

Atlantic States Marine Fisheries Commission

Summer Flounder, Scup, and Black Sea Bass Management Board

*March 13, 2014
10:00 a.m.-1:00 p.m.
Via Conference Call*

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

- | | |
|---|------------|
| 1. Welcome/Call to Order (<i>D. Pierce</i>) | 10:00 a.m. |
| 2. Board Consent | 10:05 a.m. |
| • Approval of Agenda | |
| 3. Public Comment on items not on the agenda | 10:10 a.m. |
| 4. Consider Approval of Regional 2014 Summer Flounder Recreational Proposals (<i>K. Rootes-Murdy</i>) Action | 10:20 a.m. |
| • Technical Committee Report on Proposals <i>J. Maniscalco</i> | |
| 5. Consider Approval of State 2014 Black Sea Bass Recreational Proposals (<i>K. Rootes-Murdy</i>) Action | 11:20 a.m. |
| • Technical Committee Report on Proposals <i>J. Maniscalco</i> | |
| 6. Other Business/Adjourn | 1:00 p.m. |

The meeting will be held at via conference call. To join the conference call please dial 1-888-394-8197, enter the following passcode when prompted: 499811.

To join the webinar please register at:

<https://www3.gotomeeting.com/register/617005454>



Atlantic States Marine Fisheries Commission

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MEMORANDUM

February, 28, 2014

To: Summer Flounder, Scup, and Black Sea Bass Management Board
From: Summer Flounder, Scup, and Black Sea Bass Technical Committee
RE: 2014 Summer Flounder and Black Sea Bass Recreational Fishery Proposals

List of Participants

Jason McNamee (RI)	Rich Wong (DE)	Kiley Dancy (MAFMC)
Paul Caruso (MA)	Steve Doctor (MD)	Toni Kerns (ASMFC)
Greg Wojcik (CT)	Sally Roman (VA)	Kirby Rootes-Murphy (ASMFC)
John Maniscalco (NY)	Tom Wadsworth (NC)	
Peter Clarke (NJ)	Mark Terceiro (NMFS)	

The following memo contains the Summer Flounder, Scup, and Black Sea Bass Technical Committee Review of the Summer Flounder Regional Proposals and Black Sea Bass State Proposals for the 2014 recreational fishery.

Summer Flounder Recreational Proposals

The Board and Council met in December of 2013 to establish the 2014 recreational management program for Summer flounder. At this meeting, the Board and Council initiated Draft Addendum XXV with recreational management options that included conservation equivalency and adaptive regional management options. At the ASMFC 2014 Winter Meeting, the Board approved adaptive regional management for 2014 with the following regions: Massachusetts and Rhode Island; Connecticut, New York and New Jersey; Delaware, Maryland and Virginia; and North Carolina. The Board tasked the Technical Committee (TC) with developing measures that collectively are intended to achieve, but not exceed, the 2014 recreational harvest limit.

The TC met on February 26, 2014 via conference call to review the regional management proposals for 2014. The TC evaluated the merit of each region's proposal using data from MRIP, Massachusetts summer flounder tagging program, New York headboat sampling, and volunteer angler surveys from Rhode Island, Connecticut and New Jersey. Below are the details of each option and the Technical Committee recommendations to the Board. Each proposal assumes that effort and fish availability in 2014 will be similar to the previous year.

The TC notes that a sufficient buffer between the chosen combination of regional proposals and the coastwide RHL should be considered by the Board to account for a number of sources of uncertainty:

- The scope and scale of proposed regulatory changes.
- The volatility and future evolution of MRIP, including improved charter mode catch sampling and the changes to be made to effort estimation.
- The potential for harvest by the southern states, despite recent years lower estimates.

Regional Options Comparison Table

The table below provides the projected harvest of different combinations of proposals from the North Atlantic (MA and RI) and Mid-Atlantic (CT, NY and NJ) regions relative to the 2014 RHL. Harvest for the regions that include Delaware, Maryland, Virginia and North Carolina is held constant at 358,046 fish and the 2014 RHL of 2,421,720 fish is based upon the 2014 RHL of 7.01 million pounds and an average summer flounder size of 2.89 lbs/fish. Measures from the region of Connecticut through New Jersey are listed horizontally and measures from the region of Massachusetts and Rhode Island are listed vertically. Options included in each region's proposal are included in the table (see Row and Column D) along with concisely described measures (Rows and Columns A [days in Wave 3] and B [bag@size limit, season length]). The values in Row and Column C represent what proportion of the original addendum's regional target the proposed measures are projected to harvest. To provide the Board with more flexibility, the proposed options are shown here as part of a continuum of possible scenarios that include the most conservative and the least conservative options included in each region's proposal.

As an indicator of risk, the combinations of regional proposals have been color-coded to indicate what percentage of the RHL the measures are projected to harvest. Green boxes indicate that less than 95% of the RHL is projected to be harvested if the regions were to adopt the corresponding measures. A yellow box indicates that from 95% to just less than 98% of the RHL is projected to be harvested. An orange box indicates that the combined regional measures are projected to harvest 98% to 100% of the RHL, making these combinations very risky. A red box indicates a combination of regional proposals expected to exceed the RHL and should not be considered as viable options.

The TC endorses the combination of regional options that project harvest of less than 95% of the RHL, indicated in this table with "green" shading for the reasons stated above (see bulleted points).

For the Connecticut, New York, New Jersey region there is a specified maximum number of days the season can be open in wave 3 (see Measures on the table below).

Note: The original Addendum XXV Option 3B table projected a coastwide harvest of 95.7% of the RHL. Since publication of the Addendum, states have improved upon some of the estimates used in these calculations. Under the same measures published in the original Addendum, the projected harvest is now calculated to be 95.2% of the RHL.

Table 1.Regional Options Comparison

Assumes DE thru NC projected harvest is 358,046 fish (Addendum XXV Option 3B Measures)																	
Assumes RHL of 2,421,720 fish																	
	A	B	C	D	E	Connecticut, New York & New Jersey											
A	DAYS WV 3					39dWv3	NMD	39dWv3	45dWv3	staggered	staggered	NMD	45dWv3	52dWv3	NMD	NMD	52dWv3
B		MEASURES				4@18"128d	NMD	5@18"128d	4@18"128d	4@18"122d	4@18"119d	NMD	5@18"128d	4@18"128d	NMD	NMD	5@18"128d
C			ADD XXV 3B	1,774,810		0.96	0.97	0.98	0.99	0.99	1.00	1.01	1.02	1.03	1.04	1.05	1.06
D			183,528	PROP OPTION		5	-	6	1	8	7	-	2	3	-	-	4
E				NO. FISH		1,695,949	1,721,566	1,743,942	1,754,088	1,765,109	1,766,396	1,792,558	1,804,404	1,821,918	1,845,802	1,863,551	1,874,944
Massachusetts & Rhode Island	61dWv3	8@18"245d	0.74	1	135,704	90.4%	91.5%	92.4%	92.8%	93.3%	93.3%	94.4%	94.9%	95.6%	96.6%	97.3%	97.8%
	STATUS QUO	STATUS QUO	0.87	STATUS QUO	159,661	91.4%	92.5%	93.4%	93.8%	94.3%	94.3%	95.4%	95.9%	96.6%	97.6%	98.3%	98.8%
	NMD	NMD	0.95	-	174,352	92.0%	93.1%	94.0%	94.4%	94.9%	94.9%	96.0%	96.5%	97.2%	98.2%	98.9%	99.4%
	NMD	NMD	1	-	183,528	92.4%	93.5%	94.4%	94.8%	95.2%	95.3%	96.4%	96.9%	97.6%	98.6%	99.3%	99.8%
	40dWv3	5@17"132d	1.05	2	192,428	92.8%	93.8%	94.7%	95.2%	95.6%	95.7%	96.8%	97.2%	98.0%	98.9%	99.7%	100.2%
	40dWv3	8@17"132d	1.09	4	200,556	93.1%	94.2%	95.1%	95.5%	96.0%	96.0%	97.1%	97.6%	98.3%	99.3%	100.0%	100.5%
	40dWv3	3@16.5"132d	1.10	3	201,294	93.1%	94.2%	95.1%	95.5%	96.0%	96.0%	97.1%	97.6%	98.3%	99.3%	100.0%	100.5%
	NMD	NMD	1.15	-	211,057	93.5%	94.6%	95.5%	95.9%	96.4%	96.4%	97.5%	98.0%	98.7%	99.7%	100.5%	100.9%
	NMD	NMD	1.2	-	220,234	93.9%	95.0%	95.9%	96.3%	96.8%	96.8%	97.9%	98.4%	99.1%	100.1%	100.8%	101.3%
	NMD	NMD	1.25	-	229,410	94.3%	95.3%	96.3%	96.7%	97.1%	97.2%	98.3%	98.8%	99.5%	100.5%	101.2%	101.7%
	NMD	NMD	1.3	-	238,586	94.7%	95.7%	96.6%	97.1%	97.5%	97.6%	98.7%	99.1%	99.9%	100.9%	101.6%	102.1%
	NMD	NMD	1.35	-	247,763	95.0%	96.1%	97.0%	97.4%	97.9%	98.0%	99.0%	99.5%	100.2%	101.2%	102.0%	102.4%
	40dWv3	5@16.5"132d	1.39	5	255,112	95.3%	96.4%	97.3%	97.8%	98.2%	98.3%	99.3%	99.8%	100.6%	101.5%	102.3%	102.7%
	40dWv3	8@16.5"132d	1.45	6	265,928	95.8%	96.9%	97.8%	98.2%	98.7%	98.7%	99.8%	100.3%	101.0%	102.0%	102.7%	103.2%
40dWv3	5@16"132d	1.84	7	337,981	98.8%	99.8%	100.8%	101.2%	101.6%	101.7%	102.8%	103.3%	104.0%	105.0%	105.7%	106.2%	

	RHL	NMD = No Measures Determined
	X < 95%	
	95% ≤ X < 98%	
	98% ≤ X ≤ 100%	
	X > 100%	

Where X = Projected Coastwide Harvest

Massachusetts and Rhode Island

Combined 2013 Harvest Target: MA (137,307) + RI (141,609) = 278,916 fish

Combined 2013 Landings: MA (32,936) + RI (126,725) = 159,661 fish

2013 Regulations:

Massachusetts

Minimum Size: 16"

Possession Limit: 5 fish

Open Season: May 22-September 30 (132 days)

Rhode Island

Minimum Size: 18"

Possession Limit: 8 fish

Open Season: May 1-December 31 (245 days)

Additional Notes

The TC acknowledges the very dissimilar fisheries that exist in Massachusetts & Rhode Island due to different near shore bathymetries and the length frequency distribution of available fish.

The states of Massachusetts and Rhode Island are also proposing to keep their measures at status quo, relative to their 2013 measures. To account for this, Table 1 provides an estimate of regional harvest if measures stay status quo. While status quo doesn't meet the requirements of Addendum XXV, it will not result in an estimated overharvest of RHL if the other regions take appropriate measures. The status quo for these two states is estimated to harvest the same as last year (159,661 fish).

Rhode Island For-Hire Fluke Conservation Cooperative

A group of Rhode Island based charter boat captains are requesting a distinct allocation of fluke for 2014 from Rhode Island's RHL (up to 2% of that state's allowable landings). Operating under a Hard-TAC, the captains propose to offer their fares enhanced fishing opportunities using a minimum size limit of 16", a season of May through October and no daily bag limit. The stated benefits of this program include an improved angler experience, decreased discards, regulatory stability to aid business planning and trip marketing, and increased data gathering opportunities for the RIDEM. This would be the second year this program was in operation. The first year, the Cooperative purchased RSA fish using a grant from the National Fish and Wildlife Foundation. The full proposal can be viewed at <http://www.dem.ri.gov/programs/bnatres/fishwild/pdf/sfl022014p.pdf>.

The Technical Committee noted that the harvest incurred by this proposed program would not impact the coastwide recreational harvest limit as it was a small scale program. TC members concerns include MRIP intercepts leading to biased mode estimates, the privatization of a public resource, potentially increased harvest, the self selecting nature of Cooperative membership, validation of self-reported harvest, and the potential demand by other For-Hire businesses for similar privileges.

TC Recommendations: The TC finds the methodology used to calculate the projected harvest for the different proposed measures from Massachusetts and Rhode Island to be technically sound. None of the options proposed consider the cost in fish of switching days from Wave 5 to Wave 3. Days in Wave 3 harvest ~20 times more fish than days in Wave 5. All proposed options can be considered by the Board in concert with the other regional proposals. The calculations do not incorporate any additional considerations of risk or uncertainty.

Proposed 2014 Measures

Regs: 18" - 8 fish - full season **Option 1**

NO. FISH A+B1			2014 DAYS						2014		Meets 1998 RHL Allocations		
STATE	2013 PROJ	2014 PROJ*	1	2	3	4	5	6	TOTAL	PROJ HARV**	Region sum		
MASSACHUSETTS	32,936	6,587			61	62	61	61	245	8,980	135,704	MA	RI
RHODE ISLAND	126,724	126,724			61	62	61	61	245	126,724		YES	YES

Regs: 17" - 5 fish **Option 2**

NO. FISH A+B1			2014 DAYS						2014		Meets 1998 RHL Allocations		
STATE	2013 PROJ	2014 PROJ*	1	2	3	4	5	6	TOTAL	PROJ HARV**	Region sum		
MASSACHUSETTS	32,936	13,174			40	62	30		132	13,174	192,428	MA	RI
RHODE ISLAND	126,724	216,698			40	62	30		132	179,254		YES	NO

Regs: 16.5" - 3 fish **Option 3**

NO. FISH A+B1			2014 DAYS						2014		Meets 1998 RHL Allocations		
STATE	2013 PROJ	2014 PROJ*	1	2	3	4	5	6	TOTAL	PROJ HARV**	Region sum		
MASSACHUSETTS	32,936	43,476			40	62	30		132	37,824	219,632	MA	RI
RHODE ISLAND	126,724	216,698			40	62	30		132	181,809		YES	NO

Regs: 17" - 8 fish

NO. FISH A+B1			2014 DAYS						2014		Meets 1998 RHL Allocations		
STATE	2013 PROJ	2014 PROJ*	1	2	3	4	5	6	TOTAL	PROJ HARV**	Region sum		
MASSACHUSETTS	32,936	52,698			40	62	30		132	55,332	242,055	MA	RI
RHODE ISLAND	126,724	216,698			40	62	30		132	186,722		YES	NO

Regs: 16.5" - 5 fish

NO. FISH A+B1			2014 DAYS						2014		Meets 1998 RHL Allocations		
STATE	2013 PROJ	2014 PROJ*	1	2	3	4	5	6	TOTAL	PROJ HARV**	Region sum		
MASSACHUSETTS	32,936	22,396			40	62	30		132	22,396	255,112	MA	RI
RHODE ISLAND	126,724	281,327			40	62	30		132	232,715		YES	NO

Regs: 16.5" - 8 fish

NO. FISH A+B1			2014 DAYS						2014		Meets 1998 RHL Allocations		
STATE	2013 PROJ	2014 PROJ*	1	2	3	4	5	6	TOTAL	PROJ HARV**	Region sum		
MASSACHUSETTS	32,936	23,396			40	62	30		132	23,516	265,928	MA	RI
RHODE ISLAND	126,724	281,327			40	62	30		132	242,412		YES	NO

Regs: 16" - 5 fish

NO. FISH A+B1			2014 DAYS						2014		Meets 1998 RHL Allocations		
STATE	2013 PROJ	2014 PROJ*	1	2	3	4	5	6	TOTAL	PROJ HARV**	Region sum		
MASSACHUSETTS	32,936	32,936			40	62	30		132	32,936	337,981	MA	RI
RHODE ISLAND	126,724	368,767			40	62	30		132	305,045		YES	NO

*Accounts for minimum size adjustment

**Accounts for all adjustments (season, size, bag)

Connecticut, New York, and New Jersey

Combined 2013 Harvest Target: CT (93,569) + NY (440,960) + NJ (977,998) = 1,512,527 fish

Approximate Adj. 2013 Harvest Target: CT(88,000*)+ NY(591,000*) + NJ(1,039,000*) =1,718,000 fish

Combined 2013 Landings: CT (269,651) + NY (500,167) + NJ (1,197,458) = 1,967,276 fish

*Initial targets that were adjusted by Addendum XXIV (RHL Sharing)

2013 Regulations:

Connecticut

Minimum Size: 17.5” **At 42 designated shore sites:** Minimum Size: 16”

Possession Limit: 5 fish

Possession Limit: 5 fish

Open Season: May 15-October 31 (176 days)

Open Season: May 15-Oct 31

New York

Minimum Size: 19”

Possession limit: 4 fish

Open Season: May 1- September 29 (151 days)

New Jersey

Minimum Size: 17.5”

Possession limit: 5 fish

Open Season: May 18- September 24 (133 days)

Proposed Management Strategies for 2014:

The states of Connecticut, New York, and New Jersey will adopt an 18” minimum size limit in combination with the same possession limit (4 or 5 fish) and a season of the identical length (128 days or less) but not necessarily the same start and end dates (with a specified number of days the season can be open in wave 3).

Connecticut has expressed interest in continuing their Shore Based Enhanced Opportunity Fishing Program in which anglers are allowed to harvest 16” fish at designated sites only. Connecticut has submitted separate justification for evaluation by the Technical Committee for consideration under Addendum XXV. According to MRIP, harvest by the shore mode contributes less than 3% to Connecticut's overall harvest. Designated shore site monitoring was in place in Connecticut in 2013. See their supplemental report for details.

If the Connecticut shore program is approved, New Jersey and New York may have the opportunity to adopt a similar program to be consistent within the Region. As such, New York and New Jersey are exploring options to include a limited enhanced shore fishing program. This would be a pilot program for New York and New Jersey in 2014 consisting of a limited number of sites in each state. For example, New Jersey is considering one centrally located State Park with a single entry point, which will allow enforceable regulations, provide opportunity for biological sampling, and conduct angler intercepts. Both states will need to explore the efficacy of such a program prior to adopting it for this year.

Proposed 2014 Measures: Below are 2014 regional management options for summer flounder. Option 1 was provided in Addendum XXV, all other options are relative to option 1.

TC Recommendations: The TC finds the methodology used to calculate the projected harvest for the different proposed measures from Connecticut, New York and New Jersey to be technically sound. They can all be considered by the Board in concert with the other regional proposals. Shore mode harvest at

16” in New York and New Jersey has not been considered in any of the projected harvests. As with any exemption fishery proposal, MRIP estimates could be biased by intercepts at fishing access points with special regulations. The calculations do not incorporate any additional considerations of risk or uncertainty.

The TC emphasizes for some of the proposed options for the Connecticut, New York, New Jersey region there is a specified maximum number of days the season can be open in wave 3 (see Measures on the table below). For example, if the three states selected option 3 (18”, 4-fish, Open 128 days) but violated the 52 day wave 3 limit and started on May 1, the projected harvest would exceed the regional harvest specified in the table. Days in Wave 3 are worth almost 3 times as many fish as days in Wave 5.

