



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

**Date:** November 3, 2016  
**To:** Chris Moore, Executive Director  
**From:** Kiley Dancy and Julia Beaty, Staff  
**Subject:** Summer Flounder Recreational Management Measures for 2017

In August 2015, the Council and the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Board (Board) recommended multi-year commercial quotas and recreational harvest limits for summer flounder for the 2016-2018 fishing years, based on the advice of the Scientific and Statistical Committee (SSC) and Monitoring Committee. In August 2016, the previously implemented catch and landings limits for 2017 and 2018 were revised by the Council and Board in light of new recommendations from the SSC, which were based on an updated stock assessment for summer flounder.

The July 2016 summer flounder stock assessment update<sup>1</sup> from the Northeast Fisheries Science Center (NEFSC) indicated that the stock was not overfished, but overfishing was occurring in 2015. Summer flounder spawning stock biomass estimates continue to trend downward. Given the revised biomass projections and overfishing limits (OFLs) provided in the assessment update for 2017 and 2018, it is clear that the previously implemented 2017 and 2018 catch limits would not be reasonably expected to prevent overfishing. Thus, in August 2016, the Council and Board adopted revised 2017 and 2018 specifications, based on revised advice from the Council's SSC and Monitoring Committee.<sup>2</sup>

The final rule implementing the revised 2017 commercial quota and recreational harvest limit (RHL) has not yet published, but is expected to include a 2017 RHL for summer flounder of 3.77 million lb (a reduction of approximately 30% from the 2016 RHL of 5.42 million lb).

The Monitoring Committee must recommend recreational management measures for 2017 that will constrain landings to the recreational harvest limit. The following is a review of recreational catch and landings data for the summer flounder fishery, as well as a staff recommendation.

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<sup>1</sup> NEFSC (Northeast Fisheries Science Center). 2016. Summer Flounder Stock Assessment Update for 2016. Available at: <http://www.mafmc.org/briefing/august-2016>.

<sup>2</sup> Additional information available in the August 2016 meeting materials at: <http://www.mafmc.org/briefing/august-2016>.

## **Recreational Catch and Landings**

Recreational catch of summer flounder has fluctuated since 1981, from a peak of 32.06 million fish in 1983 to a time series low of 2.68 million fish in 1989. Landings have fluctuated from a peak of 27.97 million lb in 1983 to a low of 3.16 million lb in 1989. Landings were estimated to be 4.72 million lb in 2015 (Table 1), approximately 36% below the 2015 RHL of 7.38 million lb.

Marine Recreational Information Program (MRIP) data for 2016 are incomplete and preliminary. To date, only the first four waves (January through August) of catch and landings data for the current year are available. The Monitoring Committee reviews the MRIP data once wave 4 data are available because the Council and Commission agreed that recommendations need to be made late in the current year (i.e., 2016) to give the states enough time to enact changes in their regulations for the upcoming year (i.e., 2017).

Preliminary data indicate that 12.57 million summer flounder have been caught and 1.87 million summer flounder have been landed through wave 4 in 2016. By weight, landings through wave 4 were 5.69 million lb, with the mean weight at approximately 3.04 lb per fish (Table 2).

Preliminary wave 1-4 data for 2016 can be used to project catch and landings for the entire year by assuming the same proportion of catch and landings by wave in the previous year. These projections are typically assumed to be overestimates for states with more restrictive seasonal measures in the current year, and underestimates for those with less restrictive seasonal measures. However, because state measures under regional conservation equivalency remained largely *status quo* between 2015 and 2016, the proportions by wave in 2015 and 2016 are not expected to differ substantially as a result of changes in regulations.

Total projected catch for 2016 is 14.35 million fish, and projected landings are 6.28 million lb or 2.07 million fish (Table 1). Landings by state in recent years, in thousands of fish, are shown in Table 4 and Table 6 (for waves 1-4 and all waves, respectively). Projected 2016 landings by state (in numbers of fish) are shown in Table 4 and Table 7.

## **Past Harvest Limits and Management Measures**

RHLs for summer flounder were first implemented in 1993. Since that time they have varied from a high of 11.98 million lb in 2005 to a low of 3.77 million lb proposed for 2017 (Table 6). The 2017 proposed harvest limit is a time series low as the result of the biomass projections from the 2016 stock assessment update and the subsequent application of the Council's risk policy to derive overall catch limits. For a summary of why these harvest limit reductions are proposed, see the 2017-2018 summer flounder fact sheet at: <http://www.mafmc.org/s/2016-08-24-Summer-Flounder-Fact-Sheet-2017-2018-Update.pdf>.

