

MEMORANDUM

Date:	November 8, 2023
To:	Chris Moore, Executive Director
From:	Kiley Dancy, Staff
Subject:	Summer Flounder Recreational Management Measures for 2024-2025

<u>Summary</u>

This memo provides information to assist the Monitoring Committee (MC), Advisory Panels, the Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Management Board (Board) in developing recommendations for summer flounder recreational measures for 2024-2025.

The target level of harvest that 2024-2025 measures must aim to be achieve will be determined using the Percent Change Approach, as required by Framework 17/Addendum XXXIV. This is the first year that two-year measures will be considered for summer flounder under this approach. As described in more detail below, the harvest target is defined based on expectations of 2024-2025 harvest under 2023 measures compared to the average 2024-2025 RHL, as well as considerations about stock biomass.

A model referred to as the Recreational Demand Model (RDM) has been developed by the Northeast Fisheries Science Center (NEFSC). The RDM was used to set 2023 recreational summer flounder measures. As described in more detail in the next section, the RDM remains the best currently available tool for predicting recreational summer flounder harvest in upcoming years under different management measures. As such, it will be used to define the appropriate harvest target and the resulting measures for summer flounder.

RDM results suggest that the median projected 2024-2025 harvest under current (2023) measures would be 8.88 million pounds, with an 80% confidence interval of 8.10 to 9.48 million pounds. The lower bound of this confidence interval is above the 2024-2025 RHL of 6.35 million pounds. Based on summer flounder being in the "low" biomass category within the percent change table, this means that **summer flounder harvest must be reduced down to the RHL, resulting in a 28% needed reduction relative to expected harvest under current measures.**

For summer flounder, the MC is tasked with recommending either the use of coastwide measures (identical measures in all states and federal waters) or conservation equivalency (state- or region-specific measures in state waters, and "non-preferred" federal measures that are waived in favor of the state measures). Under conservation equivalency, the Council and Board must also adopt non-preferred coastwide and

precautionary default measures (described in more detail below). Staff recommends the continued use of conservation equivalency in 2024-2025. State/regional measures under conservation equivalency would be determined through the Commission process in early 2024.

As of this memo, additional RDM estimates are not available under alternative sets of measures to inform a recommendation for non-preferred coastwide measures. Staff will work with the modelers to run estimates under alternative non-preferred coastwide measures and provide additional information to the Monitoring Committee at the November 13-14 meeting. The Monitoring Committee should consider whether changes to the precautionary default measures may also be warranted depending on the degree of changes in measures that may be needed to achieve the necessary reduction.

Recreational Demand Model

The RDM uses trip attributes such as expected harvest and costs, as well as the availability of different sizes of fish, to estimate the likelihood that an angler will go fishing under a given set of regulations. The RDM is informed by a 2022 survey of anglers from Maine through Virginia as well as recent size distribution information from the stock assessment. The RDM can predict harvest and discards of summer flounder at the trip, state, wave, and mode level under different sets of recreational measures. The RDM also predicts how regulations for scup and black sea bass may impact harvest and discards of summer flounder. Additional information about this model can be found in this overview document: https://www.mafmc.org/s/fluke-RDM-overview-final-report.pdf.

The RDM was used to set 2023 summer flounder recreational measures. Prior to 2023, summer flounder recreational measures were informed by MRIP data and the Monitoring Committee's expert judgement. The RDM represents a major improvement over prior methods for setting recreational measures in that it accounts for factors such as angler preferences and varying year class strength, which could not be explicitly accounted for under the previous methods. The RDM is based on peer-reviewed models for other species and was reviewed by the Council's Scientific and Statistical Committee (SSC) in September 2022.Several improvements have been made since the SSC review. The Monitoring and Technical Committees have also discussed the RDM several times over the past few years and several additional improvements have been made in response to Monitoring and Technical Committee feedback.^{1,2} For all these reasons, the RDM is the best tool currently available for use in determining the harvest target and the associated recreational measures for 2024-2025.

