



**Mid-Atlantic Fishery Management Council**

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## **M E M O R A N D U M**

**DATE:** August 1, 2012

**TO:** Council

**FROM:** Jessica Coakley

**SUBJECT:** Public Hearing Draft for Amendment 17 to the Summer Flounder, Scup, and Black Sea Bass FMP

The Fishery Management Action Team (FMAT) highlighted the following issues for Council consideration while reviewing the public hearing document.

- Given the need to expedite this action for the 2013 fishing year, the FMAT recommends extracting all other issues from this Amendment except state-by-state or regional conservation equivalency (CE), as it currently is presented in the public hearing draft. Other issues could be considered as part of the Council Strategic Planning process.
- The FMAT has expressed concerns about the appropriateness of the proportional standard errors (PSEs) specified in this document to govern/limit the disaggregation of data and management measures by mode or sub-areas. The revised recreational methods under the Marine Recreational Information Program (MRIP) have altered the PSEs for all species, and these values are not static and will likely continue to change as new methods from pilot projects are brought online. The FMAT recommends tasking a technical group with analyzing what PSEs values may be appropriate for inclusion in this Amendment.
- The allocation sub-options 2A-2 and 2B-2 are confounded by the combination of Marine Recreational Fisheries Statistics Survey (MRFSS) data for 2003 and years prior, and MRIP data for 2004 and later. If historic data is to be used with recent data, the FMAT recommends it should not be blended across surveys. The FMAT needs input from the Council on whether there is interest in examining an all MRFSS series for these sub-options, or if these sub-options should be removed entirely from the document.
- The FMAT recommends the Council reconsider whether it is necessary to include a sunset provision for CE for the following reason. Each year, under the proposed action alternatives, the Council and Board have a choice of coastwide versus CE. If the Council and Board do not have the desire (or votes) to select coastwide measures during the routine specifications processes, it is unlikely that there will be the desire to revert to coastwide measures through a sunset provision. It may merely create additional work for Council, Commission, and NMFS staff without any change in actual outcome.
- The FMAT continues to express concerns relative to the appropriateness of state-by-state CE for black sea bass when compared to summer flounder. Black sea bass exhibit a high level of site fidelity and the stock may be comprised of meta-populations which may not mix in the winter offshore to the same degree as summer flounder. These factors create the potential for non-uniform fishing mortality under CE which may result in localized depletion.

**PUBLIC HEARING DRAFT**

**AMENDMENT 17 TO THE  
SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS  
FISHERY MANAGEMENT PLAN**



**Public Hearing Draft**

**August 2012**

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

**Public hearing draft: DD MONTH YYYY  
Draft adopted by MAFMC: DD MONTH YYYY  
Final adopted by MAFMC: DD MONTH YYYY  
Final approved by NOAA: DD MONTH YYYY**

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## PUBLIC HEARING DRAFT

This document will be available at all of the public hearings and is available on request from the Council office at the address and telephone number below or via the Internet at: <http://www.mafmc.org>

### Schedule of Public Hearings

<u>Massachusetts Division of Marine Fisheries</u> <i>TBD - Staff Suggested Location</i> Division of Marine Fisheries Headquarters 251 Causeway Street, Suite 400 Boston, MA 02114-2152 Contact: TBD	<u>New York Department of Environmental Conservation</u> <i>TBD - Staff Suggested Location</i> NYSDEC Marine Resources 205 N. Belle Mead Rd, Ste 1 East Setauket, NY 11733 Contact: TBD
<u>Richard Stockton College of New Jersey</u> <i>TBD - Staff Suggested Location</i> Lakeside Center Lodge (Off Laurel Lane and Oak Pond Drive; follow campus signs to Lakeside Center) Pomona, NJ 08240 Contact: TBD	<u>Virginia Marine Resources Commission</u> <i>TBD - Staff Suggested Location</i> Marine Resources Commission 2600 Washington Avenue Newport News, Virginia 23607 Contact: TBD
<u>Maryland Department of Natural Resources</u> <i>TBD - Staff Suggested Location</i> Maryland Department of Natural Resources 580 Taylor Avenue Tawes State Office Building Annapolis, MD 21401Contact: TBD	

In addition to providing information and comments at the above public hearings, you may submit written comments on or before 5:00 p.m., EST, on **XXX XX**, 2012 to:

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Comments may also be sent via fax at the above fax number or by e-mail to [info1@mafmc.org](mailto:info1@mafmc.org). Please note on your correspondence and in the subject line of e-mail comments the following identifier: "Amendment 17 Comments."

# **PUBLIC HEARING DRAFT**

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### **1.0 Introduction, Purpose, and Need for Action**

This document was prepared by the Mid-Atlantic Fishery Management Council (Council) in consultation with the National Marine Fisheries Service (NMFS). This document describes management processes for recreational black sea bass (*Centropristis striata*) in both state and Federal waters in the Northwest Atlantic Ocean, from Cape Hatteras, North Carolina northward to the U.S.-Canadian border. State waters are defined as waters from the mean high tide mark to 3 nautical miles (nm) offshore from the coastline and are the region under state management jurisdiction. Federal waters are defined as the area from 3 to 200 nm and are the region under Federal management jurisdiction, with the US exclusive economic zone (EEZ) being comprised of all marine waters from the mean high tide mark to the 200 nm boundary. Currently, the recreational fishery for black sea bass is managed under coastwide management measures (i.e., identical minimum fish size in total length (TL), per-angler possession limits, and open fishing seasons throughout management areas) throughout Federal waters and throughout state waters as prescribed through the Summer Flounder, Scup, and Black Sea Bass FMPs developed by the Council and Atlantic States Marine Fisheries Commission's (Commission), respectively. In 2011 and 2012, the Commission initiated Addendums to their FMP for state waters only, which temporarily enabled the use of state-specific management measures (i.e., not uniform throughout the management jurisdiction).

