fishing. Additionally, 50 CFR part 600.815 (a)(3) states that the Councils must act to prevent, mitigate, or minimize adverse effects from fishing, to the extent practicable, if there is evidence that a fishing practice is having an identifiable adverse effect on EFH. Sections 3.2.7.1, 3.2.7.2, and 3.2.8 of this Amendment detail the possible impacts of fishing gear on summer flounder, scup, and black bass EFH (sections 2.2.3.6, 2.2.3.7, and 2.2.4 in Amendment 12, respectively). In addition, management alternatives that could be used to prevent, mitigate or minimize adverse effects from fishing are described below. Section 600.815

(a)(4) states that, fishery management options may include, but are not limited to: (i) fishing equipment restrictions, (ii) time/area closures, and (iii) harvest limits.

1.1 AMENDMENT/EIS PROCESS

This amendment was prepared under both the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) of 1976, as amended by the SFA of 1996, and the Atlantic Coastal Fisheries Cooperative Management Act of 1993 (ACFCMA). The MSFCMA requires that the management measures proposed in an FMP be consistent with ten National Standards for fishery conservation and management. Under ACFCMA, if a state does not implement management measures required by an FMP or amendment, the federal government may impose a moratorium on the landing of the species covered by the FMP in that state.

FMPs and amendments must meet the requirements of a number of federal laws and regulations. In addition to MSFCMA, these include the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), Migratory Bird Treaty Act (MBTA), Executive Order 12866 (EO 12866), Regulatory Flexibility Act (RFA), Paper Reduction Act (PRA), and Coastal Zone Management Act (CZMA). This document has been developed to meet these federal requirements and contains all elements of a FMP Amendment, Environmental Impact Statement (EIS), Regulatory Flexibility Analysis, Regulatory Impact Review (RIR). and Social Impact Assessment (SIA).

The Council is required to prepare an EIS under NEPA to assess the potential effects of the proposed actions on the human environment. Because the prior EIS was prepared in 1992 for summer flounder and in 1996 for scup and black sea bass, NMFS advised the Council to draft a completely new EIS for these species. This new EIS, which is part of this document, would replace the information presented in Amendments 2, 8, and 9 for summer flounder, scup, and black sea bass, respectively.

The notice of intent to prepare an EIS was published in the Federal Register on March 7, 2001. NEPA requires that the Council conduct one or more scoping meetings to inform interested parties of the proposed action and alternatives, and to solicit comments on the range and type of analysis to be included in the EIS. The Council held a public scoping hearing on March 21, 2001 and accepted scoping comments from March 7, 2001 through April 6, 2001. The Council evaluated a reasonable range of alternatives under each of the proposed actions in the amendment/EIS. These alternatives were approved in a public hearing draft on August 8, 2001. The Council did not choose preferred alternatives for the public hearing draft. The public had a chance to comment on Amendment 13 through a public hearing process. Specifically, the Notice of Availability for the draft amendment/EIS was released on March 1, 2002 and the comment period ended on April 15, 2002. The Council and Commission also held 7 public hearings to allow input on Amendment 13. After the public hearing process was complete, the Council considered all public comments and chose the following as preferred alternatives: a) a federal coastwide quota with a state-by-state allocation system managed by the Commission (Alternative 5f; section 2.1.5.6); b) removal of the permit requirement that restricts fishermen from using a SER S/G Permit during a northern closure (Alternative 9b; section 2.1.9.2); c) no additional regulations regarding the wet storage of black sea bass pots/traps during a closure (Alternative 10a: status quo; section 2.1.10.1); d) no initiation of a pot/trap tag program

(Alternative 11a: status quo; section 2.1.11.1); e) no restrictions on the numbers of pots/traps used by fishermen (Alternative 12a: status quo; section 2.1.12.1); and f) rely on current management measures to minimize adverse effects of fishing on EFH (EFH Alternative 1: status quo; section 2.2.1).

1.2 HISTORY OF FMP DEVELOPMENT

The Mid-Atlantic Fishery Management Council (Council) first considered the development of an FMP for summer flounder in late 1977. During the early discussions, the fact that a significant portion of the catch was taken from state waters was considered. As a result, on 17 March 1978 a questionnaire was sent by the Council to east coast state fishery administrators seeking comment on whether the plan should be prepared by the Council or by the states acting through the Atlantic States Marine Fisheries Commission (Commission).

It was decided that the initial plan would be prepared by the Commission. The Council arranged for NMFS to make some of the Council's programmatic grant funds available to finance preparation of the Commission's plan. New Jersey was designated as the state with lead responsibility for the plan. The state/federal draft was adopted by the Commission at its annual meeting in October 1982. The original Council Summer Flounder FMP (MAFMC 1988) was based on the Commission's management plan. NMFS approved the original FMP on 19 September 1988.

Amendment 1 to the FMP was developed in the summer of 1990 solely to protect the 1989 and 1990 year classes by imposing a minimum net mesh size comparable to the 13" minimum fish size included in the original FMP. On 15 February 1991 the Council was notified that NMFS had approved the overfishing definition for summer flounder contained in Amendment 1, but had disapproved the minimum net mesh provision.

Amendment 2, which was fully implemented in 1993, was a comprehensive amendment designed to rebuild a severely depleted summer flounder stock. Amendment 2 was approved by NMFS on 6 August 1992. It contained a number of management measures to regulate the commercial and recreational fisheries for summer flounder. These included a rebuilding schedule, commercial quotas, recreational harvest limits, size limits, gear restrictions, and permit and reporting requirements. Amendment 2 also established the Summer Flounder Monitoring Committee, which meets annually to review the best available biological and fisheries data and make recommendations regarding the commercial quota and other management measures.

Amendment 3 to the Summer Flounder FMP was developed in response to fishermen's concerns that the demarcation line for the small mesh exempted fishery bisected Hudson Canyon and was difficult to enforce. Amendment 3 revised the Northeast exempted fishery line to 72°30.0'W. In addition, Amendment 3 increased the large mesh net threshold to 200 pounds during the winter fishery, 1 November to 30 April. Furthermore, Amendment 3 stipulated that otter trawl vessels fishing from 1 May through 31 October could only retain up to 100 pounds of summer flounder before using the large mesh net. Amendment 3 was approved by the Council on 21 January 1993 and submitted to NMFS on 16 February 1993.

Amendment 4 adjusted Connecticut's commercial landings of summer flounder and revised the state-specific shares of the coastwide commercial summer flounder quota as requested by the Commission. Amendment 5 allowed states to transfer or combine the commercial quota. Amendment 6 allowed multiple nets on board as long as they were properly stowed and changed the deadline for publishing the overall catch limits and commercial management measures to 15 October and the recreational management measures to 15 February. Amendment 7 revised the fishing mortality rate reduction schedule for summer flounder.

The Council began the development of an FMP for black sea bass in 1978. Although preliminary work was done to support the development of an FMP, a plan was not completed. Work on an FMP began again in January, 1990 when the Council and the Commission began the development of an FMP for black sea bass. However, the development of a black sea bass plan was delayed through a series of amendments to the Summer Flounder FMP and work on a separate Black Sea Bass FMP was not resumed until 1993.

In 1996, NMFS requested that the black sea bass and scup regulations be incorporated into another FMP to reduce the number of separate fisheries regulations issued by the federal government. As a result, the Scup FMP and the Black Sea Bass FMP were incorporated into the summer flounder regulations as Amendment 8 and 9 (included EISs) to the Summer Flounder FMP, respectively. Amendment 8 established management measures for scup and Amendment 9 established a management program for black sea bass. Both of these were major amendments that implemented a number of management measures for scup and black sea bass including commercial quotas, commercial gear requirements, minimum size limits, recreational harvest limits, and permit and reporting requirements.

The Council was notified at a June, 1996 meeting that the Regional Director planned to disapprove the provision in Amendment 9 that would implement a state-by-state commercial quota. The official disapproval letter was dated July 16, 1996. In the letter, the Regional Director concluded that the state-by-state quota provision was not consistent with National Standard 7. Specifically, he stated that the provisions that apply to the area of north of Cape Hatteras, North Carolina would impose significant administrative and enforcement costs on NMFS and the state of North Carolina. The letter referenced the fact that Cape Hatteras separates two distinct stocks of black sea bass, a northern stock that would be managed by Amendment 9 regulations and a southern stock regulated by the Snapper/Grouper FMP. The disapproval letter stated that the amendment failed to address how a commercial quota that bifurcated the state of North Carolina and only applied to the northern stock of black sea bass would be implemented. Based on these comments, the Council voted to replace the state-by-state quota system with a coastwide quota allocated in quarterly periods over the year.

Amendment 10 made a number of changes to the summer flounder regulations implemented by Amendment 2 and later amendments to the Summer Flounder, Scup and Black Sea Bass FMP. Specifically this amendment modified the commercial minimum mesh regulations, continued the moratorium on entry of additional commercial vessels, removed provisions that pertain to the expiration of the moratorium permit, prohibited the transfer of summer flounder at sea, and established a special permit for party/charter vessels to allow the possession of summer flounder parts smaller than the minimum size.

