



Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201, Dover, DE 19901
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 3, 2020
To: Chris Moore, Executive Director
From: Kiley Dancy, Staff
Subject: Summer Flounder Recreational Management Measures for 2021

Background and Summary

The information in this memo is intended to assist the Monitoring Committee, 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 2021.

In August 2020, the Council and Board reviewed the previously adopted commercial quota and recreational harvest limit (RHL) for summer flounder for the 2021 fishing year. The Council and Board recommended a change to the implemented catch and landings limits based on the recommendations of the Scientific and Statistical Committee (SSC) which addressed the Council's December 2019 revisions to its risk policy. Based on these revisions, the previously implemented 2021 RHL for summer flounder was revised to 8.32 million pounds, an 8% increase from the 2019-2020 RHL of 7.69 million pounds. The rule implementing the revised 2021 commercial quota and RHL and has not yet published but is expected to publish prior to the end of 2020.

Each year, the Monitoring Committee (MC) is tasked with recommending recreational management measures (possession limits, size limits, and seasons) to constrain harvest to the RHL. For summer flounder, this includes recommending 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). In either case, the combination of measures is designed to constrain harvest to the RHL.

Typically, staff uses preliminary partial current year recreational catch data to project harvest through the remainder of the current year. This projection is then compared to the RHL for the upcoming fishing year. This year, as described below, recreational data collection was severely limited by restrictions related to the ongoing Covid-19 pandemic. As a result, no 2020 preliminary harvest estimates are available for summer flounder to project harvest for the year. Estimated total recreational fishing trips within the management unit are available and described below; however, these estimates are not species specific, and in the absence of angler intercept data, effort estimates cannot be used to estimate harvest.

As described below, staff recommend that *status quo* recreational measures be maintained for summer flounder in 2021, including the use of regional conservation equivalency with the currently implemented measures. Staff recommend no changes to the current non-preferred coastwide measures (a 19-inch size limit, 4 fish possession limit, and open season May 15-September 15) or precautionary default measures (a 20-inch size limit, 2 fish possession limit, and open season July 1-August 31).

Summer Flounder Recreational Harvest and Effort, 1981-2019

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). The revised estimates of catch and landings are several times higher than the previous estimates for shore and private boat modes, substantially raising the overall summer flounder catch and harvest estimates. On average, the new landings estimates for summer flounder (in pounds) are 1.8 times higher over the full time series (1981-2017), and 2.3 times higher in recent years (2008-2017). Recreational data included in this memo reflect revised MRIP data except where otherwise stated.

Table 1 provides the revised MRIP time series of recreational harvest (in number and weight) and total catch (in number of fish, including landings and both live and dead discards) for 1981-2019. Under the revised MRIP estimates, the time series high of harvest in pounds is 36.74 million lb (25.78 million fish) in 1983, with a low harvest of 5.66 million lb (3.10 million fish) in 1989. Total catch in number of fish peaked in 2010 at 58.89 million fish in 2010 and was lowest in 1989 at 5.06 million fish (Table 1). Table 1 also shows the percent of summer flounder released¹ (relative to total catch in numbers of fish) and the mean weight of landed summer flounder each year from 1981-2019, both of which have increased over time.

¹ Reported as released alive, with 10% of those live releases assumed to die post-release.

Table 1: Summer flounder recreational catch and landings under revised MRIP estimates, Maine through North Carolina, 1981-2019, all waves.^a Catch includes landings as well as both live and dead discards. Percent released includes all released fish, including those that survive and those that are presumed to die post-release. Preliminary 2020 MRIP estimates and projections are unavailable due to Covid-19 related data gaps.

