# Atlantic States Marine Fisheries Commission 

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## MEMORANDUM

January 31, 2012
To: Summer Flounder, Scup, and Black Sea Bass Management Board
From: Toni Kerns, Senior FMP Coordinator
RE: 2012 Summer Flounder Recreational Fishery Proposals
List of Participants

| Jason McNamee (RI) | Rich Wong (DE) | Mark Terceiro (NMFS) |
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## Summer Flounder Recreational Proposals

The Board and Council met in December of 2011 to establish the 2012 recreational management program. At this meeting, the Board and Council agreed that the states would implement conservational equivalent measures rather than implement a coastwide management program.

The Technical Committee (TC) agreed that in order for a state proposal to be considered the state must develop evaluations of their states past management history (size, season, and possession limits), fishery performance relative to those measures, and an evaluation of which measures work for that state or region. The evaluations should show the state's general fishery performance since 2002 when conservation equivalency began. A more detailed analysis should be completed for the state's most recent two years. States that liberalize their regulations should develop a detailed analysis of the methods last used to liberalize their summer flounder fishery.

The TC met on January 25, 2012 to review the state management proposals for 2012. On the day of the TC meeting NOAA Fisheries released landings estimates for 2004-2011 using the improved estimation method, MRIP. For each proposal the TC report notes the number of years the MRIP estimate was less than the MRFSS, the annual average percent the MRIP estimate was above or below the MRFSS estimate, and the amount a state could liberalize/reduce under MRFSS and under MRIP. The TC evaluated the merit of each state's proposal considering both the MRFSS and MRIP. If the Board will be using landings estimates from MRIP in 2012, the technical committee recommends the Board consider the TC evaluations of the proposals using MRIP when approving state 2012 measures.

The TC also notes the unequal distribution of harvest and risk amongst states. To illustrate the point, a 10\% overage in NJ in 2012 would equal 109,040 fish, whereas a 10\% overage in DE would equal 9,485 fish. State's with the highest overall harvest along the coast need to be particularly careful when setting conservation equivalency measures because even though they may only incur a small proportional overage, in magnitude it can be equal to another state's entire annual harvest, and therefore can lead to more severe ramifications coastwide based on this magnitude.

Below are the details of each option and the Technical Committee recommendations to the Board. Each proposal assumes that effort and availability in 2012 will be similar to prior years.

## Massachusetts

2011 Harvest Target: 187,000 fish
2011 Landings: 42,588 fish
2012 Harvest Target: 153,089 fish
Alteration for 2012: 259 \% liberalization

## 2011 Regulations:

Minimum Size: 17.5"
Possession Limit: 5 fish
Open Season: May 22-September 30
Proposed 2012 Measure

| Option \# | Min Size | Bag Limit | Open Season | Liberalization |
| :--- | :--- | :--- | :--- | :--- |
| 1 | $16.5 "$ | 5 fish | May 22-September 30 | $227-233 \%$ average |
| 2 | $17 "$ | 5 fish | May 22-September 30 | $64 \%-113 \%$ average |

## MRIP vs MRFSS Summary:

For 1 out of 8 years, the MA MRIP landings estimate was less than the MA MRFSS landings estimate. From 2004 to 2011 the MRIP annual landings estimate was $31 \%$ higher than MRFSS on average. The 2011 MRIP landings estimate would only allow a $\mathbf{1 0 0 \%}$ liberalization vs a $\mathbf{2 5 9}$ \% liberalization under MRFSS.

## Technical Committee Recommendations: MRFSS: Approve MRIP: Not Approve option 1, but approve option 2

Option 1 for 2012 as proposed is technically valid under MRFSS but the TC considers the proposal risk prone because of landings history at 16.5 " and availability of fish (because there are more year classes available for harvest).

In addition, relative to the 2011 MRIP landings, the liberalization proposed is substantially higher ( $\sim 130 \%$ ) than would be allowed under the revised MRIP landings. Under option 2, while the range of the liberalizations upper end is higher than $100 \%$, the TC is more confident in the tagging data estimates which give a $64 \%$ liberalization of harvest. The tagging data estimates are more similar to those seen in the fishery. Status quo regulations would be risk neutral.