Amendment 11, approved by NMFS in 1998, was implemented to achieve consistency among Mid-Atlantic and New England FMPs regarding vessel replacement and upgrade provisions, permit history transfer, splitting, and renewal regulations for fishing vessels issued Northeast Limited Access federal fishery permits.

Amendment 12 was developed to bring the Summer Flounder, Scup, and Black Sea Bass FMP into compliance with the new and revised National Standards and other required provisions of SFA. Specifically, the amendment revised the overfishing definitions (National Standard 1) for summer flounder, scup, and black sea bass and addressed the new and revised National Standard 9 - reduce bycatch; and National Standard 10 - promote safety at sea) relative to the existing management measures. The amendment also identified essential habitat for summer flounder, scup and black sea bass. In addition, Amendment 12 added a framework adjustment procedure that allows the Council to add or modify management measures through a streamlined public review process. Amendment 12 was partially approved on 28 April 1999.

It should be noted that any management measure implemented by an earlier amendment not specifically referenced in this amendment is intended to continue in force.

1.3 MANAGEMENT OBJECTIVES

The objectives of the FMP are:

1. Reduce fishing mortality in the summer flounder, scup and black sea bass fishery to assure that overfishing does not occur.

2. Reduce fishing mortality on immature summer flounder, scup and black sea bass to increase spawning stock biomass.

3. Improve the yield from these fisheries.

4. Promote compatible management regulations between state and federal jurisdictions.

5. Promote uniform and effective enforcement of regulations.

6. Minimize regulations to achieve the management objectives stated above.

1.4 MANAGEMENT UNIT

The management units for summer flounder, scup and black sea bass remain unchanged in this amendment. Specifically, the management unit is summer flounder in US waters in the western Atlantic Ocean from the southern border of North Carolina northward to the US-Canadian border, and scup and black sea bass in US waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the US-Canadian border.

1.5 MANAGEMENT STRATEGY

This amendment will provide the information and analyses necessary to implement a commercial management system that will modify the current quota system for black sea bass. This modification will allow for a more equitable allocation of the quota to fishermen and increase the probability that exploitation targets will be met. The Council intends to continue the management programs detailed in the summer flounder, scup, and black sea bass FMP and reduce overfishing and rebuild the summer flounder, scup, and black sea bass stocks. Finally, this amendment remedies the deficiencies associated with the EFH requirements for summer flounder, scup and black sea bass and replaces the existing EIS for all three species.

2.0 MANAGEMENT MEASURE ALTERNATIVES (EIS)*

The following is a description of the alternatives adopted by the Council and Commission for analysis and public hearing comment. The complete analysis of the biological, economic, and social impacts are presented in section 4.0 of this document. In addition, several alternatives were considered by the Council and Commission but were rejected for further analysis. They are described in sections 2.1.13 and 2.2.6.

Note that in the final deliberations on Amendment 13, and after a review of public comment, the Council and Commission considered all the alternatives and comments and chose the following preferred alternatives: a) a federal coastwide quota to facilitate the state-by-state allocation system implemented by the Commission (Alternative 5f; section 2.1.5.6); b) removal of the permit requirement that restricts fishermen from using a SER S/G Permit during a northern closure (Alternative 9b; section 2.1.9.2); c) no additional regulations regarding wet storage of black sea bass pots/traps during a closure (Alternative 10a: status quo; section 2.1.10.1); d) no initiation of a pot/trap tag program (Alternative 11a: status quo; section 2.1.11.1); e) no restrictions on the numbers of pots/traps used by fishermen (Alternative 12a: status quo; section 2.1.12.1); and f) rely on current management measures to minimize adverse effects of fishing on EFH (EFH Alternative 1: Status Quo; section 2.2.1). This combination will be submitted to the Secretary of Commerce for approval.

The Commission adopted state-by-state quotas to manage the commercial fishery for black sea bass. These quotas will be implemented by the states on January 1, 2003. This state-by-state system will give states the ability to manage their quota for the greatest benefit of the commercial black sea bass industry in their state. The Council supports this action by the Commission.

The coastwide quota alternative selected by the Council to facilitate the state-by-state quotas implemented by the Commission is an alternative that falls within the range of state-by-state quota alternatives considered in the public hearing document. Specifically, the preferred quota management program is essentially the same as the state-by-state alternatives considered in the DEIS with the difference being that the states would manage the program. As such, the resulting impacts would be consistent with those described in the public hearing document.

2.1 BLACK SEA BASS COMMERCIAL MANAGEMENT ALTERNATIVES

A number of alternatives that would affect the black sea bass commercial fishery are identified below. Alternatives 1 through 8 relate to the black sea bass commercial quota and were

proposed by the Council and Commission as possible ways of allocating the quota each year. The annual quota setting process and associated regulations as detailed in Amendment 9 would apply to all of the alternatives that involve an allocation of an annual quota.

Most of the quota alternatives base allocation formulas on landings between the years 1988 and 1997. The landings prior to 1988 are available and are used in the state-by-state allocation formulas detailed in Alternative 2.1.5.4. However, many states do not have accurate landings reports for some of those years. In fact, that was the reason that the Council and Commission used 1988-1992 data in Amendment 9 to allocate the quota. In addition, the landings data for 1998 and 1999 were affected by the restrictive quotas and possession limits that were imposed in those years. As such, those years should be left out of any allocation formula.

Alternatives 9 through 12 contain other black sea bass commercial management measures. These alternatives would modify regulations related to pots/traps as well as commercial fishing permits.

2.1.1 Status Quo: Quarterly Quota System Currently in Effect (Alternative 1)

This is a "no action" alternative that would allow the current system to remain in effect. This alternative is required by NEPA. It is the "standard" or base to which the other proposed alternatives are compared for biological, economic, and social impacts. Specifically, the annual commercial quota is allocated to four quarters based on 1988-1992 landings data. The allocation periods and the associated percent of the total quota are: January through March (38.64%), April through June (29.26%), July through September (12.33%), and October through December (19.77%; Table 1). Possession limits are implemented each period. Any landings in excess of the quota that occurred during a quarter are subtracted from the following year's quota for that quarter.

2.1.2 A Quarterly Quota System With a Rollover Provision (Alternative 2)

2.1.2.1 A quarterly quota system with a change in the allocation formula based on 1988-1997 landings data and a rollover provision (Alternative 2a)

This alternative would continue the present system with a change in the allocation formula based on landings data from 1988-1997 (Table 1). The allocation periods and the associated percent of the total quota would be: January through March (36.16%), April through June (29.45%), July through September (13.61%), and October through December (20.78%). Specifically, the annual commercial quota would be allocated to four quarters based on landings data for these years. In addition, unused quota from the previous quarters could be added to the next quarters allocation within the year, e.g., unused quota from quarter 1 could be added to the quarter 2 allocation that year. However, unused quota could not be added to the following year's quota. Possession limits would be implemented for each period. Any landings in excess of the quota that occurred during a quarter would be subtracted from the following year's quota for that quarter.

The rationale for this alternative is that with the knowledge that any unused quota will not be "wasted," but rather rolled over to the next quarter, derby-style fishing effort may not ensue, i.e.,

there would be no need to use or lose the quota. Under the current system, the "use it or lose it" mentality can result in harvesting the quarterly quota quickly, or even overharvesting it.

The Council and Commission did not choose this rollover provision alternative because this alternative did not address the problems stated in section 1.0. Specifically, given that all four quarters in 2001 closed early, 100% of the quota was landed in the first quarter of 2002, and the second quarter in 2002 closed early, it is unlikely that adding a rollover provision would allow the black sea bass fishery to remain open throughout the year. Furthermore, a quarterly quota system with or without a rollover provision would not allow for the flexibility required by the states to manage the fisheries under a state-by-state allocation system. Coastwide quarterly quotas would not be compatible with the state-by-state quota implemented by the Commission. Specifically, they would not allow states the flexibility to design their own management systems because of the temporal constraints imposed by a quarterly federal quota.

2.1.2.2 A quarterly quota system with a change in the allocation formula based on 1993-1997 landings data and a rollover provision (Alternative 2b)

The same as Alternative 2.1.2.1 except the base years used in the allocation formula would be 1993-1997 (Table 1).

2.1.3 Quota Allocation by Permit Category (Alternative 3)

2.1.3.1 Quota allocation by permit category - 3 separate categories based on landings data from 1988-1997 (Alternative 3a)

This alternative would create three permit categories or sectors based upon documented landings from 1988 to June 5, 2001 by any vessel with a NER BSB permit. Vessels qualifying for each sector would be required to meet the following criteria:

1) A1 permits - documented landings were $\geq 10,000$ pounds per 12 month period (June 6 to June 5) for at least 3 annual periods;

2) A2 permits - documented landings were $\geq 2,000$ pounds per 12 month period (June 6 to June 5) for at least 3 annual periods;

3) A3 permits - documented landings of black sea bass in a 12 month period (June 6 to June 5) for 3 annual periods, but did not meet A1 or A2 permit criteria.

Each sector would be allocated a share of the quota based on landings data from 1988-1997 for each permit category. Based on 1988-1997 data, 81.7% of the annual quota would be allocated to A1 permit holders, 12.8% to A2 permit holders, and 5.5% to A3 permit holders (Table 2a).