The purpose of this amendment is to develop a process to establish regional and spatial management measures for the black sea bass recreational fishery. More discrete management approaches are necessary to better address the observed regional differences in catch rates, variability in the effectiveness of regulations among regions, and their impact on the recreational fishery to better ensure consistency across both state and Federal waters, and to ensure that the objectives of the FMP and the requirements of the Magnuson-Stevens Act (MSA) continue to be met. This Amendment is needed to expand the suite of management tools available for management of the black sea bass recreational fishery such that the management system is able to respond to the observed regional differences in this fishery. As such, the Council is proposing action for Federal waters which, if complementary action is taken by the Commission for state waters, will:

- 1) Establish a system for the black sea bass recreational fishery that allows the Council and Commission's Summer Flounder, Scup, and Black Sea Bass Management Board (Board) to decide, on an annual (or multi-year specifications) basis whether to: (a) require all states to develop state-specific conservation equivalent management measures using guidelines agreed upon by the Council and Board; or, (b) specify coastwide measures to achieve the coastwide recreational harvest limit, as is done now. Under this system, states could consider voluntary formation of regions, by combining harvest limits and developing regional management measures designed to achieve a regional harvest limit.
- 2) Establish a system for the black sea bass recreational fishery with fixed mandatory management regions. The Council and Board would decide, on an annual (or multi-year specifications) basis whether to: (a) require states to develop region-specific conservation

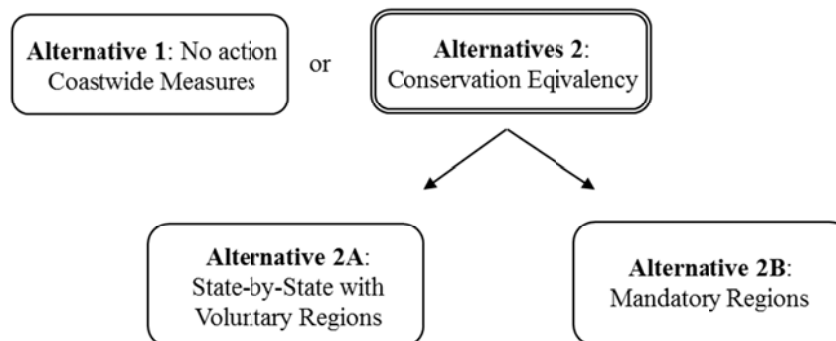
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equivalent management measures using guidelines agreed upon by the Council and Board to achieve the regional recreational harvest limits, or, (b) specify coastwide measures to achieve the coastwide recreational harvest limit.

The action proposed in this document would only apply to Federal waters; however, in order to develop an effective system of state-by-state or regional management for the black sea bass recreational fishery, a complementary process must be developed for state waters and action taken by the Commission. Therefore, a description of Commission only processes are included in this document (for clarity of the overall process) with the expectation that a complementary Commission action would be developed for state waters management. The process proposed is similar to the management program currently in place for summer flounder, where the Council and Board must decide each year whether to recommend coastwide measures or conservation equivalency for that recreational fishery.

### **2.0 Summary of Alternatives**

The alternatives under consideration in this document and described in more detail in sections that follow are structured into two groups, no action and action alternatives. The no action alternative (1A) would maintain the process as it exists presently for black sea bass. If selected, no action is taken. The action alternatives (alternatives suite 2) propose two different types of conservation equivalency that could be considered for black sea bass. Under alternative 2A, state-by-state conservation equivalency is proposed for black sea bass in the same manner that it is presently applied to the summer flounder recreational fishery. The Council and Board would meet in December under joint rules and recommend whether to implement coastwide measures or conservation equivalency for the upcoming fishing year(s). If conservation equivalency is chosen, the Commission would follow a prescribed process to develop state-by-state measures, or alternatively form voluntary regions with adjacent states. This voluntary option has never been applied under the summer flounder process, although it is a tool available to managers and is included under this black sea bass alternative. The Council would recommend conservation equivalency to the NMFS Regional Administrator (RA) to consider waiving the black sea bass regulations in Federal waters in lieu of the measures implemented in state waters.



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Under alternative 2B, fixed regions are permanently established in the state and Federal FMPs (e.g., MA-NY, NJ-NC) and the Council and Board would meet in December under joint rules and recommend whether to implement coastwide measures or regional conservation equivalency for the upcoming fishing year(s). The process would be the same as that described under alternative 2A, except that if conservation equivalency is selected, measures must be developed based on the fixed regions. Under this alternative, 3 sets of fixed regional sub-options are presented depending on the placement of New Jersey (i.e., sub-options 2B-NJtoNorth, 2B-NJtoSouth, and 2B-NJinMiddle). The catch rates are different for areas North and South of Hudson Canyon (off New Jersey); the Northern New Jersey catch rates tend to be most similar to those for New York and states North, whereas Southern New Jersey catch rates are more similar to Delaware and areas to the South.

In order to implement either state or region based recreational management measures for black sea bass, a portion of the recreational harvest limits must be allocated to each of the states or regions, to provide a landings target from which management measures (i.e., minimum fish size, seasons and possession limits) can be developed. Under the action alternatives 2A and 2B, landing and catch sub-allocation options (i.e., sub-option 2A-1,2,3, and 4, and 2B-1,2,3, and 4) are presented and represent four different time periods 1) the landings periods prior to black sea bass fishery management (i.e., development of an FMP), 2) the landings period post-management, 3) only recent landings, and 4) a recent catch period. More detailed descriptions of these sub-options are provided in sections that follow.

### **3.0 Impact Analysis**

Analysis of all management alternatives and independent management measures under consideration is provided in this Amendment will be in relation to a series of valued ecosystem components, or VECs. VECs represent the resources that may be affected by a proposed action, including non-preferred alternatives, and by other actions that have occurred or will occur outside the proposed action. An analysis of impacts is performed on each VEC to assess the direct/indirect effects of an alternative and whether these effects add to or subtract from effects of the past, present and future actions on that VEC from outside the proposed action (i.e. cumulative effects). The VECs identified for this Amendment include: the managed resources, non-target species, habitat (including essential fish habitat (EFH)), protected resources, and human communities.