	MEASURES	STATE HARVEST	STATE REL. TO 3B EXAMPLE	REGIONAL HARVEST	REG. REL. TO 3B EXAMPLE
MID-ATLANTIC OPTION 1 (ORIGINAL)	MID ATL SEASON = 5/17-9/21				
MA & RI	5 @ 17", 132 DAYS			175,623	
CONNECTICUT	4 @ 18", 128 DAYS (45 Wv 3)	227,939			
NEW YORK	4 @ 18", 128 DAYS (45 Wv 3)	640,523			
NEW JERSEY	4 @ 18", 128 DAYS (45 Wv 3)	906,348		1,774,810	
DE-VA	4 @ 16", 365 DAYS			312,493	
NC	6 @ 15", 365 DAYS			45,241	
2014 RHL (7.01 million lbs, 2.88 lbs/fish)				2,431,225	
MID-ATLANTIC OPTION 2	MID ATL SEASON = 5/17-9/21				
CONNECTICUT	5 @ 18", 128 DAYS (45 Wv 3)	209,947	92%		
NEW YORK	5 @ 18", 128 DAYS (45 Wv 3)	678,954	106%		
NEW JERSEY	5 @ 18", 128 DAYS (45 Wv 3)	915,503	101%	1,804,404	102%
MID-ATLANTIC OPTION 3	MID ATL SEASON = 5/10-9/14				
CONNECTICUT	4 @ 18", 128 DAYS (52 Wv 3)	223,232	98%		
NEW YORK	4 @ 18", 128 DAYS (52 Wv 3)	680,117	106%		
NEW JERSEY	4 @ 18", 128 DAYS (52 Wv 3)	918,569	101%	1,821,918	103%
MID-ATLANTIC OPTION 4	MID ATL SEASON = 5/10-9/14				
CONNECTICUT	5 @ 18", 128 DAYS (52 Wv 3)	226,172	99%		
NEW YORK	5 @ 18", 128 DAYS (52 Wv 3)	720,924	113%		
NEW JERSEY	5 @ 18", 128 DAYS (52 Wv 3)	927,848	102%	1,874,944	106%
MID-ATLANTIC OPTION 5	MID ATL SEASON = 5/23-9/27				
CONNECTICUT	4 @ 18", 128 DAYS (39 Wv 3)	193,491	85%		
NEW YORK	4 @ 18", 128 DAYS (39 Wv 3)	606,585	95%		
NEW JERSEY	4 @ 18", 128 DAYS (39 Wv 3)	895,873	99%	1,695,949	96%
MID-ATLANTIC OPTION 6	MID ATL SEASON = 5/23-9/27				
CONNECTICUT	5 @ 18", 128 DAYS (39 Wv 3)	196,040	86%		
NEW YORK	5 @ 18", 128 DAYS (39 Wv 3)	642,980	100%		
NEW JERSEY	5 @ 18", 128 DAYS (39 Wv 3)	904,922	100%	1,743,942	98%
MID-ATLANTIC OPTION 7					
CONNECTICUT	4@18", 119 DAYS (52 Wv 3)	225,928	99%		
NEW YORK	4@18", 119 DAYS (52 Wv 3)	672,907	105%		
NEW JERSEY	4@18", 119 DAYS (39 Wv 3)	867,561	96%	1,766,396	100%
MID-ATLANTIC OPTION 8					
CONNECTICUT	4@18", 122 DAYS (45 Wv 3)	209,784	92%		
NEW YORK	4@18", 122 DAYS (52 Wv 3)	675,310	105%		
NEW JERSEY	4@18", 122 DAYS (39 Wv 3)	880,015	97%	1,765,109	99%

Delaware, Maryland, and Virginia

Combined 2013 Harvest Target: DE (78,512) + MD (73,852) + VA (417,657) = 570,021 fish

Combined 2013 Landings: DE (48,897) + MD (48,786) + VA (187,429) = 285,112 fish

2013 Regulations:

Delaware

- Minimum Size: 17"
- Possession Limit: 4 fish
- Open Season: All year (365 days)

Maryland

- Minimum Size: 16"
- Possession Limit: 4
- Open Season: March 28- December 31 (275 days)

Virginia

- Minimum Size: 16"
- Possession Limit: 4
- Open Season: All year (365 days)

Proposed 2014 Measures: Delaware proposes to decrease its minimum size by 1". Maryland extended its season to 365 days. All other measures for all 3 states will remain identical to 2013 regulations.

Option	Min Size	Bag Limit	Open Season
1	16"	4	All year (365 days)

Potomac River Fisheries Commission (PRFC) will set measures consistent with the Delaware through Virginia region of 16 inch size limit, 4 fish possession limit, and open season all year.

TC Recommendations: The TC finds the methodology used to calculate the projected harvest for the proposed measures from Delaware, Maryland, and Virginia to be technically sound. They can be considered by the Board in concert with the other regional proposals. The calculations do not incorporate any additional considerations of risk or uncertainty.

North Carolina

2013 Harvest Target: 140,000 fish

2013 Landings: 49,632 fish

2013 Regulations:

- Minimum Size: 15"
- Possession Limit: 6 fish
- Open Season: All Year (365 days)

Proposed 2014 Measures: Status Quo

TC Recommendations: The TC finds the methodology used to calculate the projected harvest for the proposed measures from North Carolina to be technically sound. It can be considered by the Board in concert with the other regional proposals. The calculations do not incorporate any additional considerations of risk or uncertainty.

Black Sea Bass Recreational Proposals

The Addendum XXV sets forth a management program for the recreational fishery that is designed to reduce the coastwide recreational harvest by 7% (based on projected 2013 harvest) in order to not exceed the recreational harvest limit (RHL) of 1.23 million fish in 2014. The addendum approved the continuation of ad hoc regions: a northern region (Massachusetts – New Jersey) and southern region (Delaware – North Carolina) for the 2014 black sea bass recreational fishery.

Each region will implement recreational black sea bass management programs that utilize minimum size limits, maximum possession limits, and seasonal closures that are designed to achieve a specific harvest reduction that, when combined with the other regions in the management unit, achieve the required coastwide reduction for 2014. While not required, states will work to develop consistent regulations for their recreational management programs within the region. The states of Massachusetts through New Jersey were required to reduce their harvest by 7% based on the projected region performance from 2013. The states of Delaware through North Carolina (North of Cape Hatteras) agreed to set their measures consistent with the proposed Federal regulations (MAFMC recommended 12.5 inch TL minimum fish size, 15 fish possession limit, and open seasons from May 19 to September 18 and October 18 to December 31 to NOAA Fisheries). In reviewing updated MRIP wave 1-6 data, the required reduction needed to constrain harvest to the 2014 RHL is approximately 3.2% from the 2013 coastwide harvest. Given the updated MRIP harvest estimate data for waves 1-6, the TC members for the northern region developed proposals that considered measures that constituted a 7% and 3.2% reduction. TC members for the southern region developed alternatives from the proposed federal measures to account for the needed 3.2% reduction.

Methods:

The regions will attempt to construct regulations that are as similar as possible. While this is a goal of the following analyses, the Board adopted the ad hoc regional approach to allow some flexibility in setting management measures. This flexibility was an attempt to recognize that the states, particularly in the northern region, can have unique fisheries and a consistent set of regulations can have disparate effects across the region. In all cases below, the use of multiple metrics in an option uses the interaction calculation:

Total Increase = $(X+Y) - (X*Y)$;

X = The percentage decrease associated with seasonal closure(s).

Y = The percentage decrease associated with size/possession limit.

Proposed Management Strategies for 2014

The following are the proposals from the states of the northern and southern region.

Massachusetts

2013 harvest estimate data are preliminary, and 2013 bag and size data are not currently available for analyses. Additionally, because those estimates may be influenced (confounded) by the FH LOA fleet harvest exemption seasonal reductions were calculated as the proportional reduction in the 2012 harvest associated with taking days out of the waves calculated from the average of the 2012 and 2013 harvests by wave divided by the number of open days in each wave. Since the 2012 Wave 3 estimates were aberrantly high, likely due to a very early arrival of sea bass on our grounds and high MRIP survey error, the use of the two year average tempers the higher daily harvest reduction rates derived from the 2012 data alone. In essence this works as a small conservation buffer against seasonal recoupment

effects. This is consistent with the methodology we used in 2013 that was successful in reducing our harvest to well below the target level.

For bag limit analyses, the complete 2012 MRIP type 3 harvest data set for Massachusetts was used, with 362 total positive intercepts of type 3 single contributor bags, including all modes and the three waves. All regulatory options presented below total to the expected 29% reduction in harvest from the base year regardless of if they cover multiple modes or a single mode, thus negating the need for harvest proportional reduction calculations for each mode. If the smaller additional reduction is required this year (3%) the options will be adjusted accordingly.

Massachusetts Proposed Management Measures for 2014

Applicable Mode(s)	Possible Bag limits	Possible Season(s)
All	6	May 17- September 28 or May 11 to Sept 8
	7	May 17 to September 20
	8	May 17 to September 15
Private Modes Only	6	May 11 to October 13
	7	May 11 to September 20
	8	May 17 to September 27
For Hire Modes Only	10	May 11 –June 20, and July 1 – Aug 20, and Sept 1- Oct 15
	10	May 11-July 18 and Sept 1 – Oct 31
	10	May 24 – August 17
	8	June 1 – Sept 30
	8	May 11 – July 30
	8	May 11- July 24 and Sept 1 – Oct 13

Notes: If separate regulations are chosen for the FH and Private modes then season closures and bag limits must be calculated and chosen separately for both modes. Above options are only examples, actual options invoked may be slightly different in both bag limit and/or season dates but would use the same analysis methodologies and base data.

TC Recommendation: Partial Approval

The TC only approves options that apply to all modes, not the split modes. The For-Hire estimates are confounded by the harvest of the LOA fleet. TC members raised concerns regarding the effect increasingly complex regulations would have on our ability to calculate and evaluate regulatory proposals. Massachusetts has a potential to harvest large amounts of black sea bass and its For-Hire fishery accounts for an average of 30% of their fishery in recent years. Due to these concerns, the TC recommends that there not be separate regulations for the For Hire and Private modes.

Rhode Island

Rhode Island (hereafter 3 state region) explored two methods of estimating 2014 recreational black sea bass options. Those considered included; 1.) daily harvest rates based on RI's harvest from 2013; and 2.) bag and size calculations utilizing RI Volunteer Angler Survey (VAS) data along with a bag limit simulation.

Changes in harvest due to possession limit adjustments were analyzed using a unique procedure. Given the lack of available data to calculate the effects of changes to bag limits, a methodology was created to simulate a hypothetical distribution that was randomly sampled in an effort to determine an effect from changing bag limit size. Seasonal adjustments were calculated by taking the total harvest by wave and then dividing this value by the number of open days in the wave. This creates a daily harvest value, and this can then be used to determine the effects of a seasonal change on harvest.

Rhode Island Proposed Management Measures for 2014

Bag Limit		Minimum Size	Wave 3 (open days)	Wave 4 (open days)	Wave 5 (open days)	Wave 6 (open days)	Reduction
Split Bag	3	13	9	62	0	0	0.035
	7		0	0	61	61	
Split Bag	3	13	15	62	0	0	0.033
	7		0	0	58	0	
Split Bag	3	13	12	62	0	0	0.036
	5		0	0	61	30	

TC Recommendation: Approve

Connecticut

Harvest per day rates for waves 3 - 5 came directly from the 2013 landings provided by MRIP. Both options meeting the 3.2% and 7% reduction are performed by removing open fishing days from wave 3. Removing 3 days is a 4% reduction and removing 5 days is a 7% reduction.

The MRIP sample size of measured black sea bass in 2013 was only 50 fish. This sample size did not allow an accurate length frequency table to be created for making liberalization estimates for the 2014 fishing year. As an alternative, the 2013 Connecticut Volunteer Angler Survey (VAS) data had a sample size of 1,200 lengths and was used to calculate size limit liberalizations. CT does not intend on making adjustments to the minimum size in the 2014 fishing season, but analysis was performed for review regardless.

Party and Charter Vessel Program

In 2013 due to an overestimation of the average size by MRIP, States were allowed to reduce their reduction late in the season by 7%. Rather than making adjustments to black sea bass regulations already in place and printed, Connecticut opted to use the additional fish for a longer party and charter season. In order for vessels to participate in the program, they were required to register with the state and submit mandatory monthly catch reports. If vessels failed to submit their reports, they were immediately dropped from the program. A list of active qualifying vessels was maintained and shared with Conservation Law Enforcement. The program allowed party charter vessels an 8 fish creel limit from June 15 to November 30. In comparison to other modes and vessels that did not participate, it allowed for an additional 5 fish from 6/15/2013 to 8/31/2013 and 8 fish from 10/30/2013-11/30/2013.

In 2013 there were a total of 38 registered vessels (2 Party boats and 36 charter boats), of which 22 participated with a total of 300 trips harvesting a total of 5,722 fish. Of these 5,722 fish, only 1,390 (<1%) are attributed to the black sea bass party and charter vessel program.

Connecticut would like to continue this party and charter black sea bass program into 2014.

Connecticut Proposed Management Measures for 2014

Option	Season	Creel	Min Size	% Reduction
Status Quo	6/15/14 – 8/31/14	3	13”	0%
	9/1/14 – 10/29/14	8		
1	6/20/14 – 8/31/14	3	13”	7%
	9/1/14 – 10/29/14	8		
2	6/18/14 – 8/31/14	3	13”	4%
	9/1/14 – 10/29/14	8		

TC Recommendation: Approve

TC members noted that Connecticut’s For-Hire program has the same potential for difficulty that the MA LOA has demonstrated. The small harvest from the party and charter vessel program relative to the other modes that comprise the Connecticut state black sea bass harvest makes this less problematic.

New York

Wave specific daily rates are generated by dividing the MRIP Wave Estimates of harvest (A+B1 fish) by the number of days open in each wave. MRIP estimates used in the calculations were current as of February 18, 2014.

Possession limit adjustments were calculated using angler specific catch frequency data collected by NYSDEC staff sampling on 18 headboat trips in 2013. Five out of the 18 headboat trips targeted black sea bass at some point during the trip.

NY's Marine Resource Advisory Council requested a lower possession limit for some part of the fishing season be considered when generating regulatory options. In these examples, a possession limit of 3 fish was considered during Wave 4, and the possession limit reverted back to 8 fish during Waves 5 and 6. That methodology could be used for other combinations of season and possession limit. No changes in the possession limit will occur mid-Wave.

New York's Proposed Management Measures for 2014

	SEASON	DAYS WV 3	DAYS WV 4	DAYS WV 5	DAYS WV 6	PROJ HARVEST	REDUCTION
2013 MEASURES	7/10-12/31 8 FISH @ 13"		53	61	61	337,250	
-7.0% REDUX REQUIRED							
OPTION 1	7/15-12/31 8 FISH @ 13"	0	48	61	61	313,790	-7.0%
OPTION 2	7/6-8/31 3 FISH @ 13"	0	57				
	9/1-12/31 8 FISH @ 13"			61	61	311,969	-7.5%
-3.0% REDUX REQUIRED							
OPTION 1	7/13-12/31 8 FISH @ 13"	0	50	61	61	323,174	-4.2%
OPTION 2	7/3-8/31 3 FISH @ 13"	0	60				
	9/1-12/31 8 FISH @ 13"			61	61	323,726	-4.0%

TC Recommendation: Approve

New Jersey

New Jersey explored several methods of estimating 2013 recreational black sea bass options. Those considered included estimates of harvest by wave based on MRIP and New Jersey Volunteer Angler Survey (VAS). Ultimately, a combination of both data sources was utilized to allow New Jersey the flexibility to reduce the possession limit as well as season in either combination or individually. The MRIP data provided landings estimates for season reductions while the New Jersey VAS data provided the data for daily possession reductions.

All options were developed using the New Jersey MRIP harvest data from 2013. To create a daily possession bag reduction table, the New Jersey VAS data were used by taking the average harvest from 2011-2013. New Jersey is considering a split bag approach which would present a size limit of 12.5 inches and a possession limit of 15 fish during waves 3, 5, and 6 and a reduced possession limit during wave 4.

Please keep in mind that the options listed reflect potential options. New Jersey's Marine Fisheries Council's Black Sea Bass Committee and its advisors will convene to recommend their preferred options to the New Jersey Marine Fisheries Council for 2014. The Council will then meet to select an option. The option they select may or may not be one of the examples provided, but it will have been developed using the same methodology as the options listed below. The Technical Committee has been provided the spreadsheet with the calculations for the percent reductions.

New Jersey's Proposed Management Measures for 2014

Management Options for NJ's 2014 Black Sea Bass Recreational Fishery Based on Average Daily Harvest Rates from 2013 MRIP data achieving a **7.0** percent reduction in harvest.

Examples of Potential 2014 NJ Black Sea Bass Recreational Measures Achieving a 3.2 % Reduction			
Possession	Size	Total Days and Open Season	Total Reduction from Measures
		155	
20 fish at	12.5	May 19-August 8 and Oct 20 - Dec 31	9.4%
		157	
15 fish at	12.5	May 19 - Aug 8 and Oct 18 - Dec 31	8.9%
		159	
15 fish at	12.5	May 19 - Aug 17 and Oct 25 to Dec 31	8.2%
		161	
15 fish at	12.5	May 19 - Aug 26 and Nov 1 - Dec 31	7.4%
		161	
12 fish at	12.5	May 19 - Aug 12 and Oct 18 - Dec 31	7.9%
Split Bag		176	
15/5/15/15	12.5	May 19 - Aug 27 and Oct 18 - Dec 31	7.6%
fish at			
*****2014 Federal Measures*****			
15 Fish at	12.5	May 19 - Sept 18 and Oct 18 - Dec 31	

Management Options for NJ's 2014 Black Sea Bass Recreational Fishery Based on Average Daily Harvest Rates from 2013 MRIP data achieving a **3.2** percent reduction in harvest.

Examples of Potential 2014 NJ Black Sea Bass Recreational Measures Achieving a 3.2 % Reduction			
Possession	Size	Total Days and Open Season	Total Reduction from Measures
		159	
20 fish at	12.5	May 19-August 10 and Oct 18 - Dec 31	3.7%
		161	
15 fish at	12.5	May 19 - Aug 12 and Oct 18 - Dec 31	3.9%
		162	
15 fish at	12.5	May 19 - Aug 20 and Oct 25 to Dec 31	4.4%
		164	
15 fish at	12.5	May 19 - Aug 29 and Nov 1 - Dec 31	3.6%
		164	
12 fish at	12.5	May 19 - Aug 29 and Oct 18 - Dec 31	4.2%
Split Bag		180	
15/5/15/15	12.5	May 19 - Aug 31 and Oct 18 - Dec 31	4.1%
fish at			
*****2014 Federal Measures*****			
15 Fish at	12.5	May 19 - Sept 18 and Oct 18 - Dec 31	

TC Recommendation: Approve

Southern Region (Delaware, Maryland, Virginia, and North Carolina)

The Council recommended to NOAA Fisheries the federal measures for the 2014 fishing year be:

12.5 inch TL minimum fish size, 15 fish possession limit, and open season of May 19-September 18 and Oct 18-December 31 so long as the combined reduction in state waters and federal waters landings meet NOAA requirements.

These measures were intended to achieve the 2014 recreational harvest limit (RHL) (2.26 million pounds or 1,189,474 fish), with the expectation that the states in the southern region would set their measures consistent with these. The estimated reduction in harvest of these measures was 7.06% for the coast and 10.9% for the southern region.