It would be the responsibility of the states to cooperate with NMFS to monitor each sector's performance to ensure that the quota for each sector was not exceeded. If it is projected that a sector would reach its quota, it would be the responsibility of NMFS and the states to close the fishery. If, in any given year, a sector does exceed its quota, the overage would be deducted from the following year's quota for that sector.

It is possible that allocations could be subdivided over the year. Specifically, the Council and Commission could choose to further divide the allocations by permit category into two periods, January through April and May through December. Possession limits would then be implemented for each category and period to allow for an even distribution of the landings throughout the year.

This alternative was considered because allocation of the annual quota into three permit categories may result in a more equitable distribution of landings among user groups. The Council and Commission did not choose any of the permit category alternatives because these alternatives would introduce the additional burden of enforcing individual permit allocations. Additionally, the burden of monitoring the fishery for NMFS and the states would increase, relative to the current system. The reporting requirements for dealers would also increase under the permit category alternatives. The permit category alternatives would not be compatible with the state-by-state quota implemented by the Commission. Specifically, they would not allow states the flexibility to design their own management systems, because of the constraints that would be placed on the federal permit holders in the different permit categories.

2.1.3.2 Quota allocation by permit category - 3 separate categories based on landings data from 1993-1997 (Alternative 3b)

The same as Alternative 2.1.3.1 except the base years used in the allocation formula to the permit categories would be 1993-1997 (Table 2b).

2.1.3.3 Quota allocation by permit category - 2 separate categories based on landings data from 1988-1997 (Alternative 3c)

This alternative would create two permit categories or sectors based upon documented landings from 1988 to June 5, 2001 by any vessel with a NER BSB permit. Vessels qualifying for each sector would be required to meet the following criteria:

1) B1 permit - documented landings were >= 4,000 pounds per 12 month period (June 6 to June 5) for at least 3 annual periods;

2) B2 permit - documented landings of black sea bass per 12 month period (June 6 to June 5) but did not meet B1 permit criteria.

Each sector would be allocated a share of the quota based on average annual landings from 1988-1997 for each permit category. Based on 1988-1997 data, 89.8% of the annual quota would be allocated to B1 permit holders and 10.2% to B2 permit holders (Table 3a).

It would be the responsibility of the states to cooperate with NMFS to monitor each sector's performance to ensure that the quota for each sector was not exceeded. If it is projected that a sector would reach its quota, it would be the responsibility of NMFS and the states to close the fishery. If, in any given year, a sector does exceed its quota, the overage would be deducted from the following year's quota for that sector.

It is possible that allocations could be subdivided over the year. Specifically, the Council and Commission could choose to further divide the allocations by permit category into two periods,

January through April and May through December. Possession limits would then be implemented for each category and period to allow for an even distribution of the landings throughout the year.

This alternative was considered because allocation by two permit categories may result in a more equitable distribution of landings among user groups. Furthermore, a subdivision into two categories may be more equitable than three categories.

2.1.3.4 Quota allocation by permit category - 2 separate categories based on landings data from 1993-1997 (Alternative 3d)

The same as Alternative 2.1.3.3 except the base years used in the allocation formula to the permit categories would be 1993-1997 (Table 3b).

2.1.4 Quota Allocation to Separate Subregions (Alternative 4)

2.1.4.1 Quota allocation to separate subregions based on 1988-1997 landings data with additional period allocations January through April and May through December (Alternative 4a)

The annual quota would be allocated to a northern and southern subregion based on 1988-1997 landings data. The northern subregion would include the states from Maine to New York and the southern subregion would include states from New Jersey to North Carolina (Cape Hatteras). Subregional quotas would be further divided into two periods, January through April and May through December, based on the same landing years used in the subregional allocation, that is, 1988-1997. The associated allocations for each subregional period are presented in Table 4.

Possession limits would be implemented for each subregion and period. Possession limits could be modified over the period based on a recommendation of the Monitoring Committee to the Council and Commission and implementation by the Regional Administrator and the states as part of the annual specification process.

The quota would apply throughout the management unit, including both state and federal waters. All commercial landings in a state would count toward the quota in that state's subregion. Fishermen would be allowed to land in any port in their subregion. Any landings in excess of the quota that occurred during a period in a subregion would be subtracted from the following year's quota for that period and subregion.

The reason that this alternative was proposed because an allocation of the quota to subregions may account for geographic difference in the fishery. As such, it would recognize that fishing practices differ from north to south. The Council and Commission did not choose the subregion alternatives because they felt that the state-by-state allocation system implemented by the Commission and facilitated by a federal coastwide quota would allow for the most equitable distribution of the commercial quota to fishermen, without the additional burden of federal monitoring by NMFS. Quota allocation to separate subregions would not be compatible with the state-by-state quota implemented by the Commission. Specifically, they would not allow states

the flexibility to design their own management systems because of the geographic constraints imposed by a subregional allocation.

2.1.4.2 Quota allocation to separate subregions based on 1993-1997 landings data with additional period allocations January through April and May through December (Alternative 4b)

The same as Alternative 2.1.4.1 except the base years used in the allocation formula would be 1993-1997 (Table 4).

2.1.5 State-by-State Allocations (Alternative 5)

2.1.5.1 State-by-state allocations based on 1988-1997 landings data (Alternative 5a)

A state-by-state system to distribute and manage the annual commercial quota would be implemented by the Council and Commission. Quotas would be distributed to the states based on their percentage share of commercial landings for the period 1988-1997 (Table 5). States would be expected to adopt appropriate measures to prevent quota overages and to indicate these measures in their annual report to the Commission Management Board. States would have the responsibility for implementing closures in their state. The Regional Administrator would be required to prohibit landings by federally permitted individuals in any state that had reached its quota. States would be allowed to trade or combine quotas and the states could impose possession limits or other measures to manage their quotas.

The state shares could be revised based on the recommendations of the Commission to account for any changes in the landings data for the base years 1988-1997. Specifically, changes in state landing data could modify the allocation percentages. In addition, the Council and Commission could modify the allocations based on a consideration of state regulations that were in place during the base years, 1988 to 1997. For example, the Commission may develop a methodology to adjust landings to account for the different size limits in various states.

The quota would apply throughout the management unit, that is, in both state and federal waters. All black sea bass landed for sale in a state would be applied against the state's annual commercial quota regardless of where the black sea bass were harvested. Any overages of the commercial quota landed in a state would be deducted from that state's annual quota for the following year. Individuals or vessels with commercial permits could not land black sea bass in any state that had not been allocated a commercial quota.

The coastal states would work with NMFS to administer the quotas and coordinate data collection. NMFS has indicated in a letter to the Council and Commission that the implementation and administration of state-by-state quotas for black sea bass would be difficult due to the small quota that would be allocated to some of the states. As such, this alternative would require a cooperative program initiated by the states and NMFS to accurately track black sea bass landings. NMFS and the states would monitor the fishery to determine when a quota was reached. The Commission has also established compliance criteria as a part of the interstate

management process (section 5.4.4). These compliance criteria would require states to submit dealer reports to NMFS for state permitted dealers.

The Regional Administrator would close the EEZ to commercial fishing for black sea bass when the quota was landed. Each state would close its waters to commercial fishing for black sea bass when its share of the quota was landed.

This alternative was proposed because a state-by-state quota system could allow for the most equitable distribution of the commercial quota to fishermen. Specifically, under this set of alternatives, states would have the responsibility of managing their quota for the greatest benefit of the commercial black sea bass industry in their state. States could design allocation systems based on state specific landing patterns using possession limits and seasons to ensure a continuous and steady supply of product over the season for producers and/or a fair an equitable distribution of black sea bass to all fishermen who have traditionally landed black sea bass in their state. States would also have the ability to transfer or combine quota, increasing the flexibility of the system to respond to year to year variations in fishing practices or landings patterns.

2.1.5.2 State-by-state allocations based on 1993-1997 landings data (Alternative 5b)

The same as Alternative 2.1.5.1 except the base years used in the allocation formula would be 1993-1997 (Table 5).

2.1.5.3 State-by-state allocations based on the best five landing years for each state during the period 1988 to 1997 (Alternative 5c)

The same as Alternative 2.1.5.1 except the base years used in the allocation formula would be the best five landing years for each state during the period 1988-1997 (Tables 5 and 6).

2.1.5.4 State-by-state allocations based on the best five landing years for each state during the period 1980 to 1997 (Alternative 5d)

The same as Alternative 2.1.5.1 except the base years used in the allocation formula would be the best five landing years for each state during the period 1980-1997 (Table 5).