Determining the Percent Change in Harvest for 2024-2025

Framework 17/Addendum XXXIV implemented a new process for setting recreational measures called the Percent Change Approach.³ Under this approach, measures aim to achieve a specified percent change in harvest compared to the expectation of harvest in the upcoming year(s) under current measures. Unlike the previous process, the recreational measures no longer aim to achieve but not exceed the RHL. Instead, measures aim to achieve a different level of harvest, which will vary based on the following two factors:

1) A confidence interval (CI) around an estimate of expected harvest in the upcoming two years under current measures compared to the average RHL for the upcoming two years and

¹ Additional information at <u>https://asmfc.org/uploads/file/64dbc727SFSBSB_TC_Report_May2023.pdf</u>. ² Additional information at <u>https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/</u> 6541443d28772b1877b0a<u>b95/1698776125234/Monitoring+Committee+9-20-23+Summary.pdf</u>

³ See action documents and additional information at <u>https://www.mafmc.org/actions/hcr-framework-addenda</u>.

2) Biomass compared to the target level, as defined by the most recent stock assessment.

The resulting percent change in harvest that measures should aim to achieve is summarized in Table 1. This process allows recreational measures to remain unchanged across two years, aligned with the timing of updated management track stock assessments, which are expected to be available every other year for summer flounder. For 2023, measures were set for one year only given the schedule for the management track assessments. Thus, 2024-2025 is the first time this process will be used to set two-year measures. Additional detail about how this process will be applied for 2024-2025 is included below.

Table 1: Process for determining appropriate percent change in expected harvest when developing measures under the Percent Change Approach. Cells highlighted in yellow indicated the percent change in harvest needed for summer flounder in 2024-2025 based on the information summarized on the next page.

<i>Column 1</i> Future RHL vs Estimated Harvest	Column 2 Biomass compared to target level (SSB/SSB _{MSY})	<i>Column 3</i> Change in Harvest
Future 2-year average RHL is	Very high (greater than 150% of target)	Liberalization percent equal to difference between harvest estimate and 2-year avg. RHL, not to exceed 40%
greater than the upper bound of the harvest estimate CI (harvest expected to be lower than the	High (at least the target level, but no higher than 150% of target)	Liberalization percent equal to difference between harvest estimate and 2-year avg. RHL, not to exceed 20%
RHL)	Low (below the target stock size)	Liberalization: 10%
Future 2-year average RHL is within harvest estimate CI (harvest expected to be close	Very high (greater than 150% of target)	Liberalization: 10%
	High (at least the target level, but no higher than 150% of target)	No liberalization or reduction: 0%
to the RHL)	Low (below the target stock size)	Reduction: 10%
Future 2-year	Very high (greater than 150% of target)	Reduction: 10%
average RHL is less than the lower bound of the harvest estimate CI	High (at least the target level, but no higher than 150% of target)	Reduction percent equal to difference between harvest estimate and 2-year avg. RHL, not to exceed 20%
(harvest is expected to exceed the RHL)	Low (below the target stock size)	Reduction percent equal to difference between harvest estimate and 2-year avg. RHL, not to exceed 40%

Column 1: Compare Average 2024-2025 RHL to Expected Harvest Under 2023 Measures

The RDM was used to generate an estimate of expected 2024-2025 harvest under status quo (i.e., 2023) measures, with an associated 80% confidence interval.⁴ Results suggest that under status quo (2023) measures, the median projected harvest in 2024-2025 would be **8.88 million pounds, with an 80% confidence interval of 8.10 to 9.48 million pounds**. The 2024-2025 RHL of 6.35 million pounds is less than the lower bound of this confidence interval (i.e., harvest is expected to be higher than the RHL).

Column 2: Biomass Compared to Target Level

As shown in Table 1, the second step under the Percent Change Approach is to consider the most recent estimate of spawning stock biomass compared to the target level. According to the 2023 management track stock assessment (using data through 2022),⁵ summer flounder is below the target stock size (estimated at 83% of the spawning stock biomass target). This puts summer flounder in the "low" stock size category for the Percent Change Approach.

Column 3: Determining Necessary Percent Change in Harvest

As specified in Table 1, this results in a required percent change in harvest equal to the difference between harvest estimate and the two-year average RHL, not to exceed 40%. For summer flounder, this results in a 28% reduction based on the percent difference between the projected harvest of 8.88 million pounds and the RHL of 6.35 million pounds. In other words, the resulting 2024-2025 harvest target is equal to the RHL at 6.35 million pounds.