This amendment is procedural in nature - focused on the methodology and process by which the black sea bass recreational harvest limit will be managed. Due to the nature of the measures proposed this amendment, there are very few functional differences between the status quo alternatives and the other alternatives under consideration and their impacts on the VECs. The expected direct effects are generally well-defined for most fishery management actions, but indirect effects are often less so. While the National Environmental Policy Act (NEPA) requires consideration of "reasonably foreseeable effects," it does not require consideration of remote and speculative impacts; these effects remain outside the scope of a NEPA analysis (Bass et al. 2001). The

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alternatives under consideration would not alter the overall recreational annual catch target (landings + discards) or recreational harvest limit (landings only) for black sea bass. As such the process of establishing these overall limits for the black sea bass stock remains unaltered by the alternatives proposed. The overall biological impacts on the stock, therefore, would not be expected to differ from the status quo. Similarly, fishing effort would not be expected to differ substantially from the status quo. However, this will depend on how the recreational harvest limit is managed and distributed among the states. Very small allocations of the harvest limit to some states could reduce recreational access to this fishery, when compared to the status quo.

This amendment is focused on establishing a recreational management system to implement the recreational catch and harvest limits for black sea bass that is responsive to the regional variability observed for this stock, but which does not alter the overarching aspects of the FMP and the system of catch limits and accountability measures. The recreational catch limits and catch levels and associated recreational measures that would be established through the existing processes cannot be predicted. In addition, if allocations are established for state-specific or regional recreational harvest or catch limits, there may be some indirect socioeconomic effects on specific states depending on how the regulations for each region are defined. However, these would be indirect effects and it is speculative to predict the exact minimum fish size, season, and possession limit combinations that might arise from an as yet unspecified recreational harvest limit in the future and their expected impacts. It should be noted that the combined effect of the state-by-state or regional management measures is required to constrain landings to the harvest limits. Therefore, the NEPA analysis will focus solely on the potential direct, indirect, and cumulative effects expected to be immediately associated with the proposed action and primary alternatives. A more detailed analysis of impacts will be prepared to assess the direct, indirect, and cumulative effects immediately expected from the alternatives given below on each of the VECs will be included in the complete Environment Assessment that is a part of the final Amendment document.

A summary of the black sea bass stock and fishery is provided below. Black sea bass are generally considered structure oriented, preferring live-bottom and reef habitats. Within the stock area, distribution changes on a seasonal basis and the extent of the seasonal change varies by location. In the northern end of the range (Massachusetts to New York), sea bass move offshore crossing the continental shelf, then south along the edge of the shelf (Moser and Shepherd, 2009). By late winter, northern fish may travel as far south as Virginia, however most return to the northern inshore areas by May. Sea bass along the Mid-Atlantic (New Jersey to Maryland) head offshore to the shelf edge during late autumn, travelling in a southeasterly direction. They also return inshore in spring to the general area from which they originated (Moser and Shepherd, 2009). Black sea bass in the southern end of the stock (Virginia and North Carolina) move offshore in late autumn/early winter. Because they are close to the continental shelf, they transit a relatively short distance, due east, to reach over-wintering areas (Moser and Shepherd, 2009). Fisheries also change seasonally with changes in distribution; recreational fisheries generally occur during the period that sea bass are inshore. However, in recent

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years party/charter vessels, primarily from New Jersey and New York, participate in an offshore winter sea bass fishery.

The management unit for black sea bass is the U.S. waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the U.S.-Canadian border. The commercial and recreational fisheries for black sea bass are fully described in section 3.3.2 of Amendment 13 to the FMP (2002) and are also outlined by principal port in section 3.4.2 of that document. The recreational fishery for black sea bass is prosecuted with hook and line; catch and landings are given in Table A. Reports on “Stock Status,” including annual assessment and reference point update reports, Stock Assessment Workshop (SAW) reports, Stock Assessment Review Committee (SARC) panelist reports, and Data Poor Stocks Working Group (DPSWG) reports and peer-review panelist reports are available online at the Northeast Fishery Science Center’s (NEFSC) website: <http://www.nefsc.noaa.gov>.

Based on the June 2012 assessment update, the stock is not overfished and overfishing is not occurring, relative to the DPSWG biological reference points. Fishing mortality ( $F$ ) in 2011 = 0.21, less than  $F_{MSY} = 0.44$  and a decrease from  $F = 0.34$  in 2010. Spawning stock biomass (SSB) in 2011 is 24.6 million lb, slightly below  $SSB_{MSY} = 24.0$  million lb.

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**Table A. Recreational black sea bass landings data from the NMFS recreational statistics databases, Maine to Cape Hatteras, NC. Source: 1981-2003 Marine Recreational Statistics Survey, 2004-2011 Marine Recreational Information Program (MRIP).**

<b>Year</b>	<b>Catch ('000 of fish)</b>	<b>Landings ('000 of fish)</b>	<b>Landings ('000 lb)</b>
1981	3,681	1,886	1,246
1982	11,386	10,045	9,894
1983	7,561	4,537	4,080
1984	3,428	1,780	1,451
1985	6,047	3,388	2,098
1986	28,946	21,742	12,392
1987	4,981	2,881	1,938
1988	7,874	3,063	2,863
1989	6,377	4,230	3,288
1990	9,133	3,879	2,765
1991	10,829	5,269	4,188
1992	7,722	3,592	2,707
1993	9,023	6,007	4,841
1994	7,166	3,430	2,949
1995	14,059	6,747	6,207
1996	8,143	3,624	3,993
1997	10,646	4,739	4,268
1998	5,146	1,148	1,152
1999	7,350	1,378	1,664
2000	16,927	3,629	4,005
2001	13,869	2,841	3,421
2002	14,703	3,351	4,349
2003	12,131	3,251	3,290
2004	7,238	1,531	1,940
2005	7,044	1,263	1,897
2006	7,606	1,286	1,763
2007	8,732	1,528	2,166
2008	10,662	1,294	2,020
2009	9,227	1,806	2,478
2010	9,966	2,207	3,112
2011	4,739	817	1,145

## **DETAILED DESCRIPTIONS OF THE ALTERNATIVES**

### **CONSERVATION EQUIVALENCY ALTERNATIVES**

#### **Alternative 1 - No Action Coastwide Measures**

Under this alternative, no action would be taken to modify the process applied through the FMP to manage the black sea bass recreational fishery. The fishery would continue to be managed on a coastwide basis in Federal waters as prescribed by the FMP with fishery management measures (i.e., minimum fish size, per-angler possession limit, and open season) set uniformly throughout. In state waters, through the Commission process, the FMP also prescribes a coastwide measure with all states establishing uniform measures.