2.1.5.5 *De minimus* specifications (Alternative 5e)

This alternative is a sub-alternative under each state-by-state quota alternative. Under this alternative, states must specifically request *de minimus* status each year, and requests for *de minimus* status will be reviewed by the Monitoring Committee as part of the annual FMP review process. Recommendations from the Committee will follow the procedures outlined in section 9.1.2.2 on page 46 of Amendment 9. The Committee will consider the most recent available data, as well as projections of future landings, in determining whether or not a state meets the *de minimus* requirements. They will also consider the intended regulatory program of the state to ensure that the state is taking reasonable steps to prevent a sudden and unexpected increase in landings. It is the requesting states responsibility to provide the Committee with sufficient detailed information to evaluate the intended regulatory program. The Monitoring Committee

will then make a recommendation to the Demersal Committee and the Summer Flounder, Scup, and Black Sea Bass Management Board to either accept or deny the *de minimus* request. The Demersal Committee will then make a recommendation to the Council which will then make a recommendation to the Regional Administrator. The Regional Administrator will review the recommendation of the Council and will grant or deny the state *de minimus* status. The Management Board will review the Technical Monitoring Committee recommendation and will grant or deny the *de minimus* classification. Upon reviewing the Monitoring Committee's recommendation to grant a state *de minimus* status.

If *de minimus* status is granted, the *de minimus* state is required to implement the minimum size of possession, all permitting and reporting requirements, all gear restrictions required by the FMP, and must monitor its fishery. A *de minimus* state would be required to report landings annually. The Regional Administrator will close a state's fishery if the *de minimus* allocation is projected to be landed. If commercial landings in the state exceed the *de minimus* threshold, the state will lose its *de minimus* classification and will be required to implement all the commercial fishery requirements of the FMP. Any *de minimus* state that exceeds the *de minimus* allocation will be required to repay all of the overage through a reduced quota the following year. For example, if a *de minimus* state exceeds the *de minimus* allocation by 1,000 pounds, that state's allocation for the following year will be decreased by 1,000 pounds. If the overage of the *de minimus* allocation exceeds a state's annual allocation, that state's commercial black sea bass fishery will remain closed until the overage is repaid.

The rationale for this alternative is that some states have small amounts of associated black sea bass landings. By deeming a given state *de minimus*, the Regional Administrator and Management Board are recognizing that the state has a minimal commercial black sea bass fishery. As such, they recognize that the overall burden of implementing the complete commercial management and monitoring requirements of the FMP outweigh the conservation benefits of implementing those measures in that state and also that there is no risk to the health of the black sea bass stock if that state does not implement the full suite of management measures.

This alternative was not chosen because the Commission adopted state allocation percentages, including an allocation of 0.5% for the state of Maine. As such all states will be responsible for monitoring their landings and closing their fisheries when their allocation is reached. The de minimus language will not apply to the state-by-state allocation system.

2.1.5.6 Coastwide quota to facilitate state-by-state allocations implemented by the Commission (Alternative 5f: preferred alternative)

The Council and Commission met on May 1, 2002 to adopt a preferred alternative for the black sea bass commercial quota system and other commercial management measures. They considered the material in the public hearing draft, the supplement (Appendix A) that was drafted in response to comments from the Regional Administrator, the public hearing summaries, and all the public comments received on the draft Amendment/EIS. After considerable discussion, the Commission adopted and will implement a state-by-state allocation system beginning January 1, 2003. In a complementary action, the Council voted to adopt an annual

coastwide allocation system which will facilitate the state-by-state allocation system that was adopted by the Commission.

Since black sea bass is a shared resource between the states and federal governments, a federal system that does not compete with the system implemented by the Commission is needed. The fishery is a multi-jurisdictional fishery that demands cooperation between the Council and Commission. Without the cooperation of the states, no federal action could meet the National Standards. The coastwide quota is a system that recognizes and facilitates the state-by-state allocation system implemented by the Commission. This system will result in less conflicts between the management bodies than any other system. This system would replace the quarterly quota system that is currently in place.

An example of the state-by-state allocations are the allocations chosen by the Commission for the 2003 and 2004 fishing season. After considerable debate, the Commission adopted allocation percentages for 2003 and 2004 that represented a compromise between the allocation percentages associated with the various base periods presented in the public hearing draft for this amendment and the current fishing patterns, i.e. 2001 landings (Table 5). Specifically, allocations adopted by the Commission for 2003 and 2004 were as follows: Maine 0.5%, New Hampshire 0.5%, Massachusetts 13%, Rhode Island 11%, Connecticut 1.0%, New York 7%, New Jersey 20%, Delaware 5%, Maryland 11%, Virginia 20%, and North Carolina 11% (Table 9b). After that (2005 and beyond) the Commission would have to take action to continue or modify the allocation formulas. If the Commission fails to take action to adopt state-by-state allocations in 2005 or beyond, and/or the system does not meet the requirements of the National Standards, the Council would take action through a framework to reinstate the status quo quarterly quota system or take other mitigating actions. A complete description of the manner in which the Commission will implement a state-by-state allocation system and the compliance criteria required by each state is fully described in the document entitled "Amendment 1 to the Black Sea Bass Fishery Management Plan" (Appendix B).

The annual coastwide quota would be implemented and administered by NMFS. The current data reporting and monitoring system would continue. The fishery would close when the quota was projected to be taken. This closure would occur regardless of whether or not individual states still had quota available. However, given the states experience with other state-by-state quota systems, as well as their ability to transfer quota, it is unlikely that this situation would occur.

This alternative was chosen as the preferred alternative, because a federal coastwide quota would facilitate a state-by-state allocation system, which would allow for the most equitable distribution of the commercial quota to fishermen. In fact, the Commission has decided to allocate the black sea bass quota to states taking into consideration historical landings and current fishing trends. Additionally, this alternative would not place a burden of federal monitoring on NMFS. Specifically, under this alternative, states would have the responsibility of managing their quota for the greatest benefit of the commercial black sea bass industry in their state. States could design allocation systems based on state specific landing patterns using possession limits and seasons to ensure a continuous and steady supply of product over the season for producers and/or a fair an equitable distribution of black sea bass to all fishermen who have traditionally landed black sea bass in their state. States would also have the ability to

transfer or combine quota, increasing the flexibility of the system to respond to year to year variations in fishing practices or landings patterns.

2.1.6 Hybrid Quota System: Coastwide Quota From January Through April and State-by-State Quotas From May Through December (Alternative 6)

2.1.6.1 Hybrid quota system based on 1988-1997 landings data: coastwide quota from January through April and state-by-state quotas from May through December (Alternative 6a)

Under this alternative, the annual quota would be divided into two periods based on 1988-1997 landings data. The allocation would be 45.23% for the period from January through April and 54.77% for May through December (Table 7).

During the first period, the quota would be allocated to the coast. Possession limits would be implemented during this period. Possession limits could be modified over the period based on a recommendation of the Monitoring Committee to the Council and Commission and implementation by the Regional Administrator and the states as part of the annual specification process.

The quota would apply throughout the management unit, including both state and federal waters. All commercial landings in any state would count toward the quota during that period. Any landings in excess of the quota that occurred during this period would be subtracted from the following year's quota for that period.

During the period May through December, the quota would be allocated to the states based on 1988-1997 landings data. During this period, the quota system would operate as detailed in Alternative 2.1.5.

This alternative recognizes that different gear types are used by the fishery along the coast throughout the year. Bottom/mid water trawls, pots/traps, and hook and line were the major gear types used to land black sea bass from 1988 to 1997. Based on monthly black sea bass landings by gear type for the 1988 to 1997 period, bottom/mid water trawls landed 75 to 86% of the total black sea bass landings each month from January through April. This gear is highly mobile, therefore a coastwide quota for this period is logical. Pot/trap gear comprised 67 to 85% of the black sea bass landings from May through December. Since pot/trap fisheries operate differently in different states, a state-by-state quota for the May through December period would be appropriate. Since the allocations would more closely complement the spatial and temporal characteristics of the fishery, this alternative may allow for landings to be distributed evenly amongst user groups and throughout the year.

The Council and Commission did not choose any of the hybrid quota alternatives because they felt that the collaborative program with a federal coastwide quota and a state-by-state allocation system implemented by the Commission could allow for the most equitable distribution of the commercial quota to fishermen, without the additional burden of federal monitoring by NMFS. Additionally, the burden of monitoring the fishery, for NMFS and the states, would increase under the hybrid quota systems, relative to the current system. Hybrid quotas would not be

compatible with the state-by-state quota implemented by the Commission. Specifically, they would not allow states the flexibility to design their own management systems throughout the entire year.

2.1.6.2 Hybrid quota system based on 1993-1997 landings data: coastwide quota from January through April and state-by-state quotas from May through December (Alternative 6b)

The same as Alternative 2.1.6.1 except the base years used in the allocation formula would be 1993-1997 (Table 7).

2.1.6.3 Hybrid quota system based on the best five years in the 1980-1997 landings data: coastwide quota from January through April and state-by-state quotas from May through December (Alternative 6c)

The same as Alternative 2.1.6.1 except the base years used in the allocation formula would be the best five years from 1980-1997 (Table 7).

2.1.7 Hybrid Quota System: Coastwide Quota From January Through April and Subregional Quotas From May Through December (Alternative 7)

2.1.7.1 Hybrid quota system based on 1988-1997 landings data: coastwide quota from January through April and subregional quotas from May through December (Alternative 7a)

Under this alternative, the annual quota would be divided into two periods based on 1988-1997 landings data. The allocation would be 45.23% for the period from January through April and 54.77% for May through December (Table 8).

During the first period, the quota would be allocated to the coast. Possession limits would be implemented during this period. Possession limits could be modified over the period based on a recommendation of the Monitoring Committee to the Council and Commission and implementation by the Regional Administrator and the states as part of the annual specification process.