Accountability Measures

Federal regulations include reactive accountability measures (AMs) for when the recreational summer flounder annual catch limit (ACL) is exceeded. This can include paybacks of ACL overages depending on stock status and the magnitude of the overage, as described below. ACL overages in the recreational fishery are evaluated by comparing the most recent 3-year average recreational ACL against the most recent 3-year average of recreational dead catch (i.e., landings and dead discards). If average dead catch exceeds the average ACL, then the appropriate AM is determined based on the criteria listed below. This reflects minor revisions to the AMs made through Framework 17.

- If the stock is overfished (B < ½ B_{MSY}), under a rebuilding plan, or the stock status is unknown: The exact amount, in pounds, by which the most recent 3-year average recreational ACL has been exceeded, will be deducted in the following fishing year, or as soon as possible once catch data are available. This payback may be evenly spread over two years if doing so allows for use of identical recreational management measures across the upcoming two years.
- 2. If biomass is above the threshold, but below the target ($\frac{1}{2} B_{MSY} < B < B_{MSY}$), and the stock is not under a rebuilding plan:
 - a. If only the recreational ACL has been exceeded, then adjustments to the recreational management measures, taking into account the performance of the measures and

⁴ In May 2023, the Monitoring and Technical Committees recommended the use of an 80% CI around the harvest estimate for development of 2024-2025 measures. See the meeting report at: https://asmfc.org/uploads/file/64dbc727SFSBSB_TC_Report_May2023.pdf.

⁵ Available at: <u>https://www.mafmc.org/s/e_Summer_flounder_MTA_2023_06_08.pdf</u>.

conditions that precipitated the overage, will be made in the following fishing year, or as soon as possible thereafter, once catch data are available, as a single-year adjustment.

- b. If the most recent estimate of total fishing mortality exceeds F_{MSY} (or the proxy), then an adjustment to the recreational ACT will be made as soon as possible as a payback that will be scaled based on stock biomass. The calculation for the payback amount in this case is: (3-year average overage amount) * $(B_{msy}-B)/\frac{1}{2}B_{msy}$. This payback may be evenly spread over two years if doing so allows for use of identical recreational management measures across the upcoming two years. If an estimate of total fishing mortality is not available for the most recent complete year of catch data, then a comparison of total catch relative to the ABC will be used.
- 3. <u>If biomass is above the target ($B > B_{MSY}$)</u>: Adjustments to the recreational management measures, taking into account the performance of the measures and conditions that precipitated the overage, will be made in the following fishing year, or as soon as possible thereafter, once catch data are available, as a single-year adjustment.

Average recreational catch was below the average recreational ACLs for summer flounder from 2020-2022, meaning that an AM has not been triggered for summer flounder (Table 7). No adjustments to the recreational measures are needed due to AMs.

Table 2: Evaluation of summer flounder recreational AMs using the 2020-2022 average recreational ACL compared to the 2020-2022 average recreational dead catch. Data from the 2023 Summer Flounder Management Track Assessment.

Year	Recreational Harvest (mil lb)	Recreational Dead Discards (mil lb)	Total Dead Recreational Catch (mil lb)	Recreational ACL (mil lb)	% Over/ Under ACL
2020 ^a	10.08	2.52	12.59	11.51	+9%
2021	6.82	2.20	9.01	12.48	-28%
2022	8.63	2.95	11.58	14.64	-21%
Average	8.51	2.55	11.06	12.88	-14%

^a 2020 recreational estimates were developed using imputation methods (incorporating 2018 and 2019 data) to account for missing 2020 APAIS data.

Past Management Measures

RHLs for summer flounder were first implemented in 1993. Since then, they have varied from a high of 11.98 million lb in 2005 to a low of 3.77 million lb in 2017. From 1993-2000, coastwide measures were in place for all states and federal waters, with possession limits ranging from 3-10 fish and size limits ranging from 14.0-15.5 inches. Starting in 2001, conservation equivalency was implemented, and has been used as the preferred management system each year since (Table 1). Under conservation equivalency, individual states or multi-state regions set measures that collectively are designed to constrain harvest to the coastwide RHL. Federal regulations are waived and anglers are subject to the summer flounder regulations of the state in which they land. State-by-state conservation equivalency was adopted each year from 2001 through 2013, with each state implementing different sets of management measures. Each year from 2014 through 2023, the Board has approved the use of regional conservation equivalency, where some states form multi-state regions with the same measures.