The current two-step process would be maintained. First, the recreational harvest limit is recommended in August under joint meeting rules by the Council and Commission's Summer Flounder, Scup, and Black Sea Bass Board (Board), for Federal and state-waters, respectively, for the upcoming fishing year(s) which starts on January 1. Second, the Council and Board meet in December again under joint rules and recommend management measures for the upcoming fishing year(s).

If the Commission continues to develop addendums which temporarily enable state-specific measures to be implemented, as was done in 2011 and 2012, then state-specific measures would be implemented in state waters and there may be a disconnect between those measures implemented in Federal waters and those in state waters. Under this circumstance, anglers must abide by either the Federal fishery measures or the state measures in which they land their fish, whichever regulations are the more restrictive.

#### **Alternative Suite 2 - Conservation Equivalency**

##### **Alternative 2A: State-By-State with Voluntary Region Formation**

Under this alternative, the Council and Board would undertake a two-step process when developing management measures for the black sea bass recreational fishery similar under the no action alternative described above. First, the recreational harvest limit is recommended in August under joint meeting rules by the Council and Commission's Summer Flounder, Scup, and Black Sea Bass Board (Board), for Federal and state-waters, respectively, for the upcoming fishing year(s) which starts on January 1. Second, the Council and Board meet in December again under joint rules and recommend management measures for the upcoming fishing year(s).

However, this action alternative would require that the Council and Board recommend, under joint rules in December, whether to (a) require all states, through the Commission process, to develop state-specific conservation equivalent management measures using guidelines agreed upon by the Council and Board or (b) use a coastwide measure, in Federal and state waters, to achieve the coastwide recreational harvest limit with this coastwide measure to be voted on under joint rules by the Council and Board.

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Conservation equivalent measures would be defined as state-specific measures that when combined constrain recreational landings to the coastwide recreational harvest limit; therefore, the combination of those state-specific measures is considered to be "equivalent" to implementing a uniform coastwide measure designed to constrain landings to the harvest limit.

The Council and Board will be provided the necessary data to evaluate fish size, season, and possession limits and other supporting data needed to make an informed decision, including considering management uncertainty. If conservation equivalent measures are chosen, the Commission staff will summarize guidelines agreed upon by the Council and Board for states to determine equivalent measures. These guidelines would include, but would not be limited to: identify the overall required adjustment in landings (i.e., reduction if landings needed to achieve harvest limit or potential for liberalization in landings), the adjustment required by each state, information on management uncertainty/implementation error, precautionary default measures (i.e., measure to be implemented if states do not follow required process and implement equivalent measures), minimum management measures, and any procedures to be adhered to when states develop equivalent measures.

The Council and Board must specify precautionary default measures when conservation equivalency is recommended as the preferred alternative. These would be the measures required to be implemented by a state that either does not submit a black sea bass management proposal or for states whose measures do not achieve the required adjustments in landings as prescribed in the Commission guidelines. The precautionary default measures are set in a manner that is more restrictive than the most restrictive measures that are expected to be implemented by any individual state. Precautionary default measures should be voted on at the joint meeting when conservation equivalent measures are chosen.

At the joint meeting in December the Council and Board will also choose between coastwide measures or conservation equivalency. If the Council and Board choose conservation equivalency for the upcoming fishing year, the coastwide measures are submitted to NMFS as a non-preferred alternative for consideration, in the event NMFS cannot implement conservation equivalency (e.g., Board does not develop conservation equivalency measures or the measures developed are determined by NMFS to be insufficient to constrain recreational landings to the desired level).

Although this process acknowledges that the Council is requesting the implementation of state conservation equivalency measures and/or the precautionary default measures (depending on the Board recommendation for each state) in the EEZ, it is also necessary for the Council to submit the coastwide measures to NMFS for publication in the Federal Register in the event the Board does not develop conservation equivalency measures or the measures developed are later determined to be insufficient.

Because individual state proposals will not be included in the publication of the proposed rule, by providing both the precautionary default and coastwide measures NMFS can

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publish the two extreme sets of measures that will inform the public of the range of potential options and provide opportunity for the public to comment on these other measures. Secondly, as described in this section, the publication of the proposed rule is on a parallel track with the Board's decision to approve or disapprove individual states proposals. During the Technical Committee and Board decision phases, a situation may arise where there is a change of direction and the Board may reconsider its choice of state equivalency in favor of coastwide measures. By publishing the coastwide measures in the proposed rule, NMFS can accommodate the Commission's recommendation for coastwide measures. If the coastwide measures were not published in the proposed rule, NMFS would not have the flexibility to approve this recommendation if requested by the Commission. As specified above, the Commission's decision must apply to all states and not individual states.

If the Council and Board decided in December to use conservation equivalency the following procedure would apply (Table B). It should be noted that the following timeline presented is slightly different than described for summer flounder state-specific conservation equivalency as described Framework 2 and 6 because that FMP timeline was somewhat unrealistic given the processes that have to occur, including state public hearings on management measure proposals which were not contemplated when the original timeline was written. Therefore, the timeline described for black sea bass is consistent with the actual timeline for the summer flounder conservation equivalency process as it has occurred each year, from 2001 to 2012. The steps taken in the process as proposed below for black sea bass are however the same as those used for summer flounder.

A) Late December - Commission staff summarizes the guidelines agreed upon by the Council and Board to determine conservation equivalent measures, and distributes them to the states.

