## MID-ATLANTIC FISHERY MANAGEMENT COUNCIL MEETING AGENDA December 9-12, 2013 Westin Annapolis, 100 Westgate Circle, Annapolis, MD 21401 Telephone 410-972-4300

<u>Monday, December 9</u>	
3:00 p.m 5:00 p.m.	<ul> <li>Highly Migratory Species Committee [TAB 1]</li> <li>Linhard, Hemilright, Deem, Luisi, McMurray, Pate, Saunders, Zeman [Didden]</li> <li>Develop Council comments on HMS Draft Amendment 7 (bluefin tuna management measures) for submission to NMFS on December 10</li> </ul>
<u>Tuesday, December 10</u>	
9:00 a.m 9:30 a.m.	<ul> <li>Executive Committee [CLOSED SESSION]</li> <li>Robins, Anderson, Batsavage, Bullard, Elliott, King, Linhard, Luisi, McMurray, Nolan, O'Reilly, Pate [Moore]</li> <li>Ricks E Savage Award Nominations</li> </ul>
9:30 a.m 12:00 p.m.	<ul> <li>Executive Committee [OPEN SESSION] [TAB 2]</li> <li>Robins, Anderson, Batsavage, Bullard, Elliott, King, Linhard, Luisi, McMurray, Nolan, O'Reilly, Pate [Moore]</li> <li>Review Draft Implementation Plan and public comments</li> <li>Approve 2014 Implementation Plan for Council consideration</li> </ul>
12:00 p.m 1:00 p.m.	Lunch
1:00 p.m.	Council Convenes
1:00 p.m 1:10 p.m.	Council Photo
1:10 p.m 2:00 p.m.	<ul> <li>Framework 9 to the Mackerel, Squid, Butterfish FMP [TAB 3]</li> <li>First Meeting - Review and approve options to address unobserved slippage on observed trips</li> </ul>
2:00 p.m 3:00 p.m.	<ul> <li>River Herring and Shad Approach [TAB 4]</li> <li>Review and adopt plan to move forward with the river herring and shad strategy implementing motion made at October 2013 meeting</li> </ul>
3:00 p.m 4:00 p.m.	<ul> <li>Data Portal Presentation - Rutgers and Nature Conservancy [TAB 5]</li> <li>Review project goals, methods and illustrative draft maps of Mid-Atlantic fishing activity summarized by port and gear groups (Rutgers University and Nature Conservancy staff)</li> <li>Provide advice to project team on best approaches and opportunities for engaging fishermen to review, discuss and improve project data and maps</li> </ul>

4:00 p.m 5:00 p.m.	<ul> <li>Surfclam Presentation - Bonnie McCay &amp; Eric Powell [TAB 6]</li> <li>Report of the NSF Coupled Natural and Human Systems surfclam study: climate change and responses in a coupled marine system</li> <li>Update on the NSC Science Center for Marine Fisheries (SCeMFiS)</li> </ul>
Wednesday, December 11	
9:00 a.m 5:00 p.m.	Demersal Committee Meeting as a Committee of the Whole with the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Boards
9:00 a.m 12:00 p.m.	<ul> <li>Finalize Summer Flounder 2014 Recreational Management Measures [TAB 7]</li> <li>Review Monitoring Committee and Advisory Panel recommendations for 2014</li> <li>Adopt recommendations for 2014 management measures</li> </ul>
12:00 p.m 1:00 p.m.	Lunch
1:00 p.m 3:00 p.m.	<ul> <li>Finalize Black Sea Bass 2014 Management Measures [TAB 8]</li> <li>Review Monitoring Committee and Advisory Panel recommendations for 2014</li> <li>Adopt recommendations for 2014 management measures</li> </ul>
3:00 p.m 5:00 p.m.	<ul> <li>Finalize Scup 2014 Recreational Management Measures [TAB 9]</li> <li>Review Monitoring Committee and Advisory Panel recommendations for 2014</li> <li>Adopt recommendations for 2014 management measures</li> </ul>
Thursday, December 12	
9:00 a.m 9:30 a.m.	<ul> <li>Spiny Dogfish Trip Limits [TAB 10]</li> <li>Review options for trip limits in federal waters for the 2014-2015 fishing years</li> </ul>
9:30 a.m 10:00 a.m.	Stakeholder Survey on Ecosystem-based Fisheries Management Presentation - Ingrid Biedron
10:00 a.m 1:00 p.m.	Business Session

#### October 2013 Motions:

#### **Dogfish**

Move to adopt for spiny dogfish in 2014 an ACL/ACT of 60.695 metric lb. resulting in a commercial quota of 49.037 million lbs., and to adopt for spiny dogfish in 2015 an ACL/ACT of 62.270 million lbs. resulting in a commercial quota of 50.612 million lbs. Himchak/Deem (19/0/0). Motion carries Move to maintain a 4,000 daily trip limit, but also allow a 20,000 lb. weekly trip limit for spiny dogfish in 2014 and

2015. Nolan/Kaelin.

Motion to withdraw. Nolan/Kaelin. Motion carried

Move to direct the AP and staff to explore the development of cumulative trip limits or the elimination of trip limits. Nolan/Kaelin. Approved by consent

Move to allow up to 3% RSA in 2014 and 2015 for spiny dogfish. O'Reilly/Linhard. Approved by consent

#### **Monkfish**

Move to approve for consideration in Framework 8 to the Monkfish FMP the range alternatives described in the Sept 26 document. Nolan for Committee (18/0/0) Approved by consent

#### Mackerel, Squid, Butterfish

Move that the Council adopt a proactive coordinated approach to help the stocks of river herring and shads to recover. Specifically I propose the Council take the lead in forming a joint Council/ASMFC/State/Regional Office/Center working group to cooperatively seek to improve current management by aligning current ASMFC, individual state, and at-sea cap management measures to comprehensively address fishing mortality throughout the species range in state and federal waters, to use the Councils' SSC and other relevant scientific bodies to develop a scientific-based approach to determining the proper size of the catch cap in the mackerel and herring fisheries, and to monitor the success of current management actions by the Council and our partners, including that the Council relook at the decision to make river herring and shads stocks in the fishery in three years after we have had a chance to determine if these current efforts are working and if by assessing the proposed interim work to develop scientifically-determined caps sizes we can better justify the decision to go ahead. McMurray for Committee (17/2/0) Motion carries

Move to amend from 5 years to 3 years to revisit stocks in the fishery issue. O'Reilly/Himchak (17/0/2) Motion carries

Move to amend to comprehensively address fishing mortality throughout the species range in state and federal waters. Anderson/O'Reilly (17/0/2) Motion carries

Move to substitute that the Council move forward with the development of Amendment 15 DEIS, with an invitation to ASMFC to serve as cooperating entity in the development of the DEIS; development of alternatives for complementary and/or joint management with the ASMFC; and alternatives for the setting of ACLs, including review of ACL-setting for data-limited stocks in other regions.

McMurray/Linhard (9/10) - roll call vote. Motion fails for lack of majority

Summer Flounder Management Measures with Board Move that summer flounder specifications be set for 2 years (2014 and 2015). Council: Anderson/Batsavage (16/0/2) Board: Augustine/Pierce (10/0/0/0). Motion carries

Move for 2014, the recreational ACL = ACT = 9.07 mil lb. and commercial ACL = ACT = 12.87 mil lb. This results in a recreational harvest limit of 7.01 mil lb. and commercial quota of 10.51 mil lb. (after reduction for discards and max 3% RSA). For 2015, the recreational ACL = ACT = 9.44 mil lb. and commercial ACL = ACT = 13.34 mil lb. This results in a recreational harvest limit of 7.16 mil lb. and commercial quota of 10.74 mil lb. (after reduction for discards and max 3% RSA). Council: O'Reilly/Linhard (12/0/6) Board: Augustine/Himchak (7/3/0/0).

Motion carries

Move that up to 3% of the TAL be allocated for RSA in 2014 and 2015. Council: Michels/Linhard (15/3/1) Board: Augustine/Simpson (8/2/0/0). Motion carries

Move to amend above motion to read that up to 3% of the TAL be allocated for RSA in 2014 and 2015 to the commercial fishery only. Board: Pierce/ Motion failed for lack of a second

Scup Management Measures with Board Move that the revised 2014 and 2015 specifications be set equal to 2013 specifications. Board: Pierce/Gibson Motion fails due to lack of like motion from Council Move to change the scup possession limit for the Winter II commercial season to 12,000 lbs. Council: Nolan/Kaelin (16/0/0) Board: Himchak/Augustine. Motion carries unanimously.

#### Black Sea Bass Management Measures with Board

Move that previously set 2014 black sea bass specifications remain unchanged, and that those same specifications be extended into 2015. For 2015, the recreational ACL = ACT = 2.90 mil lb. and commercial ACL = ACT = 2.60 mil lb. This results in a recreational harvest limit of 2.26 mil lb. and commercial quota of 2.17 mil lb. (after reduction for discards and max 3% RSA). Council: Linhard/Batsavage (15/0/0) Board: Augustine/O'Reilly. Motion carries unanimously

Move that up to 3% of the TAL be allocated for RSA in 2014 and 2015. Council: Nolan/Anderson (14/2/0) Board: Augustine/Nowalsky (7/2/0/0). Motion carries

#### Bluefish Management Measures with Board

Move to adopt for Bluefish in 2014 an ACL of 24,432 M lb. equivalent to ABC, a recreational ACT of 20.278 M lb. and commercial ACT of 4.153 M lbs. corresponding to a recreational TAL of 16.927 M lbs., and a commercial TAL of 4.153 M lbs., and to allow a transfer of up to 3.340 M lbs. from the commercial TAL resulting in a recreational harvest limit of 13.587 M lbs., and a commercial quota of 7.494 M lbs. Board: Augustine/Himchak (motion carries unanimously) Council: Hein/Linhard (17/0/0).

Move to allow an RSA of up to 3%, 632,418 lbs., of the combined recreational and commercial TALS in 2014. Council: Deem/O'Reilly (13/2/0) Board: Augustine/Nowalsky (1 objection from NJ). Motion carries

<u>Research Set-Aside</u> Move that at least 20% of RSA funding is applied to each species generating funding for the research. Zeman/McMurray. Motion withdrawn

Move to approve 2015 RSA program Research and Information Priorities List. Elliott/Batsavage (16/0/0) Motion carries

Business Session Move to approve June 2013 and August 2013 minutes. Approved by consent

#### Continuing and New Business

Move that the MAFMC prioritize planning for an Omnibus Amendment focusing on observer coverage, in regional fisheries consistent with Regional Administrator Bullard's letter to MAFMC and NEFMC on 9/20/2013. Kaelin/McMurray. Approved by consent

Move to initiate a Framework or Amendment, as appropriate, to refine the definition of Level 2 stock assessments in the Council's ABC control rules, and to develop protocols for setting ABCs for Level 2 stocks. Elliott/O'Reilly. Approved by consent

Move to initiate a Framework to:

1. Allow the SSC and Council to base ABC; on constant catch during a multi-year period.

2. Establish a bandwidth in multi-year specifications that would allow catches and specifications to remain constant during a multi-year period if updated OFL values are within a prescribed tolerance.

Heins/DiLernia. Approved by consent

Move to initiate a Framework to address the slippage issue in Mackerel, Squid, and Butterfish Amendment 14. Anderson/Nolan (14/1/0) Approved by consent

## **Organizational Reports [TAB 11]**

- NMFS Regional Administrator
  - Update on forms and process for data collection for the surfclam and ocean quahog fisheries
- NMFS NEFSC Director
- NOAA Office of General Counsel
- Federal Enforcement Officials (NMFS and USCG)
- ASMFC Executive Director

### Liaison Reports

- South Atlantic Council (December 2-6, 2013)
- New England Council (November 20, 2013)

#### Executive Director's Report - Chris Moore [TAB 12]

#### **Science Report - Rich Seagraves**

### **Committee Reports**

- HMS Committee
- Executive Committee

#### **Continuing and New Business**

The above agenda items may not be taken in the order in which they appear and are subject to change as necessary. Other items may be added, but the Council cannot take action on such items even if the item requires emergency action without additional public notice. Non-emergency matters not contained in this agenda may come before the Council and / or its Committees for discussion, but these matters may not be the subject of formal Council or Committee action during this meeting. Council and Committee actions will be restricted to the issues specifically listed in this agenda. Any issues requiring emergency action under section 305(c) of the Magnuson-Stevens Act that arise after publication of the Federal Register Notice for this meeting may be acted upon provided that the public has been notified of the Council's intent to take final action to address the emergency. The meeting may be closed to discuss employment or other internal administrative matters.



## **Mid-Atlantic Fishery Management Council**

800 North State Street, Suite 201, Dover, DE 19901-3910 Phone: 302-674-2331 | Toll Free: 877-446-2362 | 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 27, 2013

TO: Council

FROM: Kiley Dancy, Staff

SUBJECT: Summer Flounder Recreational Measures for 2014

The following materials are enclosed for Council consideration of the above subject:

- 1) Advisory panel meeting summary
- 2) Monitoring Committee meeting summary and 2013 waves 1-4 data update
- 3) Summer Flounder staff memo dated November 12, 2013
- 4) Letter to Bob Beal and Chris Moore from Kathleen Moser, Assistant Commissioner, NYDEC
- 5) George Lapointe Consulting recreational summer flounder allocation paper, November 27, 2013



#### Summer Flounder, Scup, and Black Sea Bass Advisory Panel Meeting Summary November 25, 2013

The Mid-Atlantic Fishery Management Council's (Council's) Summer Flounder, Scup, and Black Sea Bass Advisory Panel met jointly with the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Advisory Panels on November 25, 2013 to discuss 2014 recreational management measures.

<u>Council Advisory Panel members present:</u> James Fletcher (NC), Skip Feller\* (VA), Willy Hatch (MA), Denny Dobbins (VA), Steve Witthuhn (NY), Adam Nowalsky (NJ), Rick Bellavance\* (RI)

<u>Commission Summer Flounder Advisory Panel members present:</u> Robert Busby (NY), Bill Shillingford (NJ), Joseph Huckemeyer (MA), Jack Conway (CT), Mike Plaia (CT), Paul Risi (NY), Mike Fedosh (NJ), Frank Blount (RI), James Lovgren (NJ), Skip Feller\* (VA), Rick Bellavance\* (RI)

<u>Other Commission Advisory Panel members present:</u> Paul Forsberg (NY), James Tietje (MA), Marc Hoffman (NY), Roman Jesien (MD), Victor Bunting (MD)

<u>Others present:</u> Kiley Dancy (Council staff), Kirby Rootes-Murdy (ASMFC staff), Kareem Alalkey, Ray Stinsman, Emerson Hasbrouck (NY), Cary O'Kane

\*Serve on both Council and Commission Advisory Panels.

### Summer Flounder 2014 Measures

Advisors were split on the issue of state-by-state vs. regional or coastwide management for summer flounder. Some agreed that regional or coastwide management would make estimates more precise and reduce complexity in the regulations, but others expressed that state-by-state management provides increased flexibility for each state to address different needs for different fisheries along the coast. One advisor suggested that a potential benefit to regional management is that it would partially smooth out some effects of the shift in biomass to the northeast.

The advisors discussed the possibility of states forming voluntary regions for summer flounder. One suggested a scheme with separate regions including North Carolina, Maryland to Virginia, Delaware to Connecticut, and Rhode Island and states north. Alternatively, Rhode Island could be included in a region with its southern neighbors, forming a Delaware to Rhode Island region.

Another suggestion was to make Long Island Sound its own region; however, opinions were split on this idea. Several advisors expressed that it is unrealistic to expect that New York could be split into two regions, given the difficulty in splitting allocations and enforcing different regulations in different areas. Others disagreed, saying that New York should be split, but opinions were divided as to exactly where and how.

Advisors agreed that any regions formed should not unfairly disadvantage one state over another. There was support for the idea of Maryland and Virginia being included in the same region, given that the states have been working well together, particularly on issues related to Chesapeake Bay. Massachusetts has almost zero overlap with fisheries in other states, and therefore it may be best to include this state in its own region.

An advisor expressed concern with the high numbers of discarded summer flounder, and the potential for wasted fish from dead discards. Additionally, this advisor was concerned with high size limits leading to

the fishery targeting large females, and suggested a 60-inch cumulative total length limit. This approach would reduce discards and reduce mortality on large females. Some advisors opposed this suggestion, stating concerns about compliance and high grading. Another advisor supported a slot limit instead, given that a 60-inch cumulative limit is likely to be reached quickly in many cases, making trips shorter and changing the way everyone fishes.

In terms of the Monitoring Committee non-preferred coastwide recommendation, most advisors would prefer the May 1-September 30 season over the May 15-October 15 season. However, for Virginia, it would be a tossup between these two seasonal options given that there is an important fall fishery in some areas, but also an early fishery in other parts of the state. Another advisor suggested exploring the option of a season from April 15-October 15, in combination with a 3 fish possession limit at an 18-inch TL minimum size.

### **General Comments**

As noted in the September 2013 Fishery Performance Reports, advisors continue to be concerned that the effort estimation methodology used by MRIP has not accurately captured a reduction in effort in New York and New Jersey due to Superstorm Sandy.