Year	Catch (mil fish)	Harvest (mil fish)	Harvest (mil lb)	% Released	Mean Weight of Landed Fish
1981	22.77	17.02	15.85	25%	0.93
1982	26.07	19.29	23.72	26%	1.23
1983	36.35	25.78	36.74	29%	1.43
1984	39.82	23.45	28.23	41%	1.20
1985	26.28	21.39	25.14	19%	1.18
1986	32.52	16.38	26.47	50%	1.62
1987	29.94	11.93	23.45	60%	1.97
1988	25.45	14.82	20.79	42%	1.40
1989	5.07	3.10	5.66	39%	1.82
1990	15.47	6.07	7.75	61%	1.28
1991	24.83	9.83	12.91	60%	1.31
1992	21.11	8.79	12.67	58%	1.44
1993	36.18	9.80	13.73	73%	1.40
1994	26.11	9.82	14.29	62%	1.45
1995	27.84	5.47	9.02	80%	1.65
1996	29.75	10.18	15.02	66%	1.47
1997	31.87	11.04	18.53	65%	1.68
1998	39.09	12.37	22.86	68%	1.85
1999	42.88	8.10	16.70	81%	2.06
2000	43.26	13.05	27.03	70%	2.07
2001	43.68	8.03	18.56	82%	2.31
2002	34.48	6.51	16.29	81%	2.50
2003	36.21	8.21	21.49	77%	2.62
2004	37.95	8.16	21.20	79%	2.60
2005	45.98	7.04	18.55	85%	2.63
2006	37.90	6.95	18.63	82%	2.68
2007	35.27	4.85	13.89	86%	2.86
2008	39.48	3.78	12.34	90%	3.26
2009	50.62	3.65	11.66	93%	3.20
2010	58.89	3.51	11.34	94%	3.23
2011	56.04	4.33	13.48	92%	3.12
2012	44.71	5.74	16.13	87%	2.81
2013	44.96	6.60	19.41	85%	2.94
2014	44.58	5.37	16.23	88%	3.02
2015	34.14	4.03	11.83	88%	2.92
2016	31.24	4.30	13.24	86%	3.08
2017	28.03	3.17	10.09	89%	3.18
2018	23.55	2.41	7.60	90%	3.15
2019	30.74	2.38	7.80	92%	3.28
2020	N/A	N/A	N/A	N/A	N/A

^a Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, May 12, 2020.

Landings by state in recent years, in thousands of pounds and thousands of fish are shown in Table 2.

Table 2: Summer flounder recreational harvest (in thousands of pounds and thousands of fish) for revised MRIP estimates, by state for all waves (January-December), 2016-2019. Preliminary 2020 MRIP estimates and projections are unavailable due to Covid-19 related data gaps.

	Thousands of Pounds					Thousands of Fish				
	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
NH	-	-	-	-	N/A	-	-	-	-	N/A
MA	240	172	143	145		106	65	67	55	
RI	341	597	604	837		113	156	169	214	
CT	1,024	403	549	292		338	121	153	90	
NY	5,744	4,214	2,385	2,442		1,800	1,186	641	561	
NJ	4,718	3,602	3,155	3,229		1,456	1,211	1,045	1,108	
DE	435	254	205	225		173	98	85	91	
MD	98	171	122	206		40	57	48	79	
VA	529	528	345	369		212	188	145	150	
NC	110	147	92	53		65	91	58	35	
Coast	13,239	10,088	7,600	7,798		4,302	3,174	2,413	2,383	

^a Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, May 12, 2020.

An average of 83% of summer flounder harvest in numbers of fish was estimated to be taken from state waters (0-3 miles from shore) over the last 10 years (2010-2019; Figure 1). Over the same time period, most harvest originated from private/rental mode trips (86%), while party/charter mode and shore mode accounted for an average of 5% and 9% of the harvest, respectively (Figure 2).

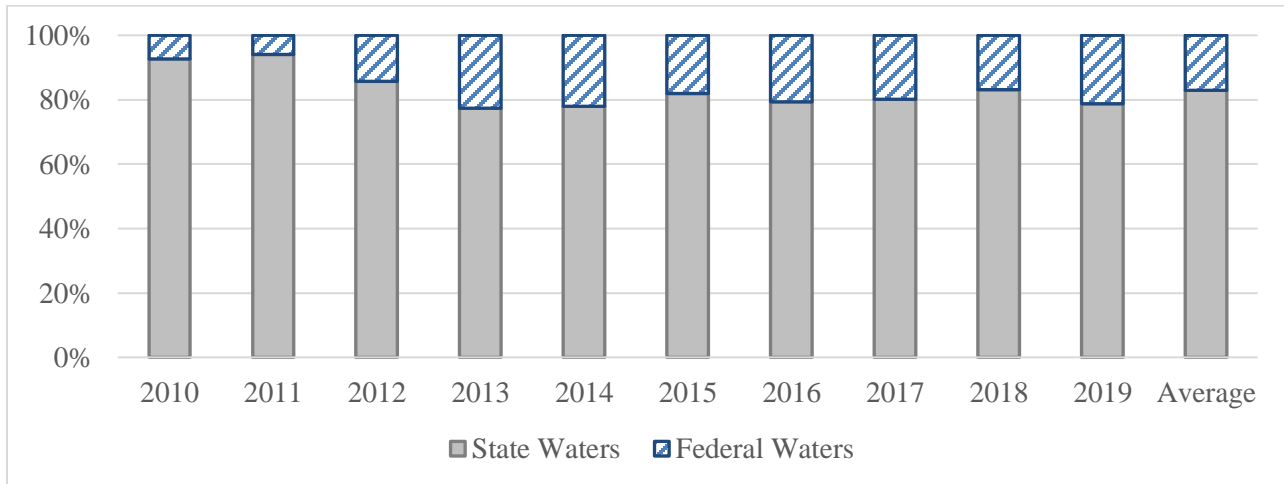


Figure 1: State vs. federal waters harvest in numbers of fish for summer flounder, 2010-2019. Fishing area information is self-reported by anglers. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, May 12, 2020.