Due to updated MRIP waves 1-6 estimates previously mentioned, the reduction required to constrain landings to the 2014 RHL is now 3.2%. This amount of reduction for the southern region can be achieved with a decrease in creel to 15 fish (1.7%), the loss of Wave 1 which had reported landings in North Carolina (0.7% for the entire wave) and three days of closure in wave five (0.39 per day times three days = 1.2%). The total reduction of these combined measures is 3.47%.

Given the smaller required reduction, the following measures could be considered for federal waters in 2014:

12.5 inches TL minimum fish size, 15 fish possession limit, and open season May 19-September 18 and October 9-December 31.

This includes three more closed days in wave five than in 2013, as well as undeterminable additional closure for all of wave one as a bonus conservation measure.

Proposal for 2014 Regional Summer Flounder Management Options in Massachusetts and Rhode Island

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Division of Fish and Wildlife*

Background:

For 2014 Addendum XXV to the fishery management plan for summer flounder requires regional measures be developed along the coast. The northern region is comprised of two states; Rhode Island (RI) and Massachusetts (MA). These two states would have had a combined recreational target of approximately 279,000 fish (137,000+142,000). Given the language in the addendum, the northern region partners are unclear as to what the regional target is, and it is also unclear what the accountability metric will be in 2015. Given these uncertainties, the northern region partners have developed a number of different options using consistent methodology showing a range of possible management scenarios for review by the technical committee.

Action:

Regional measures were adopted by the Atlantic States Marine Fisheries Commission (ASMFC) and Mid-Atlantic Fisheries Management Council (MAFMC) in lieu of a coastwide option for 2014. Therefore, RI and MA are required to develop a methodology for regional management measures (i.e. possession limits, size limits, and seasons) which when combined with the other regions along the coast will not exceed the coastwide recreational harvest.

Method:

Size Limits

Two data sets were used to calculate projected increases or decreases in harvest from altering the regulatory minimum size. RI used the MRIP dataset prepared by TC Chair John Maniscalco of expanded harvest at length. MA chose to use a more comprehensive dataset than exists in the MRIP data for MA. This is the MA summer flounder tagging program. The TC representative from MA argues that this data set is the most representative to use for the temporal and spatial distribution of the MA recreational fishery as it pertains to summer flounder. Lengths have been obtained for all fluke captured in the study by rod and reel at popular recreational fishing spots throughout the South Coast and Cape Cod waters continuously since 2009.

When using the MRIP dataset, RI developed a generalized linear model for the dataset which analyzed harvest relative to fish total size. The generalized linear model used a negative binomial distribution with the following formula:

Harvest ~ Length in inches

The results of the regression can be found in table 1 below.

MA used the raw data from the tagging dataset and calculated, in this case, the projected decrease from increasing the size limit in MA. The results are found in table 1 below.

Table 1. The projected effects of various size limits on the 2014 summer flounder recreational landings in the Northern Region, calculated as percent increase from current management configuration.

Size	16"	16.5"	17"	17.5"	18"
State					
RI	191%	122%	71%	31%	0%
MA	0%	-32%	-60%	Did no calculate	-80%

Bag Limit Adjustments

Changes in harvest due to possession limit adjustments were analyzed using a unique procedure. Given the lack of available data to calculate the effects of changes to bag limits, a methodology was created to simulate a hypothetical distribution that was randomly sampled in an effort to determine an effect from changing bag limit size. The procedure began by using RI volunteer angler data to determine the mean bag limit harvested by an angler. This value was found to be 2.5 fish per angler. Next, the existing dataset was reviewed to determine the prior distribution shape, which was then used as the hypothetical distribution. The distribution was determined to be a negative binomial distribution. A simulation was then run using R statistical software to randomly sample 10,000 replicates from a negative binomial distribution with a mean of 2.5 (the pre-determined average number of fish per angler in RI) and a shape that would keep the distribution between the upper and lower bound of the existing bag limits. This data was then used to determine the percent change in harvest by altering the bag limits. The code is available in Appendix 1. The same procedure was used for MA, but lacking any dataset to determine a mean number of fish per angler in MA, the mean number of fish per angler was assumed to be slightly less than RI's mean due to a lower bag limit in MA. This mean was set at 2 fish per angler. The results of the analysis are indicated below in table 2.

Table 2. The projected effects of various bag limits on the 2014 summer flounder recreational landings in the Northern Region, calculated as percent increase from current management configuration.

Bag	3	4	5	6	7	8
State						

RI	-24%	-11%	-4%	-1%	-0.4%	0%
MA	-13%	-4%	0%	1%	1.9%	2%

Seasonal Adjustments

Seasonal adjustments were calculated by taking the total projected harvest by wave after calculating the increase from any minimum size adjustments as defined above, and then dividing this value by the number of open days in the wave. This creates a daily harvest value, and this can then be used to determine the effects of a seasonal change on harvest.

Potential Management Strategies for 2014

The following table represents a series of potential regulatory scenarios with their associated harvest effects determined by the methodology as noted above for the Northern Region. We have bounded the scenarios with status quo options for each state as an upper and lower bound. It is important to note that this methodology does not account for any interaction in measures and therefore may create a situation of overestimation of a reduction and underestimation of a liberalization.

Table 3. Management scenarios for the Northern Region.

Regs: 18" - 8 fish - full season

NO. FISH A+B1	2013 PROJ	2014 PROJ*	2014 DAYS						TOTAL	2014 PROJ HARV**	Meets 1998 RHL Allocations		
			1	2	3	4	5	6			MA	RI	
MASSACHUSETTS	32,936	4,282			61	62	61	61	245	5,837	Region sum	MA	RI
RHODE ISLAND	126,724	126,724			61	62	61	61	245	126,724	132,561	YES	YES
CONNECTICUT	269,653	215,722			45	62	21		128	207,218			
NEW YORK	500,167	750,251			45	62	21		128	640,523			
NEW JERSEY	1,197,457	922,042			45	62	21		128	906,348			
DELAWARE	48,821	76,161	59	61	61	62	61	61	365	76,161			
MARYLAND	48,521	48,521	59	61	61	62	61	61	365	48,521			
VIRGINIA	187,428	187,428	59	61	61	62	61	61	365	187,428			
NORTH CAROLINA	45,936	45,936	59	61	61	62	61	61	365	45,936			

Regs: 17" - 5 fish

NO. FISH A+B1	2013 PROJ	2014 PROJ*	2014 DAYS						TOTAL	2014 PROJ HARV**	Meets 1998 RHL Allocations		
			1	2	3	4	5	6			MA	RI	
MASSACHUSETTS	32,936	13,174			40	62	30		132	13,174	Region sum	MA	RI
RHODE ISLAND	126,724	216,698			40	62	30		132	179,254	192,428	YES	NO
CONNECTICUT	269,653	215,722			45	62	21		128	207,218			
NEW YORK	500,167	750,251			45	62	21		128	640,523			
NEW JERSEY	1,197,457	922,042			45	62	21		128	906,348			
DELAWARE	48,821	76,161	59	61	61	62	61	61	365	76,161			
MARYLAND	48,521	48,521	59	61	61	62	61	61	365	48,521			
VIRGINIA	187,428	187,428	59	61	61	62	61	61	365	187,428			
NORTH CAROLINA	45,936	45,936	59	61	61	62	61	61	365	45,936			

Regs: 16.5" - 3 fish

NO. FISH A+B1	2013 PROJ	2014 PROJ*	2014 DAYS						TOTAL	2014 PROJ HARV**	Meets 1998 RHL Allocations		
			1	2	3	4	5	6			MA	RI	
MASSACHUSETTS	32,936	22,396			40	62	30		132	19,485	Region sum	MA	RI
RHODE ISLAND	126,724	281,327			40	62	30		132	181,809	201,294	YES	NO
CONNECTICUT	269,653	215,722			45	62	21		128	207,218			
NEW YORK	500,167	750,251			45	62	21		128	640,523			
NEW JERSEY	1,197,457	922,042			45	62	21		128	906,348			
DELAWARE	48,821	76,161	59	61	61	62	61	61	365	76,161			
MARYLAND	48,521	48,521	59	61	61	62	61	61	365	48,521			
VIRGINIA	187,428	187,428	59	61	61	62	61	61	365	187,428			
NORTH CAROLINA	45,936	45,936	59	61	61	62	61	61	365	45,936			

Regs: 17" - 8 fish

NO. FISH A+B1	2013 PROJ	2014 PROJ*	2014 DAYS						TOTAL	2014 PROJ HARV**	Meets 1998 RHL Allocations		
			1	2	3	4	5	6			MA	RI	
MASSACHUSETTS	32,936	13,174			40	62	30		132	13,833	Region sum	MA	RI
RHODE ISLAND	126,724	216,698			40	62	30		132	186,722	200,556	YES	NO
CONNECTICUT	269,653	215,722			45	62	21		128	207,218			
NEW YORK	500,167	750,251			45	62	21		128	640,523			
NEW JERSEY	1,197,457	922,042			45	62	21		128	906,348			
DELAWARE	48,821	76,161	59	61	61	62	61	61	365	76,161			
MARYLAND	48,521	48,521	59	61	61	62	61	61	365	48,521			
VIRGINIA	187,428	187,428	59	61	61	62	61	61	365	187,428			
NORTH CAROLINA	45,936	45,936	59	61	61	62	61	61	365	45,936			

Regs: 16.5" - 5 fish

NO. FISH A+B1	2013 PROJ	2014 PROJ*	2014 DAYS						TOTAL	2014 PROJ HARV**	Meets 1998 RHL Allocations		
			1	2	3	4	5	6			MA	RI	
MASSACHUSETTS	32,936	22,396			40	62	30		132	22,396	Region sum	MA	RI
RHODE ISLAND	126,724	281,327			40	62	30		132	232,715	255,112	YES	NO
CONNECTICUT	269,653	215,722			45	62	21		128	207,218			
NEW YORK	500,167	750,251			45	62	21		128	640,523			
NEW JERSEY	1,197,457	922,042			45	62	21		128	906,348			
DELAWARE	48,821	76,161	59	61	61	62	61	61	365	76,161			
MARYLAND	48,521	48,521	59	61	61	62	61	61	365	48,521			
VIRGINIA	187,428	187,428	59	61	61	62	61	61	365	187,428			
NORTH CAROLINA	45,936	45,936	59	61	61	62	61	61	365	45,936			

Regs: 16.5" - 8 fish

NO. FISH A+B1	2013 PROJ	2014 PROJ*	2014 DAYS						TOTAL	2014 PROJ HARV**	Meets 1998 RHL Allocations		
			1	2	3	4	5	6			MA	RI	
MASSACHUSETTS	32,936	22,396			40	62	30		132	23,516	Region sum	MA	RI
RHODE ISLAND	126,724	281,327			40	62	30		132	242,412	265,928	YES	NO
CONNECTICUT	269,653	215,722			45	62	21		128	207,218			
NEW YORK	500,167	750,251			45	62	21		128	640,523			
NEW JERSEY	1,197,457	922,042			45	62	21		128	906,348			
DELAWARE	48,821	76,161	59	61	61	62	61	61	365	76,161			
MARYLAND	48,521	48,521	59	61	61	62	61	61	365	48,521			
VIRGINIA	187,428	187,428	59	61	61	62	61	61	365	187,428			
NORTH CAROLINA	45,936	45,936	59	61	61	62	61	61	365	45,936			

Regs: 16" - 5 fish

NO. FISH A+B1	2013 PROJ	2014 PROJ*	2014 DAYS						TOTAL	2014 PROJ HARV**	Meets 1998 RHL Allocations		
			1	2	3	4	5	6			MA	RI	
MASSACHUSETTS	32,936	32,936			40	62	30		132	32,936	Region sum	MA	RI
RHODE ISLAND	126,724	368,767			40	62	30		132	305,045	337,981	YES	NO
CONNECTICUT	269,653	215,722			45	62	21		128	207,218			
NEW YORK	500,167	750,251			45	62	21		128	640,523			
NEW JERSEY	1,197,457	922,042			45	62	21		128	906,348			
DELAWARE	48,821	76,161	59	61	61	62	61	61	365	76,161			
MARYLAND	48,521	48,521	59	61	61	62	61	61	365	48,521			
VIRGINIA	187,428	187,428	59	61	61	62	61	61	365	187,428			
NORTH CAROLINA	45,936	45,936	59	61	61	62	61	61	365	45,936			