From 1993-2001, 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 2002, conservation equivalency was implemented, and has been used as the preferred management system each year since. Under conservation equivalency, individual states or multi-state regions set measures that collectively are designed to constrain landings to the coastwide harvest limit. Federal regulations are waived and all anglers are subject to the summer flounder regulations of the state in which they land. State level conservation equivalency was adopted each year from 2002 through 2013, with each state implementing different sets of management measures. Each year from 2014 through 2016, the Commission's 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.

Last December, the Council and Board adopted regional conservation equivalency for the summer flounder recreational fishery in 2016. Region-specific possession limits ranged from 2-8 fish with size limits ranging from 15.0-18.0 inches, with various seasons (Table 7).

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 combination of state or regional measures under conservation equivalency is theoretically designed to be “equivalent” to this set of non-preferred coastwide measures. 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 2016 include a 4-fish possession limit, an 18-inch total length (TL) minimum size, and an open season from May 1 to September 30.

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 2016 include a 2-fish possession limit with a 20-inch TL minimum fish size and an open season from May 1 to September 30.

### **Accountability Measures**

In 2013, the Council modified the recreational accountability measures (AMs) for Mid-Atlantic species via the Omnibus Recreational Accountability Measures Amendment. This amendment removed the in-season closure authority for the summer flounder recreational fishery that was previously held by the NMFS Regional Administrator. Additionally, in the event of a recreational Annual Catch Limit (ACL) overage, recreational accountability measures no longer necessarily include a direct pound-for-pound payback of the overage amount in a subsequent fishing year. Instead, accountability measures are tied to stock status, and though poundage paybacks may be required in some circumstances, any potential payback amounts would be scaled relative to biomass, as described below.

The modified recreational AMs are as follows: the 3-year recreational sector ACL is evaluated against a 3-year moving average of total catch. Both landings and dead discards are evaluated in determining if the 3-year average recreational sector ACL has been exceeded. If the recreational ACL is exceeded, the appropriate AM will be 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:
  - a. 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.
  - b. 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: (overage amount) \*  $(B_{msy}-B)^{1/2} B_{msy}$ .

3. If biomass is above the target ( $B > B_{MSY}$ ): Adjustments to the recreational management measures (bag, size, and seasonal limits) would be 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.

Accountability measures have not been triggered for the recreational summer flounder fishery based on a comparison of average 2013-2015 catch to the 2013-2015 average ACL. Although there was a slight (4%) overage of the recreational ACL in 2014, recreational catch was below the recreational ACL in 2013 (11%) and 2015 (35%), resulting in a 3-year average of catch that is below the 3-year average ACL. Recreational performance relative to the 2016 ACL will be evaluated in 2017, once final 2016 catch estimates are available, and will be taken into account in next year's recreational specifications process if necessary.

### **Methodology**

The Monitoring Committee must consider and recommend whether coastwide measures or conservation equivalency (state-by-state or voluntary regional) are appropriate for 2017 (Table 8). Specifically, the Committee must recommend measures that will ensure the recreational harvest limit is not exceeded in 2017. Based on the projected landings estimate of 6.28 million lb for 2016, landings would have to be reduced by approximately 40% to achieve the 2017 harvest limit of 3.77 million lb.

In February 2016, the Board approved Addendum XXVII, which allowed for continued use of regional conservation equivalency, with the regions slightly modified compared to 2015 to allow New Jersey to implement different regulations within the New Jersey side of Delaware Bay. Other than in Delaware Bay, each's state's summer flounder measures remained *status quo* between 2015 and 2016. The Board recently initiated another Addendum to consider continuing regional conservation equivalency, or modified state-by-state conservation equivalency, in 2017. If conservation equivalency (state-by-state or regional) is adopted at the December 2016 Council and Board joint meeting, the Commission's staff will update the 2016 landings projections based on MRIP wave 5 data, which may result in a modified reduction percentage. States and/or regions would then develop proposals for recreational measures that would be reviewed by the Board in February 2017.

The Monitoring Committee must make recommendations for non-preferred coastwide measures and precautionary default measures that would be applied under conservation equivalency in the event that this strategy is selected by the Council and Board. The methodology detailed in Framework 2 (Addendum III) to the Summer Flounder, Scup and Black Sea Bass FMP and Framework 6 to the FMP (Addendum XVII) can be used to develop state-specific or regional regulations to meet the state-specific or region-specific targets (Table 8).