## Summer Flounder, Scup, and Black Sea Bass Monitoring Committee Meeting Summary and Data Update November 22, 2013

### Summer Flounder 2014 Monitoring Committee Recommendations

Attendees: Paul Caruso (MA-DMF), Jason McNamee (RI-DFW), Peter Clarke (NJ-F&W), Greg Wojcik (CT-DEEP), Sally Roman (VMRC), Rich Wong (DNREC), Steve Doctor (MD-DNR), Moira Kelly (NMFS NERO), John Maniscalco (NY-DEC), Tom Wadsworth (NC-DMF), Kiley Dancy (Council Staff), Kirby Rootes-Murdy (ASMFC), Toni Kerns (ASMFC), Mike Luisi (MD-DNR; MAFMC Demersal Committee Chair)

The Monitoring Committee met on Friday, November 22, 2013 in Linthicum, MD to recommend recreational management measures for summer flounder, scup, and black sea bass in 2014. Prior to the meeting, preliminary Marine Recreational Information Program (MRIP) data for 2013 waves 3 and 4 (May through August) were undergoing revisions by NMFS and were unavailable for analysis. Revised data were posted shortly after the Monitoring Committee meeting began, and were reviewed by the Committee but were not able to be analyzed in-depth. Recommendations below are based on a review of available information, including projected landings through 2013.

Given the choice between conservation equivalency and coastwide measures for summer flounder, the Committee recommends conservation equivalency for the recreational fishery in 2014. The group discussed the difficulty in finding common ground for developing coastwide measures, but recognizes the utility of pooling data between states to increase precision in the estimates. The Committee encourages the exploration of voluntary regions under conservation equivalency.

The group discussed several options for a non-preferred coastwide measure for 2014. The Committee believes that the staff-recommended coastwide measure has a high risk of leading to the harvest limit being exceeded in 2014. With the combination of the season length proposed in the staff memo and a size limit of 17.5 inches, there would be considerable risk of exceeding the harvest limit given the expected increase in harvest in New York and New Jersey.

The Committee recommends the same non-preferred coastwide measure that was recommended last year, including an 18-inch TL minimum size, a 4 fish possession limit, and an open season of May 1-September 30. However, the Committee is also comfortable with the staff-recommended season of May 15-October 15.

The Committee agrees with the staff-recommended precautionary default measure, including a 20inch TL minimum size, 2 fish possession limit, and open season May 1 - September 30. This set of measures is sufficiently strict to encourage states to comply with the required regulations.

The Committee concurs with the language in the staff memos regarding concern with high possession limits in recreational fisheries.

The Committee also wishes to emphasize that the assessment of risk for the different management configurations for each of the species is based on a preliminary review of 2013 data, which was not available until the day of the meeting, as well as a more thorough review of more historical datasets including 2011 and 2012. The Council and Board may wish to consider this significant data gap when developing their recommendations.

## Summer Flounder 2013 Data Update

As mentioned previously, MRIP data for waves 1-4 (May through August) were undergoing revision prior to the Monitoring Committee meeting and were not included in the staff memo dated November 12, 2013. Tables 1-4 below summarize the revised data, which was posted during the Monitoring Committee meeting on November 22, 2013.

Summer flounder landings through the end of 2013 are projected at 6.87 million lb (Table 2), below the 2013 recreational harvest limit (RHL) of 7.63 million lb. Based on the 2014 recreational harvest limit of 7.01 million lb, a coastwide reduction would not be needed in 2014.

# Table 1. Summer flounder recreational catch and landings, 2013 waves 1-4, Maine through North Carolina.

Year	Catch	Landings	Landings	%	Mean Weight
	('000 fish)	('000 fish)	('000 lb)	Released	(lb)
2013	14,189	2,451	6,039	83%	2.46

Table 2. I	Projected sum	mer flounder	recreational	catch and	landings,	Maine t	hrough N	lorth
Carolina,	, 2013. <sup>a</sup>				_		_	

Year	Catch	Landings	Landings	2013 RHL
	('000 fish)	('000 fish)	('000 lb)	('000 lb)
2013	16,256	2,875	6,869	7,630

<sup>a</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-4 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 26, 2013).

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ME	-	-	-	-	-	-	-	-	-	-
NH	-	-	<1	-	<1	-	-	-	<1	-
MA	200	258	211	138	232	50	45	33	74	25
RI	241	153	261	173	203	71	118	152	103	126
СТ	204	130	128	111	146	45	35	47	62	215
NY	1,017	1,082	743	844	609	298	331	349	482	401
NJ	1,507	1,187	1,475	1,040	752	817	551	719	905	1,439
DE	106	60	82	101	33	78	50	56	44	33
MD	36	98	32	44	34	64	14	10	19	25
VA	514	602	674	342	243	275	235	301	249	161
NC	106	61	77	104	25	59	50	40	31	24
TOTAL	3,931	3,630	3,685	2,898	2,277	1,758	1,428	1,708	1,968	2,451

Table 3. Summer flounder recreational landings ('000 fish) by state, waves 1-4, 2004-2013.

Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 26, 2013.

State	2013 Target ('000 of fish)	2013 Landings <sup>a,b</sup> ('000 of fish)	Overage (+%)/ Underage (-%) Relative to 2013 Target
MA	137	26	-81%
RI	142	127	-11%
СТ	94	218	+132%
NY	592 <sup>c</sup>	424	-28%
NJ	1066 <sup>c</sup>	1,796	+68%
DE	79	35	-56%
MD	74	31	-58%
VA	418	168	-60%
NC	140	49	-65%

Table 4. Projected summer flounder recreational landings relative to targets, by state for 2013.

<sup>a</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-4 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 26, 2013).

<sup>b</sup> Because prior year proportions are used, for states with more restrictive seasons in 2013, landings will be overestimated, and for those with less restrictive measures landings will be underestimated.

<sup>c</sup> Target adjusted by Commission following Addendum XXIV.

Table 5. Summer flounder landings (number in thousands) by state for 1998, the 2013 projected landings (number in thousands), and the 2014 target (number in thousands) under the assumed recreational harvest limit of 7.01 million lb. The percent reduction necessary to achieve the 2014 recreational harvest limit relative to 2013 landings is also presented.

State	1998	2014 Target <sup>a</sup>	2013 <sup>b,c</sup>	% Reduction
MA	383	137	26	0
RI	395	141	127	0
СТ	261	93	218	57
NY	1,230	440	424	0
NJ	2,728	977	1,796	46
DE	219	78	35	0
MD	206	74	31	0
VA	1,165	417	168	0
NC	391	140	50	0

<sup>a</sup> Based on a 64.0% reduction in 1998 landings and 2013 waves 1-4 mean weight of 2.46 lb per fish.

<sup>b</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-4 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 26, 2013).

<sup>c</sup> Because prior year proportions are used, for states with more restrictive seasons in 2013, landings will be overestimated, and for those with less restrictive measures landings will be underestimated. If state-by-state or regional conservation equivalency is adopted, ASMFC staff will update the projections using MRIP 2013 wave 1-5 data.



## **Mid-Atlantic Fishery Management Council**

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# **MEMORANDUM**

Date: November 12, 2013

To: Chris Moore

From: Kiley Dancy, Jessica Coakley, and José Montañez, Staff

Subject: Summer Flounder Recreational Management Measures in 2014

In October 2013, the Council and the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Board (Board) reviewed previously implemented multiyear commercial quotas and recreational harvest limits for summer flounder for the 2014 fishing year, and recommended specifications for the 2015 fishing year. The multi-year specifications for 2013 and 2014 were recommended by the Council and implemented by NMFS in 2012. In September 2013, the Scientific and Statistical Committee (SSC) and Monitoring Committee provided revised recommendations for 2014 specifications after reviewing the results of the July 2013 Stock Assessment Workshop/Stock Assessment Review Committee (SAW/SARC 57) for summer flounder. Based on the updated recommendations of the SSC and Monitoring Committee, the Council and Board voted to revise the 2014 summer flounder specifications, and additionally, implement specifications for 2015.

The proposed rule implementing the 2014 (revised) and 2015 commercial quotas and recreational harvest limits has not yet published. We do not expect the NMFS proposed rule will be different than the Council and Commission recommendations given that the harvest limits are consistent with the recommendations of the SSC and the Monitoring Committee. The Council and Board recommended a recreational harvest limit of 7.01 million lb in 2014, and 7.16 million lb in 2015.

The Monitoring Committee must recommend recreational management measures for 2014 that will constrain landings to the recreational harvest limit. The following is a review of recreational catch and landings data for the summer flounder fishery.

## **Recreational Catch and Landings**

Recreational catch of summer flounder has fluctuated since 1981, from a peak in 1983 of 32.06 million fish to a time series low of 2.68 million fish in 1989 (Table 1). Landings were estimated to be 6.51 million lb in 2012. Summer flounder landings in number of fish, by state, indicate that New Jersey landed the greatest number of summer flounder, followed by New York and Virginia (Table 2).



The 2013 MRIP data are incomplete and preliminary. Typically, the first four waves of catch and landings data for the current year become available in mid-October. The Monitoring Committee does an early review of the MRIP data because the Council and Commission agreed that recommendations would have to be made late in the current year (i.e., 2013) to give the states enough time to enact changes in their regulations for the upcoming year (i.e., 2014). However, estimates for 2013 waves 3 and 4 (May-August) are undergoing significant revisions at the time of this writing, and are currently unavailable for analysis. Catch and landings estimates for 2013 waves 1-4 (January through August) will be provided when they become available.

In the past, preliminary wave 1-4 data for the current year has been 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 2013 preliminary estimates are expected to change, staff did not rely on this data to make projections when developing staff recommendations for 2014. Instead, recommendations were developed using data from the most recent complete year (2012), as the baseline.

## Past Harvest Limits and Management Measures

Recreational harvest limits have varied since the FMP was first implemented, from a high of 11.98 million lb in 2005 to a low of 6.22 million lb in 2008 (Table 3). Over the time period from 1993-2001, coastwide possession limits ranged from 3-10 fish with size limits ranging from 14.0-15.5 inches. In 2002, conservation equivalency was implemented and has been used as the preferred management system since then. In 2012, the state-specific possession limits ranged from 3-8 fish with size limits ranging from 15.0-19.5 inches, with assorted seasons (Table 4). In 2013, state-specific possession limits ranged from 4-8 fish with size limits ranging from 15.0-19.0 inches, with various seasons (Table 5). The non-preferred and precautionary default measures that were adopted in 2013 (as required for implementation of conservation equivalency) included 4 fish with a minimum size of 18.0 inch TL and an open season from May 1 to September 30, respectively.

## Accountability Measures

The proposed rule for the Council's Omnibus Recreational Accountability Measures Amendment filed on September 18, 2013. Several changes to the Council's system of accountability measures are proposed. The following would apply if the Council-preferred alternatives are implemented:

- 1. The NMFS Regional Administrator (RA) would no longer have in-season closure authority for the summer flounder recreational fishery.
- 2. The determination of whether a recreational overage has occurred would be made by comparing the 3-year moving average of the lower bound of the confidence interval of the recreational catch estimate (rather than the point estimate, as is currently used) to the 3-year moving average of the recreational ACL. NMFS has identified some concerns with the use of the lower bound of the confidence interval and requested comments on this aspect of the proposed rule. The 3-year moving average will continue to be phased in over a 3-year period, beginning with 2012.
- 3. In the event of a recreational overage, accountability measures would no longer include a poundfor-pound payback of the overage amount in a subsequent fishing year. Instead, paybacks would



occur only if: a) the ACL is exceeded for stocks that are overfished, under a rebuilding plan, or with unknown stock status; or b) biomass is below the target, but above the threshold  $(1/2 < B/B_{MSY} < 1)$ , and the acceptable biological catch (ABC) is exceeded.

4. If a payback is needed, the amount will be scaled relative to biomass (resulting in paybacks that are smaller for stocks where biomass is closer to the target).

## **Methodology**

The Monitoring Committee must consider and recommend whether coastwide measures or conservation equivalency (state-by-state or voluntary regional) are appropriate for 2014 (Table 6). Specifically, this group must recommend measures that will ensure the recreational harvest limit of 7.01 million lb is not exceeded in 2014. As mentioned above, data for 2013 waves 1-4 are currently unavailable for use in projecting 2013 catch and landings. The performance of the recreational summer flounder fishery in 2012, relative to 2012 management measures, can be compared to the 2014 harvest limit to derive measures that are likely to constrain 2014 landings to the harvest limit. Landings in 2012 were 6.51 million lb, approximately 8% below the 2014 recreational harvest limit of 7.01 million lb (Table 7). The distribution of 2012 landings by length is given in Figure 1. Using 2012 as a baseline, landings in 2014 would not need to be reduced. Given the relatively small difference between 2012 landings and the 2014 harvest limit, 2012 management measures can be used as a guide for developing 2014 measures.

If state-by-state or regional conservation equivalency is adopted, the Commission's staff will project 2013 landings by state, when 2013 wave 4 or 5 data becomes available, prior to the development of management measure proposals. The Monitoring Committee must make recommendations for a non-preferred coastwide alternative and a precautionary default measure under conservation equivalency. The methodology detailed in Framework 2 (Addendum III) to the Summer Flounder, Scup and Black Sea Bass FMP and Framework 6 to the FMP (Addendum XVII) could be used to develop state-specific or regional regulations to meet the state-specific or region-specific targets (Table 7).

Because of the long-term implementation of state-specific regulations, the use of a coastwide reduction table (minimum size/possession limit table) to analyze coastwide regulations is no longer feasible. It is noted that the level of precision of annual harvest estimates from MRIP data depend on the survey sample sizes, the frequency of sampled angler trips that caught the species, and the variability of numbers caught among those trips. Harvest estimates 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. Coastwide measures could provide greater precision in the harvest estimates and provide the opportunity to create a new base year(s) to characterize landings distributions at present [as opposed to relying on the 1998 base year].

In the last several years, the Monitoring Committee recommended using the observed mean fish weight from the most recent year to derive harvest targets for the upcoming fishing year. Consistent with this approach, and based on the information currently available, the 2012 mean weight (Table 1) was used to derive targets for 2014 (Table 7).



## Fishing Trips and Year Class Effects

Table 8 provides an overview of coastwide recreational fishery performance and provides estimates of the number of summer flounder trips where summer flounder was reported as the primary target. An examination of summer flounder directed trips to total trips suggests that summer flounder continues to be a substantial component of the total number of angler trips, ranging from about 14-21 percent of total trips taken from 1993-2012 (Table 8). Predicting the number of summer flounder trips that might be taken in 2014 is complicated because many factors affect the demand for angler fishing trips. Changes in angler behavior are also difficult to predict and complex. Changes in angler behavior may result in a breakdown in 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. Because several below average year classes are expected to become available to the fishery in 2014 and 2015 and the stock biomass is not projected to increase (NEFSC 2013), availability of summer flounder is not expected to increase during this time.

## 2014 Staff Recommendation

In 2014, staff recommend setting coastwide measures, to be implemented in both state and Federal waters, in order to reduce complexity in the regulations (particularly in shared waters/bays), increase compliance by making measures consistent across the management unit, and improve the ability to analyze the impacts of management measures. In addition, MRIP harvest estimates are always progressively less precise at lower levels of stratification; therefore, the data would be more precise when used at the coastwide level.

To derive a coastwide summer flounder minimum size limit, staff first calculated the mean minimum size regulation that was implemented in 2012, and weighted this size by the landings in numbers from each state. The average minimum size under which a fish was landed in 2012, was 17.8 inches. A 17.5 inch minimum size is consistent with 2012 and 2013 regulations implemented in New Jersey, which accounts for over 50% of recreational summer flounder landings. This suggests that 17.5 inches would be a reasonable minimum size for the coast, if implemented in conjunction with other measures (i.e., possession limit and season).

Staff recommend a coastwide season from May 15-October 15, consistent with the core season for most states and the time period when summer flounder are available in most areas given their seasonal migration. Staff also recommend a 4 fish possession limit, which is consistent with regulations in most states. A 4 fish possession limit would represent a decrease in the possession limit for some states. According to catch per angler trip data from 2011, a decreased possession limit would result in a reduction in landings that would provide a partial offset to the expected increase in landings in some states under a 17.5 inch coastwide size limit (Table 9).

If conservation equivalency is instead selected (although not staff recommended), then a non-preferred coastwide measure and a precautionary default measure must be identified. The non-preferred coastwide measures would be comprised of an identical minimum fish size, possession limit, and season for 2014, to be implemented by all states and in federal waters. The precautionary default measures are defined as



the set of measures that would achieve at least the highest percent reduction for any state on a coastwide basis. It is intended to be an unappealing measure for any state to implement. The Commission would require adoption of the precautionary default measures by any state that either does not submit a summer flounder management proposal to the Commission's Summer Flounder Technical Committee, or that submits measures that are determined not to achieve the required level of reduction for that state. Staff recommends a non-preferred coastwide measure of 17.5 inch TL minimum size, 4 fish possession limit, and coastwide season from May 15 to October 15, 2014. In addition, if conservation equivalency is chosen, staff recommends default measures that include a 20.0 inch TL minimum size, 2 fish possession limit, and coastwide season from May 1 to September 30, 2014. This default is likely to be more restrictive than any measure an individual state will implement in 2014.

Based on the above information, staff recommend coastwide measures for the 2014 fishing year that include a 17.5 inch TL minimum size, 4 fish possession limit, and coastwide season from May 15 to October 15, 2014. These coastwide measures would need to be implemented in both state and Federal waters.