*Accounts for minimum size adjustment

**Accounts for all adjustments (season, size, bag)

```
#####Code by: Jason McNamee, Feb 2014#####
```

```
#####RI data - from eLogbook
```

```
dat=c(1,      6,    2,    1,    2,    2,    1,    1,    1,    1,    6,
      1,      5,    1,    6,    4,   10,    1,    2,    2,    1,    3,
      1,      3,   11,    5,   13,    7,    2,    5, 1,    1,    1,    1,
      1,      1,   10,    1,   14,    2,    2,    1,    1,    1,    1,
      3,      2,    2,    2,    2,    1,    1,    1,    1,    1,    2,
      2,      1,    2,    1,    2,    1,    1,    1,    1,    1,    1,
      1,      2,    1,    2,    1,    2,    1,    1,    1,    1,    6,
      1,      3,    2,    2)
```

```
mu=sum(dat)/length(dat)
```

```
x1 = rbinom(10000, mu = mu, size = 200)
```

```
h1 = hist(x1, breaks = 9, plot = T)
```

```
bg7=1-(sum(h1$counts[1:7])/sum(h1$counts))
```

```
bg6=1-(sum(h1$counts[1:6])/sum(h1$counts))
```

```
bg5=1-(sum(h1$counts[1:5])/sum(h1$counts))
```

```
bg4=1-(sum(h1$counts[1:4])/sum(h1$counts))
```

```
bg3=1-(sum(h1$counts[1:3])/sum(h1$counts))
```

```
bg7
```

```
bg6
```

```
bg5
```

```
bg4
```

```
bg3
```

```
#####MA data - simulated estimated that mean=2
```

```
x2 = rbinom(10000, mu = 2, size = 50)
```

```
h2 = hist(x2, breaks = 10, plot = T)
```

```
bg8ma=(sum(h2$counts[1:8])/sum(h2$counts[1:5]))
```

```
bg7ma=(sum(h2$counts[1:7])/sum(h2$counts[1:5]))
```

```
bg6ma=(sum(h2$counts[1:6])/sum(h2$counts[1:5]))
```

```
bg5ma=(sum(h2$counts[1:5])/sum(h2$counts[1:5]))
```

```
bg4ma=1-(sum(h2$counts[1:4])/sum(h2$counts[1:5]))
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bg3ma=1-(sum(h2$counts[1:3])/sum(h2$counts[1:5]))
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**RHODE ISLAND
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**



**Commonwealth of
Massachusetts
Division of Marine Fisheries**

MEMORANDUM

TO: Robert Beal, Executive Director, ASMFC

FROM: David E. Pierce, Deputy Director, MA Division of Marine Fisheries
Robert Ballou, Assistant to the Director, RI Department of Environmental Management

DATE: February 24, 2014

RE: 2014 Summer Flounder Recreational Fishery Measures

On behalf of the Commonwealth of Massachusetts and the State of Rhode Island, we hereby offer to the ASMFC's Summer Flounder, Scup, and Black Sea Bass Board our shared position relative to the new adaptive regional management approach for recreational summer flounder adopted by the Board via Addendum XXV to the Summer Flounder, Scup, and Black Sea Bass FMP.

Addendum XXV calls upon us to identify a single regional measure involving the same size limit, bag limit, and season length, that would constrain total harvest within the region in 2014 to within a recommended reference amount of 183,528 fish. The Addendum also clearly states that the accountability standard for each state continues to be each state's 1998-based RHL, notwithstanding the new ad hoc regional harvest limit.

Accordingly, we developed a range of management options for the new MA/RI region and assessed them in accordance with the provisions set forth by the Addendum. Per our assessment, we find that there is no viable option acceptable to both states. As a result, it is our intent to remain at status quo for 2014 with separate MA and RI regulations that are the same as those that were in effect in 2013, i.e.:

- For Massachusetts: 16" min. size, 5-fish limit, and a 132-day season running from May 22 to Sept 30; and
- For Rhode Island: 18" min. size, 8-fish limit, and a 244-day season running from May 1 to Dec 31.

It is our understanding, and our representation to the Technical Committee and the Board that this decision to remain at status quo for 2014 complies with two key aspects of Addendum XXV, namely:

The regulations are projected to keep both states under our respective RHLs for 2014. Specifically, the regulations project a total harvest of 32,936 fish for Massachusetts, well

below the 2014 RHL for Massachusetts of 133,195 fish. And the regulations project a total harvest of 126,724 fish for Rhode Island, comfortably below the 2014 RHL for Rhode Island of 138,038 fish.

The regulations are projected to keep both states under the recommended reference amount (which seems akin to an ad hoc regional harvest level) set forth by the Addendum. Specifically, the combined total harvest by the two states in 2014 is projected to be 159,660 fish, well below the recommended reference amount of 183,528 fish.

The regulations are conservative and reflect a willingness by both states to constrain harvests well below that which would have otherwise been allowed under state-by-state conservation equivalency. Specifically, under conservation equivalency (which governed our fisheries through 2013), Massachusetts and Rhode Island both could have liberalized and expanded harvests up to a total of 271,233 fish. That would have involved a 70 percent increase in total harvest by the two states in 2014 relative to 2013. In essence, the two states are forgoing that opportunity, and in so doing, decreasing their impact on the resource and increasing their contribution to the “pool” of underutilized fish available to other states for use in implementing the provisions of the Addendum.

Thus, while this decision by Massachusetts and Rhode Island is inconsistent with one provision of the Addendum – i.e., it does not result in regulatory synchrony – it is consistent with other key provisions and embodies a cooperative approach. We therefore hope and expect that the Board will see fit to approve this balanced and well-reasoned approach by the two states.

Above and beyond the points set forth above, there are two additional, overarching factors that informed and influenced our decision.

The first is risk. We find that the approach adopted by the Board for 2014 puts all of the states at risk given the increased probability of the coastwide RHL being exceeded, and it puts Rhode Island at particular risk given the likelihood that any regional measure adopted for RI and MA would cause Rhode Island to exceed its state-based RHL for 2014.

The second is disproportionate impacts. We find that all of the management options for the RI/MA region would adversely and disproportionately impact Massachusetts by imposing a significant increase in minimum size. The Massachusetts summer flounder fishery is known to be significantly different from the Rhode Island fishery, as it is more dependent on access to smaller fish. The Addendum, as adopted by the Board, moves Massachusetts from a position of being able to liberalize its harvest by over 300 percent, to having to constrain its harvest by upwards of 80 percent.

In conclusion, we appreciate and support the Board’s efforts to achieve a fairer and more equitable approach to recreational fluke management, but for the reasons stated above, we find that there is no viable regional option acceptable to Massachusetts and Rhode Island. While we regret our inability to meet all provisions set forth by the Addendum, we are comfortable in our ability to move forward in 2014 in a way that supports the other states in their efforts to comply with the Addendum.

cc: Fluke, Scup, and Black Sea Bass Board Members & Technical Committee



Division of Marine Fisheries
333 Ferry Rd,
Old Lyme CT 06371
Rob Klee, Commissioner



New York State
Department of Environmental
Conservation
Division of Fish, Wildlife and
Marine Resources
205 N. Belle Mead Rd, Suite 1
East Setauket, NY 11733
Joe Martens, Commissioner



NEW JERSEY DIVISION OF
Fish and Wildlife
P.O. Box 400
Trenton, NJ 08625-0400
David Chanda, Director

Memorandum

TO: Kirby Rootes-Murdy, FMP Coordinator
Atlantic States Marine Fisheries Commission

FROM: Gregory Wojcik, Biologist
Connecticut Department of Energy and Environmental Protection

John Maniscalco, Biologist
New York State Department of Environmental Conservation

Peter Clarke, Biologist
New Jersey Department of Environmental Protection

DATE: February 24, 2014

SUBJECT: Connecticut, New York, and New Jersey Regional Summer Flounder Recreational
Fishery Management Proposal for 2014

Attached are the Connecticut, New York, and New Jersey Regional options to manage their 2014 recreational summer flounder fishery. All Options contain modifications to daily possession limit, size limit, and open season and include an 18" minimum size limit. This represents a ½" increase in minimum size for both CT and NJ, and a 1" decrease in minimum size for NY. A spreadsheet that includes data and formulas used to calculate various management options has been provided to the ASMFC's Summer Flounder, Scup and Black Sea Bass Technical Committee.

Background:

At their February 2014 meeting, the ASMFC's Summer Flounder, Scup, and Black Sea Bass Management Board approved Addendum XXV which implements adaptive regional management measures for the 2014 recreational summer flounder fishery. These measures require states in a region including CT, NY, and NJ (referred to as the Mid-Atlantic Region), to adopt complimentary management strategies to achieve an overall regional harvest target.

Method:

The Mid-Atlantic Region explored several methods of estimating 2014 harvest estimates. Those considered included estimates of harvest by wave based on the Marine Recreational Information Program (MRIP), Connecticut Volunteer Angler Survey (CTVAS), New York headboat sampling data, and New Jersey Volunteer Angler Survey (NJVAS). Ultimately, a combination of all data sources was utilized to allow the Mid-Atlantic Region the flexibility to provide possession limit, size limit, and seasonal adjustments that would satisfy each state's fishery.

Proposed Management Strategies for 2014:

Options that are being considered for the 2014 Mid-Atlantic Regional 2014 summer flounder recreational fishery are listed in Table 1. Please keep in mind that the options listed in Table 1 reflect potential options. Each state will have the opportunity to shift the start and end dates to total the same season length in days. Options include 128 day seasons that may slightly exceed the regional target and options where season length has been reduced to stay within the regional target specified under original addendum measures. Since daily harvest rates between waves vary between States, Options 7 and 8 were developed to estimate the harvest with staggered start dates between states. The exact option each state selects may or may not be one of the examples provided, but will have been developed using the same methodology as the options listed in Table 1. The Technical Committee has been provided the spreadsheet with the calculations for the percent reductions.

Connecticut has expressed interest in continuing their Shore Based Enhanced Opportunity Fishing Program in which anglers are allowed to harvest 16 inch fish at designated sites only. Connecticut will be submitting a separate justification for evaluation by the Technical Committee for consideration under Addendum XXV. If approved, we assume New Jersey and New York would have the opportunity to adopt a similar program to be consistent within the Region, as such, New York and New Jersey are exploring options to include a limited enhanced shore fishing program. This would be a pilot program for New York and New Jersey in 2014 consisting of only one site in each state. For example, New Jersey is considering this option at one centrally located State Park with a single entry point into the park, which will allow enforceable regulations, provide opportunity for biological sampling, and conduct angler intercepts. Both states will need to explore the efficacy of such a program prior to adopting it for this year.

Table 1. 2014 regional management options for summer flounder. Option 1 was provided in Addendum XXV, all other options are relative to option 1.

	MEASURES	STATE HARVEST	STATE REL. TO 3B EXAMPLE	REGIONAL HARVEST	REG. REL. TO 3B EXAMPLE
MID-ATLANTIC OPTION 1 (ORIGINAL)	MID ATL SEASON = 5/17-9/21				
MA & RI	5 @ 17", 132 DAYS			175,623	
CONNECTICUT	4 @ 18", 128 DAYS (45 Wv 3)	227,939			
NEW YORK	4 @ 18", 128 DAYS (45 Wv 3)	640,523			
NEW JERSEY	4 @ 18", 128 DAYS (45 Wv 3)	906,348		1,774,810	
DE-VA	4 @ 16", 365 DAYS			312,493	
NC	6 @ 15", 365 DAYS			45,241	
2014 RHL (7.01 million lbs, 2.88 lbs/fish)				2,431,225	
MID-ATLANTIC OPTION 2	MID ATL SEASON = 5/17-9/21				
CONNECTICUT	5 @ 18", 128 DAYS (45 Wv 3)	209,947	92%		
NEW YORK	5 @ 18", 128 DAYS (45 Wv 3)	678,954	106%		
NEW JERSEY	5 @ 18", 128 DAYS (45 Wv 3)	915,503	101%	1,804,404	102%
MID-ATLANTIC OPTION 3	MID ATL SEASON = 5/10-9/14				
CONNECTICUT	4 @ 18", 128 DAYS (52 Wv 3)	223,232	98%		
NEW YORK	4 @ 18", 128 DAYS (52 Wv 3)	680,117	106%		
NEW JERSEY	4 @ 18", 128 DAYS (52 Wv 3)	918,569	101%	1,821,918	103%
MID-ATLANTIC OPTION 4	MID ATL SEASON = 5/10-9/14				
CONNECTICUT	5 @ 18", 128 DAYS (52 Wv 3)	226,172	99%		
NEW YORK	5 @ 18", 128 DAYS (52 Wv 3)	720,924	113%		
NEW JERSEY	5 @ 18", 128 DAYS (52 Wv 3)	927,848	102%	1,874,944	106%
MID-ATLANTIC OPTION 5	MID ATL SEASON = 5/23-9/27				
CONNECTICUT	4 @ 18", 128 DAYS (39 Wv 3)	193,491	85%		
NEW YORK	4 @ 18", 128 DAYS (39 Wv 3)	606,585	95%		
NEW JERSEY	4 @ 18", 128 DAYS (39 Wv 3)	895,873	99%	1,695,949	96%
MID-ATLANTIC OPTION 6	MID ATL SEASON = 5/23-9/27				
CONNECTICUT	5 @ 18", 128 DAYS (39 Wv 3)	196,040	86%		
NEW YORK	5 @ 18", 128 DAYS (39 Wv 3)	642,980	100%		
NEW JERSEY	5 @ 18", 128 DAYS (39 Wv 3)	904,922	100%	1,743,942	98%
MID-ATLANTIC OPTION 7					
CONNECTICUT	4@18", 119 DAYS (52 Wv 3)	225,928	99%		
NEW YORK	4@18", 119 DAYS (52 Wv 3)	672,907	105%		
NEW JERSEY	4@18", 119 DAYS (39 Wv 3)	867,561	96%	1,766,396	100%
MID-ATLANTIC OPTION 8					
CONNECTICUT	4@18", 122 DAYS (45 Wv 3)	209,784	92%		
NEW YORK	4@18", 122 DAYS (52 Wv 3)	675,310	105%		
NEW JERSEY	4@18", 122 DAYS (39 Wv 3)	880,015	97%	1,765,109	99%



STATE OF DELAWARE
 DEPARTMENT OF NATURAL RESOURCES
 & ENVIRONMENTAL CONTROL
 DIVISION OF FISH & WILDLIFE
 89 Kings Highway
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**OFFICE OF THE
 DIRECTOR**

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TO: Summer flounder, black sea bass, scup Technical Committee, ASMFC
FROM: Richard Wong
DATE: February 18, 2014
SUBJECT: State of Delaware proposal for summer flounder recreational fishery management

Delaware summer flounder management for 2014

Under the provisions of Addendum XXV, Delaware will implement uniform recreational fishing measures with Maryland and Virginia. These measures will include:

Size Limit	Bag Limit	Season
16.0	4	No closure

Review of Quota Performance for the State of Delaware

Delaware’s 2013 harvest estimate of 48,897 was 38% under its target of 78,512 fish, continuing a string of quota underages in 10 of 13 years under conservation equivalency (Table 1). In the most-recent three years, harvest has been 44% under quotas on average. The 2014 harvest quota for the State of Delaware is 75,073 fish, representing a 54% allowable increase from the 2013 harvest.

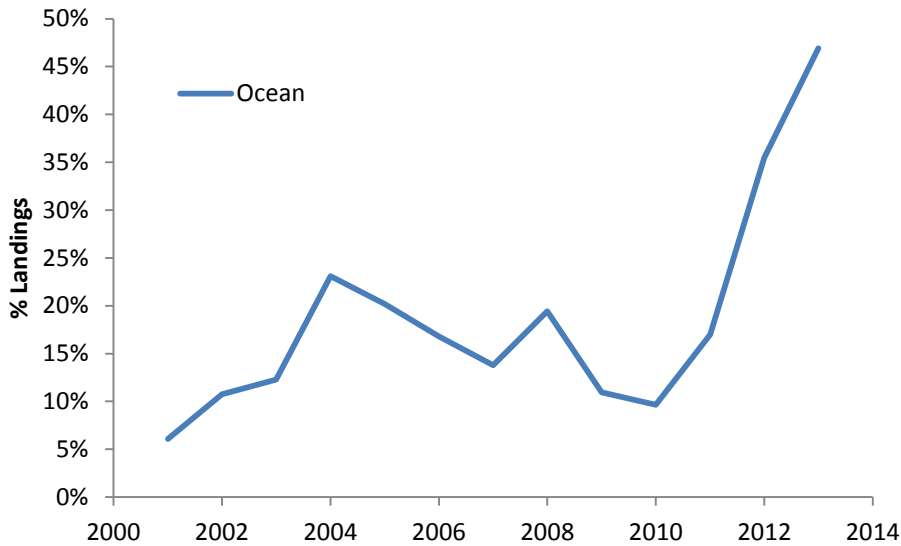
Table 1. Recreational fishery regulations and quota performance for the State of Delaware 2001-2013. Quota management through conservation equivalency for the State of Delaware has resulted in quota underages in 10 of 13 years by 15% on average.

	Size Limit	Bag Limit	Season	Landings	PSE	Target	%O/U
2001	17.5	4	Year-round	145,786	10.9	125,000	17%
2002	17.5	4	5/16 -12/31	106,837	9.7	138,000	-23%
2003	17.5	4	Year-round	105,743	10.9	129,000	-18%
2004	17.5	4	Year-round	123,714	12.7	139,000	-11%
2005	17.5	4	Year-round	90,657	13	150,000	-40%
2006	17.0	4	Year-round	110,223	13.5	116,000	-5%
2007	18.0	4	Year-round	117,735	12.5	76,608	54%
2008	19.5	4	Year-round	32,953	25.3	64,338	-49%
2009	18.5	4	Year-round	92,039	11.9	65,000	42%
2010	18.5	4	1/1 – 10/12	72,102	14.9	80,000	-11%
2011	18.0	4	1/1 - 10/23	66,820	21.9	107,000	-38%
2012	18.0	4	1/1 - 10/23	38,470	26.7	87,536	-56%
2013	17.0	4	Year-round	48,897	15.9	78,512	-38%
			Cumulative	1,151,474	15.3(ave)	1,355,994	-15%

Expectations

The Technical Committee’s predicted 2014 harvest for Delaware under the proposed 16” size limit, 4 fish bag, and open season is 76,161 fish (ASMFC, Addendum XXV). This represents a negligible 1% difference between the predicted harvest and the CE target for Delaware in 2014. (Since CE began in 2001, actual annual harvest estimates for Delaware have been almost always been lower than the predicted harvest estimate.) The three state region (DE, MD, VA) is expected to harvest 312,110 fish in 2014, relative to its 552,152 CE target.

We expect that the ½ inch size limit liberalization should help to combat the growing inequity of access for our inshore anglers. Since the onset of CE in 2001, harvest has shifted dramatically from inshore State waters towards Ocean areas. Our fluke fishery has evolved into an offshore reef fishery, with fewer and fewer anglers having access to legal sized flounder.



Summary

The proposed management measures were developed and vetted across the three state DE, MD, VA region. Delaware would have proposed identical measures under conservational equivalency. We expect that harvest will be constrained to acceptable levels for Delaware and the region.

Size Limit	Bag Limit	Season
16.0	4	No closure

Literature Cited:

Atlantic States Marine Fisheries Commission. 2013. Draft Addendum XXV to the Summer Flounder, Scup, Black Sea Bass Fishery Management Plan for Public Comment. December 2013.

Maryland's 2014 Summer Flounder Recreational Harvest Proposal

For 2014, Maryland proposes an open season year round, with the same creel and size limit as 2013 (4 fish at 16 inches), and estimates the harvest will be the same as in 2013. MRIP estimated recreational harvest was 48,521 fish in 2013 (Regions_3B.xlsx attached). The season was open March 28, 2013 to December 31, 2013. Maryland proposes an open season all year in 2014: typically no Summer Flounder landed in Maryland before March 28 in any year. The additional open season will have no effect on harvest.

In 2014 addendum XXV was passed at ASMFC and it developed regions for management of the recreational Summer Flounder fishery for 2014. Similar regulations between joining states should simplify the fisheries for the anglers, help improve the data reliability, and ultimately provide stability in the recreational regulations from year to year.

Maryland will be included in a region with Delaware and Virginia and all three states will have the same regulations, (four fish at 16 inches, open all year). This region is estimated to harvest 312,110 fish in 2014. The region harvested 284,770 fish in 2013. Proposed regulations for the region are similar to last year, with the exception that Delaware was at 17 inches minimum size in 2013.

The region will not be held to this recreational harvest limit for purposes of evaluating the Summer Flounder recreational fishery for the following year, but the coast will be held accountable for 7,010,000 pounds or 2,456,313 fish. Using the system in place before addendum XXV, Maryland would have been able to relax their regulations in 2014. Maryland anglers and the MD DNR elected not to take advantage of the surplus fish available to them because they are content with their current regulations, and in keeping with the intent of addendum XXV, so that the northern region can use them to augment their fisheries.



COMMONWEALTH of VIRGINIA

*Marine Resources Commission
2600 Washington Avenue
Third Floor
Newport News, Virginia 23607*

February 18, 2014

Memorandum:

TO: ASMFC Summer Flounder, Scup and Black Sea Bass Technical Committee

FROM: Sally Roman
Virginia Marine Resources Commission

SUBJECT: Virginia's proposed management plan for the 2014 recreational summer flounder fishery