Because of the long-term implementation of state-specific regulations, the use of a coastwide reduction table (for minimum size and possession limits) to analyze coastwide regulations is no longer feasible. Staff note that the level of precision of annual harvest estimates from MRIP data depend on the survey sample sizes, the frequency of sampled angler trips that caught the species, and the variability of numbers caught among those trips. Harvest estimates are always progressively less precise at lower levels of stratification; annual estimates are more precise than bimonthly estimates, coastal estimates are more precise than regional estimates, and regional estimates are more precise than state estimates. For the

development of 2016 measures, states used a variety of data sources to analyze the effects of adjustments at the state and regional levels, including state-specific data sources. It is increasingly difficult to quantitatively analyze the expected effects of a coastwide set of measures.

### **Fishing Trips and Year Class Effects**

Table 9 provides an overview of coastwide recreational fishery performance and estimates of the number of trips where summer flounder was reported as the primary target. A comparison of summer flounder directed trips to total trips suggests that summer flounder trips continue to be a substantial component of total angler trips, ranging from about 13-20 percent of total trips from 1996-2016 (Table 9). Predicting the number of summer flounder trips that might be taken in 2017 is complicated because many factors affect the demand for angler fishing trips. Changes in angler behavior are also complex and difficult to predict, and may violate the assumptions associated with specific sets of regulations and their anticipated results.

Year-class effects, in terms of fish availability, can influence the expected impacts of management measures and should be considered. The stock assessment update for 2016<sup>3</sup> indicates that several consecutive years of poor recruitment have been observed for summer flounder (2010-2015), resulting in a decline in biomass over the past several years. Despite constant recreational measures between 2014 and 2015, a substantial decrease in both catch and landings was observed in 2015. Although total stock biomass is projected to increase slightly in 2017, summer flounder year classes expected to become available to the fishery in 2017 are estimated to be below average.

### **2017 Staff Recommendation**

A number of concerns related to the recreational fishery have been increasingly expressed in recent years by Council and Board members, advisors, and other stakeholders. There is increasing concern that higher size limits are placing high fishing pressure on large female summer flounder, exacerbating the trends of declining spawning stock biomass and poor recruitment. Many anglers have expressed frustration with the very high discarded to kept fish ratio. The high rate of discards has decreased angler satisfaction and angler ability to keep fish for personal consumption. In addition, there is increasing concern regarding perceived waste in the fishery and the mortality associated with discards. A 10% recreational discard mortality rate is assumed in the stock assessment; however, many stakeholders believe that actual discard mortality rates may be higher, and that managers should take steps to reduce recreational discards to reverse the trend of declining biomass.

For several years, many stakeholders have requested that the Council and Board consider recreational management strategies that provide alternatives to the single minimum size requirements typically implemented as part of the bag, size, and season combination. Specifically, some have requested slot limits (i.e., specifying both a minimum and a maximum size) to reduce discards, increase angler opportunities to take fish home, and ease fishing pressure on larger summer flounder. Other suggestions have included strategies such as cumulative length limits (keep any number of fish up to a total number of inches).

The NMFS Greater Atlantic Regional Fisheries Office has advised Council staff that adopting a coastwide slot limit is not feasible under the current FMP, as the current FMP and federal regulations allow for the use of only minimum size limits and not maximum size limits.<sup>4</sup> However, GARFO staff have also indicated that states could likely develop slot limits under conservation equivalency. Such approaches

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<sup>3</sup> [http://www.mafmc.org/s/Summer\\_flounder\\_2016\\_Assess\\_Update.pdf](http://www.mafmc.org/s/Summer_flounder_2016_Assess_Update.pdf).

<sup>4</sup> This could be modified in the FMP, for example, through the ongoing summer flounder amendment.

could be considered via the Addendum for 2017 summer flounder management initiated by the Commission's Board in October 2016.<sup>5</sup>

Given the above information, staff recommend continued use of regional conservation equivalency in 2017, and additionally recommend that states or regions analyze options for alternative size and possession limit strategies. Specifically, staff recommend analysis of regional split slot limits that would allow possession of a small amount of summer flounder over two or more size slots. An example would be: 2 fish between 14-18 inches and 1 fish above 18 inches, in combination with sufficiently restrictive seasons to ensure that the coastwide RHL is not exceeded. Staff recommend that the Monitoring and Technical Committees explicitly analyze such approaches and their feasibility, for consideration by the Council and Board.