Table	1. Summer flounder recreational catch an	nd landings by y	vear, Maine	through North	Carolina,	1981-
2013.	The number of fish released is presented a	s a proportion of	the total cat	tch (% Rel).		

Year	Catch <sup>a</sup> ('000 fish)	Landings <sup>a</sup> ('000 fish)	Landings <sup>a</sup> ('000 lb)	% Released	Mean weight (lb)
1981	13,579	9,567	10,081	30%	1.05
1982	23,562	15,473	18,233	34%	1.18
1983	32,062	20,996	27,969	35%	1.33
1984	29,785	17,475	18,765	41%	1.07
1985	13,526	11,066	12,490	18%	1.13
1986	25,292	11,621	17,861	54%	1.54
1987	21,023	7,865	12,167	63%	1.55
1988	17,171	9,960	14,624	42%	1.47
1989	2,677	1,717	3,158	36%	1.84
1990	9,101	3,794	5,134	58%	1.35
1991	16,075	6,068	7,960	62%	1.31
1992	11,910	5,002	7,148	58%	1.43
1993	22,904	6,494	8,831	72%	1.36
1994	17,725	6,703	9,328	62%	1.39
1995	16,308	3,326	5,421	80%	1.63
1996	18,994	6,997	9,820	63%	1.40
1997	20,027	7,167	11,866	64%	1.66
1998	22,086	6,979	12,477	68%	1.79
1999	21,378	4,107	8,366	81%	2.04
2000	25,384	7,801	16,468	69%	2.11
2001	28,187	5,294	11,637	81%	2.20
2002	16,674	3,262	8,008	80%	2.45
2003	20,532	4,559	11,638	78%	2.55
2004	20,336	4,316	10,966	79%	2.54
2005	25,806	4,027	10,867	84%	2.70
2006	21,400	3,950	10,589	82%	2.68
2007	20,732	3,108	9,256	85%	2.98
2008	22,897	2,350	8,134	90%	3.46
2009	24,085	1,806	5,987	93%	3.32
2010	23,722	1,501	5,108	94%	3.40
2011	21,559	1,840	5,954	91%	3.24
2012	16,528	2,272	6,506	86%	2.86
2013 <sup>b</sup>	NA	NA	NA	NA	NA

<sup>a</sup> For 1981-2003 data are MRFSS, 2004-2012 are MRIP. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 1, 2013. <sup>b</sup> NA = Not available.



State	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ME	-	-	-	-	-	-	-	-	-	-
NH	<1	-	-	<1	-	<1	-	-	-	<1
MA	177	225	267	239	138	232	50	45	58	76
RI	205	249	165	264	176	204	72	118	161	103
СТ	166	216	157	138	112	146	45	35	47	63
NY	1,539	1,025	1,163	752	866	609	299	334	376	482
NJ	1,784	1,617	1,300	1,556	1,067	762	825	552	737	1,130
DE	106	111	73	88	108	35	87	54	67	45
MD	41	42	117	37	104	58	65	25	15	23
VA	451	675	684	763	397	260	289	260	318	260
NC	88	157	101	112	139	44	75	77	60	63

 Table 2. Summer flounder recreational landings ('000 fish) by state, waves 1-6, 2003-2012.

Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 1, 2013. For 1981- 2003 data are based on MRFSS, 2004-2012 are MRIP.



Table 3. Summary of Federal management measures for the summer flounder recreational fishery, 1993-2013, and preferred 2014-2015 recreationa	l
harvest limits.	

Measure	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Harvest Limit (m lb)	8.38	10.67	7.76	7.41	7.41	7.41	7.41	7.41	7.16	9.72	9.28	11.21
Landings (m lb)	8.83	9.33	5.42	9.82	11.87	12.48	8.37	16.47	11.64	8.01	11.64	10.97
Possession Limit	6	8	6/8	10	8	8	8	8	3	a	a	a
Size Limit (TL in)	14	14	14	14	14.5	15	15	15.5	15.5	а	а	a
Open Season	5/15 - 9/30	4/15 - 10/15	1/1 - 12/31	1/1 - 12/31	1/1 - 12/31	1/1 - 12/31	5/29 - 9/11	5/10 - 10/2	4/15 - 10/15	а	а	а
Measure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Recreational ACL (land+disc)	-	-	-	-	-	-	-	11.58	10.23	9.07 <sup>b</sup>	9.44 <sup>b</sup>	
Harvest Limit (m lb) - landings only	11.98	9.29	6.68	6.22	7.16	8.59	11.58	8.49	7.63	7.01 <sup>b</sup>	7.16 <sup>b</sup>	
Landings (m lb)	10.87	10.59	9.26	8.13	5.99	5.11	5.95	6.51	-	-	-	
Possession Limit	а	а	а	а	а	а	а	а	а	-	-	
Size Limit (TL in)	а	а	а	а	а	а	а	а	а	-	-	
Open Season	а	а	а	а	а	а	а	а	а	-	-	

<sup>a</sup>State-specific conservation equivalency measures. <sup>b</sup>Council preferred; pending NMFS implementation.



State	Minimum Size (inches)	Possession Limit	Open Season	2012 Target ('000 fish)	2012 Landings ('000 fish) <sup>a</sup>	Overage (+%)/ Underage (-%) Relative to 2012 Target
Massachusetts	16.5	5 fish	May 22-September 30	153	76	-50%
Rhode Island	18.5	8 fish	May 1-December 31	158	103	-35%
Connecticut*	18					
*At 44 designated Shore sites in CT	16	5 fish	May 15-October 31	104	63	-39%
New York	19.5	4 fish	May 1-September 30	492	509	+3%
New Jersey	17.5	5 fish	May 5-September 28	1,090	1,130	+4%
Delaware	18	4 fish	January 1-October 23	88	45	-49%
Maryland	17	3 fish	April 14-December 16	82	23	-72%
PRFC	16.5	4 fish	All year			
Virginia	16.5	4 fish	All year	466	260	-44%
North Carolina	15	6 fish	All Year	156	63	-60%

## Table 4. Summer flounder recreational management measures, targets, and landings by state, 2012.

<sup>a</sup>Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 1, 2013.



State	Minimum Size (inches)	Possession Limit	Open Season	2013 Target ('000 fish)
Massachusetts	16	5 fish	May 22-September 30	137
Rhode Island	18	8 fish	May 1-December 31	142
Connecticut	17.5	<i>– – –</i> 1		04
*At 46 designated Shore sites in CT	16	- 5 fish	May 15-October 31	94
New York	19	4 fish	May 1-September 29	441
New Jersey	17.5	5 fish	May 18-September 16	978
Delaware	17	4 fish	All year	79
Maryland	16	4 fish	March 28-December 31	74
PRFC	16	4 fish	All year	
Virginia	16	4 fish	All year	418
North Carolina	15	6 fish	All Year	140

## Table 5. Summer flounder recreational management measures and targets by state, 2013.



#### Table 6. Procedures for establishing summer flounder recreational management measures.

August

Council/Commission's Board recommend recreational harvest limit.

October

MRIP data available for current year through wave 4.

November

Monitoring Committee meeting to develop recommendations to Council:

Overall % reduction required.

Use of coastwide measures or state conservation equivalency.

\*Precautionary default measures.

\*\*Coastwide measures.

December

Council/Board meeting to make recommendation to NMFS

State Conservation Equivalency

or

Coastwide measures

#### State Conservation Equivalency Measures

#### Late December

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

#### **Early January**

Council staff submits recreational measure package to NMFS. Package includes:

- Overall % reduction required.

 Recommendation to implement conservation equivalency and precautionary default measures (Preferred Alternative).
 Coastwide measures (Non-preferred Alternative).

States submit conservation equivalency proposals to ASMFC.

#### January 15

ASMFC distributes <u>state-specific or multi-state conservation</u> equivalency proposals to Technical Committee.

#### Late January

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

#### February

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

#### March 1 (on or around)

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

#### March 15

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

#### April

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

#### **Coastwide Measures**

#### Early January

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

#### February 15

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

#### April

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

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



Table 7. Summer flounder landings (number in thousands) by state for 1998, the 2012 landings (number in thousands), and the 2014 target (number in thousands) under the assumed recreational harvest limit of 7.01 million lb. The percent reduction necessary to achieve the 2014 recreational harvest limit relative to 2012 landings is also presented.

State	1998	2014 Target <sup>a</sup>	2012	% Reduction
MA	383	135	76	0
RI	395	139	103	0
СТ	261	92	63	0
NY	1,230	432	482	10
NJ	2,728	958	1,130	15
DE	219	77	45	0
MD	206	72	23	0
VA	1,165	409	260	0
NC	391	137	63	0

<sup>a</sup> Based on a 65.0% reduction in 1998 landings and mean weight of 2.86 lb per fish.



 Table 8. Number of summer flounder recreational fishing trips, harvest limit, landings, and fishery performance from Maine through North Carolina, 1993 to 2014.

Year	Number of Fishing Trips <sup>a</sup>	Percentage of Directed Trips Relative to Total Trips <sup>a,b</sup>	Recreational Harvest Limit (million lb)	Recreational Landings of Summer Flounder (million lb) <sup>d</sup>	Percentage Overage (+)/ Underage(-)
1993	4,671,638	17.8	8.38	8.83	5%
1994	5,769,037	20.8	10.67	9.33	-13%
1995	4,683,754	17.2	7.76	5.42	-30%
1996	4,885,179	17.9	7.41	9.82	33%
1997	5,595,636	18.8	7.41	11.87	60%
1998	5,268,926	20.5	7.41	12.48	68%
1999	4,219,909	16.8	7.41	8.37	13%
2000	5,802,215	16.7	7.41	16.47	122%
2001	6,130,383	16.6	7.16	11.64	63%
2002	4,564,011	14.8	9.72	8.01	-18%
2003	5,624,387	16.0	9.28 <sup>c</sup>	11.64	25%
2004	4,864,356	14.3	11.21 <sup>c</sup>	10.97	-2%
2005	5,845,890	16.0	11.98 <sup>c</sup>	10.87	-9%
2006	4,991,477	13.6	9.29 <sup>c</sup>	10.59	14%
2007	5,491,077	14.5	6.68 <sup>c</sup>	9.26	39%
2008	4,932,811	13.4	6.21 <sup>c</sup>	8.13	31%
2009	4,596,613	15.6	7.16 <sup>c</sup>	5.99	-16%
2010	4,452,955	15.1	8.59 <sup>c</sup>	5.11	-41%
2011	4,500,039	16.8	11.58 <sup>c</sup>	5.95	-49%
2012	4,239,440	16.4	8.59 <sup>c</sup>	6.51	-24%
2013	NA	NA	7.63 <sup>c</sup>	NA	NA
2014	NA	NA	7.01 <sup>c,e</sup>	NA	NA
2015	NA	NA	7.16 <sup>c,e</sup>	NA	NA

<sup>a</sup> Estimated number of recreational fishing trips (expanded) where the primary target species was summer flounder, Maine through North Carolina. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 4, 2013.

<sup>b</sup> Source of total trips for all species combined: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 4, 2013. <sup>c</sup> Adjusted for research set-aside.

<sup>d</sup> Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 1, 2013.

<sup>e</sup>Recreational harvest limit - Council-preferred for 2014; pending implementation. NA = Data not available.



No. caught per trip	Frequency	Fish Landed	New catch per trip with 10 fish possession limit	New Fish Landed	
1	22	22	1	22	
2	300	600	2	600	
3	18	54	3	54	
4	76	304	4	304	
5	4	20	4	16	
6	23	138	4	92	
7	2	14	4	8	
8	9	72	4	36	
10	4	40	4	16	
12	4	48	4	16	% Reduction
	462	1312		1164	11%

Table 9. Catch per angler trip for summer flounder, from 2011 MRFSS data, waves 1-4.

Figure 1. Length frequency of Type A (landed) summer flounder, 2012 MRIP data.



2012 Summer Flounder Landings by Length

## **References**

Northeast Fisheries Science Center. 2013. 57th Northeast Regional Stock Assessment Workshop (57th SAW) Assessment Summary Report. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 13-14; 39 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026, or online at <u>http://nefsc.noaa.gov/publications/</u>

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NOV 2 7 2013

Mr. Robert E. Beal Executive Director, Atlantic States Marine Fisheries Commission 1050 N. Highland Street Arlington, VA 22201

Dr. Christopher Moore Executive Director, Mid-Atlantic Fishery Management Council 800 North State Street Dover, DE 19901

Dear Mr. Beal and Dr. Moore:

In my letter to the members of the Atlantic States Marine Fisheries Commission (ASMFC) and the Mid-Atlantic Fishery Management Council (MAFMC), dated October 9, 2013, I indicated that New York would retain the services of an outside expert to assist the members of ASMFC and MAFMC in developing and implementing a management strategy for summer flounder that is scientifically sound, as well as fair and equitable for all the Atlantic Coast states. The expert retained by New York is George Lapointe. I am enclosing a paper prepared by Mr. Lapointe that identifies management options for your consideration.

I respectfully request that Mr. Lapointe be provided an opportunity during the joint meeting of the MAFMC Demersal Committee and the ASMFC Summer Flounder, Scup and Black Sea Bass Board to briefly address the members and answer any questions that the members might have for Mr. Lapointe regarding his paper.

Please distribute this letter and Mr. Lapointe's paper to all members of ASMFC, MAFMC and the summer flounder Working Group as soon as possible so that they have sufficient time to review same prior to the meeting on December 11, 2013.

Sincerely,

Kathleen Moser

Kathleen Moser Assistant Commissioner, Natural Resources

Enclosure

cc: Dr. Louis Daniel Mr. Richard Robins Dr. David Pierce Mr. Mike Luisi



This paper is submitted in support of the proposal(s) for coastwide and regional management of summer flounder; issues being considered by the joint meeting of the Mid-Atlantic Fishery Management Council and Atlantic States Marine Fisheries Commission on 11 December 2013 to establish recreational summer flounder management measures for 2014.

## Background

Summer flounder management under the joint planning process of the Mid-Atlantic Fishery Management Council and Atlantic States Marine Fisheries Commission has been a difficult, complicated process for management bodies and stakeholders alike. Conservation measures for stock rebuilding were put in place and measures to allocate available summer flounder between different sectors in the fishery and the states from Maine through North Carolina were implemented in an attempt to provide predictable, sustainable access to the summer flounder resource by anglers in a way that reflects past fishing practices in the summer flounder range.

The management measures implemented in the states and federal waters to address the issues listed above have resulted in both positive and negative outcomes. On the positive side, the summer flounder resource was declared rebuilt by the National Marine Fisheries Service in 2011 (MAFMC 2013) and the most recent stock assessment declared summer flounder not over fished and overfishing is not occurring (NEFSC 2013). The rebuilt stock means that there are more summer flounder available to recreational and commercial fishing interests along the Atlantic Coast, demonstrating that cooperative fisheries management can restore fish stocks and provide for fish for human use. We should all recognize that rebuilding the summer flounder stock is a significant success story in marine fisheries management.

This success has not come without significant costs. Some of the negative impacts of summer flounder management history include management measures that have changed too frequently, allocation decisions that do not accurately reflect past fishing activity in a number of jurisdictions, and disparities in management measures (size limits, possession limits, and fishing season) among the states in the Mid-Atlantic and Southern New England regions. These negative impacts are the result of many factors, including the need to constrain harvest to allow stock rebuilding, a marine recreational fishing survey process that yields variable and unpredictable harvest estimates, past fishery allocation decisions, and the application of conservation equivalency for summer flounder management among the member states of the Atlantic States Marine Fisheries Commission.

The Atlantic States Marine Fisheries Commission approved a state-by-state allocation system for use in management of the summer flounder recreational fishery began in 2003 based on

estimates of state recreational landings for one year, 1998. These estimates were derived from the Marine Recreational Fishing Statistics Survey (MRFSS). The State of New York supported the state-by-state allocation system for the recreational summer flounder fishery, and the use of 1998 as the base year for allocations, because New York officials believed at the time that this system would result in an equitable distribution of fishing opportunity among the states, i.e. a system that reflected past fishing practices in the various states adjusting for conservation measures needed to rebuild the summer flounder stock. Additionally, meeting records show that New York state officials believed that allocation decisions could be revisited in the future.

Soon after implementation of the state-by-state allocation system for summer flounder recreational fishing, New York and other states saw the result was that management measures fluctuated from year to year, and had fishermen from different states fishing common waters being able to retain fish of different size limits and possession limits. For example, the current summer flounder minimum size limit in New York is 19 inches while fishermen from Connecticut and New Jersey have a summer flounder minimum size limit of 17.5 inches. In the past, the discrepancy in minimum sizes among these jurisdictions has been as high at 2 inches.

When the implications of the recreational allocation system became known, the State of New York sought reconsideration of the allocation system for the reasons outlined above. Broadly, the system did not reflect historical fishing opportunities and patterns. The transcripts of ASMFC Summer Flounder, Scup, and Black Sea Bass Management Board meetings are replete with discussion of the summer flounder recreational allocation issue, and the attempts to correct the issue.

The management measures for 2013 which provided for voluntary sharing of "unused" summer flounder recreational quota from states with underages, i.e. having projected 2013 recreational harvest levels below their respective 2013 state recreational quotas, were contained in Addendum XXIV (ASMFC 2013a). These measures achieved a better balance of size limits and angler opportunity than previous management measures but were put in place for only one year.