B) Mid-January - A state must submit a proposal to the Commission staff at least one weeks prior to the Technical Committee meeting. Commission staff distributes the states' conservation equivalency proposals to the Technical Committee and the Board.

C) Late January - The Technical Committee evaluates each state's proposal, which typically includes several options with various combinations of management measures, and advises the Board of the proposal's consistency with achieving the coastwide recreational harvest limit.

D) Late February/Early March - Council staff submits the recreational specification package to NMFS. The package would include the overall percentage adjustment in landings required, the coastwide measures (as a non-preferred alternative), and the recommendation to implement conservation equivalency (as the preferred alternative) with precautionary default measures. The Board reviews and approves or disapproves the state proposals. If it is determined the options for management measures proposed by a state are not consistent with the guidelines or the state fails to submit a proposal, then that state would be required to implement the precautionary default measures, unless the

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Board gives the state a chance to recalculate management measures, following the guidelines set forth by the Council and Board. The states then follows their prescribed rule-making process (e.g. public hearings) for the approved options to determine which measures are most appropriate given their stakeholder input.

E) April/May - NMFS publishes the proposed rule for Federal recreational measures to announce the overall required percentage adjustment in landings, the Council and Board's recommendation of state conservation equivalency (as the preferred alternative), the precautionary default measures, and coastwide measures (as the non-preferred alternative for the EEZ).

F) May/June - The Board submits comments to NMFS during the comment period to inform NMFS about the approval or disapproval of the state conservation equivalency proposals.

G) June/July - NMFS publishes the final rule announcing the state specific conservation equivalency measures and precautionary default measures, or coastwide measures for the EEZ.

The proposed rule specifying the total harvest level, including the commercial quota and recreational harvest limit, as well as any other necessary measures for the commercial fishery, is to be published in early fall, so that the rulemaking process can be completed and final rule published prior to the beginning of the fishing year on January 1. The second proposed rule (as described by the timelines in this document) is to be published on or about April or May, specifying Federal recreational management measures (coastwide or equivalent, including: minimum fish size, possession limit, and/or seasons) necessary to constrain the recreational harvest to the specified limit. This schedule of publication would allow a final rule for Federal recreational management measures to be effective by approximately July 1.

If conservation equivalency is recommended the following guidelines must also be addressed.

A. Under state-by-state conservation equivalency, states will not be allowed to implement measures by mode or area within a state unless the proportional standard errors (PSEs) of recreational landings (based on Marine Recreational Statistics Program (MRIP)) estimates by mode or area for that state are less than 30 percent. PSE expresses the standard error of a landings estimate as a percentage of that estimate, and is a measure of the precision of the landings estimate.

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**Table B. Procedures for establishing black sea bass recreational management measures.**

<b>August</b> Council/Commissions's Board recommend recreational harvest limit.	
<b>October</b> Recreational data available for current year through wave 4.	
<b>November</b> Monitoring Committee meeting to develop recommendations to Council: Overall % reduction required. Use of coastwide measures or state conservation equivalency. **Precautionary default measures. **Coastwide measures.	
<b>December</b> Council/Commission's Board meeting to make recommendation to NMFS for Conservation Equivalency or Coastwide measures.	
<i>State Conservation Equivalency Measures</i>	<i>Coastwide Measures</i>
<b>Late December</b> Commission staff summarizes and distributes <u>state-specific and multi-state conservation equivalency</u> guidelines to states.	<b>Late February/Early March</b> Council staff submits recreational measure package to NMFS. Package includes: -Overall % reduction required. -Coastwide measures.
<b>Mid-January</b>  States submit conservation equivalency proposals to Commission staff.  Commission staff distributes <u>state-specific or multi-state conservation equivalency proposals</u> to Technical Committee.	<b>April/May</b> NMFS publishes proposed rule for recreational measures announcing the overall % reduction required and Coastwide measures.
<b>Late February/Early March</b> Commission's Board meeting to approve/disapprove proposals which states will then follow their state regulatory process to implement regulations.  Council staff submits recreational measure package to NMFS. Package includes: - Overall % adjustments required. - Recommendation to implement conservation equivalency and precautionary default measures (Preferred Alternative). -Coastwide measures (Non-preferred Alternative).	<b>May/June</b> NMFS publishes final rule announcing overall % reduction required and Coastwide measures.  **Precautionary default measures - measures to achieve at least the % required reduction in each state. **Coastwide measures - measure to achieve % reduction coastwide.
<b>April/May</b> NMFS publishes proposed rule for recreational measures announcing the overall % reduction required, <u>state-specific or multi-state conservation equivalency</u> measures and precautionary default measures (as the preferred alternative), and coastwide measures as the non-preferred alternative.	
<b>May/June</b> During comment period, Board submits comment to inform whether conservation equivalency proposals are approved and state specific measures.	
<b>June/July</b> NMFS publishes final rule announcing overall % adjustments required and one of the following scenarios: - <u>State-specific or multi-state conservation equivalency</u> measures with precautionary default measures, or -Coastwide measures.	

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B. The states would use state-specific tables to develop and implement recreational management measures to achieve the necessary reduction. Tables would be adjusted to account for effectiveness of the regulations. States must use guidelines agreed to by the Council and Board to determine which possession limits, size limits, and closed seasons would constrain their landings to the harvest limit.

C. Implementation of approved equivalent measures by the states as recommended by the Council/Board must be a compliance criterion under the Commission plan. Proof of implementation will be required to fulfill the compliance criterion.

The Board reviews and determines if the measures implemented by the states are consistent with the guidelines set forth by the Council and Board and forwards those measures with the recommendation for conservation equivalency to the NMFS Regional Administrator. The Regional Administrator then decides whether the measures are equivalent, and may waive the annual Federal black sea bass measures specified under 50 CFR Part 648 and notify vessel permit holders of the equivalent measures approved by the Board for landing black sea bass in that state.