If conservation equivalency is selected by the Council and Board, a set of **non-preferred coastwide measures** must be identified, along with a set of precautionary default measures. The non-preferred coastwide measures must consist of a minimum fish size, possession limit, and season for 2017 that if implemented on a coastwide basis, would be expected to constrain harvest to the harvest limit in 2017. Under conservation equivalency, these measures are written into the federal regulations, but waived in favor of the state- or region-specific measures. The same set of non-preferred coastwide measures have been approved for the last several years, and included an 18-inch minimum size, a 4-fish possession limit, and an open season from May 1-September 30. Given the 30% reduction in the harvest limit between 2016 and 2017, and the 40% reduction required between the projected 2016 landings and 2017 harvest limit, staff do not believe that these measures, if implemented on a coastwide basis, would constrain landings to the 3.77 million lb RHL in 2017. Staff considered options to restrict the previously used non-preferred coastwide measures. As described above, there are very limited data and methods available to quantitatively analyze an appropriate coastwide alternative. Table 5 provides the 2014-2015 percentage of annual landings by state and wave; however, this table does not account for seasonal regulatory differences by state and therefore should not be used to draw conclusions about adjustments to individual state measures. However, this information provides some general basis for adjusting the non-preferred coastwide measures. Based on this information, staff recommend non-preferred coastwide measures that include a 19-inch minimum fish size, 3 fish bag limit, and open season from June 1-September 15.

The **precautionary default measures** are a set of measures that are intended to be more restrictive than measures any state would need to implement to achieve a necessary reduction, to deter states from deviating from the conservation equivalency guidelines. The Commission would require adoption of the precautionary default measures by any state that either does not submit a summer flounder management proposal to the Commission's Summer Flounder Technical Committee, or submits measures that are inconsistent with the conservation equivalency guidelines. For the past several years, the precautionary default measures have consisted of a 20-inch minimum size, a 2-fish possession limit, and an open season of May 1-September 30. Staff recommend that the precautionary default measures be adjusted for 2017 in order to sufficiently deter states from not addressing the required reductions. Staff recommend that the precautionary default measures consist of a 21-inch TL minimum size, a 2-fish possession limit, and a coastwide season from June 1-August 31, 2017. This default is likely to be more restrictive than any measure an individual state would implement in 2017.

In summary, staff recommend that the summer flounder recreational fishery be managed under regional conservation equivalency in 2017, and that states analyze options for alternative size and bag limit options,

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<sup>5</sup> [http://asmfc.org/uploads/file/58124e65pr33SummerFlounderDraftAddendumXVIII\\_Initiation.pdf](http://asmfc.org/uploads/file/58124e65pr33SummerFlounderDraftAddendumXVIII_Initiation.pdf).

specifically the use of split slot limits. Staff recommend non-preferred coastwide measures that include a 19-inch TL size limit, a 3-fish possession limit, and an open season from June 1-September 15, 2017, as well as precautionary default measures that include a 21-inch TL minimum size, 2 fish possession limit, and open season from June 1-August 31, 2017. Staff requests comments from the Monitoring Committee on the appropriateness of the recommended non-preferred coastwide and precautionary default measures.

**Table 1:** Summer flounder recreational catch and landings by year, Maine through North Carolina, 1981-2016, all waves. The number of fish released is presented as a proportion of the total catch (% Released).<sup>a</sup>