Following the implementation of Addendum XXIV in 2013, ASMFC began discussion of 2014 management measures and the need for a longer term solution to the ongoing summer flounder recreational allocation issues. A longer term solution was deemed necessary because of the ongoing commitment of time needed by the Atlantic States Marine Fisheries Commission, Mid-Atlantic Fishery Management, and by recreational fishing interests in various states. The Atlantic States Marine Fisheries Commission formed a Summer Flounder Working Group to address the 2014 recreational management measures, consisting of Board members and technical staff from interested states, to provide the Board with 2014 management options that address the deficiencies and difficulties caused by the current management system, particularly for the State of New York (ASMFC 2013b).

## Management options for 2014

Summer flounder recreational management options for 2014 include:

1) Coastwide management measures

Coastwide summer flounder management measures for the 2104 recreational fishery have been developed by the Monitoring Committee of the Mid-Atlantic Fishery Management Council following procedures established in the Summer Flounder, Scup and Black Sea Bass Fishery Management Plan. For 2014, the Monitoring Committee has recommended the following management measures:

- a) 18 inch minimum size limit
- b) 4 fish possession limit
- c) Two fishing season options
  - i. 1 May to 30 September
  - ii. 15 May to 15 October

Coastwide summer flounder recreational management measures would provide a new baseline of coastal fishing patterns and activity. A new baseline would allow contemporary ecological, fishery, and socioeconomic issues to determine the distribution of summer flounder recreational harvest patterns along the coast, a significant improvement from the reliance on one year of catch estimates from 15 years ago.

If coastwide measures are approved because of the opportunity to develop new baseline information on fishing activity and patterns along the coast, these measures should be put in place for a minimum of three years to provide sufficiently robust estimates from which to base future management decisions.

2) Regional management options

The Summer Flounder Working Group and the State of New York have developed a number of options for regional management of the summer flounder recreational fishery in 2014. The regional management options produced by the Summer Flounder Working Group for Board Consideration include the following regions and coastal catch distribution:

Regional Management Options using Percent Shares of Coastwide Allocation of Summer Flounder Recreational Fishery.

	1998						
MA	5.5%						5.5%
RI	5.7%					11.2%	
СТ	3.7%						
NY	17.6%			32.5%			
NJ	39.1%		71.6%		71.6%		66.1%
DE	3.1%					63.5%	
MD	3.0%			45.2%			
VA	16.7%	94.4%			22.8%	19.7%	22.8%
NC	5.6%	5.60%	28.4%	22.3%	5.6%	5.6%	5.6%

Source: ASMFC staff memo, 12 November 2013

These options are a significant improvement compared to the state-by-state allocation management measures approved in past years. For example, Regional Options 1,2,4, and 5 would provide consistent size and bag limits for recreational anglers in New York and adjacent waters, an issue that has been the source of much contention among New York recreational fishing interests. These options do not provide a mechanism for the sharing of unused recreational allocation among the states to provide allocation needed by states with significant recreational harvest constraints, including New York.

The application of voluntary sharing of unused quota would provide some flexibility to the management system to make this type of regional management work in 2014 for the states that would be constrained by the application of the specific percentages shown in the table above.

Regional management options have been developed that balance regional differences in fish abundance and fishery management measures and practices with the desire to achieve consistent management measures in adjacent states, and to incorporate sharing of unused quota among the states. Technical staff from New York developed Regional Options 1-6 to foster discussion at the 11 December joint ASMFC Board and MAFMC Committee meeting which can arrive at the best 2014 recreational management measures for the majority of states. This suite of management scenarios may be narrowed after the 3 December meeting of the Summer Flounder Working Group which will provide a Technical Committee analysis of the Regional Options presented.

The regions are summarized in the following tables which allow comparison of minimum size limits, possession limits, and seasons for different groups of states.

For comparison with the tables of potential 2014 regions, 2013 allocations, size limits, possession limits, and seasons are included in the table below for comparison with the various regional options.

						2013	
STATE	2013					PROJECTED	
	REGS					HARVEST	
	1998						
	ALLOC	SIZE	POSS		DAYS		
MASSACHUSETTS	5.5%	16		5	132	27,410	
RHODE ISLAND	5.7%	18		8	245	113,902	
CONNECTICUT	3.7%	17.5		5	170	261,873	
NEW YORK	17.6%	19		4	152	432,259	
NEW JERSEY	39.1%	17.5		5	130	1,260,629	
DELAWARE	3.1%	17		4	365	42,928	
MARYLAND	3.0%	16		4	365	32,231	
VIRGINIA	16.7%	16		4	365	197,306	
NORTH CAROLINA	5.6%	15		6	365	48,861	

	REGIONS						
STATE	HARVEST	SIZE	POSS	DAYS			
MASSACHUSETTS	27,410	16	5	132	1.1%		
RHODE ISLAND	98,479	18	5	146			
CONNECTICUT	234,388	18	5	146			
NEW YORK	683,679	18	5	146			
NEW JERSEY	1,040,182	18	5	146	84.5%		
DELAWARE	72,291	16	4	365			
MARYLAND	32,231	16	4	365			
VIRGINIA	197,306	16	4	365	12.4%		
NORTH CAROLINA	48,861	15	6	365	2.0%		
TOTAL	2,434,826				100.0%		
RHL	2,442,509						
PERC OF RHL	99.7%						
	2014 DAYS	Wv					
	1	2	3	4	5	6	DAYS
MASSACHUSETTS			40	62	30		132
RHODE ISLAND			54	62	30		146
CONNECTICUT			54	62	30		146
NEW YORK			54	62	30		146
NEW JERSEY			54	62	30		146
DELAWARE	59	61	61	62	61	61	365
MARYLAND	59	61	61	62	61	61	365
VIRGINIA	59	61	61	62	61	61	365
NORTH				-			
CAROLINA	59	61	61	62	61	61	365

## Regional Option 1: Regions MA, RI-NJ, DE-VA, NC

## Regional Option 2: Regions MA-RI, CT-DE, MD-VA, NC

STATE	REGIONS						
STATE	2						
	HARVEST	SIZE	POSS	DAYS			
MASSACHUSETTS	15,404	17	5	132			
RHODE ISLAND							
	162,498	17	5	132	7.3%		
CONNECTICUT	240,563	17.5	4	117			
NEW YORK	644,003	17.5	4	117			
NEW JERSEY	1,064,604	17.5	4	117			
DELAWARE	33,935	17.5	4	117	81.3%		
MARYLAND	32,231	16	4	245			
VIRGINIA	197.306	16	4	245	9.4%		
NORTH							
CAROLINA	48,861	15	6	365	2.0%		
TOTAL	2,439,404				100.0%		
RHL	2 112 500						
PERC OF RHL	99.9%						
	2014						
	DAYS	Wv	2		-	c	DAVC
	1	2	3	4	5 20	6	122
			40	62	30		132
			40	62	10		117
			45	62	10		117
NEW IERSEY			45	62	10		117
DFLAWARF			45	62	10		117
MARYLAND		61	61	62	61		245
VIRGINIA		61	61	62	61		245
NORTH		01	01		01		_ 10
CAROLINA	59	61	61	62	61	61	365

CTATE	REGIONS						
STATE	3						
	HARVEST	SIZE	POSS	DAYS			
MASSACHUSETTS	27,410	16	5	132	1.1%		
RHODE ISLAND	129,098	17.5	4	119			
CONNECTICUT	240,682	17.5	4	119			
NEW YORK	646,807	17.5	4	119			
NEW JERSEY	1,084,465	17.5	4	119			
DELAWARE	33,986	17.5	4	119	87.5%		
MARYLAND	32,231	16	4	245			
VIRGINIA	197,306	16	4	245	9.4%		
NORTH CAROLINA	48,861	15	6	365	2.0%		
TOTAL	2,440,845				100.0%		
RHL							
	2,442,509						
PERCOP KIE	99.9% 2014						
	DAYS	Wv					
	1	2	3	4	5	6	DAYS
MASSACHUSETTS			40	62	30		132
RHODE ISLAND			45	62	12		119
CONNECTICUT			45	62	12		119
NEW YORK			45	62	12		119
NEW JERSEY			45	62	12		119
DELAWARE			45	62	12		119
MARYLAND		61	61	62	61		245
VIRGINIA		61	61	62	61		245
NORTH							
CAROLINA	59	61	61	62	61	61	365

## Regional Option 3: Regions MA, RI-DE, MD-VA, NC

# Regional Option 4: Regions MA, RI-DE, MD-VA, NC, DE with slightly different management measures

STATE	REGIONS	(5.1	0.	,			
-	4 HARVEST	(Dela\	ware Ste	p)			
	HARVEST	JIZL	F033	DATS			
MASSACHUSETTS	27,410	16	5	132	1.1%		
RHODE ISLAND	129,098	17.5	4	122			
CONNECTICUT	240,682	17.5	4	122			
NEW YORK	646,807	17.5	4	122			
NEW JERSEY	1,084,465	17.5	4	122			
DELAWARE	42,928	17	4	184	87.5%		
MARYLAND	32,231	16	4	245			
VIRGINIA	197,306	16	4	245	9.4%		
NORTH CAROLINA	48,861	15	6	365	2.0%		
TOTAL	2,449,787				100.0%		
RHL	2 442 500						
PERC OF RHL	100.3%						
	2014 DAYS	Wv					
	1	2	3	4	5	6	DAYS
MASSACHUSETTS			40	62	30		132
RHODE ISLAND			45	62	12		119
CONNECTICUT			45	62	12		119
NEW YORK			45	62	12		119
NEW JERSEY			45	62	12		119
DELAWARE			61	62	61		184
MARYLAND		61	61	62	61		245
VIRGINIA		61	61	62	61		245
CAROLINA	59	61	61	62	61	61	365

# Regional Option 5: Regions MA, RI-DE, MD-VA, NC, DE with slightly different management measures

STATE	REGION 5 (Delaware Step II)						
	HARVEST	SIZE	POSS	DAYS			
MASSACHUSETTS							
WIA55ACHU52115	27,410	16	5	132	1.1%		
RHODE ISLAND	96,685	18	4	162			
CONNECTICUT	238,360	18	4	162			
NEW YORK	664,808	18	4	162			
NEW JERSEY	1,086,906	18	4	162			
DELAWARE	42,928	17	4	184	87.4%		
MARYLAND	32,231	16	4	245			
VIRGINIA	197,306	16	4	245	9.4%		
NORTH CAROLINA	48,861	15	6	365	2.0%		
TOTAL	2,435,494				100.0%		
RHL	2 112 509						
PERC OF RHI	2,442,303 99 7%						
	2014						
	DAYS	Wv					
	1	2	3	4	5	6	DAYS
MASSACHUSETTS			40	62	30		132
RHODE ISLAND			61	62	39		162
CONNECTICUT			61	62	39		162
NEW YORK			61	62	39		162
NEW JERSEY			61	62	39		162
DELAWARE			61	62	61		184
MARYLAND		61	61	62	61		245
VIRGINIA		61	61	62	61		245
NORTH							
CAROLINA	59	61	61	62	61	61	365
# Regional Option 6: Regions MA, RI –DE, MD-VA, NC, DE with slightly different management measures

STATE	REGION 5b	(Dela	ware Ste	ep II)			
MASSACHUSETTS	HARVEST	SIZE	POSS	DAYS			
RHODE ISLAND	27,410	16	5	132	1.1%		
CONNECTICUT	94,706	18	5	149			
NEW YORK	218,870	18	5	149			
NEW JERSEY	661,352	18	5	149			
DELAWARE	1,085,215	18	5	149			
MARYLAND	47,221	17	5	184	87.3%		
VIRGINIA	32,231	16	4	245			
NORTH CAROLINA	197,306	16	4	245	9.5%		
TOTAL	48,861	15	6	365	2.0%		
RHL	2,413,171				100.0%		
PERC OF RHL	2,442,509 98.8%						
	2014 DAYS	Wv					
MASSACHUSETTS	1	2	3	4	5	6	DAYS
RHODE ISLAND			40	62	30		132
CONNECTICUT			47	62	40		149
NEW YORK			47	62	40		149
NEW JERSEY			47	62	40		149
DELAWARE			47	62	40		149
MARYLAND			61	62	61		184
VIRGINIA NORTH		61	61	62	61		245
CAROLINA		61	61	62	61		245
	59	61	61	62	61	61	365

# 3) State by state allocation

The state-by-state allocation system, established in 2003, is not seen as a viable option for 2014 because it retains the inequities in the current management system that have resulted in the serious, ongoing management difficulties acutely felt by New York and other states.

# **Recommended Options**

After consideration of the complicated factors going into summer flounder recreational allocations and the impact of the varied regulatory systems on the Atlantic Coast, I urge adoption of uniform, coast-wide management measures as presented by the Monitoring Committee. This would provide (1) 18" minimum size limit, (2) 4 fish possession limit, and (3) one of two seasons, either 1 May to 30 September or 15 May to 15 October. Further, I urge consideration of adoption of this suite of management measures for at least 2 years. This is clearly the best option from a data and scientific management perspective.

A coast-wide management system for the 2014 recreational summer flounder fishery would have at least three major benefits. First, it would allow catch data from the entire coast to be combined which should result in data that are more statistically robust and reliable than the catch estimates used for the current state-by-state management system. Developing improved, reliable recreational catch estimates is critical to ongoing management of summer flounder, as well as other fisheries. Second, it could be used to establish an up-to-date, contemporary coastwide data set that could be used to establish a new baseline for angler participation. Third, it would provide equity among anglers within a region by eliminating the disparities that come with the current state-by-state approach.

However, coastwide management may disadvantage some states in the short term. With this in mind, an alternate management approach such regional management may be more acceptable until a longer term management approach is developed and implemented. The suite of regional management options listed above form the foundation from which equitable summer flounder management for 2014 could be developed.

# Longer term solution warranted

I understand and appreciate the work being done by the Atlantic States Marine Fisheries Commission and Mid-Atlantic Fishery Management Council to discuss and understand the concerns of New York and other states with the current state by state management of the summer flounder recreational fishery, and the efforts to develop creative, effective short-term solutions such as the voluntary sharing of unused allocation as done in 2013 and contemplated in many of the proposed 2014 recreational management measures. These short-term solutions have provided more access to New York's summer flounder recreational interests.

However, the ongoing reasons for current inequities in summer flounder management remain in place, and will remain in place, until a thoughtful, timely process is developed and implemented to address long-standing inequities and long-term changes to the fishery and environment.

The fishery management system on the Atlantic Coast has matured under the Magnuson-Stevens Fishery Conservation and Management Act and Atlantic Coastal Cooperative Fisheries Management Act. The Magnuson-Stevens Act was crafted and passed into law to develop US fisheries and, later, to address long-standing overfishing issues. The focus on rebuilding fisheries has been effective in many fisheries in the United States with the summer flounder fishery providing an excellent example of rebuilding fish stocks. The Atlantic Coastal Act expanded the framework of the Atlantic Striped Bass Conservation Act to other ASMFC managed species, such as summer flounder. The result of the cooperative management in federal and state waters under the auspices of these two federal laws is a rebuilt summer flounder stock.

The first summer flounder plan was approved in 1988. Many changes have occurred in fishery management plans and regulations, fish populations, the ecosystem, and human environment in the ensuing twenty-five years.

The long-term change in the summer flounder resource, and other conditions in the marine ecosystem, justifies a careful, structured examination of summer flounder allocation decisions. Richardson et al (2013) document a significant, long-term expansion of the summer flounder resource to deeper and more northerly waters. Similar patterns have also been observed in many species in the Northeast United States continental shelf (Nye, et al. 2009). For summer flounder, explanations for the range expansion include climate change and the rebuilt summer flounder stock. Fisheries managers and stakeholders could long discuss the exact reason for the range expansion to no real net benefit. It is likely that these factors, and others, all contribute to the range expansion of summer flounder.

The specific reasons for the range expansion, over time, are less relevant than the expansion itself in terms of implications to marine fisheries management. For the summer flounder fishery, this range expansion means that the availability of summer flounder to fishermen has changed substantially relative to the availability patterns during periods when previous allocation decisions were made. This means that summer flounder fishermen are living under allocations based on information that is 15 to 25 years old. Additionally, managing under allocations based on outdated fishing patterns and species distribution means that fishermen at the northern end of the summer flounder range are not reaping a portion of increased abundance that could be accessed with an equitable, contemporary allocation formula.

Another factor supporting a change in summer flounder recreational allocations to a coastwide management system is that catch data generated under a coastwide system could be used to develop new estimates that reflect current conditions in the fishery. The resultant estimates would be more robust than estimates generated with the state-by-state management system. New York and other states voted to use 1998 as the basis for the summer flounder allocation on the belief that the resultant allocations would benefit states roughly in proportion to the fishery activity that occurred prior to the allocations being set. New York and other states made this decision in good faith but this does not mean that New York, and other states, have to live with this earlier decision ad infinitum. There is sufficient information to warrant a re-examination of the recreational summer flounder fishery.

Allocations are management decisions that are implemented to equitably distribute access to fish resources. Allocations are clearly not intended to be permanent. Federal fishery

management policy calls for reviews of allocations in catch share fisheries at some regular interval (NOAA 2011). The NOAA catch share policy also states "NOAA recommends Councils periodically revisit the underlying total allocation to each sector of a fishery (e.g., commercial and recreational) on a regular basis, regardless of whether catch shares are the management tool of choice for one or more sectors." The implication of this statement is that allocation decisions are meant to be reviewed, and revised as warranted.