Since conservation equivalency would allow all states to establish unique measures, the issue of applicability and enforcement would be addressed. Currently, NMFS issues only charter/party permits for the recreational black sea bass fishery in the EEZ. In 50 CFR Part 648 of the regulations specifies permit conditions that will have to be modified to address conservation equivalency. Specifically, any person who applies for a fishing permit must agree as a condition of the permit that the vessel and the vessel's fishing activity, catch, and pertinent gear (without regard to whether such fishing activity occurs in the EEZ or landward of the EEZ, and without regard to where such fish or gear is possessed, taken or landed), is subject to all requirements of §648, unless exempted from such requirements. All such fishing activities, catch, and gear will remain subject to all applicable state requirements. Except as otherwise provided, if a requirement of §648 and a management measure required by a state or local law differ, any vessel owner permitted to fish in the EEZ for any species managed under §648 must comply with the more restrictive requirement. Federal permit holders who land in states with an approved conservation equivalent program in place would have the permit conditions in §648 waived. Those vessels would be required to abide by the appropriate requirements of the state in which they land black sea bass. Federal permit holders possessing or landing black sea bass in a state that failed to implement conservation equivalent measures, would be bound by the precautionary default measures. A waiver/exemption would be authorized by the RA and entered by a notice in the Federal Register. Permit holders would be notified via mailing. The Federal permit condition would be waived/exempted for vessels landing in a state with an approved conservation equivalent program. Those vessels would be required to abide by the appropriate state requirements.

Under this alternative, states could also voluntarily enter into an agreement to form multi-state conservation equivalency regions. Each voluntary multi-state region would implement identical fishery management measures, which would include minimum fish

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size, possession limit, and open season, following the same timeline and process specified above for state-specific conservation equivalency, with the only difference being the sum of the regional approaches must be the conservation equivalence of the coastwide measure. The recreational harvest limit for these regions would be the sum of the harvest limits for all of the states included in each region. To determine the multi-state conservation equivalency measures for the upcoming year, the prior years' recreational landings would be pooled among the inclusive states and then compared to the subsequent year's region-specific recreational harvest limit to determine if any necessary reductions in landings would be required of that region. Each multi-state region would then craft their regulations under the same guidelines used to develop state-specific conservation equivalency measures and under the same timeline identified for state-specific conservation equivalency. If a region exceeds the region-specific harvest limit in a given year, the overage would need to be addressed by adjusting regulations in the subsequent year so the recreational harvest limit in the subsequent year is achieved. There are two possible scenarios for how states can proceed based on whether a region decides to maintain their voluntary regional agreement, or decides to dissolve the voluntary multi-state region and resume state-specific conservation equivalency (Figure 1). In the event the region maintained their voluntary multi-state conservation equivalency agreement that following year, the region would again compare their regional recreational landings to the subsequent year's region-specific recreational harvest limit to determine if any necessary reductions in landings would be required of that region. The region would then adjust their regulations such that the region-specific harvest limit would be achieved. In the event the region dissolved their multi-state agreement and opted for state-specific conservation equivalency, state-specific harvest limits would apply and individual states would compare their state-specific landings to the state-specific harvest limits in the upcoming year. Each state would then adjust their regulations such that the state-specific harvest limits would be achieved.

### ***State-Specific Allocations:***

The proposed sub-options to allocate the recreational harvest limit to states are given in Table C. The Council and Board must select a state-specific allocation sub-option. Because MRIP represents the best available data on recreational catch and landings, it is used for the 2004-2011 time periods; all other years data are MRFSS based. For all of the years since the FMP was implemented, the landings and catch patterns are constrained by the harvest limits and fishing regulations; therefore, the data are confounded with regulatory effects that cannot be explicitly accounted for in the analysis. The most recent complete data year 2011 was not used because states implemented a state-specific approach which also confounded the landings patterns by constraining some states with high minimum fish sizes. In addition, substantial changes in stock demographics have occurred during the time periods that are likewise not explicitly accounted for.

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### *Allocation sub-option 2A-1 - Pre-Management Landings:*

- **Pre-management state recreational landings series - 1981, 1983-1985, 1987-1996.** The state-specific recreational harvest limits in numbers of fish will be based on recreational landings (numbers) from the pre-management time series prior to 1997, without 1982 and 1986, which were aberrant years with landings substantially higher than adjacent years.

### *Allocation sub-option 2A-2 - Post-Management Landings:*

- **Post-management state recreational landings series - 1997-2008, 2010.** The state-specific recreational harvest limits in numbers of fish will be based on recreational landings (numbers) from the post-management time series 1997 to 2008, without 2009 included because of the Federal recreational fishery closure.

### *Allocation sub-option 2A-3 - Recent Landings:*

- **Recent state recreational landings series - 2006-2008, 2010.** The state-specific recreational harvest limits in numbers of fish will be based on recent recreational landings (numbers) from the post-management time series 2006-2008, without 2009 included because of the Federal recreational fishery closure.

### *Allocation sub-option 2A-4 - Recent Catch:*

- **Recent state recreational catch series - 2006-2008.** The state-specific annual catch targets (ACTs) in numbers of fish will be based on recent recreational catch (numbers) from 2006-2008, which is a time series where all state had the same regulations (except Massachusetts with 20 fish possession limit as opposed to 25) and there was no closed season. The year 2010 was excluded because the discard patterns would be expected to be different under the more restrictive regulations. If this sub-option is selected, recreational regulations will need to be developed to achieve the recreational annual catch target (which includes both landings + discards). Presently, the Commission plan does not include a recreational annual catch target.