The quota would apply throughout the management unit, including both state and federal waters. All commercial landings in any state would count toward the quota during that period. Any landings in excess of the quota that occurred during this period would be subtracted from the following year's quota for that period.

During the period May through December, the quota would be allocated to two subregions based on 1988-1997 landings data. The northern subregion would include the states from Maine to New York and the southern subregion would include states from New Jersey to North Carolina (Cape Hatteras). The associated allocations for each subregion during this period would be 16.56% and 83.44% (Table 8).

Possession limits would be implemented for each subregion during this period. Possession limits could be modified over the period based on a recommendation of the Monitoring Committee to the Council and Commission and implementation by the Regional Administrator and the states as part of the annual specification process.

The quota would apply throughout the management unit, including both state and federal waters. All commercial landings in a subregion would count toward the quota in that subregion. Fishermen would be allowed to land in any port in their subregion. Any landings in excess of the quota that occurred in a subregion during this period would be subtracted from the following year's quota for that subregion.

This alternative recognizes that different gear types are used by the fishery along the coast throughout the year. Bottom/mid water trawls, pots/traps, and hook and line were the major gear types used to land black sea bass from 1988 to 1997. Based on monthly black sea bass landings by gear type for the 1988 to 1997 period, bottom/mid water trawls land 75% to 86% of the total black sea bass landings each month from January through April. This gear is highly mobile, therefore a coastwide quota for this period is logical. Pot/trap gear comprised 67% to 85% of the black sea bass landings from May through December. Because pot/trap fisheries operate differently in different geographic locations, a subregional quota from May through December may be appropriate. This alternative would also be less burdensome in terms of administrative costs relative to state-by-state allocations during this period. In addition, since the allocations would more closely complement the spatial and temporal characteristics of the fishery, this alternative may allow for landings to be distributed evenly amongst user groups and throughout the year.

The Council and Commission did not choose any of the hybrid quota alternatives because they felt that the collaborative program with a federal coastwide quota and a state-by-state allocation system implemented by the Commission could allow for the most equitable distribution of the commercial quota to fishermen, without the additional burden of federal monitoring by NMFS. Additionally, the burden of monitoring the fishery, for NMFS and the states, would increase under the hybrid quota systems, relative to the current system. Hybrid quotas would not be compatible with the state-by-state quota implemented by the Commission. Specifically, they would not allow states the flexibility to design their own management systems throughout the entire year.

2.1.7.2 Hybrid quota system based on 1993-1997 landings data: coastwide quota from January through April and subregional quotas from May through December (Alternative 7b)

The same as Alternative 2.1.7.1 except the base years used in the allocation formula would be 1993-1997 (Table 8).

2.1.8 Allocation System by Gear Type (Alternative 8)

2.1.8.1 Quota allocation by gear type based on 1988-1997 landings data (Alternative 8a)

Under this alternative, the quota would be allocated by gear type based on 1988-1997 landings data. The percentages by gear type would range from 0.40% for gillnets to 45.82% for bottom/mid water trawl gear (Table 9a).

To allow for equitable distribution of landings to the northern and southern contingents of the fishery, further allocations may be required by period. Specifically, trawl allocations would be further divided into two periods - January through April and May through December. Possession limits would be implemented for each gear type and period. Possession limits could be modified based on a recommendation of the Monitoring Committee to the Council and Commission and implementation by the Regional Administrator and the states as part of the annual specification process.

The quota would apply throughout the management unit, including both state and federal waters. All commercial landings would count toward the quota for each respective gear types. Any landings in excess of the quota that occurred for any gear type would be subtracted from the following year's quota for that gear type.

This alternative was considered because it recognizes that different gear types are used in the black sea bass fishery over the year. Bottom/mid water trawls, pots/traps, and hook and line were the major gear types used to land black sea bass from 1988 to 1997. Allocating the quota to the different gear types and tailoring management measures to the specific needs of each fishery may work to distribute landings equitably throughout the year. As such, overharvesting the quota or harvesting the quota too quickly may be avoided.

The Council and Commission did not choose these gear type alternatives because these alternatives would redistribute landings among gear types relative to the status quo. In addition to the economic impacts this may cause, this alternative could redistribute fishing effort relative to gear types which could have had negative consequences to EFH and protected resources. Additionally, the burden of monitoring the fishery for NMFS and the states would increase, relative to the current system. The reporting requirements for dealers would also increase under this system. Allocations by gear types would not be compatible with the state-by-state quota implemented by the Commission. Specifically, they would not allow states the flexibility to design their own management systems because of the constraints on gear types.

2.1.8.2 Allocation system by gear type based on 1993-1997 landings data (Alternative 8b)

The same as Alternative 2.1.8.1 except the base years used in the allocation formula would be 1993-1997 (Table 9a).

2.1.9 Modify the Permit Requirements for Fishermen That Have Both a Northeast Black Sea Bass Commercial Permit and a Southeast Snapper/Grouper Permit (Alternative 9)

2.1.9.1 Status quo (Alternative 9a)

Current regulations restrict fishermen with a NER BSB permit from fishing south of Cape Hatteras during a northern closure unless they relinquish their permit for a period of 6 months.

The permit requirements were implemented to ensure that in the event of a closure in the EEZ north of Cape Hatteras, vessels with moratorium permits could not possess black sea bass either north or south of Cape Hatteras, in order to maintain the integrity of that closure. In such a situation it would be impossible to determine the harvest location of the black sea bass on board. As a consequence, owners of vessels that have both a moratorium permit and a SER S/G permit would be prevented from using their SER S/G permit to land black sea bass south of Cape Hatteras, unless they relinquished their moratorium permit. Therefore, to allow vessel owners with moratorium permits greater flexibility to fish for and land black sea bass south of Cape Hatteras, vessel owners could voluntarily relinquish their moratorium permit during a closure and fish the southern stock of black sea bass under their valid SER S/G permit. After a 6-month delay for administrative and enforcement purposes, they could reapply for a moratorium permit and again be subject to the provisions of that permit. These restrictions were implemented to ensure the implementation and enforcement of the current quota system.

This alternative is required by NEPA. It is the "standard" or base to what the other proposed alternatives are compared to for the biological, economic, and social impact analyses.

2.1.9.2 Remove the permit requirement that restricts fishermen from using a Southeast Snapper/Grouper Permit during a northern closure (Alternative 9b: preferred alternative)

This alternative would remove the regulation that requires a fisherman with a NER BSB permit to surrender that permit for six months, to catch and land black sea bass south of Cape Hatteras during a northern closure. However, this does not change any other requirements in place to obtain a NER BSB permit.

Permit data from the Northeast and Southeast Region indicate that this requirement only affects 5 vessels which held both a NER BSB and a SER S/G permit in 2000. Fishermen (located in Virginia and North Carolina) indicate that this restriction creates undue hardship on those that possess both permits. These fishermen are fishing on two different stocks of fish, therefore the current regulations have no apparent benefit to the stock.

2.1.10 Prohibit the Wet Storage of Black Sea Bass Pots/Traps During a Closure (Alternative 10: preferred alternative)

2.1.10.1 Status quo (Alternative 10a: preferred alternative)

This alternative is the status quo alternative. Under the current system, commercial black sea bass pot/trap fishermen allow their pots/traps to remain in the water during periods when the black sea bass fishery is closed.

This alternative is required by NEPA. It is the "standard" or base to what the other proposed alternatives are compared to for the biological, economic, and social impact analyses.

Since Council has no information on the number pots/traps and areas fished by individual fishermen, nor how long it takes for fishermen to deploy and haul back their pots/traps, the Council decided to adopt the status quo alternative. This allows pots/traps to remain fishing during a closure. During the public hearing process, the Council received anecdotal evidence

that pots/traps are fished for other species such as tautog, ocean pout, lobsters, etc. during black sea bass closures; and that it may take more than two to four weeks to retrieve and deploy pots/traps for some fishermen. Additionally, the Council feels that the management measures adopted to reallocate the quota should keep the black sea bass fishery open throughout the year.

2.1.10.2 Prohibit the wet storage of black sea bass pots/traps during a closure of longer than two weeks (Alternative 10b)

This alternative would require that fishermen remove all black sea bass pots/traps from state and federal waters when the fishery is closed for more than two weeks (14 days). Fishermen will have no more than 10 days, from the starting date of the closure, to remove their pots/traps. Fishermen will not be allowed to deploy pots/traps until the first day of the following open period.

This alternative is included because it is a common practice during a closure is to allow pots/traps to continue to fish. Anecdotal evidence indicates that black sea bass and other species caught in the traps either die in the traps or are harvested at the beginning of the following quarter. This can result in harvesting the next quarter's quota very quickly. A two week closure was proposed to satisfy NEPA requirements by including a range of alternatives on a management option. A closure of less than two weeks may be impracticable, i.e., it may take more than two weeks to lift all the pots/traps that an individual fisherman has set in the ocean. This information is currently unknown and may vary among fishermen.