The Magnuson-Stevens Act, under a section on limited access programs contains language that "limited access privilege, quota share, or other limited access system established, implemented, or managed under this Act ... may be revoked, limited, or modified at any time in accordance with this Act" (NMFS 2007). This language, while referring to limited access programs, clearly suggests that allocations are meant to be examined, and changed, as conditions in fisheries changes.

The Mid-Atlantic Fishery Management Council changed scup quota allocations based on changing conditions in the fishery and new information becoming available. This responsive action also shows that management bodies can, and should, take contemporary information about the fishery and fish resource into account when considering allocation decisions.

I believe that the conditions found in the summer flounder fishery in 2013 warrant such a review of past allocation decisions in this important, rebuilt fishery. Such a review should use current data and information on conditions in the recreational fishery in the States and federal waters, as well as fishery resource and ecological conditions affecting summer flounder abundance, distribution, and availability to anglers in various states.

# **References**

Atlantic States Marine Fisheries Commission (ASMFC). 2013a. Addendum XXIV to the Interstate Fishery Management Plan for Summer Flounder, Scup, and Black Sea Bass. Atlantic States Marine Fisheries Commission. Arlington, VA. 10pp.

Atlantic States Marine Fisheries Commission (ASMFC). 2013b. ASMFC Summer Flounder, Scup, Black Sea Bass Board Initiates Draft Addendum XXV to Address 2014 Summer Flounder and Black Sea Bass Recreational Fisheries. Press Release. www.asmfc.org/uploads/file//52853938pr53SummerFlounder\_BSBAddendumInitiation.pdf (Site accessed 23 Nov 2013)

Mid-Atlantic Fishery Management Council (MAFMC). 2013. Summer Flounder Recreational Management Measures in 2104. Mid-Atlantic Fishery Management Council staff memo, 12 November 2013. 14pp.

National Marine Fisheries Service (NMFS). 2007. Magnuson-Stevens Fishery Conservation and Management Act As Amended Through January 12, 2007. NOAA. Washington, DC.

170pp.

National Marine Fisheries Service (NMFS). 2013. 2013 Status of US Fisheries. http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm (Site accessed 24 Nov 2013)

National Oceanic and Atmospheric Administration (NOAA). 2011. NOAA Catch Share Policy. NOAA. Washington, DC. 21pp.

http://www.nmfs.noaa.gov/sfa/domes\_fish/catchshare/docs/noaa\_cs\_policy.pdf (Site accessed 24 Nov 2013)

Northeast Fisheries Science Center (NEFSC). 2013. 57th Northeast Regional Stock Assessment Workshop (57th SAW) Assessment Report. US Dept Commerce, Northeast Fish Sci. Cent. Ref Doc. 13-16; 967 p

Nye, J.A., J.S. Link, J.A. Hare, and W.J. Overholtz. 2009. Changing spatial distribution of fish stocks in relation to climate and population size on the Northeast United States continental shelf. Mar. Ecol. Prog. Ser. Vol 393:111-129.

Richardson, D.E., K.E. Marancik, H.J. Walsh, L. Lewis, and J. Hare. 2013. Evaluation of changes in spatial distribution of Summer Flounder. Working paper prepared for the 2013 Summer Flounder benchmark assessment (SAW/SARC 57). Northeast Fishery Science Center, Oceanography Branch. Narragansett, RI.



# **Mid-Atlantic Fishery Management Council**

800 North State Street, Suite 201, Dover, DE 19901-3910 Phone: 302-674-2331 | Toll Free: 877-446-2362 | 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 27, 2013

TO: Council

FROM: Kiley Dancy, Staff

SUBJECT: Black Sea Bass Recreational Measures for 2014

The following materials are enclosed for Council consideration of the above subject:

- 1) Advisory panel meeting summary
- 2) Monitoring Committee meeting summary and 2013 waves 1-4 data update
- 3) Black sea bass staff memo dated November 12, 2013



# Summer Flounder, Scup, and Black Sea Bass Advisory Panel Meeting Summary November 25, 2013

The Mid-Atlantic Fishery Management Council's (Council's) Summer Flounder, Scup, and Black Sea Bass Advisory Panel met jointly with the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Advisory Panels on November 25, 2013 to discuss 2014 recreational management measures.

<u>Council Advisory Panel members present:</u> James Fletcher (NC), Skip Feller\* (VA), Willy Hatch (MA), Denny Dobbins (VA), Steve Witthuhn (NY), Adam Nowalsky (NJ), Rick Bellavance\* (RI)

<u>Commission Black Sea Bass Advisory Panel members present:</u> Marc Hoffman (NY), Mike Plaia (CT), Victor Bunting (MD), James Tietje (MA), Frank Blount (RI), Roman Jesien (MD), James Lovgren (NJ), Skip Feller\* (VA), Rick Bellavance\* (RI)

<u>Other Commission Advisory Panel members present:</u> Paul Forsberg (NY), Robert Busby (NY), Bill Shillingford (NJ), Jack Conway (CT), Paul Risi (NY), Mike Fedosh (NJ), Joseph Huckemeyer (MA)

<u>Others present:</u> Kiley Dancy (Council staff), Kirby Rootes-Murdy (ASMFC staff), Emerson Hasbrouck (NY), Kareem Alalkey, Ray Stinsman, Cary O'Kane

\*Serves on both Council and Commission Advisory Panels

#### Black Sea Bass 2014 Measures

The advisors agreed that the abundance of black sea bass and the apparent health of the fishery are not reflected in recent catch limits. An improved stock assessment should be completed as soon as possible, as the current assessment is not capturing the reality of the health of the stock. The advisors support status quo recreational measures, given the apparent disconnect between the data and on-thewater observations of the health of the stock.

The advisors expressed general concern with lowering possession limits in this fishery, stating that the possibility of landing the limit is an important draw for customers in the party/charter sector, even if they do not actually achieve the limit.

A cumulative length limit was suggested for black sea bass, similar to the recommendation for summer flounder and scup. Other advisors disagreed with this recommendation, stating that it is unrealistic to expect that once the cumulative length limit is reached, fishing would stop.

In response to the Monitoring Committee recommendation for a seasonal reduction in wave 5, some advisors would prefer a reduction in wave 3 instead. An open season during at least part of October is more important to the northern states. In Maryland, however, a reduction in wave 5 would be strongly preferred, as the fishery could not take any closures in June. Additional suggestions included splitting the reduction between waves 3 and 5, or taking a closure in the last two weeks of June. After much discussion, most advisors agreed that if a seasonal reduction is needed, a Federal season of May 19-September 15 and October 18-December 31 would be a workable solution.

Some advisors suggested reducing the possession limit and/or increasing the size limit in July and August in Federal waters if it would allow for keeping the season open longer. Earlier in the year, a lower possession limit can be tolerated in the northern states; however, it would present a problem for Virginia.

The advisors would like to see the fishery open in wave 1 in 2015, and stated that they should not be penalized because NMFS does not have MRIP sampling during wave 1. VTRs are completed by party/charter vessels and can and should be used to account for landings during this time. Alternatively, NMFS should produce estimates for wave 1.

Advisors generally expressed support for a regional approach for sea bass management, given that what is beneficial to the northern states tends to differ from what is beneficial to the southern states. However, some felt that in a crisis situation, state-by-state measures should be used, including for 2014. The advisors support an addendum/amendment that would allow for regional management of black sea bass, so that Federal regulations do not interfere with state or regional regulations.

#### **General Comments**

As noted in the September 2013 Fishery Performance Reports, advisors continue to be concerned that the effort estimation methodology used by MRIP has not accurately captured a reduction in effort in New York and New Jersey due to Superstorm Sandy.



# Summer Flounder, Scup, and Black Sea Bass Monitoring Committee Meeting Summary and Data Update November 22, 2013

#### Black Sea Bass 2014 Monitoring Committee Recommendations

Attendees: Paul Caruso (MA-DMF), Jason McNamee (RI-DFW), Peter Clarke (NJ-F&W), Greg Wojcik (CT-DEEP), Sally Roman (VMRC), Rich Wong (DNREC), Steve Doctor (MD-DNR), Moira Kelly (NMFS NERO), John Maniscalco (NY-DEC), Tom Wadsworth (NC-DMF), Kiley Dancy (Council Staff), Kirby Rootes-Murdy (ASMFC), Toni Kerns (ASMFC), Mike Luisi (MD-DNR; MAFMC Demersal Committee Chair)

The Monitoring Committee met on Friday, November 22, 2013 in Linthicum, MD to recommend recreational management measures for summer flounder, scup, and black sea bass in 2014. Prior to the meeting, preliminary Marine Recreational Information Program (MRIP) data for 2013 waves 3 and 4 (May through August) were undergoing revisions by NMFS and were unavailable for analysis. Revised data were posted shortly after the Monitoring Committee meeting began, and were reviewed by the Committee but were not able to be analyzed in-depth. Recommendations below are based on a review of available information, including projected landings through 2013.

For 2014, based on currently projected 2013 black sea bass landings, a coastwide reduction of at least 6% would be required in order to constrain landings to the 2014 recreational harvest limit. However, the Committee recommends a reduction of 9% in order to comply with the Council's Accountability Measures triggered by the 2012 recreational overage. The group recommends that the Council and Board follow a similar management approach as in 2013, where the states of New Jersey through Massachusetts set ad-hoc state measures to achieve the required reduction. The Committee recommends that each of the Northern states implement measures resulting in a reduction of 9% relative to that state's landings. Additionally, Federal measures should also achieve a reduction of 9%, and southern states should implement measures consistent with Federal measures.

Specifically, the group recommends Federal waters measures including a 12.5-inch TL size limit, a reduction in the season of 15 days during wave 5, and a reduction in the bag limit from 20 to 15 fish. In combination, these measures would be expected to constrain landings to the harvest limit. The Committee does not recommend increases in size limits for any state or in Federal waters, due to concerns related to the unusual life history of black sea bass as outlined in the staff memo. The Committee recommends that any seasonal adjustment be taken in wave 5, which would provide the greatest amount of reduction in the fewest amount of days. Removing 15 days from the season in wave 5 would provide a reduction of approximately 8.9%. The reduction in the bag limit is designed to provide an additional buffer to address the required adjustments resulting from the 2012 overage, consistent with the Council's new system of Accountability Measures (pending implementation).

If this approach is not adopted, a coastwide regulation would need to be considered. The Monitoring Committee does not believe that the coastwide measures recommended in the staff memo would constrain landings to the harvest limit in 2014. If the Addendum does not address the required reduction and the adjustments required for the 2012 overage, the Committee recommends coastwide measures including a 13-inch TL minimum size, a 5 fish possession limit, and an open season from June 1-September 5.

The fishery should not be open in wave 1 (January 1-February 28) without adequate recreational data sampling in place to produce comparable MRIP estimates. In terms of implementing any changes to early parts of the 2014 fishing season, in Federal waters the 2014 final rule for recreational fishing measures is not likely to publish until June 2014. This means the 2013 regulations in Federal waters will roll forward into 2014 until replaced by the final rule. Therefore, any changes to the first half of the 2014 fishing season would not occur until the first half of the 2015 fishing year.

The Committee concurs with the language in the staff memos regarding concern with high possession limits in recreational fisheries.

The Committee also wishes to emphasize that the assessment of risk for the different management configurations for each of the species is based on a preliminary review of 2013 data, which was not available until the day of the meeting, as well as a more thorough review of more historical datasets including 2011 and 2012. The Council and Board may wish to consider this significant data gap when developing their recommendations.

# Black Sea Bass 2013 Data Update

As mentioned previously, MRIP data for waves 1-4 (May through August) were undergoing revision prior to the Monitoring Committee meeting and were not included in the staff memo dated November 12, 2013. Tables 1-4 below summarize the revised data, which was posted during the Monitoring Committee meeting on November 22, 2013.

Black sea bass landings through the end of 2013 are projected at 2.40 million lb (Table 2), above the 2013 recreational harvest limit (RHL) of 2.26 million lb. Based on the 2014 recreational harvest limit of 2.26 million lb, a coastwide reduction of at least 6% would be required in 2014.

# Table 1. Black sea bass recreational catch and landings for waves 1-4, Maine through North Carolina, 2013.

Year	Catch	Landings	Landings	%	Mean Weight
	('000 fish)	('000 fish)	('000 lb)	Released	(lb)
2013	6,134	880	1,720	85.7	1.95

Table 2. Projected black sea bass recreational catch and landings for 201	<b>3.</b> <sup>a</sup>
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Year	Catch ('000 fish)	Landings ('000 fish)	Landings ('000 lb)	Recreational Harvest Limit ('000 lb)
2013	9,984	1,325	2,403	1.96

<sup>a</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-4 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 26, 2013).

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ME	-	-	-	-	-	-	-	-	-	-
NH	-	-	-	-	-	-	-	-	3	12
MA	158	175	105	149	246	431	702	195	520	213
RI	27	85	41	44	52	36	160	50	103	49
СТ	26	0	3	24	60	0	16	8	111	111
NY	133	143	269	410	260	566	543	274	322	249
NJ	1,078	660	531	725	580	583	687	148	735	206
DE	44	68	114	93	23	37	21	43	40	25
MD	16	91	121	39	26	33	36	47	33	4
VA	46	34	83	36	38	115	30	19	4	12
NC	397	231	126	110	57	107	139	95	76	40
TOTAL	1,925	1,489	1,392	1,630	1,342	1,909	2,335	881	1,946	922

 Table 3. Black sea bass recreational landings ('000 fish) by state, waves 1-4, 2004-2013.

Source: Pers	Comm	with the	National	Marine	Fisheries	Service	Fisheries	Statistics	Division	November 26	2013
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# **Mid-Atlantic Fishery Management Council**

800 North State Street, Suite 201, Dover, DE 19901 Phone: 302-674-2331 | Toll Free: 877-446-2362 | 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 12, 2013

To: Chris Moore

From: Kiley Dancy, Jessica Coakley, and José Montañez, Staff

Subject: Black Sea Bass Recreational Management Measures in 2014

In October 2013, the Council and the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Board (Board) reviewed previously implemented multiyear commercial quotas and recreational harvest limits for black sea bass for the 2014 fishing year, and considered specifications for the 2015 fishing year. Specifications were recommended by the Council and implemented by NMFS for 2014 were implemented earlier in 2013. At the October meeting, the Council and Board made no changes to the previously implemented 2014 specifications, and extended these same specifications into 2015.

The final rule implementing 2014 commercial quotas and recreational harvest limits for black sea bass published on June 21, 2013, and includes an adjusted recreational harvest limit of 2.26 million lb. There was a significant overage in the recreational black sea bass fishery in 2012 that previously would have required a direct payback in the amount of the overage in 2014. However, the pending implementation of the Council's Omnibus Recreational Accountability Measures Amendment is expected to change the way this overage will be addressed. Instead of a payback, the overage will be addressed via adjustments to bag limits, size limits, and seasons in 2014 (see "Accountability Measures" below). Ib. The proposed rule for 2015 has not yet filed, however, we do not expect the NMFS proposed rule will be different than the Council and Commission recommendations given that the harvest limits are consistent with the recommendations of the SSC and the Monitoring Committee.

The Monitoring Committee must recommend recreational management measures for 2014 that will constrain landings to the recreational harvest limit. Additionally, these measures must address the 2012 recreational overage, consistent with the proposed revisions to the Council's recreational accountability measures. 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.

# **Recreational Catch and Landings**

Recreational catch of black sea bass has fluctuated since 1981, from a peak in 1986 at 28.9 million fish to a low of 3.4 million fish in 1984 (Table 1). Landings were estimated at 3.18 million lb in 2012. The 2013 MRIP data are incomplete and preliminary. Black sea bass landings in number of fish, by state,



indicate that New Jersey landed the greatest number of black sea bass followed by Massachusetts and New York (Table 2).

Typically, the first four waves of catch and landings data for the current year become available in mid-October. The Monitoring Committee does an early review of the MRIP data because the Council and Commission agreed that recommendations would have to be made late in the current year (i.e., 2013) to give the states enough time to enact changes in their regulations for the upcoming year (i.e., 2014). However, estimates for 2013 waves 3 and 4 (May-August) are undergoing significant revisions at the time of this writing and are currently unavailable for analysis. Catch and landings estimates for 2013 waves 1-4 (January through August) will be provided when they become available.

In the past, preliminary wave 1-4 data for the current year has been 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 2013 preliminary estimates are expected to change, staff did not rely on this data to make projections when developing staff recommendations for 2014. Instead, recommendations were developed using data from the most recent complete year (2012), as the baseline.

# 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 (Table 3). In 2013, the harvest limit was 2.26 million lb. Since 2011, state-specific measures have been implemented in state waters, including minimum fish sizes ranging from 12.5 to 14 inches TL and various combinations of possession limits and open seasons (Table 4). The Federal waters (EEZ) measures in 2013 are similar to those states in the southern half of the stock range, and include a 12.5-inch TL minimum size, a 20 fish possession limit, and open seasons of May 19-October 14 and November 1-December 31 (Table 3).