If MA uses bag or season to adjust the 2012 regulations the TC will need to review those evaluations because the MA proposal for 2012 did not have adjustments to the bag and season therefore no methodology was reviewed.
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## Rhode Island

2011 Harvest Target: 193,000 fish
2011 Landings: 142,877 fish
2012 Harvest Target: 157,885 fish
Alteration for 2012: 11\% liberalization

## 2011 Regulations:

Minimum Size: 18.5"
Possession Limit: 7 fish
Open Season: May 1-December 31
Proposed 2012 Measures

| Option | Min Size | Bag Limit | Season | Liberalization |
| :--- | :---: | :---: | :--- | :--- |
| 1 | $18.5 "$ | 8 | May 1-December 31 | $2 \%$ |
| 2 | $18.5 "$ | 9 | May 1-December 31 | $6 \%$ |
| 3 | $18.5 "$ | 10 | May 1-December 31 | $7 \%$ |

## MRIP vs MRFSS Summary:

For 5 out of 8 years, the RI MRIP landings estimate was less than the RI MRFSS landings estimate. From 2004 to 2011 the MRIP annual landings estimate was 3\% higher than MRFSS on average. The 2011 MRIP landings estimate would allow a $12 \%$ liberalization vs a $11 \%$ liberalization under MRFSS.

## Technical Committee Recommendations: MRFSS and MRIP: Approve

If RI uses size or season to adjust the 2012 regulations the TC will need to review those evaluations because the RI proposal for 2012 did not have adjustments to the size and season therefore no methodology was reviewed.

Connecticut
2011 Harvest Target: 128,000 fish
2011 Landings: 62,542 fish
2012 Harvest Target: 104,324 fish
Alteration for 2012: 67\% liberalization

## 2011 Regulations:

Minimum Size: 18.5"
Possession Limit: 3 fish
Open Season: May 15-September 5

Possession Limit: 1 fish
Open Season: May 15-Sept 5

Proposed 2012 Measures:
For all options, CT proposes to have a separate shore size limit to allow the catch of fish at 16 " at specified locations the bag and season will mirror the other modes.

| Option | Min Size | Bag Limit | Season | Liberalization | Liberalization <br> with shore |
| :--- | :---: | :--- | :--- | :--- | :--- |
| 1 | $18 "$ | 5 | May 15-October 31 | $48.4 \%$ | $57.3 \%$ |
| 2 | $17.5 "$ | 3 | May 15-October 31 | $47.8 \%$ | $56.7 \%$ |
| 3 | $18 "$ | 3 | May 1-October 31 | $48.6 \%$ | $57.5 \%$ |

MRIP vs MRFSS Summary:
For 4 out of 8 years, the CT MRIP landings estimate was less than the CT MRFSS landings estimate. From 2004 to 2011 the MRIP annual landings estimate was 3\% lower than MRFSS on average. The 2011 MRIP landings estimate would allow a 95\% liberalization vs a 67\% liberalization under MRFSS.

Technical Committee Recommendations: MRIP and MRFSS: Approve options that do not have a separate shore mode. Reject shore mode option unless there is a commitment to enhanced data collection for the shore mode.
The TC does not recommend approving separate mode fisheries, the state does not meet the FMP requirement of a PSE less than $15 \%$ for separate shore mode. The TC recommends that if the Board approves a shore mode, that the state consider a more gradual decrease in the size limit (16.5") for the shore mode since there is little to no data to support the shore mode analysis. The TC would also recommend that the state implement increased coverage for data collection in the shore mode.

## New York

2011 Harvest Target: 602,000 fish
2011 Landings: 288,117 fish
2012 Harvest Target: 491,642 fish
Alteration for 2012: 71\% liberalization

## 2011 Regulations:

Minimum Size: 20.5"
Possession Limit: 3 fish
Open Season: May 1 - September 30

Proposed 2012 Measures:

| Option | Min Size | Bag Limit | Season | Liberalization |
| :--- | :---: | :---: | :--- | :---: |
| 1 | 19.5 | 3 | May 1 - September 30 | $37.0 \%$ |
| 2 | 19 | 3 | May 12 - September 16 | $54.0 \%$ |
| 3 | 19 | 3 | May 14 - September 23 | $52.2 \%$ |
| 4 | 19 | 3 | May 11 - September 3 | $52.8 \%$ |
| 5 | 19 | 3 | May 15 - September 30 | $52.0 \%$ |
| 6 | 19.5 | 4 | May 1 - September 30 | $50.7 \%$ |

## MRIP vs MRFSS Summary:

For 1 out of 8 years, the NY MRIP landings estimate was less than the NY MRFSS landings estimate. From 2004 to 2011 the MRIP annual landings estimate was $\mathbf{1 3 \%}$ higher than MRFSS on average. The 2011 MRIP landings estimate would only allow a 33\% liberalization vs a $\mathbf{7 1 \%}$ liberalization under MRFSS.

Technical Committee Recommendations: MRFSS: Approve MRIP: Approve option 1, not approve option 2-6.
The options for 2012 as proposed is technical valid using MRFSS. But relative to the 2011 MRIP landings, the liberalization proposed in options 2-6 is substantially higher than would be allowed under the revised MRIP landings.