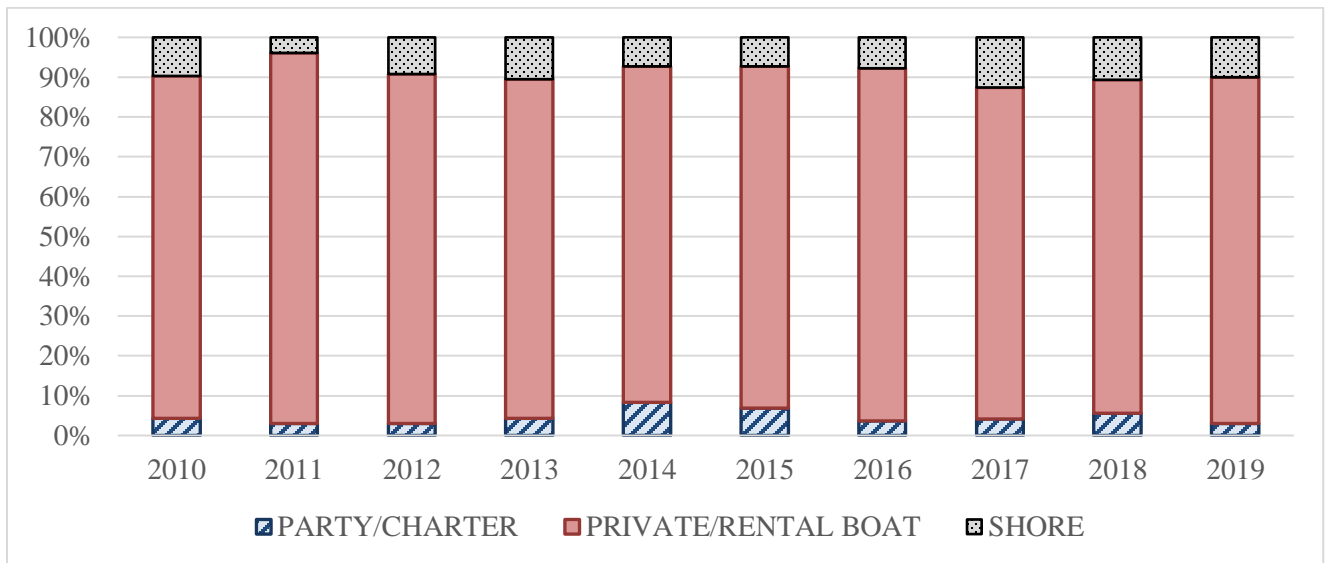


Figure 2: Summer flounder harvest by fishing mode (in numbers of fish), 2010-2019. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, May 12, 2020.

Expanded length frequencies for summer flounder recreational harvest from 2017-2019 are shown in Figure 3, both in number of fish harvested and in percent of total harvest. Size limits were held constant in the states of New Jersey and north between 2017-2019, with the exception of the addition of a shore program size limit in Rhode Island in 2019. The states of Delaware through Virginia revised their size limits from 17 to 16.5 inches between 2017 and 2018 and made no changes between 2018 and 2019. North Carolina remained at 15 inches from 2017-2019.

In 2019, the size bin with the largest landings was 18 inches (21% of 2019 harvest, or about 415,000 fish).