# **Accountability Measures**

The proposed rule for the Council's Omnibus Recreational Accountability Measures Amendment filed on September 18, 2013. Several changes to the Council's system of accountability measures (AMs) are proposed. The following would apply if the Council-preferred alternatives are implemented:

- 1. The NMFS Regional Administrator (RA) would no longer have in-season closure authority for the black sea bass recreational fishery.
- 2. The determination of whether a recreational overage has occurred would be made by comparing the 3-year moving average of the lower bound of the confidence interval of the recreational catch estimate (rather than the point estimate, as is currently used) to the 3-year moving average of the recreational ACL. The 3-year moving average will continue to be phased in over a 3-year period, beginning with 2012. NMFS has identified some concerns with the use of the lower bound of the confidence interval and requested comments on this aspect of the proposed rule.
- 3. In the event of a recreational overage, accountability measures would no longer necessarily include a pound-for-pound payback of the overage amount in a subsequent fishing year. Instead, paybacks would occur only if: a) the ACL is exceeded for stocks that are overfished, under a rebuilding plan, or with unknown stock status; or b) biomass is below the target, but above the



- threshold  $(1/2 < B/B_{MSY} < 1)$ , and the acceptable biological catch (ABC) is exceeded.
- 4. If a payback is needed, the amount will be scaled relative to biomass (resulting in paybacks that are smaller for stocks where biomass is closer to the target).

In 2012, recreational black sea bass landings were estimated at 3.18 million lb,<sup>1</sup> exceeding both the recreational harvest limit (1.32 million lb) and the recreational ACL (2.52 million lb). If the above changes to the accountability measures are implemented, the lower bound of the confidence interval of this estimate will be compared to the 2012 recreational ACL. In the event of a confirmed overage, the type of accountability measure to be applied would be dependent on stock status. Because the black sea bass stock is not overfished or under a rebuilding plan, and because the most recent point estimate of biomass is above the biomass target (i.e.,  $B/B_{MSY}>1$ ), no payback would be required. Instead, adjustments to recreational management measures (bag limit, size limit, and season) would be used as the AM.

# **Methodology**

The Monitoring Committee must consider and recommend measures that will ensure the recreational harvest limit of 2.26 million lb will not be exceeded in 2014. As mentioned previously, data for 2013 waves 1-4 are currently unavailable for use in projecting 2013 catch and landings. The performance of the recreational black sea bass fishery in 2012, relative to 2012 management measures, can be compared to the 2014 harvest limit to derive measures that are likely to constrain 2014 landings to the harvest limit. Landings in 2012 were estimated at 3.18 million lb, under the management measures described in Tables 3 and 4. The distribution of 2012 landings by length is given in Figure 1. Using 2012 as the baseline, to achieve the 2014 harvest limit of 2.26 million lb, landings would need to be reduced by 29%. The management measures applied in 2012, including possession limits, size limits, and seasons, can be modified to achieve the desired harvest level in 2014. Table 5 provides the distribution of landings by wave from 2006-2008, when identical state and Federal waters measures (coastwide) were in place.

# Fishing Trips and Year Class Effects

Predicting the number of trips that might be taken in 2014 is complicated (Table 6). 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 characteristics (age, gender, race, income, etc.) affect the demand for angler fishing trips. Changes in angler behavior may result in a breakdown in 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.

<sup>&</sup>lt;sup>1</sup> Includes landings north of Cape Hatteras, NC, only.



# 2014 Staff Recommendation

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. In 2011, 2012, and 2013, the Commission developed an addendum which enabled state-specific measures to be implemented in state waters. These measures have varied substantially among the states and from the measures implemented in Federal waters. In 2014, staff recommend setting coastwide measures, to be implemented in both state and Federal waters, in order to reduce complexity in the regulations, increase compliance by making measures consistent across the management unit, and improve the ability to analyze the impacts of management measures.

Based on the information available to staff at this time, 2014 landings would have to be reduced by 29% from 2012 levels to achieve the 2014 recreational harvest limit of 2.26 million lb. This reduction would be based on adjustments to 2012 measures as the baseline, rather than adjustments to 2013 measures. This reduction would also account for the adjustments to bag limit, size limit, and season that would be required to address the 2012 overage under the new system of accountability measures.

Staff do not recommend increasing the current 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 on stock productivity. Instead, staff recommend adjustments be made to the season and possession limit to achieve the required reduction in landings. Staff recommend a coastwide minimum size of 12.5 inches, which is less than or equal to the size limits currently implemented in Federal and state waters, and consistent with what the majority of anglers are landing under these regulations (Table 4; Figure 1).

Staff remain concerned about the use of high possession limits in recreational fisheries, particularly with large increases in the average size of black sea bass being landed. The mean weight of landed black sea bass has increased significantly in recent years, from 1.10 lb in 2000 to 1.70 lb in 2012 (Table 1). This has substantial implications for a fishery managed using weight-based harvest limits. A federal 20 fish per person, per day possession limit borders on commercial quantities and negates the effectiveness of the possession limit as a management tool. High possession limits also contribute to high variance in the catch estimates and the potential for relatively unconstrained fishing effort under high fish availability conditions. Possession limits should be reduced to levels more consistent with the average angler catch per trip. Based on Type A fish examined in 2010 and 2011, about 97% and 98% of anglers, respectively, landed 10 or fewer fish. However, the reduction generated by reducing the possession limit is potentially greater than this statistic would imply, given the high numbers of fish being landed by some anglers. Catch per angler trip data from 2011 indicate that reducing the possession limit from 20 fish to 10 fish would potentially generate a reduction of approximately 4% (Table 7). Therefore, staff recommend a 10 fish possession limit, in order to help constrain landings while remaining consistent with the performance of the majority of anglers.

The remaining portion of the reduction in landings can be accounted for by modifications to the black sea bass season. A closure of all of Wave 6 (November/December) results in a reduction in landings of



5.3%, and a closure of 34 consecutive days in wave 5 (September/October) results in a reduction of 20.1% (Table 5a). In total, a black sea bass season extending from May 19-September 10 would account for a 25.4% reduction in landings.

Staff recommend that the black sea bass fishery remain closed during wave 1 (January 1 to February 28). This time period is not sampled by MRIP, and therefore wave 1 catch is not accounted for in the stock assessment, overall catch estimates, or calculations of recreational management measures. Vessel trip reports indicate that there is some fishing activity during this time period, when black sea bass are aggregated on the shelf and may be more susceptible to fishing mortality. In addition, anecdotal information has suggested that the fish being caught during this time period may be larger than during the other times of the fishing year.

The seasonal measures described above, coupled with a reduction in the possession limit, should reduce the risk of exceeding the 2014 recreational harvest limit of 2.26 million lb.

Based on the above information, staff recommend coastwide measures for the 2014 fishing year that include a 12.5 inch minimum fish size, a 10 fish possession limit, and an open season from May 19 to September 10, 2014. These coastwide measures would need to be implemented in both state and Federal waters.



Table 1. Black sea bass recreational catch and landings by year, 1981 to 2013,
Maine to Cape Hatteras, NC. The number of fish released is presented as a
proportion of the total catch.

Year	Catch <sup>a</sup> ('000 fish)	Landings <sup>a</sup> ('000 fish)	Landings <sup>a</sup> ('000 lb)	% Released	Mean weight (lb)
1981	3,681	1,886	1,232	48.8	0.65
1982	11,386	10,045	9,894	11.8	0.98
1983	7,561	4,537	4,079	40.0	0.90
1984	3,428	1,780	1,447	48.1	0.81
1985	6,047	3,388	2,097	44.0	0.62
1986	28,946	21,742	12,392	24.9	0.57
1987	5,052	2,883	1,924	42.9	0.67
1988	8,186	3,088	2,869	62.3	0.93
1989	6,427	4,239	3,289	34.0	0.78
1990	9,135	3,881	2,761	57.5	0.71
1991	10,829	5,269	4,186	51.3	0.79
1992	7,722	3,592	2,706	53.5	0.75
1993	9,023	6,007	4,842	33.4	0.81
1994	7,166	3,430	2,948	52.1	0.86
1995	14,059	6,747	6,207	52.0	0.92
1996	8,143	3,624	3,993	55.5	1.10
1997	10,646	4,739	4,268	55.5	0.90
1998	5,146	1,148	1,152	77.7	1.00
1999	7,400	1,378	1,664	81.4	1.21
2000	16,927	3,629	3,988	78.6	1.10
2001	13,869	2,841	3,421	79.5	1.20
2002	14,703	3,351	4,349	77.2	1.30
2003	12,128	3,251	3,289	73.2	1.01
2004	7,238	1,531	1,942	78.8%	1.27
2005	7,041	1,263	1,906	82.1%	1.51
2006	7,602	1,286	1,778	83.1%	1.38
2007	8,727	1,528	2,178	82.5%	1.43
2008	10,653	1,294	2,027	87.9%	1.57
2009	9,224	1,806	2,482	80.4%	1.37
2010	9,964	2,207	3,122	77.9%	1.41
2011	4,737	817	1,171	82.8%	1.43
2012	12,536	1,874	3,181	85.1%	1.70
2013 <sup>b</sup>	NA	NA	NA	NA	NA

<sup>a</sup> For 1981-2003 data are MRFSS, 2004-2013 are MRIP. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 31, 2013. <sup>b</sup> NA = Not available.



State	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ME	-	-	-	-	-	-	-	-	-	-
NH	-	-	-	-	-	-	-	-	-	3
MA	117	158	175	105	149	246	431	702	195	520
RI	70	27	85	41	44	52	36	160	50	103
СТ	5	26	0	3	24	60	0	16	8	111
NY	318	133	143	269	410	260	566	543	274	322
NJ	1,903	1,078	660	531	725	580	583	687	148	735
DE	307	44	68	114	93	23	37	21	43	40
MD	241	16	91	121	39	26	33	36	47	33
VA	265	46	34	83	36	38	115	30	19	4
NC <sup>a</sup>	166	397	231	126	110	57	107	139	95	76

Table 2. Black sea bass recreational landings (number '000) by state, waves 1-6,2003-2012.

Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 4, 2013. For 2003 data are based on MRFSS, 2004-2012 are MRIP. <sup>a</sup>Includes all of NC, both North and South of Hatteras.



Table 3. Summary o	able 3. Summary of management measures for the black sea bass recreational fishery, 1996-2014, and proposed harvest limit for 2015.									
Measure	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Harvest Limit (m lb)	-	-	3.15	3.15	3.15	3.15	3.43	3.43	4.01	4.13
Landings (m lb) <sup>a</sup>	4.1	4.4	1.3	1.7	4.1	3.6	4.4	3.4	2.3	2.2
Possession Limit	-	-	_b	_b	_ <sup>b</sup>	25	25	25	25	25
Size Limit (TL in)	9	9	10	10	10	11	11.5	12	12	12
Open Season	1/1 - 12/31	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
Measure	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Measure Harvest Limit (m lb)	<b>2006</b> 3.99	<b>2007</b> 2.47	<b>2008</b> 2.11	<b>2009</b> 1.14	<b>2010</b> 1.83	<b>2011</b> 1.84	<b>2012</b> 1.32	<b>2013</b> 2.26	<b>2014</b> 2.26	<b>2015</b> 2.26 <sup>c</sup>
Measure Harvest Limit (m lb) Landings (m lb) <sup>a</sup>	<b>2006</b> 3.99 1.9	2007           2.47           2.4	2008           2.11           2.1	<b>2009</b> 1.14 2.6	<b>2010</b> 1.83 3.3	<b>2011</b> 1.84 1.3	<b>2012</b> 1.32 3.2	<b>2013</b> 2.26 -	<b>2014</b> 2.26	<b>2015</b> 2.26 <sup>c</sup>
Measure Harvest Limit (m lb) Landings (m lb) <sup>a</sup> Possession Limit	<b>2006</b> 3.99 1.9 25	2007           2.47           2.4           25	2008           2.11           2.1           2.5	2009           1.14           2.6           25	2010           1.83           3.3           25	2011           1.84           1.3           25	2012           1.32           3.2           20 or 25	<b>2013</b> 2.26 - 20	<b>2014</b> 2.26	<b>2015</b> 2.26 <sup>°</sup> -
Measure Harvest Limit (m lb) Landings (m lb) <sup>a</sup> Possession Limit Size Limit (TL in)	2006           3.99           1.9           25           12	2007           2.47           2.4           25           12	2008           2.11           2.1           2.5           12	2009           1.14           2.6           25           12.5	2010           1.83           3.3           25           12.5	2011           1.84           1.3           25           12.5	2012           1.32           3.2           20 or 25           12.5	<b>2013</b> 2.26 - 20 12.5	<b>2014</b> 2.26	2015 2.26 <sup>c</sup> - -

Table	3.	<b>Summary</b>	of managem	ent measures	for the	black sea	bass recre	ational fishe	rv, 1	996-2014.	and	propos	ed harv	est limit	for 2015	j.
									•/ /							

<sup>a</sup> For 1996-2003 data are MRFSS, 2004-2013 are MRIP. <sup>b</sup> There was no Federal possession limit but some states implemented a 20 fish possession limit in these years. <sup>c</sup> Council-preferred; pending implementation by NMFS.



# Table 4. Black sea bass recreational management measures by state, 2012 and 2013.

# a) 2012 measures by state.

State	Minimum Size (inches)	Possession Limit	Open Season
		10 fish	May 11-June 24
Massachusetts	14	20 fish	June 25-October 31
Rhode Island	13	15 fish	June 15-December 31
Connecticut	13	15 fish	June 15-December 31
New York	13	15 fish	June 15-December 31
New Jersey	12.5	25 fish	May 19-September 3, September 23-October 14, and November 1-December 31
Delaware	12.5	25 fish	May 22-October 14 and November 1-December 31
Maryland	12.5	25 fish	May 22-October 14 and November 1-December 31
PRFC	12.5	25 fish	May 19-October 14 and November 1-December 31
Virginia	12.5	25 fish	May 19-October 14 and November 1-December 31
North Carolina (North of Cape Hatteras)	12.5	25 fish	May 19-October 14 and November 1-December 31



b) 2013 measures by st	ate.		
State	Minimum Size (inches)	Possession Limit	Open Season (closed in October)
Massachusetts (Private and For-hire)	14	4 fish	May 11- October 31
Massachusetts		10 fish	May 11- June 14
(For-hire with Letter of Authorization from MA DMF)	14	20 fish	July 1- August 11 and September 1- October 10
	12	3 fish	June 15- August 31
Rhode Island	13	7 fish	September 1- December 31
Connecticut	12	3 fish	June 15-August 31
(Private and Shore)	13	8 fish	September 1-October 29
Connecticut (For-hire)	13	8 fish	June 15-November 30
New York	13	8 fish	July 10-December 31
New Jersey	12.5	20 fish	May 19-August 8, September 27-October 14, and November 1-December 31
Delasar	12.5	15 fish	January 1- February 28
Delaware	12.5	20 fish	May 19 - October 14 and November 1 - December 31
Mamland	12.5	15 fish	January 1 - February 28
Maryland	12.5	20 fish	May 19 - October 14 and November 1 - December 31
DDEC	12.5	15 fish	January 1 - February 28
PRFC	12.5	20 fish	May 19 - October 14 and November 1 - December 31
Vincinia	12.5	15 fish	January 1 - February 28
virginia	12.5	20 fish	May 19 - October 14 and November 1 - December 31
North Carolina (North of	10.5	15 fish	January 1 - February 28
Latitude)	12.5	20 fish	May 19 - October 14 and November 1 - December 31

Table 5. a) Average percent of black sea bass landed (in number) by wave, 2006 to 2008, based on MRIP landings data and b) projected reduction in black sea bass landings (in number) associated with closing one day per wave, based on 2006 to 2008 MRIP landings data.

a.

State	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
MA	0.0000	0.0000	37.1113	20.0479	42.8408	0.0000
RI	0.0000	0.0058	4.3758	24.4527	64.0531	7.1126
СТ	0.0000	0.0000	2.0370	72.2979	0.9908	24.6742
NY	0.0000	0.0000	24.8098	29.4535	36.1107	9.6260
NJ	0.0000	0.1494	41.5411	16.6213	38.7958	2.8924
DE	0.0000	4.5314	51.5769	21.7233	20.4979	1.6704
MD	0.0000	0.6181	59.0091	9.5374	24.6708	6.1646
VA	0.0000	2.4764	42.8817	25.7301	17.4615	11.4503
NC <sup>a</sup>	2.4157	5.4607	24.6746	23.6117	30.6216	13.2157
Coast	0.0508	0.5525	36.2126	21.8059	36.1011	5.2770

<sup>a</sup> North of Hatteras.

b.

State	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
MA	0.0000	0.0000	0.6084	0.3234	0.7023	0.0000
RI	0.0000	0.0001	0.0717	0.3944	1.0501	0.1166
СТ	0.0000	0.0000	0.0334	1.1661	0.0162	0.4045
NY	0.0000	0.0000	0.4067	0.4751	0.5920	0.1578
NJ	0.0000	0.0024	0.6810	0.2681	0.6360	0.0474
DE	0.0000	0.0743	0.8455	0.3504	0.3360	0.0274
MD	0.0000	0.0101	0.9674	0.1538	0.4044	0.1011
VA	0.0000	0.0406	0.7030	0.4150	0.2863	0.1877
NC <sup>a</sup>	0.0409	0.0895	0.4045	0.3808	0.5020	0.2167
Coast	0.0009	0.0091	0.5936	0.3517	0.5918	0.0865

<sup>a</sup> North of Hatteras.