The Council did not choose any of the alternatives that prohibit wet storage because the Council has no information on the number pots/traps and areas fished by individual fishermen, nor how long it takes for fishermen to deploy and haul back their pots/traps. The Council decided to adopt the status quo alternative which allows pots/traps to remain fishing during a closure. During the public hearing process, the Council received anecdotal evidence that pots/traps are fished for other species such as tautog, ocean pout, lobsters, etc. during black sea bass closures; and that it may take more than two to four weeks to retrieve and deploy pots/traps for some fishermen. As such, these pots would continued to be tended throughout a black sea bass closure the quota should keep the black sea bass fishery open throughout the year.

2.1.10.3 Prohibit the wet storage of black sea bass pots/traps during a closure of longer than four weeks (Alternative 10c)

This alternative would require that fishermen remove all black sea bass pots/traps from state and federal waters when the fishery is closed for more than four weeks (28 days). Fishermen will have no more than 10 days, from the starting date of the closure, to remove their pots/traps. Fishermen will not be allowed to deploy pots/traps until the first day of the following open period.

This alternative is included because common practice during a closure is to allow pots/traps to continue to fish. Anecdotal information indicates that black sea bass and bycatch either die in the traps or fishermen are harvested at the beginning of the following quarter. This can result in harvesting the next quarter's quota very quickly. A four week closure was included to satisfy

NEPA requirements by including a range of alternatives on a management option. A closure of less than four weeks may be impracticable, i.e., it may take more than four weeks to lift all the pots/traps a fishermen has set in the ocean. This information is currently unknown and may vary among fishermen.

2.1.11 Black Sea Bass Pot/Trap Tag Program (Alternative 11)

2.1.11.1 Status quo (Alternative 11a: preferred alternative)

This alternative is the status quo alternative. Under the current system, black sea bass pot/trap tags would not be required.

This alternative is required by NEPA. It is the "standard" or base to what the other proposed alternatives are compared to for the biological, economic, and social impact analyses.

The Council and Commission do not feel that a pot/trap tag program is necessary at this time because a pot/trap tag program is only necessary if pot/trap limit is implemented. The Council is not implementing a pot/trap limit at this time.

2.1.11.2 Pot/trap tag requirements for federal permit holder fishing with black sea bass pots/traps (Alternative 11b)

This alternative would require that any black sea bass pot/trap fished must have a valid black sea bass pot/trap tag permanently attached to the trap bridge or central cross-member. A black sea bass trap is defined as any pot/trap gear that is capable of catching black sea bass. Black sea bass pot/trap tags would be purchased from the NMFS Northeast Region Permit Office.

This alternative was included for public hearing because a tag program would be necessary to implement limits on the number of pots/traps used by fishermen. This alternative would also allow for an accurate count of the number of pots/traps used by fishermen. The Council decided not to implement pot/trap tag program because they felt that a pot/trap limit is not necessary at this time. A pot/trap tag program is only necessary if the Council implements a pot/trap limit. The Council is not implementing a pot limit because of the lack of information on the number of pots fished by individual fishermen. Without this information, economic, biological, EFH, and protected resources impacts cannot be analyzed. Additionally, pot/trap limits are not necessary because trip limits constrain landings. Under the preferred alternative adopted by the Council and Commission, individual states can implement pot/trap tag programs and limits, if necessary.

2.1.12 Limit the Number of Pots/Traps Used by Fishermen (Alternative 12)

2.1.12.1 Status quo (Alternative 12a: preferred alternative)

This alternative is the status quo alternative. Under the current system, there is no limit to the number of black sea bass pots/traps that federal permit holders are allowed to fish with, deploy, possess in, or haul back from state or federal waters.

This alternative is required by NEPA. It is the "standard" or base to what the other proposed alternatives are compared to for the biological, economic, and social impact analyses. There is currently no such effort control on pots/traps and the number of pots/traps used by fishermen is unknown. However this information was requested during the public hearing process. Commenters indicated that pot/trap fishermen could fish anywhere from 100 to 4,000 pots/traps. Additionally, some fishermen may travel at least 60 miles offshore to deploy pots/traps.

Due to the lack of information on the number of pots fished by individual fishermen, a pot/trap limit was not adopted by the Council and Commission. Without this information, economic, biological, EFH, and protected resources impacts cannot be analyzed. Additionally, pot/trap limits are not necessary because trip limits constrain landings. Under the preferred alternative adopted by the Council and Commission, individual states can implement pot/trap tag programs and limits, if necessary.

2.1.12.2 Limit fishermen to no more than 400 black sea bass pots/traps (Alternative 12b)

Under this alternative federal permit holders may not fish with, deploy, possess in, or haul back from state or federal waters, more than 400 black sea bass pots/traps. A black sea bass trap is defined as any pot/trap gear that is capable of catching black sea bass.

This program is dependent upon the implementation of the black sea bass pot/trap tag program. In any fishing year, each permit holder would be authorized to purchase a set number of tags, up to a maximum of 400 pot/trap tags.

This alternative is being proposed to limit the number of pots/traps used by fishermen. There is currently no such effort control and the number of pots/traps used by fishermen is unknown. The Council is not implementing a pot limit because of the lack of information on the number of pots fished by individual fishermen. Without this information, economic, biological, EFH, and protected resources impacts cannot be analyzed. Additionally, pot/trap limits are not necessary because trip limits constrain landings. Under the preferred alternative adopted by the Council and Commission, individual states can implement pot/trap tag programs and limits, if necessary.

2.1.12.3 Limit fishermen to no more than 800 black sea bass pots/traps (Alternative 12c)

Under this alternative federal permit holders may not fish with, deploy, possess in, or haul back from state or federal waters, more than 800 black sea bass pots/traps. A black sea bass trap is defined as any pot/trap gear that is capable of catching black sea bass.

This program is dependent upon the implementation of the black sea bass pot/trap tag program. In any fishing year, each permit holder would be authorized to purchase a set number of tags, up to a maximum of 800 pot/trap tags.

This alternative is being proposed to limit the number of pots/traps used by fishermen. There is currently no such effort control and the number of pots/traps used is unknown.

2.1.13 Alternatives Considered but Rejected for Further Analysis

2.1.13.1 Allocation of quota to three subregions

This alternative would allocate the quota to three subregions based on historic landings data for the region. The subregions would be North (Maine to New York), Mid (New Jersey and Delaware), and South (Maryland to North Carolina). The Council and Commission did not consider this alternative for further analysis because of concerns related to the state groupings and possible impact on historic landing patterns. Specifically, the Council and Commission indicated that this subdivision may create inequities between border states, e.g., Delaware and Maryland.

2.1.13.2 An F-based management system

This system would be similar to the management system implemented by the Commission for weakfish and striped bass. States would be required to develop management measures designed to achieve a target fishing mortality rate. This alternative would require the development of a document to detail the guidelines that the states would use to determine their management program.

This alternative could work if there was a good estimate of the current F and the time to develop the methodology that would be used by the states to establish their individual management programs. This alternative was rejected because both the F and the time are lacking. Specifically, the current assessment is based on an analysis of Northeast Fishery Science Center (NEFSC) spring survey data. That data is combined with landings information to develop a relative exploitation index that is compared to previous estimates of mortality to assess current exploitation levels. However, the mortality estimates are highly uncertain and, as such, would not support the detailed analysis necessary to support an F-based management system. The Council and Commission are supporting a tagging program that may be initiated in 2002 to collect additional data that could be used to develop fishing mortality estimates.

2.1.13.3 An individual allocation of effort or quota

2.1.13.3.1 Days-at-Sea (DAS) option, based on separate permit categories and defined possession limits

Under this alternative, permit categories would be established based on past performance. Allocations would then be established for each category based on historic landings and the overall quota. Each permit holder would receive a DAS allocation based on the quota for category and a daily possession limit. The number of days would be determined by dividing the quota by the possession limit (e.g., a 1000 lb quota would have 100 lb possession limit for 10 DAS). A day would be defined as any possession within a 24-hour period and each permit holder could then determine when they wanted to fish.

The Council and Commission did not consider this alternative for additional analysis because of concerns related to the pot/trap fishery and the DAS approach. Specifically, it would be difficult to define a "day" for fishermen using pot/trap gear. In addition, the Council and Commission were advised that this alternative could violate the congressional ban on individual quota (IQ) systems since this alternative would result in an individual allocation.

2.1.13.3.2 Individual quotas (IQ) based on historic performance

Each vessel would receive an allocation based on a landings history percentage and an overall quota. Landings would be tracked by individual vessel permits. Individual allocations could be used in conjunction with the information on permits to allocate IQs to those vessels that land the majority of the black sea bass. The other permit categories would have allocations that could be managed by possession limits. Because IQ systems cannot be implemented until the Congressional ban on IQs is lifted, this alternative could not be implemented at this time. However, this does not preclude the use of IQ systems in future years. This alternative was rejected for further analysis in this amendment because of the length of time associated with determining an appropriate allocation formula (e.g., allocations of individual transferrable quotas [ITQs] in the surfclam fishery took 4 years to develop and implement) and the possible effect on the timely implementation of Amendment 13.