In December 2022, the Council and Board adopted conservation equivalency for the summer flounder recreational fishery in 2023. Although the RDM results that were originally provided to the Council

indicated that a 10% liberalization of recreational summer flounder harvest would be appropriate for 2023, Council staff received an updated harvest estimate the week before the meeting which indicated that a 10% reduction was needed instead. The model revisions were based on a different range of years of catch per trip data and were not reviewed by the Monitoring Committee or other technical advisory group prior to the meeting. Given varying opinions on the appropriate configurations of the model inputs and the conflicting Percent Change Approach outcomes under the two model configurations, the Council and Board determined that status quo regional measures would be appropriate for 2023. Region-specific possession limits in 2023 range from 1-5 fish with size limits ranging from 15-18.5 inches, with various seasons (Table 2).

Under conservation equivalency, the Council and Board must adopt two associated sets of measures: the non-preferred coastwide measures, and the precautionary default measures. The **non-preferred** coastwide measures are a set of measures that would be expected to constrain harvest to the appropriate coastwide target⁶ if implemented on a coastwide basis (the same measures in all states and in federal waters). The combination of state or regional measures under conservation equivalency is designed to be equivalent to this set of non-preferred coastwide measures in terms of coastwide harvest. These coastwide measures are included in the federal regulations but waived in favor of state- or region-specific measures. The non-preferred coastwide measures adopted in 2023 include a 3-fish possession limit, an 18-inch total length (TL) minimum size, and an open season from May 15-September 22.

The **precautionary default measures** would be implemented in any state or region that failed to develop adequate measures to constrain or reduce landings as required by the conservation equivalency guidelines. The precautionary default measures in 2023 include a 2-fish possession limit with a 20-inch TL minimum fish size and an open season from July 1-August 31.

⁶ Through 2022, the target level of harvest was the RHL. Starting with 2023, the target level of harvest is defined by the Percent Change Approach.

Measure	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
ABC (m lb)	-	-	-	-	-	-	-	-	-	-	-	-	21.5	25.5
Recreational ACL (land+disc; m lb)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RHL (m lb)	7.41	7.41	7.41	7.41	7.16	9.72	9.28	11.21	11.98	9.29	6.68	6.22	7.16	8.59
Harvest - OLD MRIP (m lb)	11.87	12.48	8.37	16.47	11.64	8.01	11.64	11.02	10.92	10.5	9.34	8.15	6.03	5.11
% Over/Under RHL ^c	60%	68%	13%	122%	63%	-18%	25%	-2%	-9%	13%	40%	31%	-16%	-41%
Harvest - NEW MRIP	18.52	22.86	16.70	27.03	18.56	16.29	21.49	21.20	18.55	18.63	13.89	12.34	11.66	11.34
Possession Limit	8	8	8	8	3	a	a	a	а	a	a	a	a	a
Size Limit (TL in)	14.5	15	15	15.5	15.5	a	a	a	а	a	a	a	a	a
Open Season	1/1 – 12/31	1/1 – 12/31	5/29 – 9/11	5/10 - 10/2	4/15 - 10/15	a	a	a	a	a	a	a	a	a
Measure	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024- 2025
ABC (m lb)	33.95	25.58	22.34	21.94	22.57	16.26	11.3	13.23	25.03	25.03	27.11	33.12	33.12	19.32
Recreational ACL (land+disc; m lb)	-	11.58	10.23	9.07	9.44	6.83	4.72	5.53	11.51	11.51	12.48	14.64	14.90	8.69
RHL (m lb) - landings only	11.58	8.49	7.63	7.01	7.38	5.42	3.77	4.42	7.69	7.69	8.32	10.36	10.62	6.35
Harvest - OLD MRIP (m lb)	5.96	6.49	7.36	7.39	4.72	6.18	3.19	3.35	-	-	-	-	-	-
% Over/Under RHL ^c	-49%	-24%	-4%	5%	-36%	14%	-15%	-24%	1%	31%	-18%	-17%	-	-
Harvest - NEW MRIP	13.48	16.13	19.41	16.23	11.83	13.24	10.09	7.60	7.80	10.06	6.82	8.63	-	-
Possession Limit	а	а	a	b	b	b	b	b	b	b	b	b	b	-
Size Limit (TL in)	а	а	a	b	b	b	b	b	b	b	b	b	b	-
Open Season	а	a	a	b	b	b	b	b	b	b	b	b	b	-

Table 3: Summary of federal management measures for the summer flounder recreational fishery, 1997-2025.