Year	Number of Fishing Trips <sup>a</sup>	Percentage of Directed Trips relative to Total Trips <sup>b</sup>	Recreational Harvest Limit (million lb)	Recreational Landings of BSB (million lb) <sup>d</sup>	Percentage Overage (+%)/ Underage (-%)
1994	253,888	0.9	None	3.05	None
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 <sup>c</sup>	4.37	+27
2003	285,861	0.8	3.43 <sup>c</sup>	3.30	-4
2004	149,670	0.4	4.01 <sup>c</sup>	1.68	-58
2005	199,603	0.5	4.13 <sup>c</sup>	1.88	-54
2006	253,040	0.7	3.99 <sup>c</sup>	1.98	-50
2007	368,042	1.0	2.47 <sup>c</sup>	2.23	-10
2008	256,341	0.7	2.11 <sup>c</sup>	1.57	-26
2009	393,389	1.3	1.14 <sup>c</sup>	2.31	+103
2010	417,663	1.4	1.83 <sup>c</sup>	2.98	+63
2011	193,655	0.7	1.83 <sup>c</sup>	1.27	-31
2012	267,934	1.0	1.32 <sup>c</sup>	3.18	+141
2013	NA	NA	2.26 <sup>c</sup>	NA	NA
2014	NA	NA	2.26 °	NA	NA
2015	NA	NA	2.26 <sup>c,e</sup>	NA	NA

Table 6. Number of coastwide black sea bass recreational fishing trips, recreational harvest limits, recreational landings, and fishery performance from 1994 to 2015.

<sup>a</sup>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, November 4, 2013.

<sup>b</sup>Source of total trips for all species combined: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 4, 2013. <sup>c</sup>Adjusted for research set-aside.<sup>d</sup>For 1994-2003 data are MRFSS, 2004-2013 are MRIP. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 4, 2013. <sup>c</sup>Pectrational barvest limit is Council recommended for 2015: negding implementation, NA

Service, Fisheries Statistics Division, November 4, 2013. "Recreational harvest limit is Council recommended for 2015; pending implementation. NA = Data not available.



No. caught per trip	Frequency	Fish Landed	New catch per trip with 10 fish possession limit	New Fish Landed	
1	254	254	1	254	
2	94	188	2	188	
3	43	129	3	129	
4	34	136	4	136	
5	30	150	5	150	
6	6	36	6	36	
7	7	49	7	49	
8	3	24	8	24	
9	3	27	9	27	
10	2	20	10	20	
11	2	22	10	20	
13	2	26	10	20	
14	1	14	10	10	
15	1	15	10	10	1
18	1	18	10	10	1
31	1	31	10	10	Reduction
Total	484	1139		1093	4%

# Table 7. Catch per angler trip for black sea bass, from 2011 Waves 1-4 MRFSS data.



Figure 1. Length frequency of Type A (landed) black sea bass from 2012 MRIP data for a) New Hampshire through New York and b) New Jersey through North Carolina.



b.

a.





# **Mid-Atlantic Fishery Management Council**

800 North State Street, Suite 201, Dover, DE 19901-3910 Phone: 302-674-2331 | Toll Free: 877-446-2362 | 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 27, 2013

TO: Council

FROM: Kiley Dancy, Staff

SUBJECT: Scup Recreational Measures for 2014

The following materials are enclosed for Council consideration of the above subject:

- 1) Advisory panel meeting summary
- 2) Monitoring Committee meeting summary and 2013 waves 1-4 data update
- 3) Scup staff memo dated November 12, 2013



#### Summer Flounder, Scup, and Black Sea Bass Advisory Panel Meeting Summary November 25, 2013

The Mid-Atlantic Fishery Management Council's (Council's) Summer Flounder, Scup, and Black Sea Bass Advisory Panel met jointly with the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Advisory Panels on November 25, 2013 to discuss 2014 recreational management measures.

<u>Council Advisory Panel members present:</u> James Fletcher (NC), Skip Feller\* (VA), Willy Hatch (MA), Denny Dobbins (VA), Steve Witthuhn (NY), Adam Nowalsky (NJ), Rick Bellavance\* (RI)

<u>Commission Scup Advisory Panel members present:</u> James Tietje (MA), Paul Forsberg (NY), Frank Blount (RI), Rick Bellavance\* (RI), Mike Plaia (CT), Joseph Huckemeyer (MA), James Lovgren (NJ)

<u>Other Commission Advisory Panel members present:</u> Robert Busby (NY), Bill Shillingford (NJ), Jack Conway (CT), Paul Risi (NY), Mike Fedosh (NJ), Skip Feller\* (VA), Marc Hoffman (NY), Roman Jesien (MD), Victor Bunting (MD)

<u>Others present:</u> Kiley Dancy (Council staff), Kirby Rootes-Murdy (ASMFC staff), Kareem Alalkey, Ray Stinsman, Emerson Hasbrouck (NY), Cary O'Kane

\*Serve on both Council and Commission Advisory Panels.

#### Scup 2014 Measures

The advisors strongly believe that measures should be liberalized for scup to allow the recreational fishery the opportunity to achieve the target.

The suggestion of a cumulative length limit was again brought up for scup, but most advisors agreed that this would be far too complicated for the scup fishery, especially given high numbers of participants and high numbers of scup landed in the party/charter fishery.

In terms of the Monitoring Committee's recommendations for Federal measures, the advisors agreed that the possession limit should be higher than 30 fish. The advisors suggested a possession limit of 40 fish or more, but at a 10-inch size limit instead of the 9-inch limit recommended by the Monitoring Committee. Generally, in Federal waters, a high possession limit is more important than a smaller size limit.

The advisors commented that the fishery should not be closed during wave 1 (January and February). The amount of harvest in wave 1 is small compared to the rest of the year, and primarily consists of bycatch during directed trips for cod and other species. This harvest occurs primarily in the party/charter sector, for which VTR data is available to provide estimates of scup harvest during this wave.

If the Commission chooses to continue the regional approach in state waters, the advisors recommend liberalizing measures in state waters. Staff should explore what levels of liberalization are available and provide this information to the Council and Board.

# **General Comments**

As noted in the September 2013 Fishery Performance Reports, advisors continue to be concerned that the effort estimation methodology used by MRIP has not accurately captured a reduction in effort in New York and New Jersey due to Superstorm Sandy.



#### Summer Flounder, Scup, and Black Sea Bass Monitoring Committee Meeting Summary and Data Update November 22, 2013

#### Scup 2014 Monitoring Committee Recommendations

Attendees: Paul Caruso (MA-DMF), Jason McNamee (RI-DFW), Peter Clarke (NJ-F&W), Greg Wojcik (CT-DEEP), Sally Roman (VMRC), Rich Wong (DNREC), Steve Doctor (MD-DNR), Moira Kelly (NMFS NERO), John Maniscalco (NY-DEC), Tom Wadsworth (NC-DMF), Kiley Dancy (Council Staff), Kirby Rootes-Murdy (ASMFC), Toni Kerns (ASMFC), Mike Luisi (MD-DNR; MAFMC Demersal Committee Chair)

The Monitoring Committee met on Friday, November 22, 2013 in Linthicum, MD to recommend recreational management measures for summer flounder, scup, and black sea bass in 2014. Prior to the meeting, preliminary Marine Recreational Information Program (MRIP) data for 2013 waves 3 and 4 (May through August) were undergoing revisions by NMFS and were unavailable for analysis. Revised data were posted shortly after the Monitoring Committee meeting began, and were reviewed by the Committee but were not able to be analyzed in-depth. Recommendations below are based on a review of available information, including projected landings through 2013.

The Committee supports the Commission continuing the regional approach for setting measures in state waters, rather than a coastwide measure for both state and federal waters. This approach provides flexibility for the states to accommodate the needs of the modes and areas for their individual states.

The Committee recommends Federal measures including a 9-inch TL size limit, a 30 fish possession limit, and an open season of March 1-December 31. Given that only a small fraction of the scup harvest occurs in Federal waters, a 30 fish possession limit (as opposed to the staff-recommended 20 fish possession limit) is not likely to significantly increase the likelihood of exceeding the harvest limit. A 9-inch size limit is more consistent with regulations in the southern states which have more significant fisheries in Federal waters, New Jersey in particular. The fishery should not be open in wave 1 (January 1-February 28) without adequate recreational data sampling in place to produce comparable MRIP estimates.

In terms of implementing any changes to early parts of the 2014 fishing season in Federal waters, the 2014 final rule for recreational fishing measures is not likely to publish until June 2014. This means that the 2013 regulations in Federal waters will roll forward into 2014 until replaced by the final rule. Therefore, any changes to the first half of the 2014 fishing season would not occur until the first half of the 2015 fishing year.

The Committee concurs with the language in the staff memos regarding concern with high possession limits in recreational fisheries.

The Committee also wishes to emphasize that the assessment of risk for the different management configurations for each of the species is based on a preliminary review of 2013 data, which was not available until the day of the meeting, as well as a more thorough review of more historical datasets including 2011 and 2012. The Council and Board may wish to consider this significant data gap when developing their recommendations.

# Scup 2013 Data Update

As mentioned previously, MRIP data for waves 1-4 (May through August) were undergoing revision prior to the Monitoring Committee meeting and were not included in the staff memo dated November 12, 2013. Tables 1-4 below summarize the revised data, which was posted during the Monitoring Committee meeting on November 22, 2013.

Scup landings through the end of 2013 are projected at 5.27 million lb (Table 2), below the 2013 recreational harvest limit (RHL) of 7.55 million lb. Based on the 2014 recreational harvest limit of 7.03 million lb, a coastwide reduction would not be needed in 2014.

Table 1. Scup recreational catch and landings for	waves 1-4,	Maine through No	orth
Carolina, 2013.			

Year	Catch	Landings	Landings	%	Mean Weight
	('000 fish)	('000 fish)	('000 lb)	Released	(lb)
2013	6,144	3,687	3,670	40	1.00

Table 2. Projected scup recreational catch and landings for 2013	Table 2. Project	ted scup rec	reational catc	h and landin	gs for 2013	3. <sup>a</sup>
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Year	Catch ('000 fish)	Landings ('000 fish)	Landings ('000 lb)	Recreational Harvest Limit ('000 lb)
2013	8,514	5,174	5,274	7,550

<sup>a</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-4 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 26, 2013).

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ME	-	-	-	-	-	-	-	-	-	-
NH	-	-	-	-	-	-	-	-	-	-
MA	2,787	598	374	1,718	598	988	774	661	1,545	2,025
RI	661	212	359	167	428	76	276	195	201	643
СТ	98	169	266	397	280	252	670	631	544	349
NY	1,163	325	952	592	790	1,127	1,585	280	420	668
NJ	31	4	219	26	14	28	483	2	83	0
DE	0	<1	<1	<1	1	<1	0	<1	0	0
MD	0	0	0	<1	<1	0	0	0	0	0
VA	0	0	0	<1	4	<1	5	6	0	1
NC	1	2	<1	0	0	0	1	<1	<1	<1
TOTAL	4,740	1,311	2,170	2,901	2,115	2,471	3,795	1,776	2,795	3,687

# Table 3. Scup recreational landings ('000 fish) by state, waves 1-4, 2004-2013.

Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 26, 2013.

State	2013 Target	2013 Landings <sup>a</sup>	Percent Overage (%)	
МА		2,079,542		
RI	6,781,019 <sup>b</sup>	1,590,752	0%	
СТ		557,448	070	
NY		941,773		
NJ	с	250 <sup>d</sup>	N/A	
DE	c	0	N/A	
MD	с	0	N/A	
VA	с	2,524	N/A	
NC	c	1,625	N/A	
	Total	5,174,553		

Table 4. Projected recreational scup landings (in number of fish) relative to Commission targets, for 2013, by state.

<sup>a</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-4 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 26, 2013).

<sup>b</sup> States of MA, RI, CT, and NY formed a multi-state region and pooled landings, targets, and implemented similar regulations.

<sup>c</sup> State does not have specific target.

<sup>d</sup> New Jersey projection should be reevaluated once wave 5 becomes available. Dominant wave shifts between 4 and 5 annually; therefore, projections tend to be extremely unstable. This issue is further discussed in the scup staff memo dated November 12, 2013.



# **Mid-Atlantic Fishery Management Council**

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# M E M O R A N D U M

Date: November 12, 2013

To: Chris Moore

From: Kiley Dancy, Jessica Coakley, and José Montañez, Staff

Subject: Scup Recreational Management Measures in 2014

In October 2013, the Council and the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Board (Board) reviewed previously implemented multiyear commercial quotas and recreational harvest limits for scup for the 2014 and 2015 fishing years. These multi-year specifications were recommended by the Council and Board in 2012. At the October 2013 meeting, the Council and Board considered the advice of the Scientific and Statistical Committee (SSC) and Monitoring Committee, and recommended no changes to these specifications.

The final rule implementing the 2014 commercial quotas and recreational harvest limits published on December 31, 2012, and includes an adjusted 2014 recreational harvest limit for scup of 7.03 million lbs. Commercial quotas and recreational harvest limits for 2015 will be implemented with the proposed rule for 2015, which has not yet filed. However, we do not expect the NMFS proposed rule will modify these harvest limits given the Council and Commission recommendations are consistent with the recommendations of the SSC and the Monitoring Committee, and 2013 recreational landings are substantially lower than the 2013 recreational harvest limit.

The Monitoring Committee must recommend recreational management measures for 2014 that will constrain landings to the recreational harvest limit. The following is a review of recreational catch and landings data for the scup fishery to help in the Monitoring Committee's deliberations.

# **Recreational Catch and Landings**

Recreational catch of scup has fluctuated since 1981, from a peak in 1986 of 30.87 million fish to a time series low of 2.67 million fish in 1998, the lowest value in the times series (Table 1). Recreational landings were estimated to be 4.17 million lb in 2012. Scup landings in number of fish, by state, indicate that Massachusetts landed the greatest number of scup, followed by Connecticut, New York, and Rhode Island (Table 2).

The 2013 MRIP data are incomplete and preliminary. Typically, the first four waves of catch and landings data for the current year become available in mid-October. The Monitoring Committee does an early review of the MRIP data because the Council and Commission agreed that recommendations would have to be made late in the current year (i.e., 2013) to give the states enough time to enact



changes in their regulations for the upcoming year (i.e., 2014). However, estimates for 2013 waves 3 and 4 (May-August) are undergoing significant revisions at the time of this writing and are currently unavailable for analysis. Catch and landings estimates for 2013 waves 1-4 (January through August) will be provided when they become available.

In the past, preliminary wave 1-4 data for the current year has been 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 2013 preliminary estimates are expected to change, staff did not rely on this data to make projections when developing staff recommendations for 2014. Instead, recommendations were developed using data from the most recent complete year (2012), as the baseline.

# Past Harvest Limits and Management Measures

Recreational harvest limits have varied since the FMP was first implemented, from a low of 1.24 million lb in 1999 and 2000, to a high of 8.45 million lb in 2012 (Table 3). In 2013, the Council adopted Federal management measures that included a 30 fish possession limit, a 10 inch TL size limit, and an open season from January 1 through December 31. Since 2011, the Commission has adopted a regional approach for regulations in state waters, resulting in a relatively complex set of regulations for the states from Massachusetts to New York (Table 4).

#### **Accountability Measures**

The proposed rule for the Council's Omnibus Recreational Accountability Measures Amendment filed on September 18, 2013. Several changes to the Council's system of accountability measures are proposed. The following would apply if the Council-preferred alternatives are implemented:

- 1. The NMFS Regional Administrator (RA) would no longer have in-season closure authority for the scup recreational fishery.
- 2. The determination of whether a recreational overage has occurred would be made by comparing the 3-year moving average of the lower bound of the confidence interval of the recreational catch estimate (rather than the point estimate, as is currently used) to the 3-year moving average of the recreational ACL. The 3-year moving average will continue to be phased in over a 3-year period, beginning with 2012. NMFS has identified some concerns with the use of the lower bound of the confidence interval and requested comments on this aspect of the proposed rule.
- 3. In the event of a recreational overage, accountability measures would no longer include a poundfor-pound payback of the overage amount in a subsequent fishing year. Instead, paybacks would occur only if: a) the ACL is exceeded for stocks that are overfished, under a rebuilding plan, or with unknown stock status; or b) biomass is below the target, but above the threshold ( $1/2 < B/B_{MSY} < 1$ ), and the acceptable biological catch (ABC) is exceeded.
- 4. If a payback is needed, the amount will be scaled relative to biomass (resulting in paybacks that are smaller for stocks where biomass is closer to the target).

# **Methodology**

The Monitoring Committee must consider and recommend measures that will ensure the recreational harvest limit of 7.03 million lb will not be exceeded in 2014. As mentioned previously, data for 2013 waves 1-4 are currently unavailable for use in projecting 2013 catch and landings. The performance of



the recreational scup fishery in 2012 can be reviewed relative to 2012 measures, and compared to the 2014 harvest limit to derive measures that are likely to constrain 2014 landings to the harvest limit. Recreational landings of scup in 2012 were 4.17 million lb, under the Federal and state management measures described in Tables 3 and 4. Using 2012 as the baseline, landings in 2014 would not need to be reduced to achieve the 2014 harvest limit. The 2012 landings (Table 5) were 41% below the 2014 harvest limit of 7.03 million lb. The distribution of 2012 landings by length is given in Figure 1. The recreational fishery has harvested less than the recreational harvest limit since 2011, when overall catch limits were significantly increased.