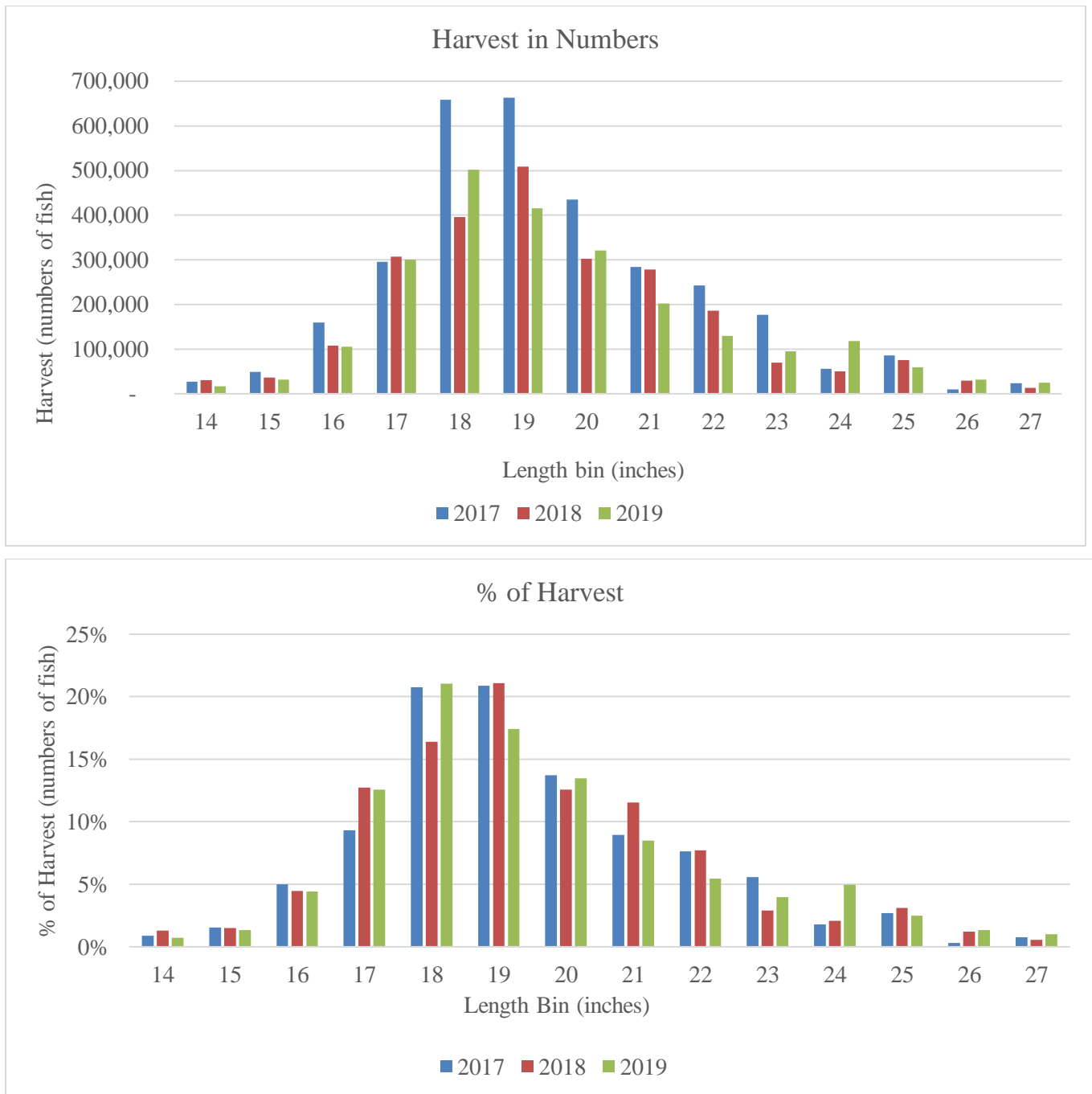


Figure 3: Expanded recreational length frequency for summer flounder, 2017-2019. Size bins below 14" and above 27" accounted for less than 0.5% each of the estimated total harvest and were omitted. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 5, 2020.

Table 3 provides estimates of the number of trips where summer flounder was reported as the primary target from Maine through North Carolina, and the estimated percentage of these directed summer flounder trips relative to directed trips from all species Maine through North Carolina.

The number of directed recreational summer flounder trips has generally declined since 2011 but summer flounder trips remain greater than 10% of total fishing trips within the management unit (11% in 2019; Table 3).

Table 3: Number of summer flounder directed recreational fishing trips, and percentage of total directed trips, Maine through North Carolina, 2008-2019.

	Number of Summer Flounder Directed Trips (millions)^a	Percentage of Directed Trips Relative to Total Trips^{a,b}
2008	8.84	10%
2009	10.42	11%
2010	11.92	12%
2011	13.03	14%
2012	11.89	13%
2013	11.23	13%
2014	11.49	13%
2015	10.61	13%
2016	10.19	12%
2017	8.62	10%
2018	8.59	12%
2019	8.67	11%
AVG	10.61	12%

^a Revised MRIP estimated number of recreational fishing trips (expanded) where the primary target species was summer flounder, Maine through North Carolina. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 5, 2020.

^b Source of total trips for all species combined, revised MRIP data: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 5, 2020.