Background

In accordance with the provision of Addendum XXV, the VMRC shall establish the following management measures for Virginia's 2014 recreational summer flounder fishery that is part of a Delaware through Virginia management region:

1. a minimum possession size limit of 16 inches, in total length;
2. a 4-fish possession limit; and ,
3. an open fishing season, from January 1, 2014 through December 31, 2014.

These management measures are identical to the other two states, Maryland and Delaware, within the 3 state region. The Delaware through Virginia ASMFC management region is projected to land 311,110 summer flounder in 2014, as part of the coastwide recreational harvest limit (RHL) of 2,421,720 summer flounder (projected value).

Issues

There are several issues related to the adoption of Addendum XXV. Concerning the Delaware-Virginia regional approach in 2014, one state (Delaware) has not managed its recreational summer flounder fishery by a 16-inch minimum possession size limit. In 2006, Delaware imposed a 17-inch minimum size limit, and this represents the smallest minimum size limit. It may be the projected increase in Delaware's landings are too conservative, and landings may be appreciably higher. Also, the 5-year average (2009 through 2013) Virginia landings are about 75,000 fish more than the assigned 2014 landings.

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Another issue concerns the MRIP estimate. The MRIP has not achieved a practical, standardized interview methodology, but the interview approach may show improvement this year. Those improvements may lead to landings estimates that are not expected by the simple projections used for 2014 landings in New York, New Jersey, Connecticut, and Delaware. This is important to consider because there is very little buffer between the 2014 RHL and the expected Addendum XXV 2014 landings, as projected 2014 landings, under OPTION 3B, Region 2, that potentially account for 95.6% of the 2014 RHL. Connecticut's 2014 projected landings of 227,939 fish may offer some buffer, as this amount of expected landings is 130,000 fish more than Connecticut's 5-year average. Since the regional approach is strictly for one year, 2014, any overage of the RHL can be compensated for in 2015, using current allocation scenerios.

Past Performance

According to MRIP, Virginia landings have been under its annual target landings for six consecutive years (Table 1). Management measures have been liberalized each year since 2009, with minimum size limits ranging from 19 inches in 2009 to 16.5 inches in 2012. During that timeframe, landings ranged from 260,050 fish (2010) to 317,674 fish (2011). That there has not been a steady increase in landings with the incremental decrease in size limits may be attributed to fish availability, decreased effort, and an inconsistent, changing intercept survey.

Table 1. Virginia management measures, target (number of fish), and landings (A+B1, number of fish), 1998 through 2013.

Year	Minimum landing size (in)	Possession Limit	Closed Season	Target Landings (number of fish)	Landings (A+B1) (number of fish)
1998	15	10	None		1,164,527
1999	16	8	1/1-2/29; 7/25-7/31	698,716	378,283
2000	15.5	8	1/1-3/28; 7/24-8/1	687,071	580,517
2001	15.5	8	1/1-3/28; 7/24-8/7	664,000	1,338,134
2002	17.5	8	1/1-3/28	734,000	772,265
2003	17.5	8	1/1-3/28	689,000	451,348
2004	17	6	1/1 - 3/28	741,000	674,552
2005	16.5	6	None	800,000	684,272
2006	16.5	6	None	616,000	762,597
2007	18.5	5	1/1-3/28; 7/23-28	407,525	397,041
2008	19	5	7/21 - 7/30	342,254	260,221
2009	19	5	None	345,000	289,075
2010	18.5	4	None	426,000	260,050
2011	17.5	4	None	570,000	317,674
2012	16.5	4	None	466,000	259,973
2013*	16	4	None	418,000	187,428

Summary

The proposed management measures for Virginia in conjunction with those of Maryland and Delaware would conform to the regional approach for management of 2014 recreational summer flounder fisheries, as described in Addendum XXV. Technical committee members from all three states have communicated to develop the regional management measures that are solely for management in 2014.



North Carolina Department of Environment and Natural Resources
Division of Marine Fisheries

Pat McCrory
Governor

Dr. Louis B. Daniel III
Director

John E. Skvarla, III
Secretary

To: ASMFC Summer Flounder, Scup and Black Sea Bass Technical Committee
From: Tom Wadsworth
Date: February 13, 2014
Subject: Summer Flounder Recreational Management Measures

The ASMFC Summer Flounder, Scup, and Black Sea Bass Management Board (Board) and the Mid-Atlantic Fisheries Management Council (Council) met in December 2013 and voted for conservation equivalency measures rather than implement a coastwide management program for the recreational summer flounder fishery. With preliminary data available for Waves 1-5, the harvest of summer flounder for 2013 in North Carolina was 49,632 fish. This is 64.5% below the 2013 allocation of 140,000 fish. The 2014 allocation of summer flounder for North Carolina is 137,000 fish, which allows for liberalization in harvest of up to 276%. This memo outlines North Carolina's management strategy for the 2014 recreational summer flounder fishery based on the process approved by the Board and the Council.

Regulatory and Harvest History

The minimum size limit for recreationally harvested flounder in much of the North Carolina inland waters was 13 inches from 1998 to September 2002 (Table 1). The size limit in these waters increased to 14 inches for October 2002 through 2007. The minimum size limit for much of the inland waters (except western portions of Albemarle and Pamlico sounds and their tributaries where summer flounder are rarely caught) was 15.5 inches in 2008 and 15 inches in 2009 and 2010. The minimum size limit for recreationally harvested flounder in the ocean waters fluctuated between 15 inches and 15.5 inches from June 1998 through 2003 and decreased to 14 inches from 2004 to 2006. The minimum size limit for most ocean waters (except the southern portion of the state where summer flounder are less common) was 15.5 inches in 2008 and 15 inches in 2009 and 2010. The minimum size limit was 15 inches for all inland and ocean waters on February 21, 2011. The bag limit was 8 flounder (of any species) in the ocean from June 1998 through 2010 and in inland waters from April 2005 through 2010. No bag limit existed for recreationally harvested flounder in inland waters prior to 2005. The bag limit was reduced to 6 flounder for inland and ocean waters on February 21, 2011. Since 1998, the only season closures occurred in 2001 and 2002 for ocean waters only.

The recreational harvest of summer flounder exceeded 320,000 fish from 1998 to 2001 with the exception of 1999 (236,791 fish) (Table 1). From 2002 to 2007, the recreational harvest ranged from 87,852 fish in 2003 to 189,458 fish in 2002. The recreational summer flounder harvest estimate of 43,510 fish in 2008 was the lowest annual harvest estimate for 1998-2013. Harvest increased

to 63,147 fish in 2012 but then decreased to the projected 2013 harvest estimate of 49,632 fish. The majority of the recreational harvest was from inland waters (except in 2003-2004 and 2008) with much of the harvest from inlets in the northern portion of the North Carolina coast by private/rental boats mode.

The recreational target ranged from 223,000 fish in 2001 to 269,000 fish in 2005 before decreasing to 115,000 fish in 2008. The target in 2011 (191,000 fish) was the highest since 2002, but the target decreased each year subsequently, with the target in 2014 (137,000 fish) the lowest since 2009. Since conservation equivalency began, the target for North Carolina was exceeded only twice: in 2001 by 47% and in 2007 by 2%. In all other years, the harvest was below the target, ranging from 23% below the target in 2002 to 68% below the target in 2011.

The management measure that had the greatest effect on recreational harvest was the minimum size limit in inland waters. The harvest decreased substantially after the minimum size limit increased to 14 inches in inland waters in 2002 and again when the size limit increased to 15.5 inches for much of the inland and ocean waters in 2008. This was expected since typically most of the annual summer flounder harvest occurred in inland waters and the modal size class for 2004-07 was 14 inches, representing 36% of summer flounder harvested. Also, greater than 90% of fish harvested recreationally were below 18 inches in 2008-2012, indicating that there was no clear upward expansion of the size distribution.

Weather conditions also affect the recreational harvest of summer flounder in North Carolina. Much of the summer flounder fishing takes place in the inlets, surf and ocean fishing piers along the northern and central coasts. Flounder fishing in these areas is very dependent on water and weather conditions. Recreational harvest in 1999 was likely impacted by hurricanes Dennis and Floyd in August and September. In 2003 fishing was impacted by low salinity in the estuaries (from above normal rainfall), unusually cold ocean temperatures during the summer from offshore upwelling, and Hurricane Isabel in September. Hurricane Irene probably impacted harvest to some degree in 2011. Late in 2012, Hurricane Sandy had a lasting effect on ocean access in the northern portion of the state's coast, where a high percentage of the North Carolina summer flounder harvest usually occurs, but it is uncertain how harvest was affected. In contrast, favorable weather and water conditions in 2004 and 2007 likely contributed to relatively higher harvest estimates.

Proposed Management Strategy for 2014

North Carolina proposes continuing 2013 management measures of a 15-inch minimum size limit, 6 fish bag limit, and no closed season statewide in 2014.

Justification for Management Strategy

The management measures implemented for the recreational flounder fishery in 2011 (Table 1) were designed to reduce the harvest of southern flounder through the North Carolina Southern Flounder Fishery Management Plan. Recreational flounder regulations are not species specific in North Carolina due to problems with flounder species identification by anglers, so any management measures that allow for an increase in summer flounder harvest could also result in an increase in southern flounder harvest.

Table 1. Regulations and landings of recreationally harvested summer flounder in North Carolina from 1998 to 2012 by area.

Year	Inland Waters Regulations			Ocean Waters Regulations			Inland Landings	Percent Inland	Ocean Landings	Percent Ocean	Total Landings	Target	% Over/Under
	Size Limit	Bag Limit	Closed Season	Size Limit	Bag Limit	Closed Season							
1998	13"	----	----	14.5" (1/1-6/6) 15" (6/7-12/31)	10 (1/1-6/6) 8 (6/7-12/31)	----	314,030	80.3	77,106	19.7	391,136		
1999	13"	----	----	15"	8	----	158,095	66.8	78,696	33.2	236,791		
2000	13"	----	----	15"	8	----	258,554	69.0	116,202	31.0	374,756		
2001	13"	----	----	15.5"	8	5/1-5/14	249,563	76.3	77,686	23.7	327,249	223,000	46.7
2002	13" (1/1-9/30) 14" (10/1-12/31)	----	----	15.5"	8	4/3-7/4	168,082	88.7	21,376	11.3	189,458	246,000	-23.0
2003	14"	----	----	15"	8	----	36,839	41.9	51,013	58.1	87,852	231,000	-62.0
2004	14"	----	----	14"	8	----	45,185	28.8	111,781	71.2	156,967	249,000	-37.0
2005	14"	8 (4/1-12/31)	----	14"	8	----	51,333	50.7	49,879	49.3	101,212	269,000	-62.4
2006	14"	8	----	14"	8	----	60,220	53.7	51,956	46.3	112,176	207,000	-45.8
2007	14"	8	----	14.5"	8	----	95,657	68.8	43,332	31.2	138,989	136,000	2.2
2008	14"/15.5"*	8	----	14"/15.5"*	8	----	21,621	49.7	21,889	50.3	43,510	115,000	-62.2
2009	14"/15.5"*	8	----	14"/15.5"*	8	----	54,185	72.6	20,456	27.4	74,641	116,000	-35.7
2010	14"/15.5"*	8	----	14"/15.5"*	8	----	47,436	61.5	29,721	38.5	77,157	143,000	-46.0
2011	15"	6	----	15"	6	----	41,495	68.7	18,927	31.3	60,422	191,000	-68.4
2012	15"	6	----	15"	6	----	43,547	69.0	17,255	27.3	63,137	156,000	-59.5
2013 [#]	15"	6	----	15"	6	----	29,671	66.5	14,935	33.5	44,606	140,000	-68.1

*14" minimum size limit in western portions of Albemarle and Pamlico sounds and their tributaries, and ocean and estuarine waters from Brown's Inlet to the SC border; 15.5" (2008) & 15" (2009 & 2010) minimum size limit in eastern estuarine and ocean waters north of Brown's Inlet to the VA border.

[#]Landings through Wave 5 only



Paul J. Diodati
Director

Commonwealth of Massachusetts

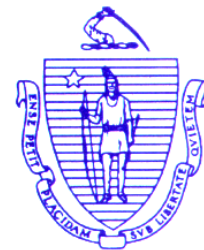
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Commissioner

TO: ASMFC Summer flounder, Scup, and Black Sea Bass Technical Committee

FROM: Paul Caruso, Senior Marine Fisheries Biologist

SUBJECT: Massachusetts' 2014 Black Sea Bass Recreational Management Proposals

DATE: February 27, 2014

Introduction

The existing Massachusetts' black sea bass regulations are May 11 – October 31, at 4 fish. The additional harvest reduction required for 2014 is either 3% or 7%, the exact required harvest reduction value is unavailable at this time. The estimated harvest for 2013 as derived from the MRIP estimates (304,013 fish) is lower than the “pseudo” state target of 395,131 fish.

Based on feed back from our angling public and our for hire industry we are looking to revisit our 2013 regulations to come up with a regulation or set of regulations that is more fair and equitable for all modes. In order to do that less restrictive bag limits were explored and corresponding decreases in season length are necessary. In order to account for the additional 7% reduction a target reduction value of 29 % was used to account for non- additivity the of two proportional reductions and incorporate the 24 % reduction required last year and the additional 7% reduction for this year. An increase or decrease in the existing 14” size limit is not contemplated at this time.

Methods

The 2013 harvest estimate data is preliminary and 2013 bag and size data are not currently available for analyses. Additionally, because those estimates may be influenced (confounded) by the FH LOA fleet harvest exemption seasonal reductions were calculated as the proportional reduction in the 2012 harvest associated with taking days out of the waves calculated from the average of the 2012 and 2013 harvests by wave divided by the number of open days in each wave. Since the 2012 Wave 3 estimates were aberrantly high, likely due to a very early arrival of sea bass on our grounds and high MRIP survey error, the use of the two year average tempers the higher daily harvest reduction rates derived from the 2012 data alone. In essence this works as a small conservation buffer against seasonal recoupment effects. This is consistent with the methodology we used in 2013 that was successful in reducing our harvest to well below the target level.

For bag limit analyses I used the complete 2012 MRIP type 3 harvest data set for Massachusetts, with 362 total positive intercepts of type 3 single contributor bags, including all modes and the three waves. This is an improved data source from what was used in 2013 analysis (247 MRIP head boat angler intercepts and 23 volunteer angler intercepts) although most reduction values at a particular bag limit were relatively unchanged from those used in 2013. All bags greater than the legal limit were adjusted to the limit to account for non-compliance. For mode specific bag

analysis only data from that mode was included. Options that contained both bag reductions and seasonal closures were analyzed using the adjustment formula $R = (x+y)-(xy)$ to account for the non-additivity of two proportional reductions.

All regulatory options presented below total to the expected 29% reduction in harvest from the base year regardless of if they cover multiple modes or a single mode, thus negating the need for harvest proportional reduction calculations for each mode. If the smaller additional reduction is required this year (3%) the options will be adjusted accordingly.

Seasonal "sliding bag" limits (e.g. W3 – 7 fish, W4 – 4 fish and W5 – 7 fish) were also explored, but as expected, reducing the bag limit during the time of the season when catches are light yields little gain in conservation savings with much additional regulatory complexity so no options of that type are presented. For example a 7 fish bag equates to an 8% reduction where a 7,4,7 fish bag limit option is a 9% reduction.

Discussion of analyses

PSE's for all modes harvest estimates by wave are good justifying individual wave/ season analyses. The 2 year average all modes PSE's are 26, 27 and 29 for waves 3-5 respectively. The sample size for the bag limit analysis is also good with 362 positive intercepts (excludes zero harvest interviews).

The PSE's for the P/R and FH modes separately are poor to fair so analysis of separate mode treatments by wave may not be justified. The P/R mode 2 year wave 3-5 averages are 38.5, 54, and 69.5 respectively. The For Hire mode 2 year wave 3-5 averages are 30.5, 51, and 49 respectively. The bag sample size for the F/H mode is reasonable at 257 but the P/R mode individual bag data is only adequate at 86 positive intercepts.

The Charter mode specific harvest estimates 2 year average waves 3-5 PSEs are poor at 65, 68.5 and 54 and the small sample size of 19 positive bag intercepts is inadequate for analysis given the likely range of probable bags in a fishery that takes both directed trips and non-directed trips. Thus a separate analysis treatment of this mode is not warranted based on the lack of data. The most technically supportably management options, based on both the PSE's of the harvest estimates and the harvest bag sample sizes, are the all mode bag/season options.

Option table

Applicable Mode(s)	Possible Bag limits	Possible Season(s)
All	6	May 17- September 28 or May 11 to Sept 8
	7	May 17 to September 20
	8	May 17 to September 15
Private Modes Only	6	May 11 to October 13
	7	May 11 to September 20
	8	May 17 to September 27
For Hire Modes Only	10	May 11 –June 20, and July 1 – Aug 20, and Sept 1- Oct 15
	10	May 11-July 18 and Sept 1 – Oct 31
	10	May 24 – August 17
	8	June 1 – Sept 30
	8	May 11 – July 30
	8	May 11- July 24 and Sept 1 – Oct 13

Notes: If separate regulations are chosen for the FH and Private modes then season closures and bag limits must be calculated and chosen separately for both modes. Above options are only examples, actual options invoked may be slightly different in both bag limit and/or season dates but would use the same analysis methodologies and base data.

Proposals for 2014 Recreational Black Sea Bass Management Options – RI (Northern region)

Background:

In February of 2014 the summer flounder, scup, and black sea bass Management Board (Board) approved Addendum XXV to the fishery management plan for summer flounder, scup, and black sea bass. The addendum sets forth management measures for the recreational fishery that are meant to reduce the coastwide recreational harvest by 3.2% in an effort to reduce recreational harvest under the recreational harvest limit (RHL) of 1.23 million fish. The addendum seeks to achieve this reduction through the creation of ad hoc regions.