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**Table C. State-specific recreational harvest or catch limit allocation percentages associated with each allocation sub-option.**

State	Sub-option 2A-1: Pre-management 1981, 1983-1985, 1987-2006		Sub-option 2A-2: Post-management 1997-2008, 2010		Sub-option 2A-3: Recent 2006-2008, 2010		Sub-option 2A-4: Recent Catch 2006-2008	
	Landings (no. of fish)	Percent Allocation	Landings (no. of fish)	Percent Allocation	Landings (no. of fish)	Percent Allocation	Catch (no. of fish)	Percent Allocation
<b>Maine</b>	0	0.00%	0	0.00%	0	0.00%	0	0.00%
<b>New Hampshire</b>	398*	0.00%	3,346	0.01%*	0	0.00%	0	0.00%
<b>Massachusetts</b>	801,784	1.48%	2,006,860	6.82%	1,202,871	19.05%	1,475,758	5.47%
<b>Rhode Island</b>	343,011	0.63%	964,997	3.28%	297,778	4.72%	544,345	2.02%
<b>Connecticut</b>	117,749	0.22%	182,267	0.62%	102,477	1.62%	468,366	1.73%
<b>New York</b>	3,835,166	7.06%	3,114,089	10.58%	1,480,978	23.46%	5,468,050	20.25%
<b>New Jersey</b>	26,869,540	49.47%	15,878,759	53.93%	2,522,383	39.95%	10,771,831	39.90%
<b>Delaware</b>	1,754,879	3.23%	1,814,134	6.16%	250,491	3.97%	1,606,840	5.95%
<b>Maryland</b>	7,654,196	14.09%	2,344,201	7.96%	221,918	3.51%	2,082,254	7.71%
<b>Virginia</b>	12,213,312	22.49%	2,914,449	9.90%	187,211	2.97%	4,033,795	14.94%
<b>North Carolina</b>	723,397	1.33%	220,587	0.75%	47,693	0.76%	548,750	2.03%
<b>Total</b>	54,313,432	100.00%	29,443,689	100.00%	6,313,800	100.00%	26,999,989	100.00%

\* A small allocation could be made to New Hampshire.

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### **Alternative 2B: Mandatory Regions**

Under this alternative, mandatory recreational fishery management regions would be established. However, this action alternative would require that the Council and Board recommend, under joint rules in December, whether to (a) require all states, through the Commission process, to develop region-specific conservation equivalent management measures, that are identically implemented by all states within the regions, using guidelines agreed upon by the Council and Board or (b) use a coastwide measure, in Federal waters and state waters to achieve the coastwide recreational harvest limit with this coastwide measure to be voted on under joint rules by the Council and Board. Conservation equivalent measures would be defined as region-specific measures that constrain recreational landings to the coastwide recreational harvest limit; therefore, the combination of those region-specific measures is considered to be "equivalent" to implementing a uniform coastwide measure designed to constrain landings to the harvest limit.

#### ***Selection of Mandatory Regions***

The Council and Board must establish the specific region in the FMP and must select a mandatory region sub-option. The following sub-options are presented:

##### ***Regional sub-option 2B-NJtoNorth:***

- **Two Regions - New Jersey to North (MA-NJ, DE-NC):** The state of Massachusetts, Rhode Island, Connecticut, New York and New Jersey comprise the Northern recreational management region. Maine and New Hampshire would not be required to develop recreational measures for black sea bass; however, those states catch and landings contributions will be included in the Northern region when developing regulations. The Southern recreational management region would be comprised of Delaware, Maryland, Virginia, and North Carolina<sup>1</sup>.

##### ***Regional sub-option 2B-NJtoSouth:***

- **Two Regions - New Jersey to South (MA-NY, NJ-NC):** The state of Massachusetts, Rhode Island, Connecticut, and New York comprise the Northern recreational management region. Maine and New Hampshire would not be required to develop recreational measures for black sea bass; however, those states catch and landings contributions will be included in the Northern region when developing regulations. The Southern recreational management region would be comprised of New Jersey, Delaware, Maryland, Virginia, and North Carolina<sup>1</sup>.

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<sup>1</sup> North Carolina, North of Cape Hatteras only, consistent with the management unit in the FMP.

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### *Regional sub-option 2B-NJinMiddle:*

- **Three Regions (MA-NY, NJ, DE-NC):** The state of Massachusetts, Rhode Island, Connecticut, and New York the Northern recreational management region. Maine and New Hampshire would not be required to develop recreational measures for black sea bass; however, those states catch and landings contributions will be included in the Northern region when developing regulations. The Middle recreational management region includes New Jersey. The Southern recreational management region would be comprised of Delaware, Maryland, Virginia, and North Carolina<sup>1</sup>.

The process and requirements under state-specific conservation equivalency described above under alternative 2A apply here except the states will develop equivalent regional measure, with two exceptions to the process. The voluntary multi-state regional requirement does not apply because the use of regions under this alternative is mandatory and the specific region must be established in the FMP (see sub-options below). In addition, the level of precision of annual harvest estimates from the recreational statistics programs (MRFSS/MRIP) are always progressively less precise at lower levels of stratification; annual estimates are more precise than bimonthly estimates, coastal estimates are more precise than regional estimates, and regional estimates are more precise than state estimates. Therefore, a 20 percent PSE is more appropriate at the regional level, and regions will not be allowed to implement measures by mode or area within a region unless the proportional standard errors (PSEs) of the MRIP landings estimates by mode or area for that region are less than 20%.

Similar to that described under alternative 2A, the Board reviews and determines if the regional measures implemented by the states are consistent with the guidelines set forth by the Council and Board and forwards those measures with the recommendation for conservation equivalency to the NMFS Regional Administrator. The Regional Administrator then decides whether the measures are equivalent, and may waive the annual Federal black sea bass measures specified under 50 CFR Part 648 and notify vessel permit holders of the equivalent measures approved by the Board for landing black sea bass in those regions.

### *Regional Allocations:*

The proposed sub-options to allocate the recreational harvest limit to regions are given in Table D. The Council and Board must select a region option first and then a regional allocation sub-option. Because MRIP represents the best available data on recreational catch and landings, it is used for the 2004-2011 time periods; all other data are MRFSS based. For all of the years since the FMP was implemented, the landings and catch patterns are constrained by the harvest limits and fishing regulations; therefore, the data are confounded with regulatory effects that cannot be explicitly accounted for in the analysis. In addition, substantially change in stock demographics have occurred during the time periods that are likewise not explicitly accounted for.

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### *Allocation sub-option 2B-1 - Pre-Management Regional Landings:*

- **Pre-management regional recreational landings series - 1981, 1983-1985, 1987-1996.** The regional recreational harvest limits in numbers of fish will be based on recreational landings (numbers) from the pre-management time series prior to 1997, without 1982 and 1986, which were aberrant years with landings substantially higher than adjacent years.