2020 Recreational Data

Typically, staff uses preliminary MRIP data in the current year for waves 1-4 (January through August²) to project catch and harvest through the rest of the year. These projections are then compared to the RHL for the upcoming year to evaluate how harvest may need to be adjusted to prevent RHL overages in the upcoming year. Because 2020 catch data from MRIP are not available due to limited Access Point Angler Intercept Survey (APAIS) sampling related to Covid-19, projections of 2020 harvest cannot be generated.

MRIP effort sampling, via the mail-based Fishery Effort Survey (FES), continued uninterrupted in 2020. Coastwide data on the estimated number of angler trips are available for the first four waves of 2020 (January-August). These data can be broken down by wave and fishing mode; however, they generated for all recreational species combined and are not available by target species given that directed trip data are generated using information from APAIS.

Figure 4 and Table 4 summarize estimated combined-species recreational trips for waves 1-4 between 2018-2020 for Maine through North Carolina. These data indicate that estimated total trips in waves 1-4 rose by 11% between 2018 and 2019, and then fell 4% between 2019 and 2020.

² Within the summer flounder management unit, wave 1 (January/February) data are only available for the state of North Carolina.

By wave, between 2019 and 2020, trips in wave 2 decreased by 19%, trips in wave 3 decreased by 4%, and trips in wave 4 increased by 2%. By mode, estimates of party/charter trips in waves 1-4 decreased by 31% between 2019 and 2020. Private/rental trips increased by an estimated 2%, and shore mode trips decreased by 7%.

While these data can give managers a general sense of how effort in 2020 compares to 2018 and 2019, they cannot be used to make conclusions about summer flounder catch or harvest in 2020 in terms of pounds or numbers of fish. Given the lack of intercept survey data, no information is available on recreational catch rates, discard rates, or size/weight of landed and discarded summer flounder in 2020. APAIS information is also required to account for and adjust for non-resident fishing effort and account for area fished, which is important for generating harvest and catch estimates. MRIP is in the process of evaluating possible methods for generating estimates of 2020 catch, including modeling approaches, the feasibility of imputation, and using data proxies such as the previous year's data. These approaches will take some time to develop, and any catch estimates that can be generated for 2020 are not likely to be available until at least early 2021.