New Jersey
2011 Harvest Target: 1,335,000 fish
2011 Landings: 787,234 fish
2012 Harvest Target: 1,090,407 fish
Alteration for 2012: 38\% liberalization

## 2011 Regulations:

Minimum Size: 18"
Possession Limit: 8 fish
Open Season: May 7-September 25
Proposed 2012 Measures:

| Option | Min Size | Bag Limit | Open Season | Liberalization |
| :--- | :---: | :---: | :---: | :---: |
| 1 | $18 "$ | 8 | May 7 - September 25 | $0 \%$ |
| 2 | $18 "$ | 8 | April 28 - October 14 | $32 \%$ |
| 3 | $18 "$ | 8 | April 7 - September 23 | $32 \%$ |
| 4 | $18 "$ | 8 | May 5 - October 21 | $32 \%$ |
| 5 | $17.5 "$ | 5 | May 5 - September 23 | $29 \%$ |
| 6 | $17.5 "$ | 5 | April 29 - September 23 | $38 \%$ |
| 7 | $17.5^{\prime \prime}$ | 5 | May 5 - September 29 | $38 \%$ |
| The Below Options were developed using the NJ VAS data |  |  |  |  |
| 8 | $18 "$ | 8 | May 22-October 8 |  |
| 9 | $17.5^{\prime \prime}$ | 5 | June 19-September 13 | $38 \%^{*}$ |
| 10 | $17 / 18 "$ | $1 / 3$ | June 14-September 10 | $38 \%^{*}$ |

* Liberalization results based on catch per trip from NJ VAS and average coastwide weight per fish of 3.14 pounds


## MRIP vs MRFSS Summary:

For 7 out of 8 years, the NJ MRIP landings estimate was less than the NJ MRFSS landings estimate. From 2004 to 2011 the MRIP annual landings estimate was $\mathbf{1 0 \%}$ lower than MRFSS on average. The 2011 MRIP landings estimate would allow a $\mathbf{5 0 \%}$ liberalization vs a 38\% liberalization under MRFSS.

## Technical Committee Recommendations: MRFSS and MRIP: Approve

The options for 2012 as proposed are technically valid under MRFSS but the TC considers the proposal risk prone because some of the liberalizations do not allow for any buffer to account for uncertainty, specifically options 6, 7 using the MRFSS data. Use of dated bag/size tables may be problematic because the population abundance has changed since 2007. Relative to the 2011 MRIP landings, the options provide a buffer between the predicted landings and the target.

TC has reservations using the NJ VAS based approach because the data collected and methods applied are not comparable to MRFSS. The NJ VAS is not standardized as they are in MRFSS and the effort calculations are not comparable. By using the 2011 VAS data the approach is more conservative but it may not be if using other years. Using VAS data alone has other concerns related to its use. The TC recommends the Board task the TC to evaluate the use of VAS for use in recreational proposals other than length data.

Technically the proposed dual size limit using the VAS data is valid but it will make future years analysis more difficult.
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Delaware
2011 Harvest Target: 107,000 fish
2011 Landings: 94,745 fish
2012 Harvest Target: 87,536 fish
Alteration for 2012: 8\% reduction

## 2011 Regulations:

Minimum Size: 18"
Possession Limit: 4
Open Season: January 1- October 23
Proposed 2012 Measures:

| Option | Min Size | Bag Limit | Open Season | Reduction |
| :--- | :--- | :--- | :--- | :--- |
| 1 | $18 "$ | 4 | January 1-October 23 | $0 \%$ |
| 2 | $18 "$ | 4 | January 1-September 6 | $7.6 \%$ |
| 3 | $18 "$ | 3 | January 1-October 7 | $7.6 \%$ |
| 4 | $18 "$ | 2 | All Year | $10.7 \%$ |
| 5 | $18.5 "$ | 4 | All Year | $8.5 \%$ |

## MRIP vs MRFSS Summary:

For 7 out of 8 years, the DE MRIP landings estimate was less than the DE MRFSS landings estimate. From 2004 to 2011 the MRIP annual landings estimate was $\mathbf{1 2 \%}$ lower than MRFSS on average. The 2011 MRIP landings estimate would allow a 8\% liberalization vs a $8 \%$ reduction under MRFSS.

## Technical Committee Recommendations: MRFSS: Approve options 2-5 Not approve option 1 MRIP: Approve

Option 1 does not meet the required reduction under MRFSS. Options 2-5 for 2012 as proposed are technically valid under MRFSS. Relative to the 2011 MRIP landings, all the options provide a buffer between the predicted landings and the target.