2.1.13.4 Harvest cooperative sector allocation

A harvest cooperative sector allocation would permit vessels within a harvest cooperative to pool harvesting resources and/or to make joint harvesting decisions while staying within the sector's designated allocation. For example, if a cooperative was formed from 74 vessels that averaged more than 4,000 pounds of black sea bass per vessel from 1988-1997, the cooperative would receive a quota allocation of 86.94%. This quota allocation is the portion of the landings these vessels were responsible for during this time period. The cooperative may choose to fish the allocation using whatever combination of vessels/gears generates the greatest benefit to the cooperative. Once the cooperative is assigned an overall quota, the members could buy/sell/trade/lease their respective shares of the quota within the cooperative. Initial individual shares would be determined by the cooperative. Most likely, this would be based on fishing history. This alternative was rejected from further analysis because of the potential difficulties associated with implementing a cooperative for fishermen over such a large geographic range, i.e., Maine through North Carolina.

2.1.13.5 The use of base years before 1988 and/or after 1997 for allocation formulas

The above alternatives focus primarily on allocations based on landings from 1988 to 1997. The landings prior to 1988 are available and are used in the state-by-state allocation alternatives. However, many states do not have accurate landings reports for some of those years. In fact, that was the reason that the Council and Commission used 1988-1992 data in Amendment 9 to allocate the quota. In addition, the landings data for 1998 and 1999 were affected by the restrictive quotas and possession limits that were imposed in 1998 and 1999. As such, those years should be left out of any allocation formula.

2.2 SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS EFH ALTERNATIVES

Options available to the Council to minimize impacts of fishing gear on essential fish habitat include, but are not limited to: 1) area and/or seasonal closures; 2) specific gear modifications/restrictions; and 3) harvest limits. Viable management alternatives that could be used to prevent, mitigate or minimize adverse effects from fishing are described below and are analyzed for biological, economic, and social impacts to the environment in section 4.0. In

addition, several alternatives were considered by the Council but were rejected for further analysis described in section 2.2.6.

2.2.1 Status Quo: Current Management Measures (EFH Alternative 1: Preferred Alternative)

This is the "no action alternative." It would result in no additional management measures to minimize the effects of fishing on EFH.

This alternative is required by the NEPA. It is the "standard" or base to what the other proposed alternatives are compared to for the biological, economic, and social impact analyses. The Council has implemented many regulations that have indirectly acted to reduce fishing gear impacts on EFH. These include many of the current regulations which have restricted fishing effort to achieve the target mortalities implemented by the rebuilding schedules in the FMPs. Such regulations include restrictive harvest limits, gear restricted areas, and restriction on the size of roller rig gear to 18" rollers for scup and black sea bass (which makes some areas inaccessible to trawling).

Currently, 40 out of 51 stocks managed by in NMFS Northeast Region are designated as overexploited (NEFSC 1998a). These designations have resulted in a reduction of fishing effort from Maine through Florida. A reduction of effort due to decreased target mortalities in an FMP translates into a decrease in gear impacts on habitat throughout the western Atlantic ocean. Additionally, the majority of habitat in the Mid-Atlantic region is dynamic sandy bottom. Current research shows that bottom tending mobile gear has a short-term impact on this type of habitat (Appendix C). As such, further EFH regulations may not be necessary at this time. A complete discussion of management measures that are already in place, and how these measures work to minimize the impact of gear on habitat can be found in section 4.2.1.

2.2.2 Prohibit Bottom Tending Mobile Gear from the Nearshore Areas Surrounding Estuaries (EFH Alternative 2)

Alternative 2 would prohibit fishermen from using bottom tending mobile gear in the nearshore areas of Albemarle Sound, Chesapeake Bay, Delaware Bay, and New York Harbor (Table 10, Figure 1). Bottom tending mobile gear in these areas include: bottom otter trawls, clam dredges, and scallop dredges.

This alternative was included because these estuaries are important nursery areas and EFH for summer flounder, scup, and black sea bass. Additionally, the closed areas include important summer flounder spawning habitat, and are areas where all three species congregate in warmer months. Many states currently restrict trawling in estuaries. This alternative would extend the restriction from the 3-mile line to offshore areas. In addition, this alternative includes reef areas and structured habitat in federal waters, which are considered EFH for scup and black sea bass, thus complementing the Special Management Zone (SMZ) program.

It was suggested by the EFH Steering Committee that the Council consider implementing a SMZ as an alternative to protect habitat. Amendment 9 established a process that allows the Council to develop management measures to control fishing on specific artificial reefs on a case by case

basis. The intent of the SMZ program, as stated in Amendment 9, is to protect artificial reefs from: "a) entanglement of other boating and fishing gear: b) entanglement in reef structure ('ghost gear'); and c) damage to or movement of reef structure." Structured habitat, such as reef habitat is more complex and thus more vulnerable to fishing gear. Since the implementation of Amendment 9, no specific SMZs have been established. Because SMZs were established to protect a user group's right to a particular structure (e.g., recreational fishermen) it is currently impractical to establish SMZs as a mechanism to protect habitat.

2.2.3 Prohibit Bottom Tending Mobile Gear in the Area Surrounding the Hudson Canyon (EFH Alternative 3)

Alternative 3 would prohibit fishermen from using bottom tending mobile gear in the area surrounding the Hudson Canyon, between the 200-foot and 500-foot isobaths (Table 11, Figure 1). Bottom tending mobile gear in these areas include: bottom otter trawls, clam dredges, and scallop dredges.

This alternative was included for public consideration because this is an area that has been identified as an important overwintering area for summer flounder, scup, and black sea bass in NRDC (2001). A portion of the proposed closed area has been identified as tilefish EFH and tilefish burrows may be vulnerable to mobile gear. As such, a potential benefit associated with closing this area would be the impact on tilefish.

2.2.4 Roller Rig and Rock Hopper Gear Restrictions (EFH Alternative 4)

Alternative 4 would restrict the size or prohibit the use of roller rig and rock hopper gear in the EEZ, from Maine through North Carolina. Alternatives for roller rig gear would include 8 inches, 12 inches, or 18 inches for maximum roller size, or a complete prohibition of roller rig gear. Alternatives for rock hopper gear include 8 inches, 12 inches, or 22 inches for maximum roller and rubber disk size, or a complete prohibition of rock hopper gear. Specific regulations would prohibit the use of this gear or the use of roller rigs or rock hoppers with rollers and disks larger than the maximum size.

The summer flounder, scup, and black sea bass FMP currently restricts vessels issued a moratorium permit for scup and/or black sea bass from using roller rig trawl gear equipped with rollers greater than 18 inch diameter. As such, a restriction on the diameter of rock hopper gear is reasonable. An 18 inch diameter corresponded to the maximum roller diameter limitation imposed by the states of Massachusetts and North Carolina to regulate this gear in state waters. In the Gulf of Maine rock hopper gear is restricted to a maximum 12 inch diameter. Information is needed on the size of rollers that are currently used, the habitat types in which they are used, and the extent of the use. However, no additional information on roller rig or rock hopper gear was received during the public comment period.

This alternative is included because limitations on roller size would make some areas of the ocean inaccessible to trawls by preventing fishermen from trawling in the harder, rough bottom areas. As a result, habitat in these areas would be protected. However, information is lacking as to the relationship between roller diameter and the size of the habitat obstruction that it can clear. In general, 10 inch to 12 inch diameter rollers can be used for fishing over rough bottom that

includes ledges and cliffs (MAFMC 1996a, b). It is important to note that current regulations prohibit fishing with rock hopper gear with roller diameter greater than 18 inches for scup and black sea bass.

Roller diameter also correlates with vessel size and the ability of vessels to fish rough, hard bottom areas. Larger roller sizes require larger engine sizes to pull the net. An engine size with an associated horsepower (hp) of 800-900 required to tow a net with 18 inch to 24 inch rollers, whereas 10 inch to 12 inch rollers can be pulled by a boat using a 175 to 200 hp engine (Simpson pers. comm.).

2.2.5 Prohibit Street-Sweeper Gear (EFH Alternative 5)

Alternative 5 would prohibit fishermen from using street-sweeper gear in the EEZ. Streetsweeper gear is a newly developed trawl gear that is constructed of a series of rubber disc spacers and bristle brushes, as found in actual street sweepers. The distinguishing component of this sweep is the brushes are made of stiff bristles mounted on a cylinder core. The brush cylinders are up to 31 inches in diameter and have smaller diameter rubber discs placed between them. The discs are strung on a cable or chain and aligned in series forming the sweep of the trawl net.

This alternative is included because it may afford additional protection to structured habitat. Structured habitat is more complex and thus more vulnerable to fishing gear. Preliminary evidence suggests that this prohibition may make some areas of the ocean inaccessible to trawls by preventing fishermen from trawling in the harder, rough bottom areas.

Additionally, the NEFMC prohibited street sweeper gear as a precautionary measure. They prohibited this type of gear because they received testimony from the public that this gear was more effective at catching flat fish than a typical trawl. Prohibiting this gear would make regulations consistent along the coast.

More information needs to be collected on the relative use of this gear and its effect on habitat. There is the possibility that this gear is not currently in use, thus the implementation of this alternative may not result in any benefit to EFH. No additional information on street-sweeper gear was received during the public comment period.