^a State-specific conservation equivalency measures.
^b Region-specific conservation equivalency measures.
^c Based on a comparison with old MRIP data through 2018 and new MRIP data starting in 2019.

Table 4: Summer flounder recreational fishing measures 2022-2023, by state, under regional conservation equivalency. Conservation equivalency regions in these years include: 1) Massachusetts, 2) Rhode Island, 3) Connecticut and New York, 4) New Jersey, 5) Delaware, Maryland, The Potomac River Fisheries Commission, and Virginia, and 6) North Carolina.

	2022-2023						
State	Minimum Size (inches)	Possession Limit	Open Season				
Massachusetts	16.5	5 fish	May 21-September 29				
Rhode Island (Private, For-Hire, and all other shore-based fishing sites)	18	4 fish	May 3-December 31				
PL7 designated shore sites	18	2 fish ^a					
KI / designated shore sites	17	2 fish ^a					
Connecticut	18.5						
CT Shore Program (45 designed shore sites)	17	4 fish	May 1-October 9				
New York	18.5						
New Jorsey	Slot limit 17-17.99	2 fish ^b					
New Jersey	18	1 fish ^b					
NJ Shore program site (ISBSP)	16	2 fish	May 2-September 27				
New Jersey/Delaware Bay COLREGS	17	3 fish					
Delaware							
Maryland	16	1 fich	Innuary 1 December 21				
PRFC	10	4 11511	January 1- December 31				
Virginia							
North Carolina ^c	15	1 fish	<i>2022:</i> September 1-30 <i>2023:</i> September 15-29				

^a Combined possession limit of 4 fish; no more than 2 fish at 17 inch minimum size limit.

^b New Jersey's slot limit includes a combined possession limit of 3 fish; two fish greater than 17 inches and less than 18 inches, and one fish greater than 18 inches.

^c North Carolina's regulations have been restricted for all flounders in North Carolina (southern, gulf, and summer flounder) in recent years due to the need to end overfishing on southern flounder. North Carolina manages all flounder in the recreational fishery under the same regulations.

Recreational Catch and Landings Trends

Table 4 provides the annual MRIP time series⁷ of recreational harvest (in number and weight), dead discards (in weight), and catch (in number of fish) for 2009-2022, as well as the estimates for waves 1-4 (i.e., January – August) for 2023. Table 4 also shows the percent of summer flounder released⁸ (relative to total catch in numbers of fish) and the mean weight of landed summer flounder each year from 2009-2022, and 2023 through wave 4.

Year	Catch (mil fish)	Harvest (mil fish)	Harvest (mil lb)	Dead discards (mil lb) ^b	% Released (Released Alive) ^a	Average Weight of Harvested Fish
2009	50.62	3.65	11.66	5.48	93%	3.19
2010	58.89	3.51	11.34	5.97	94%	3.23
2011	56.04	4.33	13.48	5.98	92%	3.11
2012	44.71	5.74	16.13	4.79	87%	2.81
2013	44.96	6.60	19.41	4.67	85%	2.94
2014	44.58	5.36	16.23	4.61	88%	3.03
2015	34.14	4.03	11.83	3.47	88%	2.94
2016	31.24	4.30	13.24	3.27	86%	3.08
2017	28.07	3.17	10.06	3.30	89%	3.17
2018	23.55	2.41	7.60	2.21	90%	3.15
2019	30.74	2.38	7.80	3.04	92%	3.28
2020 ^c	33.25	3.49	10.06	2.52	90%	2.88
2021	22.73	2.32	6.82	2.20	90%	2.94
2022	29.01	3.38	8.63	2.95	88%	2.55
2023 (w1-4 only)	24.02	2.62	6.96		89%	2.66

Table 5: Summer flounder recreational catch, landings, and dead discards, Maine through North Carolina, 2009-2022, all waves. 2023 preliminary estimates are shown through wave 4.

^a For summer flounder, 10% of recreational releases are assumed to die.

^b Dead discards source: 2023 Management Track Assessment.