## Maryland

2011 Harvest Target: 101,000 fish
2011 Landings: 29,062 fish
2012 Harvest Target: 82,340 fish
Alteration for 2012: 183\% liberalization

## 2011 Regulations:

Minimum Size: 18"
Possession Limit: 3 fish
Open Season: April 16-November 30
Proposed 2012 Measures:

| Option | Min Size | Bag Limit | Open Season | Liberalization |
| :--- | :--- | :--- | :--- | :--- |
| 1 | $18 "$ | 3 | All Year | $19 \%$ |
| 2 | $17^{\prime \prime}$ | 3 | April 17-November 30 | $91 \%$ |
| 3 | $17 "$ | 3 | All Year | $127 \%$ |

MRIP vs MRFSS Summary:
For 7 out of 8 years, the MD MRIP landings estimate was less than the MD MRFSS landings estimate. From 2004 to 2011 the MRIP annual landings estimate was $\mathbf{2 6 \%}$ lower than MRFSS on average. The 2011 MRIP landings estimate would allow a 367\% liberalization vs a $183 \%$ reduction under MRFSS.

## Technical Committee Recommendations: MRFSS and MRIP: Approve

Relative to the 2011 MRIP landings, all the options provide a significant buffer between the predicted landings and the target.

## Virginia

2011 Harvest Target: 570,000 fish
2011 Landings: 269,106 fish
2012 Harvest Target: 465,661 fish
Alteration for 2012: 73\% liberalization

## 2011 Regulations:

Minimum Size: 17.5"
Possession Limit: 4 fish
Open Season: All year
Proposed 2012 Measures:

| Option | Min Size | Bag Limit | Open <br> Season | Liberalization |
| :--- | :--- | :--- | :--- | :--- |
| 1 | $17.5 "$ | 5 | All year | $4.2 \%$ |
| 2 | $17 "$ | 5 | All Year | $19-49 \%$ average 27\% |
| 3 | $17 "$ | 4 | All Year | $15-44.5 \%$ average $22.4 \%$ |
| 4 | 16.5 | 4 | All Year | $31-106 \%$ average $55 \%$ |

## MRIP vs MRFSS Summary:

For 3 out of 8 years, the VA MRIP landings estimate was less than the VA MRFSS landings estimate. From 2004 to 2011 the MRIP annual landings estimate was $\mathbf{6 \%}$ higher than MRFSS on average. The 2011 MRIP landings estimate would allow a 53\% liberalization vs a $73 \%$ reduction under MRFSS.

Technical Committee Recommendations: MRFSS: Approve MRIP: Not approve option 4, Approve options 1-3

## Additional Factors accounted for in proposal:

The VMRC projected 2011 landings, on the basis of 5 different data sources (VA VAS, ChesMMAP, NEAMAP, MRFSS and the MD VAS). An additional eight treatments of the ChesMMAP and NEAMAP data sources, where treatments included multi-year length data from one of these surveys or a combination of these surveys, were also included. For all four-fish bag limit options proposed in the table above, the range of estimated percent liberalization is derived from these 13 total data treatments.

## North Carolina

2011 Harvest Target: 191,000 fish
2011 Landings: 65,321 fish
Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015

## 2011 Regulations:

Minimum Size: 15"
Possession Limit: 6 fish
Open Season: All Year
Proposed 2012 Measures: Status Quo

## MRIP vs MRFSS Summary:

For 7 out of 8 years, the NC MRIP landings estimate was less than the NC MRFSS landings estimate. From 2004 to 2011 the MRIP annual landings estimate was $\mathbf{1 1 \%}$ lower than MRFSS on average. The 2011 MRIP landings estimate would allow a 171\% liberalization vs a $139 \%$ reduction under MRFSS.

## Technical Committee Recommendations: MRFSS and MRIP: Approve

Relative to the 2011 MRIP landings, all the proposed option provides a significant buffer between the predicted landings and the target.

PRFC will consider both the Maryland and Virginia proposals and pick one for their 2012 measures.

For all state proposals: States may alter the start and end date of the season as long as it follows the methodology used in their proposal to achieve the required alterations listed above.

Other TC comments:
As minimum sizes for most states have increased over time in the recreational fishery, the numbers of landed fish has correspondingly decreased. This has resulted in fewer summer flounder be measured by the point-of-access angler intercept survey. This reduced length frequency sampling limits the ability to characterize the length composition of landed fish for the states. In addition, most of the lengths are collected from the party/charter (for-hire) mode.

| State | 2010 Number of Type A Fish |  |
| :---: | :---: | :---: |
| MA | 2005 Number of Type A Fish $^{\text {b }}$ |  |
| RI | 39 | 84 |
| CT | 95 | 617 |
| NY | 45 | 178 |
| NJ | 181 | 904 |
| DE | 442 | 945 |
| MD | 326 | 566 |
| VA | 88 | 111 |
| NC | 202 | 340 |
| Coastwide Total | 349 | 253 |
| a <br> Recreational <br> landings ('000 fish) | 1,767 | 3,998 |

${ }^{a}$ Recreational landings based on on pers. comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 14, 2010. ${ }^{\text {b }}$ Waves 1-5 only; most states were closed or summer flounder landings low during wave 6.

Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015


NEW JERSEY DIVISION OF

## Fish and Wildlife

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David Chanda, Director

## Memorandum

TO: Toni Kerns, Senior FMP Coordinator for Management Atlantic States Marine Fisheries Commission

FROM: Tom Baum, Principal Biologist
New Jersey Bureau of Marine Fisheries
DATE: January 19, 2012

SUBJECT: NJ Summer Flounder Recreational Fishery Management Proposal for 2012
Attached are New Jersey's (NJ) options to manage its 2012 summer flounder recreational fishery. Each option contains a combination of a size limit, bag limit and season that satisfies the requirements of conservation equivalency as established by the Atlantic States Marine Fisheries Commission (ASMFC). Spreadsheets that include the formulas used to calculate the percent liberalization for various sample options have been provided to the ASMFC's Summer Flounder Technical Committee.

## Background:

At their December 2011 joint meeting, the ASMFC and the Mid-Atlantic Fisheries Management Council (MAFMC) adopted conservation equivalent measures versus coastwide regulations for managing the 2012 recreational summer flounder fishery. Most states were significantly under their 2011 recreational target. New Jersey is allocated a recreational target of 1,090,407 fish for 2012.

## Action:

According to Table 1 of Toni Kerns’ (ASMFC) conservation equivalency memo of January 6, 2012, New Jersey is able to liberalize its current summer flounder recreational regulations by $38 \%$. This is the difference of NJ’s 2011 summer flounder harvest estimate of 787,234 fish and its 2012 summer flounder recreational target of 1,090,407 fish. Current management measures may be adjusted in order to realize (but not exceed) the increased target in the following ways: 1) by reducing the size limit; 2) by increasing the bag limit; 3) by increasing the season; and 4) a combination of numbers $1-3$.

## Performance Evaluation of Management Measures:

Table 1 lists NJ's summer flounder recreational management measures by year since 2000. It includes the annual harvest and respective targets and appropriate year to year reductions (if necessary). The first year (2001) that all states developed regulations under conservation equivalency, NJ was required to reduce its 2000 summer flounder recreational harvest by $34 \%$. The size limit was increased to 16 -inches and the season reduced by 45 days. This action decreased the harvest $32 \%$ relative to the 2000 harvest, yet there was still a $33 \%$ overage relative to the 2001 target. In 2002 the size limit was increased to 16.5 -inches. The 2002 harvest estimate for NJ was $52 \%$ less than the previous year. The size limit remained 16.5 -inches through 2006 with an 8 -fish bag limit. During the 5 -years the size limit was at 16.5 -inches, the target was exceeded three times, by an average of less than $10 \%$. During the next two years, the target dramatically declined, necessitating severe reductions. A 40\% reduction was required for 2007, in which the size limit was raised to 17 -inches and the open season reduced by 49 days. Although the 2007 harvest estimate was 15\% lower than the 2006 harvest estimate, the 2007 target was exceeded by nearly $40 \%$. With this overage and the record low target for 2008, the size limit was raised one inch to 18 -inches for 2008. The 2008 harvest estimate was $36 \%$ lower than the 2007 harvest estimate, but the 2008 target was still exceeded by $6 \%$. The bag limit was reduced from 8-fish to 6-fish in 2009 to account for the $4 \%$ required reduction. The 2009 harvest estimate was $19 \%$ greater than the 2008 harvest estimate, and exceeded the 2009 target by $25 \%$. The 2010 target increased relative to the 2009 target, therefore, NJ was required to take a $2 \%$ reduction, which it did by reducing the season 4-days. The 2010 and 2011 recreational summer flounder harvest estimates for NJ are the lowest harvest estimates during management by conservation equivalency.

The significant 2007 and 2009 overages are due to the low targets for those years. It is difficult to state a case for any one management measure being solely effective. Size limit increases appeared to reduce harvest significantly for 2002 and 2008. The bag limit adjustment from 8 -fish to 6 -fish for 2009 appeared to have no effect, but such a small reduction was required that the 2009 overage is more likely due to fish availability. The strong 2004 year class may have contributed significantly to the annual harvest since 2006. The size limit increases may have inadvertently targeted that year class from 2006 through 2009.

There were two years, 2001 and 2007 where the season was reduced significantly, 45days and 49-days respectively. Those two season reductions were associated with a half inch size limit increase. The result was a decrease of $32 \%$ and $15 \%$ respectively of the harvest estimates from the previous years. Shortening the season has proven to be effective for constraining harvest for NJ's summer flounder recreational fishery. Conversely, the season was increased by 34 days in 2003, where the harvest estimate increased $80 \%$ from the previous year. In 2011, NJ increased the season by 41 days. As a result, the 2011 harvest estimate increased by $33 \%$ from 2010, although, the 2011 regulations were developed to achieve a $77 \%$ increase in harvest.