Two regions will be established. Each region will implement recreational black sea bass management programs that utilize minimum size limits, maximum possession limits, and seasonal closures that are designed to achieve a specific harvest reduction that, when combined with the other regions in the management unit, achieve the required coastwide reduction for 2014. The northern region will contain the states of Massachusetts through New Jersey and the southern region will contain the states of Delaware through North Carolina (North of Cape Hatteras). All states will agree to the regulations implemented within the region. While not required, states will work to develop consistent regulations for their recreational management programs within the region. Under this option, the states of Massachusetts through New Jersey are required to reduce their harvest by 3.2% based on the region performance from 2013. The states of Delaware through North Carolina (North of Cape Hatteras) will set their measures consistent with Federal regulations that also achieve a 3.2% reduction. The regulations of the two regions combined would require a total harvest reduction of 3.2% in numbers of fish to achieve the 2014 RHL (1.23 million fish).

Action:

Regional conservation equivalent measures were adopted by the Atlantic States Marine Fisheries Commission (ASMFC) and Mid-Atlantic Fisheries Management Council (MAFMC) in lieu of a coastwide option for 2014. Therefore, the two regions as presented above are required to develop regional management plans which include management measures (i.e. possession limits, size limits, and seasons) to achieve not in excess of the recreational harvest target of 1.23 million black sea bass.

Methods:

The following is how RI as a member of the Northern region will calculate its reductions. As noted in the background section, the regions will attempt to construct regulations that are as similar as possible. While this is a goal of the following analyses, the Board adopted the Ad Hoc regional approach to allow some flexibility in setting management measures. This flexibility was an attempt to recognize that the states, particularly in the northern region, can have unique fisheries and a consistent set of regulations can have disparate effects across the region. As the analyses were undertaken, a natural break out occurred. New Jersey, New York through Rhode Island, and then Massachusetts were a natural delineation and these three sub regions within the northern region were analyzed separately given data constraints, existing management plans, and

fishery characteristics. Each sub region analysis is presented separately but in total meet the goals of Addendum XXV. In all cases below, the use of multiple metrics in an option uses the interaction calculation:

$$\text{Total Increase} = (X+Y) - (X*Y);$$

X = The percentage decrease associated with seasonal closure(s).

Y= The percentage decrease associated with size/possession limit.

Rhode Island

Rhode Island (hereafter 3 state region) explored two methods of estimating 2014 recreational black sea bass options. Those considered included; 1.) daily harvest rates based on RI's harvest from 2013; and 2.) bag and size calculations utilizing RI Volunteer Angler Survey (VAS) data along with a bag limit simulation.

Bag Limit Adjustments

Changes in harvest due to possession limit adjustments were analyzed using a unique procedure. Given the lack of available data to calculate the effects of changes to bag limits, a methodology was created to simulate a hypothetical distribution that was randomly sampled in an effort to determine an effect from changing bag limit size. The procedure began by using RI volunteer angler data to determine the mean bag limit harvested by an angler. This value was found to be 1.4 fish per angler. Next, the existing dataset was reviewed to determine the prior distribution shape, which was then used as the hypothetical distribution. The distribution was determined to be a negative binomial distribution. A simulation was then run using R statistical software to randomly sample 10,000 replicates from a negative binomial distribution with a mean of 1.4 (the pre-determined average number of fish per angler in RI) and a shape that would keep the distribution between the upper and lower bound of the existing bag limits. This data was then used to determine the percent change in harvest by altering the bag limits. The code is available in Appendix 1. The results of the analysis are indicated below in table 1.

Table 1. The projected effects of various bag limits on the 2014 Black Sea Bass recreational landings in the RI, calculated as percent decrease from current management configuration.

Bag	3	4	5	6	7
RI	-11%	-6%	-3%	-1%	0%

Seasonal Adjustments

Seasonal adjustments were calculated by taking the total harvest by wave and then dividing this value by the number of open days in the wave. This creates a daily harvest value, and this can then be used to determine the effects of a seasonal change on harvest.

Proposed Management Strategies for 2014

The following are the proposals from RI (table 2). The options meet the required 3.2% reduction and follow the calculations as set forth above.

Table 2 – RI options based on 2013 harvest

Bag Limit	Minimum Size	Wave 3 (open	Wave 4 (open	Wave 5 (open	Wave 6 (open	Reduction

			days)	days)	days)	days)	
Split Bag	3	13	9	62	0	0	0.035
	7		0	0	61	61	
Split Bag	3	13	15	62	0	0	0.033
	7		0	0	58	0	
Split Bag	3	13	12	62	0	0	0.036
	5		0	0	61	30	



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

To: Summer flounder, Scup and Black Sea Bass Technical Committee
From: Greg Wojcik, CT DEEP Marine Fisheries Division
Date: February 24, 2014

Connecticut Recreational Black Sea Bass Fishery Compliance Options for 2013

According to Addendum XXV of the summer flounder, scup and black sea bass fishery management plan, the northern region (MA – NJ) must reduce black sea bass recreational harvest to constrain landings to the coast-wide RHL of 2.26 million pounds using Ad Hoc regional Measures.

Addendum XXV used projected Wave 6 values that indicated a necessary coast wide reduction of 7%. On February 14, 2014 MRIP Wave 6 estimates became available and the estimates were lower than the projections used by Addendum XXV. The coast wide reduction required if the current MRIP Wave 6 estimates are considered is 3.2%.

CT will consider adjustments to the season and minimum size to meet either 3.2% or 7% reduction.

LIBERALIZATION METHODS USED FOR CALCULATING 2013 REGULATIONS

The cumulative liberalizations were made using the formula $(X+Y)-(X*Y)$ with X as the percent liberalization associated with season and Y as the percent liberalization associated with the size/possession limits.

Season (X)

Harvest per day rates for waves 3 through 5 came directly from the 2013 landings provided by MRIP, specifically 1,464 fish per day for wave 3, 1,181 fish per day for wave 4 and 161 fish per day for wave 5. Both options meeting the 3.2% and 7% reduction are performed by removing open fishing days from wave 3. Removing 3 days is a 4% reduction and removing 5 days is a 7% reduction.

Size / Possession (Y)

The MRIP sample size of measured black sea bass in 2013 was only 50 fish. This sample size did not allow an accurate length frequency table to be created for making liberalization estimates for the 2014 fishing year. As an alternative, the 2013 Connecticut Volunteer Angler Survey (VAS) data had a sample size of 1,200 lengths and was used to calculate size limit liberalizations (Figure 1). Typically, in VAS data, fishermen round the length to the whole inch rather than half inch increments, using this raw length data when calculating liberalizations results in uneven values. To account for this digit bias that appears in the VAS data, a smoothing procedure was performed. CT does not intend on making adjustments to the minimum size in the 2014 fishing season, but analysis was performed for review regardless.

Party and Charter Vessel Program

In 2013 due to an overestimation of the average size by MRIP, States were allowed to reduce their reduction late in the season by 7%. Rather than making adjustments to black sea bass regulations that were already in place and printed, Connecticut opted to use the additional fish to allow a longer season for party and charter vessels. In order for vessels to participate in the program, they were required to register with the State. They were also required to submit mandatory monthly catch reports (Figure 2). If vessels failed to submit their reports, they were immediately dropped from the program. A list of active qualifying vessels was maintained and shared with Conservation Law Enforcement. The program allowed party charter vessels an 8 fish creel limit from June 15 to November 30. In comparison to other modes and vessels that did not participate, it allowed for an additional 5 fish from 6/15/2013 to 8/31/2013 and 8 fish from 10/30/2013-11/30/2013.

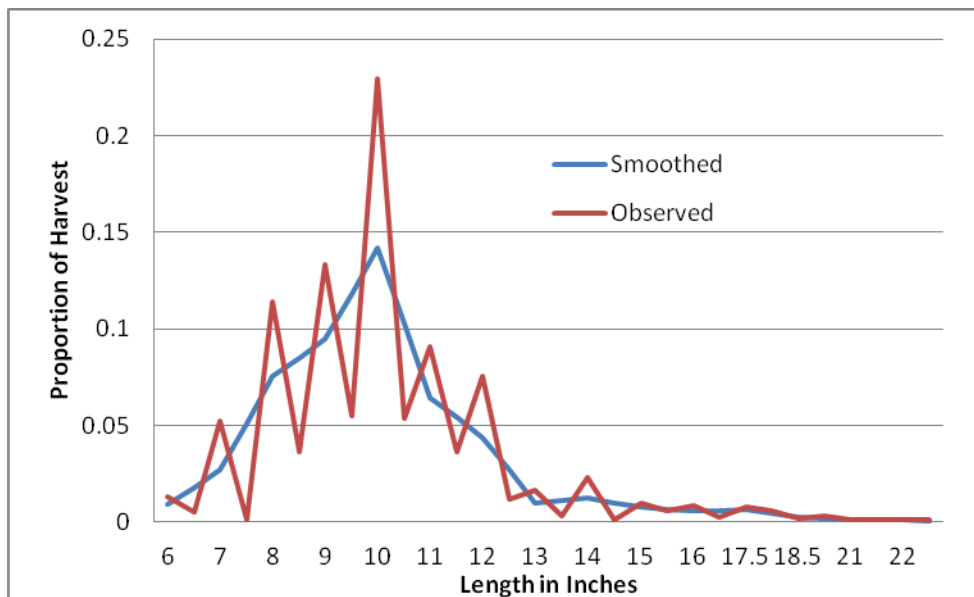
In 2013 there were a total of 38 registered vessels (2 Party boats and 36 charter boats), of which 22 participated with a total of 300 trips harvesting a total of 5,722 fish. Of these 5,722 fish, only 1,390 (<1%) are attributed to the black sea bass party and charter vessel program.

Connecticut would like to continue the party and charter black sea bass program into 2014.

Table 1. 2014 Connecticut Black Sea Bass Options.

Option	Season	Creel	Min Size	% Reduction
<i>Status Quo</i>	6/15/14 – 8/31/14	3	13"	0%
<i>1</i>	6/20/14 – 8/31/14	3	13"	7%
	9/1/14 – 10/29/14	8		
<i>2</i>	6/18/14 – 8/31/14	3	13"	4%
	9/1/14 – 10/29/14	8		

Figure 1. 2013 Black Sea Bass CT VAS Lengths.





Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

To: Summer flounder, Scup and Black Sea Bass Technical Committee
From: Greg Wojcik, CT DEEP Marine Fisheries Division
Date: February 24, 2014

Supplemental Report to the Summer Flounder Mid-Atlantic Region Proposal

As noted in the 2014 Mid-Atlantic Summer Flounder Proposal, Connecticut intends to continue its Enhanced Shore Fishing Opportunity Program while New York and New Jersey are weighing adoption of a similar program on a pilot basis at a single site this year. For 2014, the Connecticut program is requesting a 16" minimum size at 46 designated shore fishing sites with the same creel limit and season as the rest of the Modes.

CONNECTICUT ENHANCED OPPORTUNITY SHORE FISHING SITE PROGRAM BACKGROUND

The Enhanced Opportunity Shore Fishing Program is part of a broader CT Department of Energy and Environmental Protection effort to improve the fishing experience and quality of access to our Public Trust marine fisheries resources in the state, especially in urban areas. As the name of this program implies our goal is increase opportunity for shore anglers, not to substantially increase harvest. In addition to summer flounder the program includes a scup component (9" minimum size vs 10.5"/11" for private boat and for-hire boats respectively) and a striped bass component. The striper program utilizes formerly unused commercial quota in a tightly controlled bonus fishery in which 22"<28" fish may be harvested with a voucher. Voucher distribution focuses heavily on shore anglers including in urban areas. In the bonus striper program only about 10% of the available quota is harvested, largely due to our focus on providing opportunity rather than maximizing harvest.

The Enhanced Opportunity Shore Fishing Program began in 2011, in response to two cross-cutting threats to casual and urban fishing in the form of the new NOAA mandated recreational fishing license/registry and the ever increasing minimum size requirements in interstate fishery management plans.

Shore mode catch and harvest have historically been a very small portion of the total catch and harvest for summer flounder (Figures 1, 2). Landings have not exceeded 8,000 fish over the most recent eight years. In 2013, MRIP estimated that fewer than 5,000 fish were harvested from shore. The regulations at the 46 designated sites include a minimum length of 16", offering shore fishermen a better opportunity of keeping a fish. Enhanced shore fishing signs are posted at each of the sites (Figure 3) and a list of the sites are located on the state website, with links to our agencies Coastal Access Guide.

In 2013 Connecticut increased its data collection for the enhanced opportunity shore fishing sites by conducting more on-site interviews and distributing 'Connecticut Fishing Quality Evaluation Form' (Figure 4). Enhanced Opportunity sites comprised a stand-alone mode to separate data from anglers that fish specifically at these sites. The intent was to supplement the MRIP

program to get a better understanding of the size distribution of summer flounder harvested from shore, and the proportion of harvested from these sites with the lower minimum sizes.

2013 SURVEY RESULTS

In 2013 there were 1,106 survey cards distributed to anglers at designated shore fishing sites along the Connecticut coastline. A total of 207 (19%) cards were returned to the agency and 20 cards reported summer flounder catch. There were 44 summer flounder reported caught at designated sites, with 40 lengths recorded.. Of these 40 fish lengths, only 4 were harvested. There were no fish reported harvested between the length of 16” and 17.5”, even though a number of fish in that size interval were caught.

In previous years, the TC has supported the program with the stipulation that additional data is collected by the state to support the MRIP estimates. In 2014, Connecticut intends to expand the current data collection methodology to include effort data, ultimately to develop an estimation of harvest. A “bus stop” design creel survey originally developed by Jones and Robson in 2001 is currently being modified to incorporate the Connecticut Enhanced Shore Fishing Sites.

Figure 1. 1981 – 2013 MRIP Catch Estimates for Summer Flounder by Shore Mode and all Modes Combined.

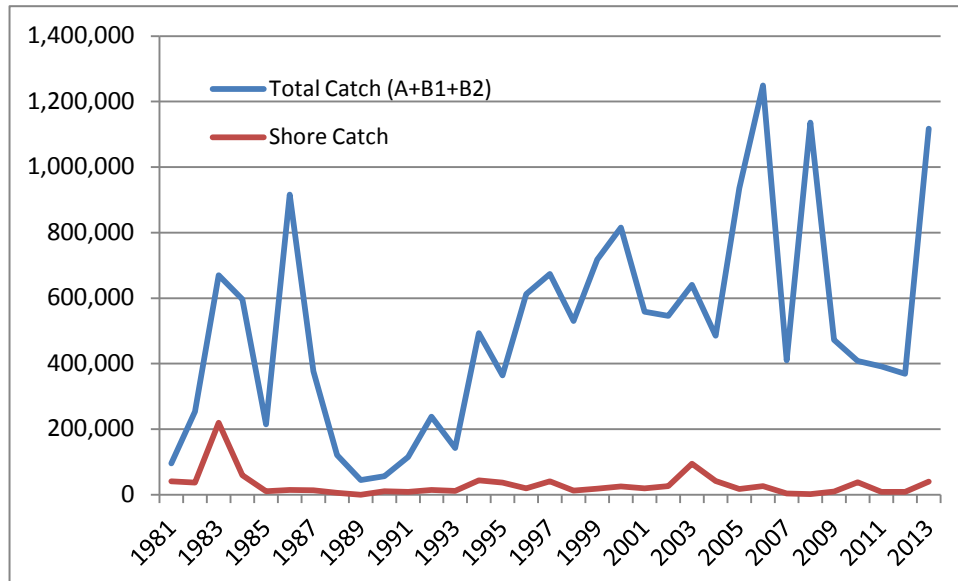
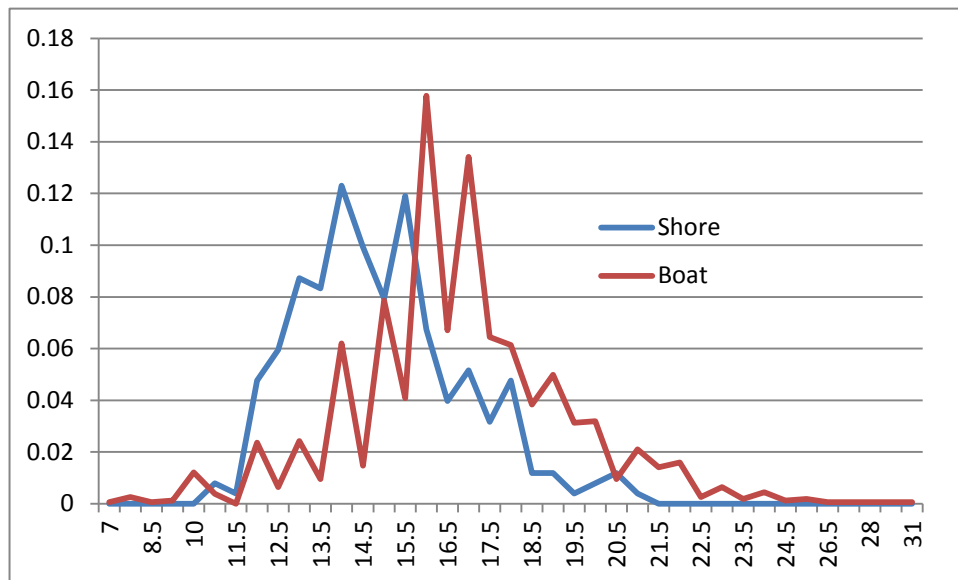


Figure 2. 2013 CT VAS Length Frequencies of Summer flounder by Mode.



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Joe Martens
Commissioner

TO: Kirby Rootes-Murdy, FMP Coordinator
Atlantic States Marine Fisheries Commission

FROM: John Maniscalco
New York State Department of Environmental Conservation

DATE: February 20, 2014

SUBJECT: **New York's Proposed Management Plan for the 2014 Black Sea Bass Recreational Fishery**

Summary

According to Addendum XXV of the summer flounder, scup and black sea bass fishery management plan, the northern region (MA – NJ) must reduce black sea bass recreational harvest to constrain landings to the coast-wide RHL of 2.26 million pounds or 1,189,474 fish (average weight 1.90 lbs) using Ad Hoc Regional Measures.

Addendum XXV (December 2013) used projected Wave 6 values that indicated a necessary coast-wide reduction of 7.1%. On February 14, 2014 MRIP Wave 6 estimates became available and the estimates were lower than the projections used by Addendum XXV. The coastwide reduction required if the current MRIP Wave 6 estimates are considered is 3.2%.

NY will consider adjustments to the season and possession limit to meet either the 3% or 7% reduction required by the Addendum.

Methods

Wave specific daily rates are generated by dividing the MRIP Wave Estimates of harvest (A+B1 fish) by the number of days open in each wave. MRIP estimates used in the calculations were current as of February 18, 2014.

Possession limit adjustments were calculated using angler specific catch frequency data collected by NYSDEC staff sampling on 18 headboat trips in 2013. Five out of the 18 headboat trips targeted black sea bass at some point during the trip. Thirty-five anglers kept a total of 85 black sea bass under the 2013 regulations that included a 13" size limit and an 8 fish possession limit. One angler kept 10 fish and this non-compliance was allowed to persist when considering lower possession limits.

Proposed Measures

NY's Marine Resource Advisory Council requested that a lower possession limit for some part of the fishing season be considered when generating regulatory options. In these examples, a possession limit of 3 fish was considered during Wave 4, and the possession limit reverted back to 8 fish during Waves 5 and 6. See spreadsheet for details. That methodology could be used for other combinations of season and possession limit. No changes in the possession limit will occur mid-Wave.

NY's 2014 Recreational Black Sea Bass Options

	SEASON	DAYS WV 3	DAYS WV 4	DAYS WV 5	DAYS WV 6	PROJ HARVEST	REDUCTION
2013 MEASURES	7/10-12/31 8 FISH @ 13"		53	61	61	337,250	
-7.0% REDUX REQUIRED							
OPTION 1	7/15-12/31 8 FISH @ 13"	0	48	61	61	313,790	-7.0%
OPTION 2	7/6-8/31 3 FISH @ 13"	0	57				
	9/1-12/31 8 FISH @ 13"			61	61	311,969	-7.5%
-3.0% REDUX REQUIRED							
OPTION 1	7/13-12/31 8 FISH @ 13"	0	50	61	61	323,174	-4.2%
OPTION 2	7/3-8/31 3 FISH @ 13"	0	60				
	9/1-12/31 8 FISH @ 13"			61	61	323,726	-4.0%



NEW JERSEY DIVISION OF
Fish and Wildlife
P.O. Box 400
Trenton, NJ 08625-0400
David Chanda, Director

Memorandum

TO: Kirby Rootes-Murdy, FMP Coordinator
Atlantic States Marine Fisheries Commission

FROM: Peter Clarke, Biologist
New Jersey Bureau of Marine Fisheries

DATE: March 4, 2014-REVISED

SUBJECT: New Jersey Black Sea Bass Recreational Fishery Management Proposal for 2014

Attached are New Jersey's options to manage its 2014 recreational black sea bass fishery. Each option contains modifications to either daily possession limit, and/or an open season that satisfies the required reduction of 6.8 % as established by the Atlantic States Marine Fisheries Commission (ASMFC). On February 18, 2014, NMFS MRIP data was published for preliminary estimates for all of 2013 landings including the previously missing wave 6 estimates. The percent reductions were calculated with Wave 6 projected harvest. The preliminary Wave 6 harvest estimates suggest a 3.2% reduction. Both reduction estimates have been developed and are included in this document. New Jersey plans to retain its current minimum size limit of 12.5 inches and therefore no options with a modification to the size limit are included. A spreadsheet that includes the data and formulas used to calculate the percent reductions for the options has been provided to the ASMFC's Summer Flounder, Scup and Black Sea Bass Technical Committee.

Background:

At their February 2014 meeting, the ASMFC's Summer Flounder, Scup, and Black Sea Bass Management Board approved ad hoc regional management measures for the 2014 recreational black sea bass fishery. These measures require states in the northern region, MA, RI, CT, NY, and NJ, to take a 7% reduction based on the preliminary 2013 recreational black sea bass harvest estimates. Since that meeting, preliminary estimates for 2013 wave 6 have been published indicating that the northern region may only need to take a 3.2 % reduction in harvest. The current 2013 New Jersey recreational black sea bass regulations are 20 fish at 12.5 inches, with an open season from May 19-August 8, September 27-October 14, and November 1-December 31. Current Federal Regulations for 2014 are 15 fish at 12.5 inches, with an open season from May 19 to September 18 and October 18 to December 31.

Method:

New Jersey explored several methods of estimating 2013 recreational black sea bass options. Those considered included estimates of harvest by wave based on the National Marine Fisheries Service (NMFS), Marine Recreational Information Program (MRIP) and New Jersey Volunteer Angler Survey (VAS). Ultimately, a combination of both data sources was utilized to allow New Jersey the flexibility to reduce the possession limit as well as season in either combination or individually. The MRIP data provided landings estimates for season reductions while the New Jersey VAS data provided the data for daily possession reductions (Table 1).

Proposed Management Strategies for 2014:

Options that are being considered for New Jersey's 2014 black sea bass recreational fishery are listed in Table 2. All options were developed using the New Jersey MRIP harvest data from 2013 with an averaged wave 6 estimate from 2011 and 2012 and are the same values used for table 6 in the ASMFC Addendum XXV to the Summer Flounder, Scup, Black Sea Bass Fishery Management Plan. To create a daily possession bag reduction table, the New Jersey VAS data was used by taking the average harvest from 2011-2013. New Jersey is considering a split bag approach which would present a size limit of 12.5 inches and a possession limit of 15 fish during waves 3, 5, and 6 and a reduced possession limit during wave 4.

Please keep in mind that the options listed in Table 2 reflect potential options. New Jersey's Marine Fisheries Council's Black Sea Bass Committee and its advisors will convene to recommend their preferred options to the New Jersey Marine Fisheries Council for 2014. The Council will then meet to select an option. The option they select may or may not be one of the examples provided, but it will have been developed using the same methodology as the options listed in Table 2 and Table 3. The Technical Committee has been provided the spreadsheet with the calculations for the percent reductions.

Table 1. Percent Reductions obtained through bag changes from the New Jersey Volunteer Angler Survey.

NJ 2014 Bag Reduction Table								
Possession Limit	20	15	12	10	8	6	5	4
Percent Reduction	0%	3%	7%	12%	19%	27%	33%	39%

Table 2. Management Options for NJ's 2014 Black Sea Bass Recreational Fishery Based on Average Daily Harvest Rates from 2013 MRIP data achieving a 7.0 percent reduction in harvest.

Examples of Potential 2014 NJ Black Sea Bass Recreational Measures Achieving a 3.2 % Reduction			
Possession	Size	Total Days and Open Season	Total Reduction from Measures
		155	
20 fish at	12.5	May 19-August 8 and Oct 20 - Dec 31	9.4%
		157	
15 fish at	12.5	May 19 - Aug 8 and Oct 18 - Dec 31	8.9%
		159	
15 fish at	12.5	May 19 - Aug 17 and Oct 25 to Dec 31	8.2%
		161	
15 fish at	12.5	May 19 - Aug 26 and Nov 1 - Dec 31	7.4%
		161	
12 fish at	12.5	May 19 - Aug 12 and Oct 18 - Dec 31	7.9%
		176	
Split Bag 15/5/15/15 fish at	12.5	May 19 - Aug 27 and Oct 18 - Dec 31	7.6%
*****2014 Federal Measures*****			
15 Fish at	12.5	May 19 - Sept 18 and Oct 18 - Dec 31	

Table 3. Management Options for NJ's 2014 Black Sea Bass Recreational Fishery Based on Average Daily Harvest Rates from 2013 MRIP data achieving a 3.2 percent reduction in harvest.

Examples of Potential 2014 NJ Black Sea Bass Recreational Measures Achieving a 3.2 % Reduction			
Possession	Size	Total Days and Open Season	Total Reduction from Measures
		159	
20 fish at	12.5	May 19-August 10 and Oct 18 - Dec 31	3.7%
		161	
15 fish at	12.5	May 19 - Aug 12 and Oct 18 - Dec 31	3.9%
		162	
15 fish at	12.5	May 19 - Aug 20 and Oct 25 to Dec 31	4.4%
		164	
15 fish at	12.5	May 19 - Aug 29 and Nov 1 - Dec 31	3.6%
		164	
12 fish at	12.5	May 19 - Aug 29 and Oct 18 - Dec 31	4.2%
		180	
Split Bag 15/5/15/15 fish at	12.5	May 19 - Aug 31 and Oct 18 - Dec 31	4.1%
*****2014 Federal Measures*****			
15 Fish at	12.5	May 19 - Sept 18 and Oct 18 - Dec 31	

Atlantic States Marine Fisheries Commission

**ADDENDUM XXV TO THE SUMMER FLOUNDER, SCUP,
BLACK SEA BASS FISHERY MANAGEMENT PLAN**

Summer Flounder and Black Sea Bass Recreational Management



Vision: Sustainably Managing Atlantic Coastal Fisheries

Approved February 4, 2014

1.0 Introduction

Summer flounder, scup, and black sea bass fisheries are managed cooperatively by the states through the Atlantic States Marine Fisheries Commission (Commission) in state waters (0-3 miles), and through the Mid-Atlantic Fishery Management Council (Council) and the NOAA Fisheries in federal waters (3-200 miles). The management unit for summer flounder, scup, and black sea bass in US waters is the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the US-Canadian border.

This Addendum is adopted under the adaptive management/framework procedures of Amendment 12 and Framework 2 that are a part of the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP).

This Addendum establishes regional management of the summer flounder and black sea bass recreational fisheries for the 2014 fishing year. The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board (Board) initiated this addendum with the following motion on October 29, 2013:

- 1) *Move to initiate an addendum to the summer flounder, scup, and black sea bass fisheries management plan to consider and develop alternate approaches for management of the recreational summer flounder fishery for the 2014 fishing season;*
- 2) *Move to initiate an addendum using an ad hoc regional approach in the recreational black sea bass fishery.*

2.0 Overview

2.1 Statement of the Problem

2.1.1 Summer Flounder

It is important that Commission fishery management plans strive to provide recreational anglers with equitable access to shared fishery resources throughout the range of each managed species. While equitable access is difficult to characterize, it generally relates to the distribution, abundance, and size composition of the resource vis-à-vis the abundance and distribution of anglers along the coast.

There is a growing concern that the management measures set forth under the Summer Flounder FMP are not providing recreational fishermen along the coast with equitable access to the summer flounder fishery. Those measures, involving the use of conservation equivalency on a state-by-state basis, are increasingly being viewed as problematic due to several factors, including: reliance upon recreational harvest estimates for a single year (1998) as the basis for individual state allocations; a change in the abundance and distribution of the resource; and changes in the socio-economic characteristics of the fishery.

The dynamic stock characteristics of summer flounder, such as recruitment, spawning stock biomass and age class expansion, have challenged managers for the last 20 years.

These elements of the fishery have created a need for more dynamic and adaptive management that can handle potential inequities that may arise.

2.1.2 Black Sea Bass

During the past 15 years, the black sea bass recreational harvest target was exceeded six times, most recently in 2010, 2012, and 2013 when the harvest target was the lowest in the time series. The management plan for black sea bass does not provide an opportunity to craft recreational measures by regions or state; it only allows for a coastwide measure. Due to the wide geographic range of this species, the application of coastwide minimum size, possession limit, and season restrictions may not affect every area involved in the fishery the same way. States are concerned that the coastwide regulations have disproportionately impacted states within the management unit. To address these concerns, the Board approved Addendum XXIII to provide the necessary management flexibility to mitigate potential disproportionate impacts on states in 2013. Addendum XXIII established regional management for only the 2013 black sea bass recreational fishery. This Addendum XXV continues the regional approaches for black sea bass recreational fishery management in 2014.

2.2 Background

2.2.1 Summer flounder

Amendment 2, which introduced quota-based management to the summer flounder fishery, initially required each state (Massachusetts to North Carolina) to adopt the same minimum size and possession limit as established in federal waters, allowing only for different open seasons. The consistent measures were intended to achieve conservation equivalency in all state and federal waters throughout the range of the resource. However, states soon found that one set of measures applied coastwide did not achieve equivalent conservation due to the significant geographic differences in summer flounder abundance and size composition.

To address this disparity, the FMP was amended via Addendum IV (2001) and Addendum VIII (2003) to allow for the use of state conservation equivalency to manage recreational harvests. Since 2001, the FMP has allowed for, and the Commission and Council have utilized, a state-by-state allocation formula, based on estimates of state recreational landings in 1998, to establish individual state harvest targets. Individual states have the flexibility to tailor their regulations – namely, minimum size, possession, and season limits – to meet the needs and interests of their fishermen, provided that the targets are not exceeded. The individual state allocations, as a percentage of the total coastwide recreational harvest limit, are set forth in Table 1.

Re-assessing in the Face of Changing Conditions:

The interim solution of state-by-state conservation equivalency based on estimated state harvests in 1998 succeeded, initially, in mitigating the disparity in conservation burden among states, but the approach is increasingly being viewed as an inadequate long-term solution, given recent changes in resource status and fishery performance. Fifteen years have passed since 1998. Even if the allocations were perfectly equitable when adopted

over a decade ago, they are now likely out of synch given the substantial variation in stock dynamics that has occurred since then. Over the many years since Amendment 2 was first implemented, the summer flounder stock spawning stock biomass has increased approximately six-fold, and the number of age classes has increased from 2-3 to 7 or more. These changes have led to geographic shifts in the distribution of the resource (As the stock has rebuilt, its range has expanded). Climate change may also be contributing to shifts in migratory patterns, spatially and temporally. Taken together, these changing conditions have altered the dynamics regarding the challenge of maintaining balance in equivalent conservation burden across the range of the species.

Further, the 1998-based allocation formula set forth by the FMP does not reflect changes in socio-economic patterns over the past fifteen years, particularly with regard to the number and distribution of anglers along the coast. During this time, estimates of angler participation have increased 35% from 4.6 million in 1998 to 6.2 million in 2012 (Table 2). Landings by mode have also changed over the past 15 years, with decreases across all modes (Table 3). Additionally, the Summer Flounder Advisory Panel members for the Commission and Council have noted that the continuing rising cost of fuel, bait and other trip expenditures have impacted anglers financially.

Finally, any attempt to allocate harvest opportunities on the basis of estimated recreational harvests for a given year is necessarily fraught with uncertainty and error, given the general difficulty of measuring recreational catch and effort, and the particular difficulty of doing so on a state-by-state basis. Over the past 15 years, there have been strides made by NOAA Fisheries to more accurately estimate catch and effort data by reducing the potential for bias. This has been and will continue to be a process in improving precision in estimates for species such as summer flounder, due to factors including weighting survey intercepts, variety of fishing modes, and catch rates.

Alternative Approaches:

A more realistic and flexible gauge of equitable conservation may be needed to enable the summer flounder management program to adjust to past, current, and future changes in the resource and the fishery. The biological characteristics of the summer flounder stock have changed with the restoration of this stock that occurred in 2010. In particular, there has been a substantial expansion in the size and age composition, as more large summer flounder and greater overall abundance have resulted from management conservation measures over the course of a decade. Since 2011 there have been reductions in the recreational harvest limit (RHL) partly because the spawning stock biomass has been less than the SSBMSY proxy = $SSB_{35\%} = 137.555$ million pounds. In addition, recruitment has been below average since 2009, and these two stock conditions could lower future recreational harvest limits and this would present additional challenges to equitability in fishing and harvest opportunities among states.

2.2.2 Black Sea Bass

The black sea bass recreational fishery is managed on a “target quota” basis. Fifty-one percent of the total allowable landings are allocated as a recreational harvest target and

forty-nine percent is allocated to the commercial sector. From 1996 to 2010, a uniform coastwide size, season, and bag limits had been used by the Commission and Council to constrain the recreational fishery to the annual harvest limit (Table 4). States were concerned that the coastwide regulations disproportionately impacted states within the management unit; therefore, the Board approved several addenda which allowed for state-by-state and regional measures for 2011 through 2013 in state waters only. Each of the addenda expired at the end of one year. The Board passed Addendum XXIII in 2013 to provide the necessary management flexibility to mitigate potential disproportionate impacts through the use of regional ad hoc management. Table 5 shows the individual state regulations for the 2013 fishing year. In 2013, the projected coastwide harvest is estimated at 2.46 million pounds or, approximately 200,000 pounds over the harvest target (2.26 million pounds) (Tables 4 & 6). The management plan for black sea bass does not provide an opportunity to craft recreational measures by regions or state, it only allowed for a single coastwide measure. Due to the wide geographic range of this species, the application of coastwide minimum size, possession limit, and season restrictions may not affect every area involved in the fishery the same way. Additionally, black sea bass migrations may result in differences in availability to the recreational fishery in each state.

2.3 Description of the Fishery

2.3.1 Summer Flounder

In practice, the recreational fishery for summer flounder is managed on a “target quota” basis. A set portion of the total allowable landings is established as a RHL, and management measures are established by the states that can reasonably be expected to constrain the recreational fishery to this limit each year. It has historically been deemed impractical, because of the limitations of producing timely landing estimates, to try to manage these recreational fisheries based on a real-time quota.

With a catch of over 5.5 million fish and a harvest of over 500,000 fish in 2012, New York is second only to New Jersey (1 million fish harvested in 2012) in the size of its fluke fishery (Table 7). Virginia ranks third with 259,973 fish harvested. Catch and harvest levels diminish rapidly, thereafter, such that the smallest landing state (Maryland) landed 22,617 fish and the combined harvest of six states (MA, RI, CT, DE, MD, NC) totals 372,632 fish.

Minimum sizes adopted by states follow a general south to north pattern of increasing size. In 2013, they ranged from 15 inches in North Carolina (smallest) to 19 inches in New York (largest), and then drop again northward to Massachusetts (Table 8). Despite the wide range in minimum sizes, only two states: New York and New Jersey exceeded their targets in 2012 (Table 7). For many other states, harvest fell significantly below 2012 targets despite expectations that the adopted regulatory programs would produce landings near their targets. These states were allowed to adopt more liberal regulations in 2013 even with lower harvest targets, because their 2012 harvest was lower than the 2013 target.

In assessing the performance of the summer flounder recreational fishery in 2012, fishing opportunities and success vary across the range of the management unit (Table 9, Appendix A assesses the performance of the 2010 and 2011 fishery). Using metrics including retention rate, fishing trips, possession limits, season length, and scoring each state in relation to each of other, the fishing opportunity differs on a state by state basis with little to no regional distinction; for example, retention rates are highest in the states of Virginia and Massachusetts, and the lowest in New York and Maryland (Table 9). Fishing seasons also vary significantly along the coast, with states such as North Carolina and Virginia open all year, while Massachusetts and New Jersey have the shortest seasons within the management unit (132 and 147 days respectively). Interest or avidity in relation to successful trips also varies widely as well; for example, trips targeting summer flounder are lowest in Maryland (3.4 % of all trips) and highest in New Jersey and New York, yet the highest success rates for targeted trips in relation to harvest is in Maryland (Table 9). Bag limits also vary across the states from the most restrictive in Maryland (3 fish possession limit) to least in Rhode Island (8 fish possession limit). Lastly, in comparing states to their nearest neighboring state regarding size limit, states differ significantly, with New York having the highest difference between its two neighbors (1.8 inch average difference compared to Connecticut and New Jersey) and smallest between Maryland and its neighboring states.

Recreational Survey Estimates

The Marine Recreational Information Program, or MRIP, is the new way NOAA Fisheries is counting and reporting marine recreational catch and effort. It is an angler-driven initiative that will not only produce better estimates, but will do so through a process grounded in the principles of transparency, accountability and engagement. MRIP replaces the Marine Recreational Fisheries Statistics Survey, or MRFSS, which has been in place since 1979. MRIP is designed to meet two critical needs: (1) provide the detailed, timely, scientifically sound estimates that fisheries managers, stock assessors and marine scientists need to ensure the sustainability of ocean resources and (2) address head-on stakeholder concerns about the reliability and credibility of recreational fishing catch and effort estimates.

The MRIP is an evolving program with ongoing improvements. Most recently, NOAA Fisheries scientists, in partnership with leading outside experts, have created an improved method for estimating recreational catch using data from existing shoreside angler survey data. The new method addresses a major concern raised by the National Research Council's evaluation of MRFSS –that the MRFSS catch estimation method was not correctly matched with the sampling design used gathering data, leading to potential bias in the estimates. Eliminating potential sources of bias is a fundamental change that lays the groundwork for future improvement and innovations, many of which are already being piloted. More detailed information on the improvement to the MRIP program can be found at <https://www.st.nmfs.noaa.gov/mrip/aboutus/timeline.html> .

2.3.2 Black Sea Bass

Black sea bass are generally considered structure oriented, preferring live-bottom and reef habitats. Within the stock area, distribution changes on a seasonal basis and the

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

An examination of the previous 7 years of recreational harvest data shows there is no systematic pattern in state harvest. In the most recent years, the states of Delaware and Massachusetts have seen an increase in harvest (Figures 1 and 2); Maryland and Virginia have seen a decline in harvest (Figures 2); and Connecticut and Rhode Island have remained fairly stable (Figures 1 and 2). For the past 3 years, the states of Massachusetts, New York and New Jersey make up the majority of the coastwide harvest. An examination of average state-specific MRIP harvest estimates by 'Area Harvested' (State v. EEZ waters) for the last 3 years indicate that the majority of the black sea bass fishery occurs in state waters in Massachusetts, Rhode Island, Connecticut, and New York (60%). For the states of Delaware to North Carolina, the majority of fishery operates in the waters of the EEZ (NJ and VA 31% and DE, MD and NC 9%).