The possession limit, size limit, or season could be modified for scup to achieve the desired harvest level in 2014. Table 6 provides the distribution of landings by wave from 1996-2000, when identical state and Federal waters measures (coastwide) were in place. Given that measures were liberalized in most states and in Federal waters between 2012 and 2013 (Tables 3 and 4), landings data for 2013 should be examined when it becomes available. Based on a review of preliminary recreational data and the slight downward trend in stock biomass in recent years as indicated by the 2012 stock assessment update (Terceiro 2012), staff do not expect that the availability of scup to the recreational fishery will substantially increase.

The impacts of changes in recent scup management measures are difficult to analyze, given the complex and variable set of regulations implemented in state waters for the past few years. It is apparent that the state management measures in place for Massachusetts to North Carolina in 2007-2010 in conjunction with Federal measures did not constrain landings to the harvest limits, and resulted in substantial overages (Table 7). An examination of scup landings (in weight) by area indicates that in 2012, less than 1 percent of the scup landings occurred in the EEZ (> 3 miles); although the data by area is self-reported from intercepts and has associated caveats. Despite those caveats, this suggests the majority of scup landings are occurring in state waters, specifically Massachusetts through New York.

# Fishing Trips and Year Class Effects

Predicting the number of trips that might be taken in 2014 is complicated (Table 7). 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 characteristics (age, gender, race, income, etc.) affect the demand for angler fishing trips. This makes evaluation of changes in angler behavior difficult and complex. Changes in angler behavior may result in a breakdown in the assumptions associated with specific sets of regulations and their anticipated results. Also, year-class effects in terms of fish availability can influence the expected impacts of management measures and should be considered.

# 2014 Staff Recommendation

Until 2002, the scup recreational fishery was managed with coastwide measures as dictated by the FMP, which included a common minimum fish size, possession limit, and an open season that were implemented in both state and Federal waters. In 2003, the Commission developed an addendum which created regional harvest limits for state waters and allocated 97 percent of the coastwide limit to the states of Massachusetts to New York. State waters measures have grown increasingly complex, with variable possession limits and minimum sizes by fishing mode (i.e., party/charter versus private angler) and by season. In 2014, staff recommend setting coastwide measures, to be implemented in both state



and Federal waters, in order to reduce complexity in the regulations, increase compliance by making measures consistent across the management unit, and improve the ability to analyze the impacts of management measures.

Staff recommend a coastwide minimum size limit of 9 inches, a decrease from the current 10 inches in place in Federal waters and in most states in the Northern region (Tables 3 and 4). In 2012, approximately 9 million scup were caught, with a release rate of approximately 58% (Table 1). Given that the stock size for scup is projected to decrease slightly in 2014 and 2015, staff expect no major changes in availability. Although a decrease in the minimum size would be expected to increase landings, staff do not expect that landings would increase to an extent that the harvest limit would be approached, if the minimum size reduction is taken in conjunction with the staff recommended decrease in the possession limit described below.

Staff remain concerned about the use of high possession limits in recreational fisheries given large increases in the average size of landed scup in recent years (Table 1). The current Federal waters 30 fish per-person per-day possession limit borders on commercial quantities, and negates the effectiveness of the possession limit as a management tool. It also contributes to high variance in the catch estimates and the potential for relatively unconstrained fishing effort under high fish availability conditions. The mean weight of landed scup has increased significantly in recent years, from 0.75 lb in 2000 to 1.14 lb in 2012 (Table 1). Given that the recreational fishery is managed with weight-based harvest limits, the implications of a 30-fish possession limit when the mean weight is over 1 lb are substantially different than the same possession limit during earlier periods where the average scup landed were smaller. Catch per angler trip data from 2011 indicate that reducing the possession limit to 20 fish, from current possession limits as high as 45 fish in northern states and 50 fish in southern states, could balance the expected increase in landings from a decrease to a 9 inch size limit (Table 8).

Based on the above information, staff recommend coastwide measures for 2014 that include a 9.0 inch TL minimum fish size, 20 fish possession limit, and open season from January 1 to December 31 in 2014. These coastwide measures would need to be implemented in both state and Federal waters.



Table 1. Scup recreational catch and landings by year, 1981-2013. The number of fish released	ÍS
presented as a proportion of the total catch (% Rel).	

Year	Catch <sup>a</sup> ('000 fish)	Landings <sup>a</sup> ('000 fish)	Landings <sup>a</sup> ('000 lb)	% Released	Mean weight (lb)
1981	10,376	9,084	5,812	12%	0.64
1982	7,181	6,454	5,205	10%	0.81
1983	10,155	8,837	6,252	13%	0.71
1984	7,775	6,057	2,416	22%	0.40
1985	13,861	10,810	6,093	22%	0.56
1986	30,872	24,823	11,605	20%	0.47
1987	12,377	9,916	6,197	20%	0.62
1988	7,539	6,062	4,267	20%	0.70
1989	11,394	9,176	5,557	19%	0.61
1990	10,172	8,043	4,140	21%	0.51
1991	16,852	13,279	8,087	21%	0.61
1992	10,077	7,764	4,412	23%	0.57
1993	7,076	5,663	3,197	20%	0.56
1994	5,650	4,270	2,628	24%	0.62
1995	3,767	2,419	1,344	36%	0.56
1996	4,676	2,972	2,156	36%	0.73
1997	3,070	1,916	1,198	38%	0.63
1998	2,670	1,211	875	55%	0.72
1999	4,636	3,251	1,886	30%	0.58
2000	11,284	7,244	5,443	36%	0.75
2001	9,925	5,099	4,262	49%	0.84
2002	7,580	3,647	3,624	52%	0.99
2003	14,661	9,452	8,484	36%	0.90
2004	13,426	7,154	7,227	47%	1.01
2005	7,038	2,589	2,678	63%	1.03
2006	9,615	3,434	3,696	64%	1.08
2007	10,051	4,748	4,593	53%	0.97
2008	10,706	3,487	3,763	67%	1.08
2009	8,704	3,134	3,221	64%	1.03
2010	11,147	5,148	5,980	54%	1.16
2011	6,473	3,056	3,663	53%	1.20
2012	8,829	3,668	4,166	58%	1.14
2013 <sup>b</sup>	NA	NA	NA	NA	NA

<sup>a</sup> For 1981-2003 data are MRFSS, 2004-2013 are MRIP. <sup>b</sup> NA = Not available.


State	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ME	-	-	-	-	-	-	-	-	-	-
NH	-	-	-	-	-	-	-	-	-	-
МА	1,624	3,313	657	425	1,770	762	1,069	925	785	1,587
RI	1,027	817	431	470	353	633	140	398	568	498
СТ	1,529	1,072	508	532	925	549	289	1,088	933	868
NY	5,112	1,877	859	1,678	1,596	1,451	1,460	1,990	715	592
NJ	150	60	119	327	99	87	175	740	45	120
DE	1	<1	4	<1	2	1	<1	0	<1	<1
MD	<1	1	2	<1	<1	<1	<1	<1	<1	0
VA	8	11	9	0	<1	4	<1	5	10	1
NC	1	2	2	<1	<1	0	0	2	<1	2

### Table 2. Scup recreational landings (number '000) by state, waves 1-6, 2003-2012.

Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 31, 2013. 2003 data are based on MRFSS, 2004-2012 are MRIP.



Measure	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Harvest Limit (m lb)	1.95	1.55	1.24	1.24	1.76	2.71	4.01	3.99	3.96	3.99
Landings (m lb)	1.20	0.88	1.89	5.44	4.26	3.62	8.48	4.24	2.54	2.95
Possession Limit	-	-	-	-	50	20	50	50	50	50
Size Limit (TL in)	7	7	7	-	9	10	10	10	10	10
Open Season	1/1 - 12/31	1/1 -12/31	1/1 - 12/31	1/1 -12/31	8/15 - 10/31	7/1 - 10/2	1/1-2/28 and 7/1- 11/30	1/1- 2/28 and 9/7- 11/30	1/1-2/28 and 9/18- 11/30	1/1-2/28 and 9/18- 11/30
Measure	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Measure Harvest Limit (m lb)	<b>2007</b> 2.74	<b>2008</b> 1.83	<b>2009</b> 2.59	<b>2010</b> 3.01	<b>2011</b> 5.74	<b>2012</b> 8.45	<b>2013</b> 7.55	<b>2014</b> 7.03	<b>2015</b> 6.60 <sup>a</sup>	
Measure Harvest Limit (m lb) Landings (m lb)	<b>2007</b> 2.74 3.65	<b>2008</b> 1.83 4.04	<b>2009</b> 2.59 2.94	<b>2010</b> 3.01 5.74	<b>2011</b> 5.74 3.66	<b>2012</b> 8.45 4.17	<b>2013</b> 7.55	<b>2014</b> 7.03	<b>2015</b> 6.60 <sup>a</sup>	
Measure Harvest Limit (m lb) Landings (m lb) Possession Limit	<b>2007</b> 2.74 3.65 50	<b>2008</b> 1.83 4.04 15	<b>2009</b> 2.59 2.94 15	<b>2010</b> 3.01 5.74 10	<b>2011</b> 5.74 3.66 10	<b>2012</b> 8.45 4.17 20	<b>2013</b> 7.55 - 30	<b>2014</b> 7.03 -	<b>2015</b> 6.60 <sup>a</sup> -	
Measure Harvest Limit (m lb) Landings (m lb) Possession Limit Size Limit (TL in)	2007           2.74           3.65           50           10	2008           1.83           4.04           15           10.5	2009           2.59           2.94           15           10.5	2010           3.01           5.74           10           10.5	2011           5.74           3.66           10           10.5	2012         8.45         4.17         20         10.5	<b>2013</b> 7.55 - 30 10	<b>2014</b> 7.03	<b>2015</b> 6.60 <sup>a</sup>	

	Table 3. Summary of Federal	management measures for	r the scup recreational	fishery, 1997-2015.
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<sup>a</sup>Council-preferred; pending implementation by NMFS.



## Table 4. Scup recreational management measures by state, 2012 and 2013.

a) 2012 measures by	v state.		
State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts (party/charter)	11	20 fish from May 1-10 and June 25- Dec 31; 45 fish from May 11-June 24	May 1- December 31
Massachusetts (private angler)	10.5	20 fish; private vessels with 6 or more persons aboard are prohibited from possessing more than 100 scup per day	May 1- December 31
Rhode Island (party/charter)	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 40 fish from Sept 1-Oct 31	May 1- December 31
Rhode Island (private angler)	10.5	20 fish	May 1- December 31
Connecticut (party/charter)	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 40 fish from Sept 1-Oct 31	May 1- December 31
Connecticut (private angler)	10.5; and 9 for shore mode at 44 designated sites	20 fish	May 1- December 31
New York (party/charter)	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 40 fish from Sept 1-Oct 31	May 1- December 31
New York (private angler)	10.5	20 fish	May 1- December 31
New Jersey	9	50 fish	Jan 1-Feb 28 and July 1 – December 31
Delaware	8	50 fish	All Year
Maryland	8	50 fish	All Year
Virginia	8	50 fish	All Year
North Carolina	8	50 fish	All Year



# b) 2013 measures by state.

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



Table 5.	Projected	recreational	scup landin	gs (in nu	mber of fish)	relative to	<b>Commission</b>	targets,
for 2012	2, by state.		_	_				_

State	2012 Target	2012 Landings <sup>a</sup>	Percent Overage (%)
MA		1,587,005	
RI	< <b>7</b> 01 010h	497,504	0%
СТ	6,781,019	868,474	
NY		592,237	
NJ	с	119,961	N/A
DE	с	85	N/A
MD	с	0	N/A
VA	с	1,425	N/A
NC	с	1,799	N/A
	Total	3,668,490	

<sup>a</sup> Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 31, 2013. <sup>b</sup> States of MA, RI, CT, and NY formed a multi-state region and pooled landings, targets, and implemented similar regulations. <sup>°</sup> State does not have specific target. N/A=Not applicable.



Table 6. a) Average percent of scup landed (in number) by wave, based on 1996-2000 MRFSS landings data and b) projected reduction in scup landings (in number) associated with closing one day per wave, based on 1996-2000 MRFSS landings data.

a.

State	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
MA	0.0	0.0	37.4	31.5	31.1	0.0
RI	0.0	0.0	4.9	48.1	45.7	1.3
СТ	0.0	0.0	8.2	49.6	42.2	0.0
NY	0.0	0.0	22.0	27.7	48.8	1.5
NJ	0.0	0.3	0.0	3.0	78.6	18.1
DE	0.0	0.0	0.0	9.0	89.9	1.1
MD	0.0	0.0	0.0	46.2	0.0	53.8
VA	0.0	0.0	0.0	0.0	87.8	12.2
NC	0.0	3.3	40.9	31.3	24.5	0.0
Coast	0.0	0.4	12.6	27.4	49.8	9.8

b.

State	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
MA	0.0	0.0	0.61	0.51	0.51	0.0
RI	0.0	0.0	0.08	0.78	0.75	0.02
СТ	0.0	0.0	0.13	0.80	0.69	0.00
NY	0.0	0.0	0.36	0.45	0.80	0.02
NJ	0.0	0.01	0.0	0.05	1.29	0.30
DE	0.0	0.0	0.0	0.15	1.47	0.02
MD	0.0	0.0	0.0	0.74	0.0	0.88
VA	0.0	0.0	0.0	0.0	1.44	0.20
NC	0.0	0.05	0.67	0.50	0.40	0.0
Coast	0.0	0.01	0.21	0.44	0.82	0.16



# Table 7. Number of scup recreational fishing trips, harvest limit, landings, and fishery performance from Maine through North Carolina, 1991 to 2014.

Year	Number of Fishing Trips <sup>a</sup>	Percentage of Directed Trips relative to Total Trips <sup>a,b</sup>	Recreational Harvest Limit (million lb)	Recreational Landings of Scup (million lb) <sup>d</sup>	Percentage Overage (+)/ Underage (-)
1993	499,703	1.9	None	3.20	NA
1994	435,625	1.6	None	2.63	NA
1995	242,956	0.9	None	1.34	NA
1996	241,322	0.9	None	2.16	NA
1997	198,754	0.7	1.95	1.20	-38
1998	213,842	0.8	1.55	0.88	-43
1999	231,596	0.9	1.24	1.89	+52
2000	485,039	1.4	1.24	5.44	+339
2001	484,604	1.3	1.77	4.26	+141
2002	481,716	1.6	2.71 <sup>c</sup>	3.62	+34
2003	971,770	2.8	4.01 <sup>c</sup>	8.48	+111
2004	698,561	2.0	4.01 <sup>c</sup>	4.24	+6
2005	545,729	1.5	3.96 <sup>c</sup>	2.54	-36
2006	547,761	1.5	4.15 <sup>c</sup>	2.93	-29
2007	516,752	1.4	2.74 <sup>c</sup>	3.65	+33
2008	536,307	1.5	1.83 <sup>c</sup>	4.04	+121
2009	538,084	1.8	2.59 <sup>c</sup>	2.94	+14
2010	699,516	2.4	3.01 <sup>c</sup>	5.74	+91
2011	477,275	1.8	5.74 <sup>c</sup>	3.66	-36
2012	603,126	2.3	8.45 <sup>c</sup>	4.17	-51
2013	NA	NA	7.55 <sup>c</sup>	NA	NA
2014	NA	NA	7.03 <sup>c</sup>	NA	NA

<sup>a</sup> Estimated number of recreational fishing trips (expanded) where the primary target species was scup, Maine through North Carolina. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 4, 2013. <sup>b</sup> Source of total trips for all species combined: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 4, 2013. <sup>c</sup> Adjusted for research set-aside. <sup>d</sup> Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 31, 2013. NA = Data not available.



No.			New catch per trip		
caught	Frequency	Fish Landed	with 10 fish	New Fish Landed	
per trip			possession limit		
1	78	78	1	78	
2	44	88	2	88	
3	15	45	3	45	
4	20	80	4	80	
5	5	25	5	25	
6	10	60	6	60	
7	5	35	7	35	
8	4	32	8	32	
9	6	54	9	54	
10	6	60	10	60	
12	2	24	12	24	
14	3	42	14	42	
16	3	48	16	48	
17	1	17	17		
19	3	57	19	57	
21	2	42	20	40	
35	1	35	20	20	
26	4	104	20	80	
27	4	108	20	80	
28	1	28	20	20	
30	1	30	20	20	
31	1	31	20	20	
32	1	32	20	20	
34	2	68	20	40	
35	1	35	20	20	
37	1	37	20	20	
38	1	38	20	20	
40	7	280	20	140	
41	1	41	20	20	
43	1	43	20	20	
45	1	45	20	20	ļ
48	1	48	20	20	
50	1	50	20	20	Reduction
Total	237	1018		580	43%

<sup>a</sup> Possession limits in 2011 included 10 fish in Federal waters, 10 or 40 fish from Massachusetts through New York, and 50 fish from New Jersey south.





Figure 1. Length frequency of Type A (landed/observed) scup from 2012 MRIP data.

#### **References**

Terceiro M. 2012. Stock Assessment of Scup for 2012. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 12-21; 148 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026, or online at http://www.nefsc.noaa.gov/publications/crd/.