During the eleven years of managing summer flounder under conservation equivalency, NJ exceeded the annual target seven of those years by an average of $19 \%$. Overall, the sum of the landings for eleven years during conservation equivalency did not exceed the sum of the targets for those years.

## Method:

Harvest liberalizations associated with various size and bag limits were calculated using NJ's size and bag limit reduction table developed provided by MAFMC staff. The 2007 table was utilized for determining percent liberalization. The liberalization is calculated as the difference between the numbers associated with the proposed regulations and the 2011 regulations. The negative values in Table 2 represent percent liberalization. The cells that are blacked out in Table 2 indicate there was insufficient data available to derive a value.

In order to determine the percent liberalization associated with changes in season length, a daily harvest rate was calculated based on NJ harvest estimates (A+B1 fish) from the National Marine Fisheries Service's (NMFS) recreational fishing survey. Averages of the most recent three years of data (2009 through 2011) were used. As per Toni Kerns’ memo (January 6, 2012) "If a state can liberalize their measures, evaluations should be done using the average landings per day of the wave with the highest landings within the waves to be opened". Wave 4 (July and August) has always been the wave of highest harvest in NJ. Using the daily harvest rate for wave 4 of 0.113 (Table 3), is more conservative, since options include opening days in waves 3 and 5. The daily harvest rate for wave 4 is almost twice that of the daily harvest rate of wave 3 (0.0069) and significantly greater than the wave 5 daily harvest rate (0.001).

Total reductions were adjusted to account for the fact that cumulative changes associated with size/bag limits and seasonal closures are not additive using the total reduction/liberalization formula of: $(\mathrm{X}+\mathrm{Y})$ - $(\mathrm{X} * \mathrm{Y})$.
$\mathrm{X}=$ The percent reduction associated with seasonal closure(s).
$\mathrm{Y}=$ The percent reductions associated with size/possession limit.

## Proposed Management Strategies for 2012:

Sample options that might be considered for NJ's 2012 summer flounder recreational fishery are listed in Tables 4 and 5b. Option A represents the 2011 regulations or status quo. Options B through G were developed using the bag/size limit table (Table 2) and the daily harvest rates from Table 3. The options shown in Table 5b were developed using data from NJ's Volunteer Angler Survey (VAS) to calculate size and bag limits and season length. This methodology was presented to the Technical Committee by Mr. Jeffrey Brust (NJDFW) at its November 17, 2010 meeting in Baltimore, Md. The Committee was also provided the MS_WORD file "NJ VAS analysis method.doc", which provides a detailed description of the survey and methodology used to develop those options. The NJ VAS analysis methodology was approved by the Technical Committee at its January 2011 meeting and the 2011 options that were developed using the NJ VAS data were approved by the Management Board at its February 2011 meeting. Table 5a shows the number of days available for harvest by wave. There are two sections: the first uses the wave 5 catch rate to determine the number of days available for harvest during wave 5 ; while the second section uses the average catch rates of waves 3 and 4 to determine the number of days available for harvest during wave 5 . Using only the wave 5 catch rate is more liberal than using the average of waves 3 and 4 catch rates. Examining Table 5b, the option of an 18 " size limit, 8 -fish bag limit and a season of May 22 through September 30, shows that staying at status quo is actually a reduction (season is nine days shorter). Jeff proposes to use a catch rate that would not show a reduction in this case. Although not presented, other dual size/bag limit options with a 1 -fish bag and 17.5 -inch minimum size / x-fish bag and 18-inch minimum size will be developed using the methodology that is accepted by the Technical Committee.

Please keep in mind that the options in this proposal reflect possibilities. NJ’s Marine Fisheries Council Summer Flounder Committee and its advisors will meet in March to recommend to the Council the option(s) for 2012. The Council will meet in April 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 methodology(ies) that are accepted by the Technical Committee and approved by the Management Board.

The Technical Committee recommends precautionary measures be used when developing management options. While crafting the sample options listed in Table 4 and 5b, the following concerns were considered:
$>$ Percent Standard Error (PSE) for NJ’s 2011 harvest estimates is 9\%.
> 2010 and 2011 recreational summer flounder harvest estimates may be underestimated.
$>$ The 38\% allowed liberalization represents the difference of the 2012 target in relation to the 2011 harvest estimate.
> The 2011 regulations were developed to achieve the 2011 target.
> The 2012 target is $18 \%$ less than the 2011 target.
$>$ Constraining the season has been effective for reducing harvest, the converse is also true; i.e.: in 2003 NJ increased season by 34-days and the harvest increased $80 \%$.
> Bag/size limit table from 2007 was utilized for calculating percent liberalizations.
> Year class strength of 2008 and 2009
> Target fishing effort declined significantly in 2011