2.2.6 Alternatives Considered but Rejected for Further Analysis

2.2.6.1 Prohibit all bottom tending mobile gear

This alternative would prohibit fishermen from using all bottom tending mobile gear in the EEZ. The commercial fishing industry from Maine through North Carolina landed approximately 1.3 billion pounds of fish in 2000 (NMFS 2001). A large proportion of these landings were landed by bottom tending mobile gear in the EEZ. This alternative would result in a significant burden on the fishing industry and coastal community, i.e., both in compliance cost and loss of revenue from fishing. For some fisheries, suitable alternative fishing gear do not exist. As such, this is the extreme end of the range of alternatives and not very practicable.

Additionally, the impact of bottom tending mobile gear is still unclear and the impacts may be minimal or short lived, depending on the intensity of fishing and the complexity of the habitat. Considering that most of the Mid-Atlantic is comprised of a dynamic, sandy bottom, a prohibition on all mobile gear in the EEZ would cause a large economic and social impact with minimal or unknown benefit to habitat. As such, this alternative was rejected from further analysis.

2.2.6.2 Prohibit bottom tending mobile gear from the nearshore corridor (from Long Island Sound, New York extending south to Cape Fear, North Carolina) from the shore extending to 22 miles offshore

This alternative would prohibit fishermen from using bottom tending mobile gear in the nearshore corridor (from Long Island Sound, New York extending south to Cape Fear, North Carolina) from the shore extending to 22 miles offshore. Figures 10 and 15 in Appendix C indicate that the bulk of the otter trawl and dredge trips take place in this area. As such, this alternative is extreme and not very practicable. This alternative would result in a significant burden on the fishing industry and community, both in compliance cost and loss of revenue from fishing. For some fisheries, suitable alternative fishing gear do not exist.

The impact of bottom tending mobile gear is unclear. The impacts may be minimal or short lived depending on the intensity of fishing and the complexity of the habitat. Considering that most of the Mid-Atlantic is comprised of a dynamic, sandy bottom, a prohibition on mobile gear would cause a large economic and social impact with unknown benefit to habitat. Even if an area closure proves to be effective in reducing gear impacts to EFH, a reduction in landings of targeted species would also occur. In addition, effort could be redirected elsewhere in the region and as such, this large area closure may result in smaller reductions of impacts to EFH and/or landings of targeted species than estimated. Therefore, this alternative was rejected from further analysis.

2.2.6.3 Prohibit the use of bottom tending mobile gear in submerged aquatic vegetation (SAV) beds (summer flounder habitat area of particular concern [HAPC])

This alternative would prohibit fishermen from using bottom tending mobile gear in submerged aquatic vegetation (SAV) beds (summer flounder habitat area of particular concern [HAPC]). Summer flounder HAPC is identified as all SAV beds which is found in state waters. While the Council can prohibit federal permit holders from fishing with bottom tending mobile gear in state waters, the majority of the trawlers operating in state waters are not federal permit holders. Therefore, this alternative would not be effective because the number of federal permit holders operating in state waters and subjected to this prohibition would be minimal.

Additionally, although many states are in the process of mapping SAV beds, the location of many SAV beds is largely unknown. Therefore this measure would be difficult to enforce. Finally, many states regulate trawling and other types of mobile gear in state waters, where SAV is located. For these reasons, this alternative was considered but rejected for further analysis.

Stephan *et al.* (2000) offers mitigation strategies for the impacts from fishing activities to SAV. The Council endorses the recommendations in the Stephan *et al.* (2000) report. The Council
encourages the mitigation strategies identified in Stephan *et al.* (2000) for addressing fishing impacts to SAV including avoidance and minimization. The Council encourages agencies to adopt measures and or policies that recognize the importance of inshore habitats (especially SAV) and foster cooperation among the Commission, NMFS, and the states in protecting these important areas. This includes a coordinated effort between states to restrict the use of mobile gear in state waters.

2.2.6.4 Require a reduction in fishing effort to minimize impact on bottom habitats

Currently, the MAFMC manages summer flounder, scup, and black sea by setting commercial quotas and recreational harvest limits based on the total allowable catch (TAC) for each species. These management systems include rebuilding schedules which are mandated by National Standard 1. The rebuilding schedules establish annual fishing mortality targets in order to rebuild the stocks. While the stocks are in the process of rebuilding (i.e., the biomass is increasing), the management measures used to lower fishing mortality should translate into lower fishing effort. A reduction in fishing effort should translate into a reduction in fishing intensity. Once the stocks are rebuilt, fishing effort should remain at a low level due to an increase in catchability at higher stock levels. Since the current system reduces fishing effort, and is believed to have a positive impact on essential fish habitat, additional controls on fishing effort are not be needed to protect habitat. As such, this alternative was rejected from further analysis.

2.2.6.5 Prohibit bottom tending mobile gear from summer flounder, scup, and black sea bass offshore overwintering areas, from Lydonia Canyon east of Cape Cod, Massachusetts to Cape Hatteras, North Carolina between the 200-foot to 500-foot isobaths

This alternative would prohibit fishermen from using bottom tending mobile gear in summer flounder, scup, and black sea bass offshore overwintering areas, from Lydonia Canyon east of Cape Cod, Massachusetts to Cape Hatteras, North Carolina between the 200-foot to 500-foot isobaths. Figures 13 and 17 in Appendix C indicate that a large portion of the scallop otter trawl and scallop dredge trips take place in this area. This alternative would result in a significant burden on the scallop industry and communities dependent on the scallop industry both in compliance cost and loss of revenue from fishing. Suitable alternative fishing gear may not exist for this species.

Additionally, the impact of bottom tending mobile gear is still unclear and the impacts may be minimal or short lived, depending on the intensity of fishing and the complexity of the habitat. Considering that most of the Mid-Atlantic is comprised of a dynamic, sandy bottom, a prohibition on mobile gear would cause a large economic and social impact with unknown benefit to habitat. Finally, the area proposed under this alternative is a large offshore area that may make this alternative expensive to enforce. As such, this alternative was rejected from further analysis.

2.2.6.6 Modify otter trawl footrope to raise the net off the bottom, using a 42 inch long chain connecting the sweep to the footrope, which results in the trawl fishing about 18-24 inches above the bottom

This alternative would require fishermen to modify the otter trawl footrope to raise the net off the bottom using a 42 inch long chain connecting the sweep to the footrope. This results in the trawl fishing about 18-24 inches above the bottom (Carr and Milliken 1998). The raised footrope allows the net to be lifted off the bottom, but the trawl doors would still come in contact with the bottom. The net was specifically designed to catch whiting, red hake, and dogfish, while avoiding groundfish such as cod (NMFS 2001). A raised footrope trawl would not effectively catch summer flounder and other flatfish and therefore would not be practicable in directed summer flounder fisheries. It is also not likely to be effective in catching scup and black sea bass. Without a suitable alternative gear for these fisheries, it is not currently feasible to require that trawls be modified to raise the net off the bottom. As such, this alternative was rejected for further analysis.

It is important to note that studies are currently being conducted to reduce the weight of trawl doors, which would reduce the impact of groundfish trawling to habitat while making the trawls more effective at catching groundfish, such as summer flounder, scup, and black sea bass.

2.2.6.7 Prohibit trawling in estuaries

This alternative would prohibit fishermen from trawling in estuaries. The Council only has the authority to restrict trawling by federal permit holders. The majority of the summer flounder, scup, and black sea bass commercial landings occurred in the EEZ in 1999 (Tables 12, 13, and 14). This alternative would not be effective because the federal permit holders operating in estuaries and subjected to this prohibition would be minimal. As such, a federal prohibition may not effectively protect habitat in estuaries from federally permitted trawlers.

Currently, most states have some restrictions on trawling and other mobile gear which may help to protect summer flounder, scup, and black sea bass nursery habitat. The state of Maine has a groundfish spawning closure in North Bay and Sheepscot Bay from May 1 to June 30. The state of New Hampshire does not allow mobile gear in state waters between April 16 and December 14. The state of Massachusetts prohibits trawling in Buzzards Bay year-round, while state waters from Nauset Light around Monmoy west to Succonessett Point, Mashpee are closed to trawling from May 1 to October 31. In Rhode Island, trawling is prohibited in the upper portion of Narragansett Bay from November 1 to July 1. In Connecticut, trawling is prohibited in rivers, coves, and harbors, as well as in portions of Long Island Sound. Night trawling is also prohibited in the western two-thirds of Long Island Sound. In New York, there are numerous locations where trawl gear is prohibited. In New Jersey, trawling and purse-seining is prohibited within two miles of the coast. In Delaware, trawls, purse-seines, power-operated seines, and run-around gillnets are prohibited. In Maryland, trawls are prohibited within one mile of the coastline, and in the Chesapeake Bay. Additionally, there are numerous specific locations where trawling is restricted in Maryland state waters. In Virginia, trawls and encircling nets are prohibited in state waters. In North Carolina, trawls are prohibited within one-half mile of the beach between the Virginia line and Oregon Inlet. The Council encourages a state-coordinated program to restrict the use of mobile gear in estuaries.

However, a full prohibition of trawling in estuaries is an extreme alternative that would result in a significant burden on the fishing industry and some fishing communities, both in compliance