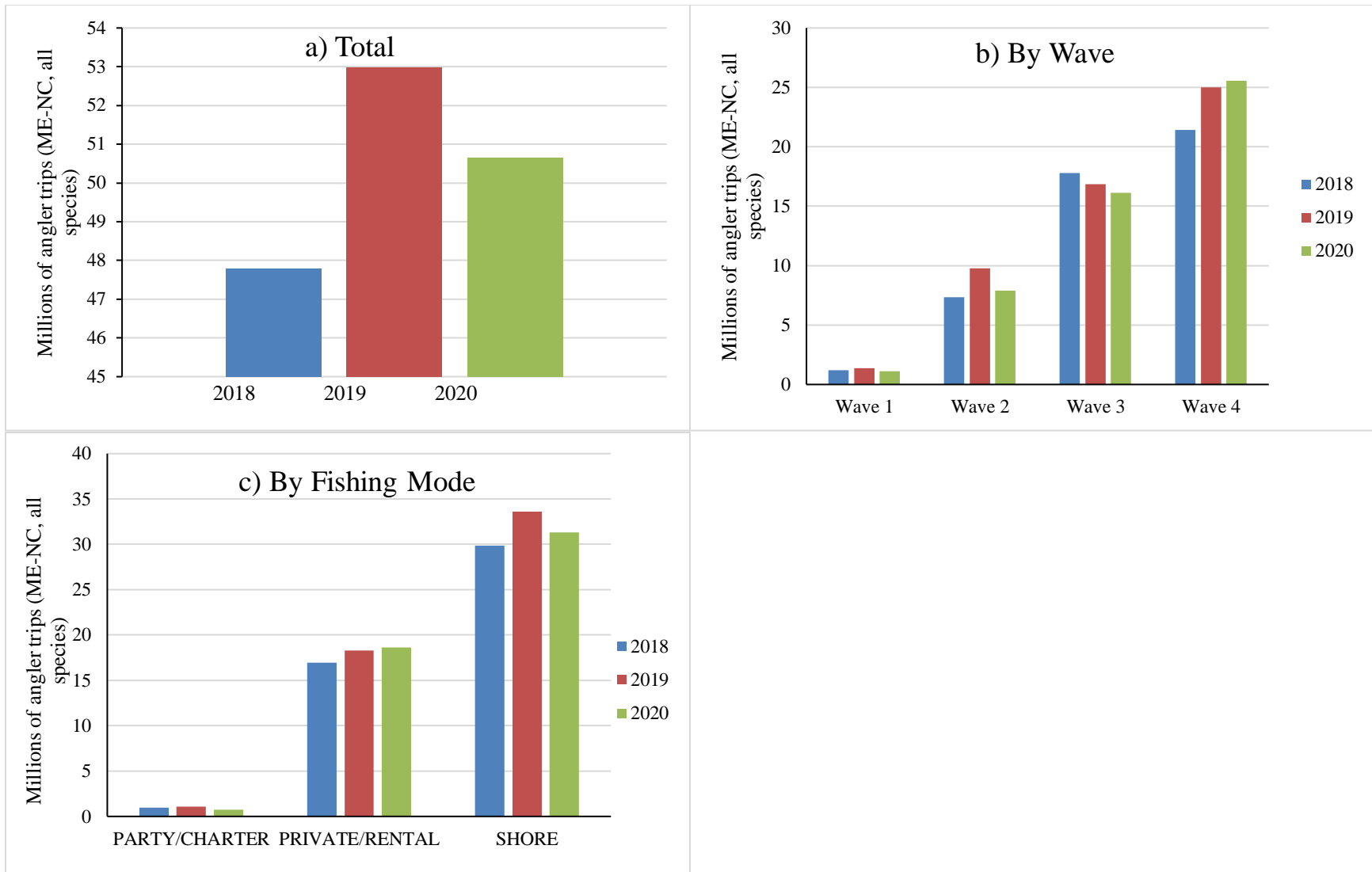


Figure 4: Estimated wave 1-4 angler trips for all species, ME-NC, 2018-2020 for a) all trips combined; b) trips by wave, and c) trips by fishing mode.

Table 4: Total estimated angler trips by wave and fishing mode, 2018-2020, waves 1-4, ME-NC. Includes all trips regardless of species caught or targeted.

	2018	2019	2020
Wave 1 (Jan/Feb)	1,198,416	1,367,270	1,113,345
Party/Charter	284	757	1,935
Private/Rental	396,807	363,376	371,757
Shore	801,325	1,003,137	739,653
Wave 2 (Mar/Apr)	21,434,158	25,000,122	25,551,407
Party/Charter	563,025	675,081	484,402
Private/Rental	7,946,904	8,583,014	10,323,820
Shore	12,924,229	15,742,027	14,743,185
Wave 3 (May/Jun)	7,356,358	9,755,048	7,883,221
Party/Charter	26,347	28,413	3,164
Private/Rental	1,886,247	3,209,239	2,441,457
Shore	5,443,764	6,517,396	5,438,600
Wave 4 (Jul/Aug)	17,793,795	16,866,182	16,112,517
Party/Charter	380,926	388,272	261,453
Private/Rental	6,732,529	6,148,493	5,482,056
Shore	10,680,340	10,329,417	10,369,008
Total	47,782,727	52,988,622	50,660,490

Past Fishery Performance and 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. Performance relative to past RHLs can only be evaluated using pre-revision ("old") MRIP data, since past RHLs were set using assessments that incorporated the previous MRIP time series. Recreational harvest (pre-revision data) relative to the RHL has varied from a high of 122% over the RHL (2000) to a low of 49% under the RHL (2011; Table 5).

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, depending on the year. Starting in 2001, conservation equivalency was implemented, and has been used as the preferred management system each year since (Table 5). 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 2020, the Board has approved the use of regional conservation equivalency, where the combination of regional measures is expected to constrain the coastwide harvest to the RHL.

In December 2019, the Council and Board adopted regional conservation equivalency for the summer flounder recreational fishery in 2020, using the same regions, state measures, non-preferred coastwide measures, and precautionary default measures as adopted for 2019. The RHL was unchanged between 2019 and 2020. Region-specific possession limits in 2020 range from 2-6 fish with size limits ranging from 15.0-19.0 inches, with various seasons (Table 6).

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 RHL 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 2020 include a 4-fish possession limit, a 19-inch total length (TL) minimum size, and an open season from May 15-September 15. These non-preferred coastwide measures are only waived for the duration of the applicable fishing year; thus, the non-preferred measures described above will take effect in federal waters and for federal party/charter permit holders starting on January 1, 2021 until replaced (if applicable) by the implementation of conservation equivalency or alternative coastwide measures.

The precautionary default measures would be implemented in any state or region that failed to develop adequate measures to constrain landings as required by the conservation equivalency guidelines. The precautionary default measures in 2020 include a 2-fish possession limit with a 20-inch TL minimum fish size and an open season from July 1-August 31.