Notes:
> NJ's 2011 summer flounder recreational regulations:
18" size limit; 8-fish bag limit; open season from May 7 to September 25.
> NJ's 2011 recreational summer flounder target $=1,335,000$ fish
$>$ NJ's 2011 preliminary recreational summer flounder harvest estimate $=787,234$ fish
> NJ's 2012 recreational summer flounder target $=1,090,407$ fish

Table 1. Performance of New Jersey's Summer Flounder Recreational Regulations

| Year | Needed Reduction | Size Limit (inches) | Bag <br> Limit | Open <br> Season | \# days open | Numbers of Fish |  | \%O/U |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 |  | 15.5 | 8 | May 6 - Oct 20 | 168 |  |  |  |
| 2001 | 34\% | 16 | 8 | May 12 - Sept 11 | 123 | 2,070,234 | 1,555,000 | 33\% |
| 2002 | 17\% | 16.5 | 8 | May 18 - Sept 24 | 130 | 988,878 | 1,719,000 | -42\% |
| 2003 | -63\% | 16.5 | 8 | May 3 - Oct 13 | 164 | 1,784,356 | 1,612,000 | 11\% |
| 2004 | 3\% | 16.5 | 8 | May 8 - Oct 11 | 157 | 1,887,193 | 1,736,000 | 9\% |
| 2005 | 1\% | 16.5 | 8 | May 7 - Oct 10 | 157 | 1,395,626 | 1,873,000 | -25\% |
| 2006 | -3\% | 16.5 | 8 | May 6 - Oct 9 | 157 | 1,560,505 | 1,443,000 | 8\% |
| 2007 | 39\% | 17 | 8 | May 26 - Sept 10 | 108 | 1,327,567 | 954,000 | 39\% |
| 2008 | 40\% | 18 | 8 | May 24 - Sept 7 | 107 | 851,447 | 801,433 | 6\% |
| 2009 | 5\% | 18 | 6 | May 23 - Sept 4 | 105 | 1,012,806 | 809,000 | 25\% |
| 2010 | 2\% | 18 | 6 | May 29 - Sept 6 | 101 | 593,677 | 997,000 | -40\% |
| 2011 | -125\% | 18 | 8 | May 7 - Sept 25 | 142 | 787,234 | 1,335,000 | -41\% |
| 2012 | -38\% |  |  |  |  |  | 1,090,407 |  |

Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division (January 7, 2011).
Indicates measure(s) used to achieve reduction.
> NJ’s 2011 recreational summer flounder target $=1,335,000$ fish
$>$ NJ's 2011 preliminary recreational summer flounder harvest estimate $=787,234$ fish
$>$ NJ's 2012 recreational summer flounder target $=1,090,407$ fish
NJ's 2011 summer flounder recreational regulations: 18 " size limit; 8 -fish bag limit; open season from May 7 to September 25

Table 2. Percent Reductions various size and bag limits on 2007 summer flounder recreational landings in the state of New Jersey.

| bag | $\mathbf{1 7 \%}$ | $\mathbf{1 7 . 5 "}$ | $\mathbf{1 8 "}$ |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | $-9 \%$ | $10 \%$ | $28 \%$ |
| $\mathbf{2}$ | $-49 \%$ | $-17 \%$ | $8 \%$ |
| $\mathbf{3}$ | $-65 \%$ | $-27 \%$ | $1 \%$ |
| $\mathbf{4}$ | $-70 \%$ | $-29 \%$ | $0 \%$ |
| $\mathbf{5}$ | $-71 \%$ |  |  |
| $\mathbf{6}$ |  |  |  |
| $\mathbf{8}$ |  |  |  |

Negative values represent amount of liberalization.

Table 3. Daily Harvest Rate by Wave for NJ: 2009 - 2011 (average)

|  | Wave 3 | Wave 4 | Wave 5 | Total |
| :--- | :---: | :---: | :---: | :---: |
| \# Days Open | 127 | 186 | 35 | 348 |
| Harvest (\#'s of fish) | 695,808 | $1,671,337$ | 26,572 | $2,393,717$ |
| Daily Harvest (\#'s of fish) | 5,479 | 8,986 | 759 | 6,878 |
| Daily Harvest Rate | 0.0069 | $\mathbf{0 . 0 1 1 3}$ | 0.0010 | 0.0086 |

Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division (1/12/2012).