2.4 Status of the Stock

2.4.1 Summer Flounder

The most recent peer-reviewed benchmark assessment for summer flounder was conducted by the July 2013 Stock Assessment Workshop/Stock Assessment Review Committee. The assessment utilizes an age-structured assessment model called ASAP. Results of the benchmark assessment indicate that the summer flounder stock was not overfished and overfishing was not occurring in 2012 relative to the biological reference points. The fishing mortality rate has been below 1.0 since 1997 and was estimated to be 0.285 in 2012, below the threshold fishing mortality reference point $F_{MSY} = 0.309$. Spawning stock biomass (SSB) was estimated to be 113 million pounds (51,238 mt) in 2012, about 82% of $SSB_{MSY} = 137.555$ million pounds (62,394 mt). NOAA Fisheries declared the summer flounder stock rebuilt in 2010, based on the 2011 assessment update.

2.4.2 Black Sea Bass

The most recently approved benchmark assessment on black sea bass was peer-reviewed and accepted in December 2008 by the Data Poor Stock Work Group (DPSWG) Peer Review Panel. Based on the June 2012 update, the stock is not overfished and overfishing is not occurring, relative to the biological reference points. Fishing mortality in 2011 is $F = 0.21$, a decrease from 2010. This point estimate of F in 2011 is below the fishing mortality threshold of $F=0.44$. Estimates for 2011 total biomass remain above the

biomass maximum sustainable yield. SSB in 2011 is 24.6 million pounds, which is 0.6 million pounds above the SSB_{MSY} target (24 million pounds) and a small decrease from the 2010 SSB estimate. Recruitment at age 1 averaged 26.4 million fish during 1968-1999 and in 2000, peaking at 56 million fish. Recruitment estimated by the model was relatively constant through the time series with the exception of 1975, 1999, and 2001 year classes. The 2011 year class was 21.0 million fish.

3.0 Management Program

3.1 Summer Flounder Recreational Fisheries Management Adaptive Regional Management

Due to the wide geographic range of this species, the application of a single coastwide minimum size, possession limit, and season restrictions does not affect all jurisdictions involved in the fishery the same way; and the application of state-by-state conservation equivalency can result in disparate measures by neighboring states.

Dividing the coastal states into regions allows states the flexibility to mitigate potential disproportionate impacts resulting from coastwide measures and to pursue more equitable harvest opportunities, while providing consistent measures to states within the same region, in many cases sharing the same fishing grounds. **This option is not intended to implement new state allocations and is not intended to set a precedent for new state allocations. Under the adaptive regional approach, states would not give up their (1998-based) allocated portion of the Recreational Harvest Limit (RHL), would not be held accountable for anything other than their allocated portion of the RHL, and would retain the future opportunity (depending on what management approach is adopted for 2015) to continue managing their fisheries in accordance with their allocated portion of the RHL.**

Under adaptive regional management, the Technical Committee (TC) will develop measures for each region that, when combined with other regions, constrain the coastwide harvest to the RHL. The measures will be similar to the 2013 regulations for each state, but allow for some flexibility to achieve consistent harvest opportunities among the regions. States within each region would be required to implement the same bag limits, size limits, and number of open season days. The final measures are subject to Board review and approval.

Any number of size, possession, and season combinations can be evaluated when looking at regional management. **One example of possible measures is given for each region for use in this document (this example may change as additional MRIP data are released).** The projected harvests listed in each example are based on the management constraints of size limits, possession limits, and season length and compared to the projected 2013 harvest.

The coastwide recreational harvest limit will be divided into four regions: 1) Massachusetts-Rhode Island 2) Connecticut-New Jersey 3) Delaware-Virginia and 4) North Carolina.

Example of 2014 regional measures:

STATE	Size Limit	Possession Limit	# of Days Open	Projected 2014 Harvest	Projected 2014 Regional Harvest
MASSACHUSETTS	17	5	132	21,079	
RHODE ISLAND	17	5	132	162,448	183,528
CONNECTICUT	18	4	128	227,939	
NEW YORK	18	4	128	640,523	
NEW JERSEY	18	4	128	906,348	1,774,810
DELAWARE	16	4	365	76,161	
MARYLAND	16	4	365	48,521	
VIRGINIA	16	4	365	187,428	312,110
NORTH CAROLINA	15	6	365	45,936	45,936
TOTAL				2,316,384	

3.1.1 Timeframe for Summer Flounder Measures

The adaptive summer flounder regional management provision outlined in section 3.1 expires on December 31, 2014. After 2014, measures would revert back to the FMP status quo: The Board and Council specify coastwide measures to achieve a coastwide recreational harvest limit or permit conservation equivalent management measures using guidelines agreed upon by both management authorities in Framework 2 and Addenda XIV and XVII. Under conservation equivalency, states can implement state-by-state measures or adjacent/contiguous states can voluntarily enter into an agreement forming regions. Under either option, the combined measures of all the states or regions need to constrain recreational landings to the coastwide RHL.

3.2 Black Sea Bass

The federal FMP does not allow for conservation equivalency and would require an amendment to the plan to make the necessary changes consistent with those proposed in this document; therefore, a single coastwide measure is set in federal waters. Federal permit holders have to follow regulations set by the NOAA Fisheries regardless of where they are fishing. The Council recommended to NOAA Fisheries that the federal measures for the 2014 fishing year be: 12.5 inch TL minimum fish size, 15 fish possession limit, and open season of May 19-September 18 and Oct 18-December 31 so long as reductions the combined reduction in state waters and federal waters landings meet NOAA requirements. If action is not taken to meet the required reduction specified by NOAA, coastwide measures would include a 13 inch TL minimum fish size, a 5 fish possession limit, and a season from June 1-September 30. Under the ad hoc regional measures approach, regions will implement recreational black sea bass management programs that utilize minimum size limits, maximum possession limits, and seasonal closures that are

designed to achieve a specific harvest reduction/liberalization that, when combined with the other regions in the management unit, achieve the required coastwide reduction for 2014 of 7% in numbers of fish (based on preliminary wave 1-5 data with wave 6 projected using prior years data)

Reduction tables, provided by the TC, will be used to determine which suite of possession limits, size limits, and closed seasons would constrain recreational landings to the recreational harvest limit for the state/region. Tables will be adjusted for each region to account for past effectiveness of the regulations. Each region will propose a combination of size limit, possession limit, and closed season that would constrain landings to the appropriate level. These regulations will be reviewed by the Technical Committee and approved by the Board. States will not implement measures by mode or area unless the PSE of the mode or area for that region is less than 15%.

Note: The MRIP data used to set state-specific conservation equivalent measures produces more variable results when used on a state-by-state basis. As the coverage area increases, the variability of the data decreases; therefore, adopting regional or coastwide approaches will give more precision to the data.

The measures in section 3.2 of this addendum are not intended to implement state allocations and are not intended to set a precedent for state allocations. The Technical Committee (TC) recommends that monitoring of harvest and catch should be conducted for the duration that the fishery is open in a given year.

Ad Hoc Recreational Black Sea Bass Regional Measures for 2014

This addendum establishes a northern and the southern region. Each region will implement recreational black sea bass management programs that utilize minimum size limits, maximum possession limits, and seasonal closures that are designed to achieve a specific harvest reduction that, when combined with the other regions in the management unit, achieve the required coastwide limit for 2014. The northern region will contain the states of Massachusetts through New Jersey and the southern region will contain the states of Delaware through North Carolina (North of Cape Hatteras). All states will agree to the regulations implemented within the region. While not required, states will work together to develop consistent regulations to allow for as seamless as possible recreational management program within the region. The states of the northern region (Massachusetts through New Jersey) will reduce their regulations based on the region's performance in 2013. The states of the southern region [Delaware through North Carolina (North of Cape Hatteras)] will set their measures consistent with federal regulations (current recommend Federal measures are: 12.5 inch TL minimum fish size, 15 fish possession limit, and open season from May 19-September 18 and October 18-December 31). The regulations of the two regions combined would require a total harvest reduction of 7% in numbers of fish to achieve the 2014 recreational harvest limit (RHL) (2.26 million pounds or 1,189,474 fish).

3.2.1 Timeframe for Black Sea Bass Measures

The measures in section 3.2 are for state waters in 2014. The Board can take action to extend this the provisions in section 3.2 ad hoc regional black sea bass management for one year, with the regulations in state waters expiring at the end of 2015. After 2015, measures would revert back to the FMP single coastwide measures.

4.0 Compliance:

The measures contained in section 3.0 of Addendum XXV are effective immediately upon its approval (February 4, 2014). The Technical Committee recommends that monitoring of harvest and catch should be conducted for the duration that the fishery is open in a given year.

Table 1. State summer flounder harvest in 1998 and the proportion of harvest conservation equivalency is based on

State	1998 estimated harvest (thousands)	Percent of the 1998 harvest
MA	383	5.5%
RI	395	5.7%
CT	261	3.7%
NY	1,230	17.6%
NJ	2,728	39.1%
DE	219	3.1%
MD	206	3.0%
VA	1,165	16.7%
NC	391	5.6%

Table 2. Angler Participation on the Atlantic Coast with percent change from 1998-2012

Angler Participation coastwide from 1998-2012				
Year	Coastal	Non-Coastal	Total	Percent Change from 1998
1998	4,137,554	447,172	4,584,726	
1999	3,797,901	480,630	4,278,531	-6.68%
2000	5,074,359	653,104	5,727,463	24.92%
2001	5,537,676	717,490	6,255,166	36.43%
2002	4,660,668	597,327	5,257,995	14.69%
2003	5,697,540	768,372	6,465,912	41.03%
2004	5,623,004	832,386	6,455,390	40.80%
2005	6,965,785	892,768	7,858,553	71.41%
2006	6,886,353	889,097	7,775,450	69.59%
2007	7,799,919	910,168	8,710,087	89.98%
2008	6,541,755	944,118	7,485,873	63.28%
2009	5,581,259	812,991	6,394,250	39.47%
2010	5,848,691	882,858	6,731,549	46.83%
2011	5,293,098	726,760	6,019,858	31.30%
2012	5,399,706	821,199	6,220,905	35.69%

Source: Personal Communication from National Marine Fisheries Service, Fisheries Statistics Division, 12/3/2013

Table 3. The number of summer flounder landed from Maine through North Carolina by mode, 1981-2012.

Year	Shore	Party/Charter	Private/Rental
1981	3,145,683	1,362,252	5,058,639
1982	1,120,521	5,936,006	8,416,173
1983	3,963,680	3,574,229	13,458,398
1984	1,355,595	2,495,733	13,623,843
1985	786,185	1,152,247	9,127,759
1986	1,237,033	1,608,907	8,774,921
1987	406,095	1,150,095	6,308,572
1988	945,864	1,134,353	7,879,442
1989	180,268	141,320	1,395,177
1990	261,898	413,240	3,118,447
1991	565,404	597,610	4,904,637
1992	275,474	375,245	4,351,387
1993	342,225	1,013,464	5,138,352
1994	447,184	836,362	5,419,145
1995	241,906	267,348	2,816,460
1996	206,927	659,876	6,130,182
1997	255,066	930,633	5,981,121
1998	316,314	360,777	6,302,004
1999	213,447	300,807	3,592,741
2000	569,612	648,755	6,582,707
2001	226,996	329,705	4,736,910
2002	154,958	261,554	2,845,647
2003	203,717	389,142	3,965,811
2004	200,368	463,776	3,652,354
2005	104,295	498,614	3,424,557
2006	154,414	315,935	3,479,934
2007	98,418	499,160	2,510,000
2008	79,339	171,951	2,098,583
2009	62,691	176,997	1,566,490
2010	59,812	160,109	1,281,546
2011	34,849	137,787	1,667,240
2012	106,342	96,386	1,996,407
% of Total, 1981-2012	9%	14%	77%
% of Total, 2008-2012	3%	8%	89%

Source: Summer Flounder AP Information Document. Mid-Atlantic Fishery Management Council. August 2013.

Table 4. Black Sea Bass Specifications and Harvest estimates from 1998-2013

Year	1998	1999	2000	2001	2002	2003	2004	2005
Harvest Limit (mlbs)	3.15	3.15	3.15	3.15	3.43	3.43	4.01	4.13
Harvest (mlbs)	1.51	1.94	4.30	3.98	4.65	3.44	2.88	2.55
Size (inches)	10	10	10	11	11.5	12	12	12
Bag[^]	--	--	--	25	25	25	25	25
Open Season	1/1-7/30 and 8/16-12/31	All year	All year	1/1-2/28 and 5/10-12/31	All year	1/1-9/1 and 9/16-11/30	1/1-9/7 and 9/22-11/30	All year

Year	2006	2007	2008	2009	2010	2011	2012	2013
Harvest Limit (mlbs)	3.99	2.47	2.11	1.14	1.83	1.84	1.32	2.26
Harvest (mlbs)	2.31	2.64	2.40	2.78	3.72	1.54	3.57	2.46**
Size (inches)	12	12	12	12.5	12.5	Varied by region	Varied by region	Varied by region
Bag[^]	25	25	25	25	25	Varied by region	Varied by region	Varied by region
Open Season	All year	All year	All year	All year*	5/22-10/11 and 11/1-12/31	Varied by region	Varied by region	Varied by region

[^] The state of Massachusetts has a more conservative bag limit of 20 fish.

* In 2009 Federal waters were closed on October 5, 2009

** 2013 Projected harvest estimate using MRIP waves 1-5 preliminary data (projecting wave 6 data)

Table 5. 2013 Black Sea Bass recreational management measures

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

Table 6. Black Sea Bass MRIP Harvest Estimates (in numbers of fish)

State	Year			
	2010	2011	2012	2013*
NH	0	0	3,195	12,347
MA	702,138	194,753	519,910	304,013
RI	160,428	50,204	102,548	75,506
CT	15,682	8,377	110,858	106,149
NY	543,245	274,475	321,516	366,307
NJ	687,450	148,486	734,928	356,505
DE	21,029	42,962	40,141	26,316
MD	36,019	47,444	33,080	4,478
VA	29,717	18,964	4,075	21,219
NC**	34,741	23,751	3,664	9,149
Total	2,230,449	809,416	1,873,915	1,281,989
NH-NJ	2,108,943	676,295	1,792,955	1,220,827
DE-NC	121,506	133,121	80,960	61,162
*2013 estimates are preliminary (wave 6 is projected using prior year data)				
** post-stratified data unavailable, North of Hatteras landings estimated at 1/4 of total NC landings				

Table 7. Summer flounder recreational landings ('000 fish) by state, waves 1-6, 2003-2012.

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
CT	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

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 8. 2013 Summer Flounder recreational management measures

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	16	5 fish	May 22-September 30 (131 days)
Rhode Island	18	8 fish	May 1-December 31 (244 days)
Connecticut*	17.5	5 fish	May 15-October 31 (176 days)
*At 42 designated shore sites	16		
New York	19	4 fish	May 1-September 29 (151 days)
New Jersey	17.5	5 fish	May 18-September 24 (133 days)
Delaware	17	4 fish	All year (356 days)
Maryland	16	4 fish	March 28-December 31 (275 days)
PRFC	16	4 fish	All year (365 days)
Virginia	16	4 fish	All year (365 days)
North Carolina	15	6 fish	All Year (365 days)

Table 9. 2012 Summer Flounder Recreational Fishery Performance Matrix

STATE	MA	RI	CT	NY	NJ	DE	MD	VA	NC*
RETENTION RATE (%)	23.2	21.3	16.9	9.2	13.9	15.2	9.6	23.3	NA
SIZE LIMIT	16.5	18.5	18.0	19.5	17.5	18.0	17.0	16.5	15
% of ALL S/W TRIPS TARGETING SF	3.4	13.9	17.2	31.7	39.3	19.2	5.7	23.7	NA
TRIPS w/ HARVEST : TARGETED TRIPS	0.37	0.31	0.16	0.20	0.29	0.16	0.22	0.28	NA
INTERCEPTS HARVEST : CATCH	0.50	0.43	0.28	0.22	0.35	0.23	0.20	0.41	NA
BAG LIMIT	5	8	5	4	5	4	3	4	6
SEASON (DAYS)	132	245	170	153	147	296	248	365	365
NEAREST NEIGHBOR SIZE LIMIT	1.8	0.8	-0.3	-1.0	-1.3	0.5	1.3	-2.0	-1.5

*The North Carolina recreational flounder fishery regularly catches 3 species of flounder. Due to problems with angler identification, released flounder are included in MRIP categories for lefteye flounder genus or family. Trip targets are also generally reported as lefteye flounder although it is likely that some trips are more likely to catch a particular flounder species. Determining the number of releases and targeted trips for summer flounder based on available information would require assumptions that cannot be tested without further study. Therefore, any fishery metric that includes released or trips targeting summer flounder for North Carolina is too uncertain to be used for management decisions and is listed as NA.

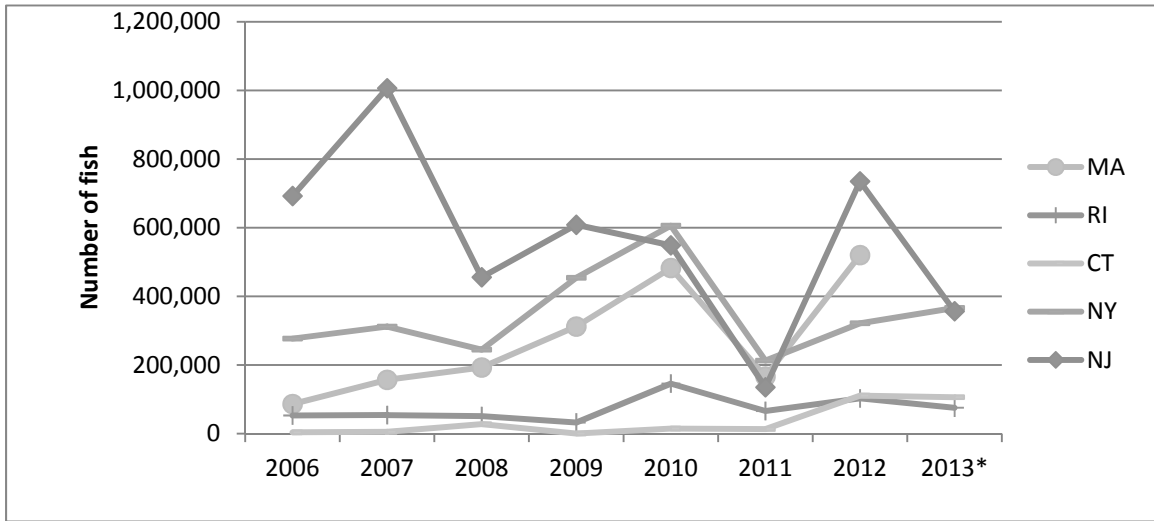


Figure 1. Recreational harvest estimates by state (MA-NJ) from 2006 to 2012. 2013 estimates are preliminary (waves 5 & 6 are projected using prior year data).

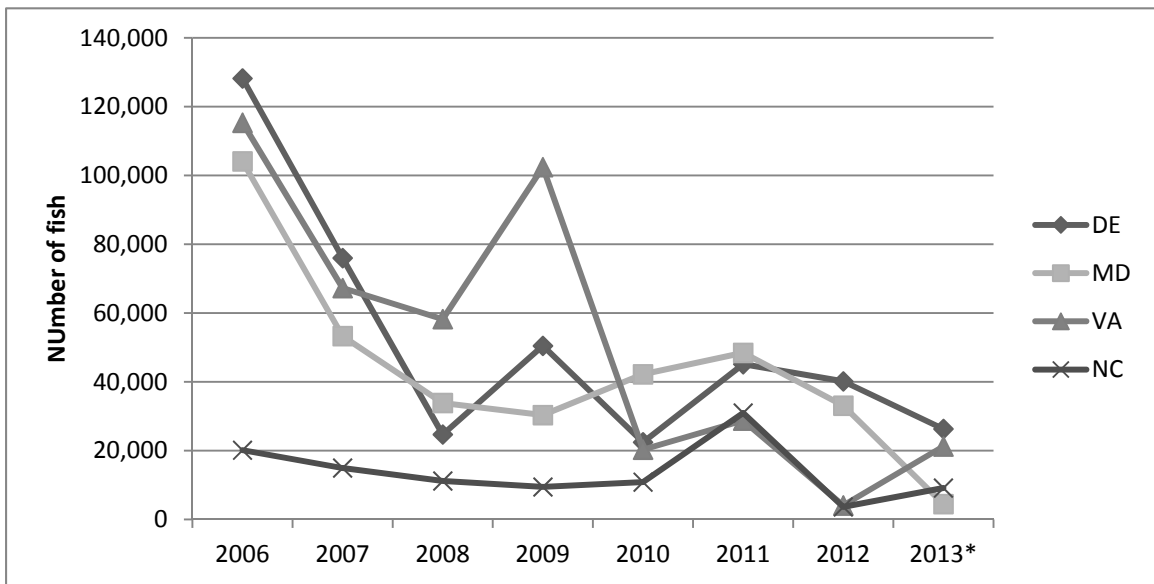


Figure 2. Recreational harvest estimates by state (DE-NC) from 2006 to 2012. 2013 estimates are preliminary (waves 5 & 6 are projected using prior year data).

Appendix A

2010 Summer Flounder Recreational Fishery Performance Matrix

STATE	MA	RI	CT	NY	NJ	DE	MD	VA	NC*
RETENTION RATE (%)	17.4	34.0	8.6	4.8	5.0	8.0	2.0	9.7	NA
SIZE LIMIT	18.5	19.5	19.5	21	18	18.5	19	18.5	15
% of ALL S/W TRIPS TARGETING SF	1.4	11.5	9.2	28.5	35.0	26.4	9.5	24.4	NA
TRIPS w/ HARVEST : TARGETED TRIPS	0.40	0.21	0.23	0.16	0.16	0.19	0.10	0.25	NA
INTERCEPTS HARVEST : CATCH	0.55	0.31	0.24	0.18	0.19	0.22	0.07	0.28	NA
BAG LIMIT	5	6	3	2	6	4	3	4	8
SEASON (DAYS)	108	245	103	115	101	285	219	365	365
NEAREST NEIGHBOR SIZE LIMIT	-1.0	0.5	-0.75	2.25	-1.75	0	0.5	1.5	-3.5

2011 Summer Flounder Recreational Fishery Performance Matrix

STATE	MA	RI	CT	NY	NJ	DE	MD	VA	NC*
RETENTION RATE (%)	24.2	18.2	12.0	4.9	8.3	9.8	3.1	13.8	NA
SIZE LIMIT	17.5	18.5	18.5	20.5	18	18	18	17.5	15
% of ALL S/W TRIPS TARGETING SF	2.6	18.6	9.3	33.5	36.4	25.8	5.5	22.4	NA
TRIPS w/ HARVEST : TARGETED TRIPS	0.31	0.37	0.23	0.16	0.20	0.17	0.11	0.21	NA
INTERCEPTS HARVEST : CATCH	0.40	0.43	0.24	0.18	0.26	0.20	0.08	0.29	NA
BAG LIMIT	5	7	3	3	8	4	3	4	6
SEASON (DAYS)	132	245	113	153	142	296	229	365	365
NEAREST NEIGHBOR SIZE LIMIT	-1.0	0.5	-1	2.25	-1.25	0	0.25	1	-2.5

*The North Carolina recreational flounder fishery regularly catches 3 species of flounder. Due to problems with angler identification, released flounder are included in MRIP categories for left eye flounder genus or family. Trip targets are also generally reported as left eye flounder although it is likely that some trips are more likely to catch a particular flounder species. Determining the number of releases and targeted trips for summer flounder based on available information would require assumptions that cannot be tested without further study. Therefore, any fishery metric that includes released or trips targeting summer flounder for North Carolina is too uncertain to be used for management decisions and is listed as NA.