Table 5: Summary of federal management measures for the summer flounder recreational fishery, 1994-2021.

Measure	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ABC (m lb)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational ACL (land+dead disc; m lb)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RHL (m lb)	10.67	7.76	7.41	7.41	7.41	7.41	7.41	7.16	9.72	9.28	11.21	11.98	9.29	6.68
Harvest - OLD MRIP (m lb)	9.33	5.42	9.82	11.87	12.48	8.37	16.47	11.64	8.01	11.64	11.02	10.92	10.50	9.34
% Over/Under RHL(Old MRIP)	-13%	-30%	+33%	+60%	+68%	+13%	+122%	+63%	-18%	+25%	-2%	-9%	+13%	+40%
Harvest - NEW MRIP	14.29	9.02	15.02	18.52	22.86	16.70	27.03	18.56	16.29	21.49	21.20	18.55	18.63	13.89
Possession Limit	8	6/8	10	8	8	8	8	3	a	a	a	a	a	a
Size Limit (TL in)	14	14	14	14.5	15	15	15.5	15.5	a	a	a	a	a	a
Open Season	4/15 - 10/15	1/1 - 12/31	1/1 - 12/31	1/1 - 12/31	1/1 - 12/31	5/29 - 9/11	5/10 - 10/2	4/15 - 10/15	a	a	a	a	a	
Measure	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
ABC (m lb)	-	21.50	25.50	33.95	25.58	22.34	21.94	22.57	16.26	11.30	13.23	25.03	25.03	27.11 ^c
Recreational ACL (land+dead disc; m lb)	-	-	-	-	11.58	10.23	9.07	9.44	6.83	4.72	5.53	11.51	11.51	12.48 ^c
RHL (m lb) - landings only	6.22	7.16	8.59	11.58	8.49	7.63	7.01	7.38	5.42	3.77	4.42	7.69	7.69	8.32 ^c
Harvest - OLD MRIP (m lb)	8.15	6.03	5.11	5.96	6.49	7.36	7.39	4.72	6.18	3.19	3.35	-	-	-
% Over/Under RHL(Old MRIP through 2018; New MRIP 2019)	+31%	-16%	-41%	-49%	-24%	-4%	+5%	-36%	+14%	-15%	-24%	+1%	-	-
Harvest - NEW MRIP	12.34	11.66	11.34	13.48	16.13	19.41	16.23	11.83	13.24	10.09	7.60	7.80	-	-
Possession Limit	a	a	a	a	a	a	b	b	b	b	b	b	b	-
Size Limit (TL in)	a	a	a	a	a	a	b	b	b	b	b	b	b	-
Open Season	a	a	a	a	a	a	a	b	b	b	b	b	b	-

^a State-specific conservation equivalency measures. ^b Region-specific conservation equivalency measures. ^c Proposed revisions; pending implementation.

Table 6: Summer flounder recreational fishing measures in 2018-2020, by state, under regional conservation equivalency. 2018-2020 regions 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.

State	2018			2019			2020		
	Min. Size (inches)	Bag Limit	Season	Min. Size (inches)	Bag Limit	Season	Min. Size (inches)	Bag Limit	Season
MA	17	5 fish	5/23-10/9	17	5 fish	5/23-10/9	17	5 fish	5/23-10/9
RI	19	6 fish	5/1-12/31	19	6 fish	5/3-12/31	19	6 fish	5/3-12/31
RI 7 designated shore sites	N/A	N/A		19	4 fish ^a		19	4 fish ^a	
				17	2 fish ^a		17	2 fish ^a	
CT	19	4 fish	5/4-9/30	19	4 fish	5/4-9/30	19	4 fish	5/4-9/30
CT Shore Program (45 sites)	17			17			17		
NY	19			19			19		
NJ	18	3 fish	5/25-9/22	18	3 fish	5/24-9/21	18	3 fish	5/22-9/19
NJ Shore program site (ISBSP)	16	2 fish		16	2 fish		16	2 fish	
NJ/Delaware Bay COLREGS	17	3 fish		17	3 fish		17	3 fish	
DE	16.5	4 fish	1/1-12/31	16.5	4 fish	1/1-12/31	16.5	4 fish	1/1-12/31
MD									
PRFC									
VA									
NC	15	4 fish	1/1-12/31	15	4 fish	1/1-9/3 ^b	15	4 fish	8/16-9/30

^a Combined possession limit of 6 fish, no more than 2 fish at 17-inch minimum size limit.