Table 4. Sample Options for New Jersey's 2012 Summer Flounder Recreational Fishery

| Sample <br> Option | Size Limit <br> (inches) | Bag <br> Limit | Open Season | \# days <br> open | Liberalization |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A* | 18 | 8 | May 7 - Sept 25 | 142 | $0 \%$ |
| B | 18 | 8 | April 28 - Oct 14 | 170 | $32 \%$ |
| C | 18 | 8 | April 7 - Sept 23 | 170 | $32 \%$ |
| D | 18 | 8 | May 5 - Oct 21 | 170 | $32 \%$ |
| E | 17.5 | 4 | May 5 - Sept 23 | 142 | $29 \%$ |
| F | 17.5 | 4 | April 29 - Sept 23 | 148 | $38 \%$ |
| G | 17.5 | 4 | May 5 - Sept 29 | 148 | $38 \%$ |

* Option A = 2011 regulations

Denotes change from 2011 regulations.
Table 5a. Number of days available for harvest by minimum size and bag limit using NJ VAS data.

| Size <br> Limit (inches) | Bag <br> Limit | Wave 5 catch rate used for analysis |  |  | Bag Limit | Waves 3 \& 4 average catch rate used for analysis |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wave 3 | Wave 4 | Wave 5 |  | Wave 3 | Wave 4 | Wave 5 |
| 18 | 4 | 46 | 62 | 203 | 4 | 46 | 62 | 35 |
|  | 5 | 43 | 62 | 188 | 5 | 43 | 62 | 33 |
|  | 6 | 42 | 62 | 179 | 6 | 42 | 62 | 32 |
|  | 8 | 40 | 62 | 171 | 8 | 40 | 62 | 30 |
| 17.5 | 4 | 16 | 62 | 35 | 4 | 16 | 62 | 12 |
|  | 5 | 12 | 62 | 27 | 5 | 12 | 62 | 9 |
|  | 6 | 10 | 62 | 22 | 6 | 10 | 62 | 8 |
|  | 8 | 8 | 62 | 17 | 8 | 8 | 62 | 6 |
| 17/18 | $1 / 3$ | 14 | 62 | 21 | $1 / 3$ | 14 | 62 | 10 |
|  | $1 / 4$ | 12 | 62 | 17 | $1 / 4$ | 12 | 62 | 9 |
|  | 1 / 5 | 11 | 62 | 16 | $1 / 5$ | 11 | 62 | 8 |
|  | $1 / 7$ | 10 | 62 | 14 | $1 / 7$ | 10 | 62 | 8 |

Table 5b. Options for NJ’s 2012 Summer Flounder Recreational Fishery using NJ VAS data.

| Size <br> Limit (inches) | Bag <br> Limit | Open Season Wave 5 catch data used for analysis | \# days <br> open | Open Season <br> Waves 3 \& 4 average catch rate used for analysis | \# days <br> open |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | 4 | May 16 - Dec 31 | 229 | May 16 - Oct 5 | 142 |
|  | 5 | May 19 - Dec 31 | 226 | May 19 - Oct 3 | 138 |
|  | 6 | May 20 - Dec 31 | 225 | May 20 - Oct 2 | 135 |
|  | 8 | May 22 - Dec 31 | 223 | May 22 - Sept 30 | 133 |
| 17.5 | 4 | June 15 - Oct 5 | 113 | June 15 - Sept 12 | 90 |
|  | 5 | June 19 - Sept 27 | 101 | June 19 - Sept 9 | 84 |
|  | 6 | June 21 - Sept 22 | 94 | June 21 - Sept 8 | 80 |
|  | 8 | June 23 - Sept 17 | 87 | June 23 - Sept 6 | 76 |
| 17 / 18 | $1 / 3$ | June 17 - Sept 21 | 97 | June 17 - Sept 10 | 87 |
|  | $1 / 4$ | June 19 - Sept 17 | 92 | June 19 - Sept 9 | 83 |
|  | $1 / 5$ | June 20 - Sept 16 | 89 | June 20 - Sept 8 | 81 |
|  | $1 / 7$ | June 21 - Sept 14 | 87 | June 21 - Sept 8 | 80 |

All options assume coastwide average weight of $3.14 \mathrm{lbs} /$ fish

## Black Sea Bass Addendum XXII Public Hearing

Narragansett, RI
January 18, 2012
1 Attendee
Meeting Staff: Jason McNamee (RI DFW)
Meeting Participant: see sign in sheet
Option 2: State-by-State with Liberalization/Reduction in the Northern Region:
The meeting participant indicated support for option 2 and a $16 \%$ liberalization allowance for RI. His comments included:

- Opposition to combining with other states in a region as RI represents a low percentage of the overall harvest and he feared being overwhelmed by the harvest in other states.
- Preference for configuring management within RI to tailor the regulations in a way that best suited RI's fisheries.
- Wondered if developing a management plan for RI that was similar to the federal option was an approach that could be explored.

The attendee did not make any other specific comments on the other options, but his comments are inherent in his comments regarding option 2.

# Black Sea Bass Draft Addendum XXII <br> Public Hearing 

Atlantic States Marine Fisheries Commission
Rhode Island
January 18, 2012
-- PLEASE PRINT --

| Name | Company/Organization | City, State |
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| MEN COMRT | Sackil Sela charters |  |
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