^c MRIP estimates for 2020 were impacted by the COVID-19 pandemic due to temporary suspension of the Access Point Angler Intercept Survey (APAIS) and headboat sampling. NMFS used imputation methods to fill gaps in 2020 data with data collected in 2018 and 2019. For additional information, see documents at: <u>https://www.mafmc.org/council-events/2021/sfsbsb-mc-july27</u>.

⁷ In July 2018, the Marine Recreational Information Program (MRIP) released revisions to their time series of recreational catch and landings estimates based on adjustments for a revised angler intercept methodology and a new effort estimation methodology (i.e., a transition from a telephone-based effort survey to a mail-based effort survey). Recreational data included in this memo reflect revised MRIP data except where otherwise stated.

⁸ Reported as released alive, with 10% of those live releases assumed to die post-release.

Landings by state in recent years in pounds are shown in Table 6, including full year estimates for 2018-2022 and preliminary wave 1-4 estimates for 2023.

The percent of summer flounder harvest (in numbers of fish) from state waters (0-3 miles from shore) averaged 72% from 2018-2022 (Figure 1). Over the same time period, most harvest originated from private/rental mode trips (84%), while party/charter mode and shore mode accounted for an average of 5% and 11% of the harvest, respectively (Figure 2).

Table 6: Summer flounder recreational harvest MRIP estimates (in pounds), by state for all waves (January-December), 2018-2023. 2023 values are preliminary estimates through wave 4 (January-August).

	2018	2019	2020	2021	2022	2023 (w1-4)
NH	-	-	-	-	-	3,322
MA	142,541	145,203	175,589	120,806	198,199	173,159
RI	603,752	837,108	479,591	163,105	330,910	237,206
СТ	549,267	292,453	387,742	465,969	411,598	306,699
NY	2,385,311	2,441,732	2,389,690	1,156,832	2,840,200	1,330,033
NJ	3,154,539	3,229,057	5,491,680	3,780,044	3,552,155	3,526,360
DE	205,381	224,526	534,247	272,106	253,282	279,757
MD	121,760	206,373	187,227	192,795	185,647	89,580
VA	345,065	368,955	381,164	636,395	839,164	1,013,638
NC	92,032	52,872	37,935	27,492	22,151	
Coast	7,599,648	7,798,279	10,064,865	6,815,544	8,633,306	6,959,754



Figure 1: State vs. federal waters harvest (in weight) for summer flounder, 2018-2022. Fishing area information is self-reported by anglers.



Figure 2: Summer flounder harvest by fishing mode (in weight), 2018-2022.

2024-2025 Staff Recommendation

Staff recommend continued application of regional conservation equivalency in 2024-2025 to achieve the target level of harvest (i.e., the 2024-2025 RHL). Under conservation equivalency, a set of non-preferred coastwide measures must be identified. The non-preferred coastwide measures must consist of a minimum fish size, possession limit, and season for 2024-2025 that if implemented on a coastwide basis, would be expected to achieve the same level of harvest as the conservation equivalency measures. Under conservation equivalency, these measures are written into the federal regulations, but waived in favor of the state- or region-specific measures.

As noted above, the only RDM estimates currently available are those under current (2023) state measures, used to inform the percent change in harvest needed. Additional runs have not yet been completed to identify specific recommendations for adjustments to the non-preferred coastwide measures, or to identify the expected harvest associated with the current non-preferred coastwide measures (18-inch minimum fish size, 3 fish bag limit, and open season from May 15-September 22). Changes to the non-preferred coastwide measures are presumed to be needed based on the degree of reduction needed for summer flounder. Staff will continue to work with the modelers to provide additional information and recommendations for the November 13-14 meeting.

The MC must also provide recommendations for precautionary default measures. The precautionary default measures are intended to be a deterrent against states/regions implementing measures inconsistent with the conservation equivalency guidelines and are not associated with any particular harvest target. In 2023, the precautionary default measures consist of a 20-inch minimum size, a 2-fish possession limit, and an open season of July 1-August 31. Typically, these measures have been identified using non-quantitative methods, by identifying measures that are understood to be deterrent measures to all states. Staff recommends using any results of the RDM from non-preferred coastwide measure runs to gauge whether changes to the precautionary default measures may be needed or if they are still likely to serve as

a deterrent. If the Monitoring Committee believes the current precautionary default measures are more restrictive than any state will consider implementing in 2024-2025, then it may be appropriate to leave these measures unchanged.