^b The recreational flounder fishery in North Carolina (southern, gulf, and summer flounder) closed on September 4, 2019 as the result of measures implemented to end overfishing on southern flounder. NC manages all flounder in the recreational fishery under the same regulations resulting in a de facto closure of the summer flounder recreational fishery. Additional season restrictions were implemented for 2020.

Accountability Measures

Federal regulations include proactive accountability measures (AMs) to prevent the summer flounder recreational Annual Catch Limit (ACL) from being exceeded and reactive AMs to respond when an ACL is exceeded. Proactive recreational AMs include adjusting management measures (bag limits, size limits, and season) for the upcoming fishing year to prevent the RHL and ACL from being exceeded. The NMFS Regional Administrator no longer has in-season closure authority for the recreational fishery if the RHL or ACL is expected to be exceeded. For reactive AMs, paybacks of ACL overages may be required in a subsequent fishing year, 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 following criteria:

1. If the stock is overfished ($B < \frac{1}{2} B_{MSY}$), under a rebuilding plan, or the stock status is unknown: The exact amount, in pounds, by which the most recent year's recreational ACL has been exceeded, will be deducted in the following fishing year, or as soon as possible once catch data are available.
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:
 - If only the recreational ACL has been exceeded, then adjustments to the recreational management measures (bag, size, and seasonal limits) would be made in the following year, or as soon as possible once catch data are available. These adjustments would take into account the performance of the measures and the conditions that precipitated the overage.
 - If the Acceptable Biological Catch ($ABC = \text{recreational ACL} + \text{commercial ACL}$) is exceeded in addition to the recreational ACL, then a single year deduction will be made as a payback, scaled based on stock biomass. The calculation for the payback amount in this case is: $(\text{overage amount}) * (B_{msy} - B) / \frac{1}{2} B_{msy}$.
3. If biomass is above the target ($B > B_{MSY}$): Adjustments to the recreational management measures (bag, size, and seasonal limits) would be considered for the following year, or as soon as possible once catch data are available. These adjustments would take into account the performance of the measures and the conditions that precipitated the overage.

The most recent three years of recreational catch data available are 2017-2019; however, 2017 and 2018 recreational ACLs were set using assessments that used the pre-revision MRIP data; therefore, it is necessary to use catch estimates based on the old MRIP estimation methodology to compare pre-2019 recreational catch to the ACLs. The evaluation shown in Table 7 thus uses old MRIP data for 2017-2018 and revised MRIP data for 2019. This evaluation indicates that recreational catch was below the recreational ACLs for summer flounder in each year from 2017-2019, meaning that a recreational AM has not been triggered for application in 2021.

Table 7: Evaluation of summer flounder recreational AMs using 3-year moving average of the recreational ACL compared to 3-year moving average of recreational dead catch. Because revised MRIP estimates were incorporated into the RHL setting process starting in 2019, old MRIP data is used for 2017-2018 comparisons and revised MRIP for 2019.

	Recreational Harvest	Recreational Dead Discards	Total Dead Recreational Catch	Recreational ACL	% Over/Under
2017 (old MRIP)	3.19	0.94	4.13	4.72	-13%
2018 (old MRIP)^a	3.35	0.97	4.32	5.53	-22%
2019 (new MRIP)	7.80	3.04	10.84	11.51	-6%

^a MRIP stopped publicly releasing pre-calibration MRIP data after 2017, but back-calibrated 2018 recreational harvest data were provided to Council staff by request. 2018 dead discards were estimated by assuming the same ratio of recreational discards to landings for the 2018 pre- and post-revision MRIP data (using post-revision data from the 2019 Northeast Fisheries Science Center data update).

2021 Staff Recommendation

The lack of 2020 harvest information makes it difficult to assess what management changes may be needed for 2021. While the RHL for 2021 is proposed to increase by 8% from 2020 to 8.32 million pounds, it is not known how the fishery has performed thus far in 2020 relative to the current limit of 7.69 million pounds. Summer flounder is not overfished and overfishing is not occurring, and harvest in 2019 was very close to the 2019 RHL as described above. **Staff recommends maintaining the current management strategy of regional conservation equivalency and maintaining state management measures status quo for 2021.**

Staff recommends no changes to the current non-preferred coastwide measures of a 19-inch size limit, 4 fish possession limit, and open season May 15-September 15. Again, these are measures that would be expected to constrain harvest to the RHL if implemented on a coastwide basis, but are waived in favor of state- and region-specific measures under conservation equivalency. **Staff also recommends no changes to the precautionary default measures** (a 20-inch size limit, 2 fish possession limit, and open season July 1-August 31), which would be implemented in any state that does not abide by the conservation equivalency guidelines by implementing the agreed upon measures necessary to constrain harvest to the RHL.