### *Allocation sub-option 2B-2 - Post-Management Regional Landings:*

- **Post-management regional recreational landings series - 1997-2008, 2010.** The regional recreational harvest limits in numbers of fish will be based on recreational landings (numbers) from the post-management time series 1997 to 2008, without 2009 included because of the Federal recreational fishery closure.

### *Allocation sub-option 2B-3 - Recent Regional Landings:*

- **Recent regional recreational landings series - 2006-2008, 2010.** The regional recreational harvest limits in numbers of fish will be based on recent recreational landings (numbers) from the post-management time series 2006-2008, without 2009 included because of the Federal recreational fishery closure.

### *Allocation sub-option 2B-4 - Recent Regional Catch:*

- **Recent regional recreational catch series - 2006-2008.** The regional annual catch targets (ACTs) in numbers of fish will be based on recent recreational catch (numbers) from 2006-2008, which is a time series where all state had the same regulations (except Massachusetts with 20 fish possession limit as opposed to 25) and there was no closed season. The year 2010 was excluded because the discard patterns would be expected to be different under the more restrictive regulations. If this sub-option is selected, recreational regulations will need to be developed to achieve the recreational annual catch target (which includes both landings + discards). Presently, the Commission plan does not include a recreational annual catch target.

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**Table D. Regional recreational harvest or catch limit allocation percentages associated with each allocation sub-option.**

Region Sub-Options	Region Description	Sub-option 2A-1: Pre-management 1981, 1983-1985, 1987-2006		Sub-option 2A-2: Post-management 1997-2008, 2010		Sub-option 2A-3: Recent 2006-2008, 2010		Sub-option 2A-4: Recent Catch 2006-2008	
		Landings (no. of fish)	Percent Allocation	Landings (no. of fish)	Percent Allocation	Landings (no. of fish)	Percent Allocation	Catch (no. of fish)	Percent Allocation
<b>2 Regions NJ to North</b>	<b>Northern Region MA-NJ</b>	31,967,250	58.86%	22,146,972	75.23%	5,606,487	88.80%	18,728,350	69.36%
	<b>Southern Region DE-NC</b>	22,345,784	41.14%	7,293,371	24.77%	707,313	11.20%	8,271,639	30.64%
<b>2 Regions NJ to South</b>	<b>Northern Region MA-NY</b>	5,097,710	9.39%	6,268,213	21.29%	3,084,104	48.85%	7,956,519	29.47%
	<b>Southern Region NJ-NC</b>	49,215,324	90.61%	23,172,130	78.71%	3,229,696	51.15%	19,043,470	70.53%
<b>3 Regions NJ in Middle</b>	<b>Northern Region MA-NY</b>	5,097,710	9.39%	6,268,213	21.29%	3,084,104	48.85%	7,956,519	29.47%
	<b>New Jersey</b>	26,869,540	49.47%	15,878,759	53.94%	2,522,383	39.95%	10,771,831	39.90%
	<b>Southern Region DE-NC</b>	22,345,784	41.14%	7,293,371	24.77%	707,313	11.20%	8,271,639	30.64%

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### **OTHER ALTERNATIVES UNDER CONSIDERATION**

#### **Alternative Suite 3 - Sunset and Revisitation**

##### **Alternative 3A: Status quo/no action**

Under this alternative, the status quo would continue and no action would be taken to revisit the proposed management system for the black sea bass recreational fishery.

##### **Alternative 3B: Sunset Provision**

Under this alternative, every 5 years the state-by-state or regional recreational system of management will default to coastwide for black sea bass, unless upon recommendation by the MAFMC, the NMFS Regional Administrator continues the program by publication in the Federal Register for an additional 5 years.

##### **Alternative 3C: Formal State-by-State or Regional Management System Review**

This alternative would provide for an enforceable provision for regular review and evaluation of the performance of the IFQ program as described in the above. Under this alternative, a formal and detailed review of the performance of the state-by-state or regional management system for black sea bass will occur five years after the implementation of the program, and every five years thereafter. This review will highlight potential issues associated with the system and any potential modifications if needed.

#### **Alternative Suite 4 - Process to Modify Actions**

##### **Alternative 4A: Status quo/no action**

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

##### **Alternative 4B: Modification of Actions, including Framework Action List**

The actions taken in this document are intended to be dynamic to ensure the recreational management system is responsive to changes in the fishery and stock and achieves the FMP objectives. Flexibility is imperative and must allow for timely modifications given the dynamic nature of fisheries and the environment. This alternative, therefore, contemplates a process that allows for the timely modification of specific items described in this document through the FMP framework adjustment process. Undoubtedly, there

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will be modifications to the program as yet not contemplated that will have to go through an FMP amendment.

### **Updates and Recalibration of the MRFSS data**

The MRIP data are presently available for 2004-present; however, there are procedures underway to recast/recalibrate the MRFSS times series to the revised MRIP process. If prior time periods are selected, and recalibrated, the proposed allocations described in this document may not be based upon the best available data for recreational statistics. Therefore, these data will be revisited in 3 years to determine if the data have been recalibrated. If so, the updating of the allocation sub-options based on a data recalibration may occur through the Framework adjustment process.

### **Proportional Standard Errors (PSEs)**

The expected variability in the recreational catch and landings estimates as expressed as a PSE may increase or decrease due to a variety of factors such as changes sampling protocols, sample size, and the variability of the data itself. As such, it may be necessary to adjust the minimum PSE associated with not allowing states to implement measures by mode or area unless the minimum PSE is met. Modification of these PSEs may occur through the Framework adjustment process.

### **Literature Cited:**

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

MAFMC. 2006. Framework 6 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan. Dover, DE. 41 p.

Moser, J. and G.R. Shepherd. 2009. Seasonal Distribution and Movement of Black Sea Bass (*Centropristis striata*) in the Northwest Atlantic as Determined from a Mark-Recapture Experiment. *Journal of Northwest Fisheries Science*. 40:17-28.