<b>Year</b>	<b>Catch (‘000 fish)</b>	<b>Landings (‘000 fish)</b>	<b>Landings (‘000 lb)</b>	<b>% Released</b>	<b>Mean weight of landed fish (lb)</b>
<b>1981</b>	13,579	9,567	10,081	30%	1.05
<b>1982</b>	23,562	15,473	18,233	34%	1.18
<b>1983</b>	32,062	20,996	27,969	35%	1.33
<b>1984</b>	29,785	17,475	18,765	41%	1.07
<b>1985</b>	13,526	11,066	12,490	18%	1.13
<b>1986</b>	25,292	11,621	17,861	54%	1.54
<b>1987</b>	21,023	7,865	12,167	63%	1.55
<b>1988</b>	17,171	9,960	14,624	42%	1.47
<b>1989</b>	2,677	1,717	3,158	36%	1.84
<b>1990</b>	9,101	3,794	5,134	58%	1.35
<b>1991</b>	16,075	6,068	7,960	62%	1.31
<b>1992</b>	11,910	5,002	7,148	58%	1.43
<b>1993</b>	22,904	6,494	8,831	72%	1.36
<b>1994</b>	17,725	6,703	9,328	62%	1.39
<b>1995</b>	16,308	3,326	5,421	80%	1.63
<b>1996</b>	18,994	6,997	9,820	63%	1.40
<b>1997</b>	20,027	7,167	11,866	64%	1.66
<b>1998</b>	22,086	6,979	12,477	68%	1.79
<b>1999</b>	21,378	4,107	8,366	81%	2.04
<b>2000</b>	25,384	7,801	16,468	69%	2.11
<b>2001</b>	28,187	5,294	11,637	81%	2.20
<b>2002</b>	16,674	3,262	8,008	80%	2.45
<b>2003</b>	20,532	4,559	11,638	78%	2.55
<b>2004</b>	20,336	4,316	11,022	79%	2.55
<b>2005</b>	25,806	4,027	10,915	84%	2.71
<b>2006</b>	21,400	3,950	10,505	82%	2.66
<b>2007</b>	20,732	3,108	9,337	85%	3.00
<b>2008</b>	22,897	2,350	8,151	90%	3.47
<b>2009</b>	24,085	1,806	6,030	93%	3.34
<b>2010</b>	23,722	1,501	5,108	94%	3.40
<b>2011</b>	21,559	1,840	5,956	91%	3.24
<b>2012</b>	16,528	2,272	6,490	86%	2.86
<b>2013</b>	16,105	2,521	7,355	84%	2.92
<b>2014</b>	18,969	2,458	7,389	87%	3.01
<b>2015</b>	12,153	1,621	4,721	87%	2.91
<b>2016 (proj.)<sup>b</sup></b>	14,350	2,065	6,279	86%	3.04

<sup>a</sup> Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 13, 2016 and October 18, 2016. 1981-2003 data are from MRFSS, 2004-2016 data are from MRIP.

<sup>b</sup> Projected using proportion by wave from 2015 MRIP data and 2016 MRIP wave 1-4 data.



**Table 2:** Summer flounder recreational catch and landings for waves 1-4 (January-August), Maine through North Carolina, 1981-2016.<sup>a</sup>

<b>Year</b>	<b>Catch (*000 fish)</b>	<b>Landings (*000 fish)</b>	<b>Landings (*000 lb)</b>	<b>Mean Weight of landed fish (lb)</b>
1981	11,774	8,071	8,899	1.10
1982	20,108	12,599	15,289	1.21
1983	26,979	17,128	22,523	1.31
1984	26,355	14,614	15,245	1.04
1985	10,626	8,535	9,691	1.14
1986	21,321	8,885	13,274	1.49
1987	18,749	6,656	10,393	1.56
1988	13,906	7,918	11,728	1.48
1989	2,120	1,465	2,715	1.85
1990	7,277	3,025	4,125	1.36
1991	13,977	5,186	6,796	1.31
1992	9,830	3,992	5,688	1.42
1993	17,636	4,750	6,553	1.38
1994	15,052	5,499	7,603	1.38
1995	14,315	2,765	4,629	1.67
1996	17,206	6,175	8,685	1.41
1997	14,466	4,657	7,636	1.64
1998	19,015	5,944	10,568	1.78
1999	19,113	3,629	7,441	2.05
2000	22,131	6,867	14,148	2.06
2001	25,661	4,810	10,651	2.21
2002	14,442	2,842	7,008	2.47
2003	18,177	4,123	10,615	2.57
2004	17,998	3,931	10,088	2.57
2005	22,874	3,630	9,800	2.70
2006	20,515	3,685	9,813	2.66
2007	18,659	2,898	8,803	3.04
2008	21,792	2,277	7,951	3.49
2009	23,482	1,758	5,905	3.36
2010	22,725	1,428	4,902	3.43
2011	19,347	1,708	5,511	3.23
2012	14,390	1,968	5,680	2.89
2013	14,641	2,304	6,758	2.93
2014	16,691	2,202	6,684	3.04
2015	10,633	1,463	4,291	2.93
2016	12,573	1,869	5,691	3.04

<sup>a</sup> Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 28, 2016. 1981-2003 data are from MRFSS, 2004-2016 data are from MRIP.

**Table 3:** Summer flounder recreational landings (in thousands of fish) by state for waves 1-4 (January-August), 2007-2016.<sup>a</sup>

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ME	-	-	-	-	-	-	-	-	-	-
NH	-	<1	-	-	-	<1	-	-	-	-
MA	138	232	50	45	33	74	29	113	66	53
RI	173	203	71	118	152	103	126 <sup>b</sup>	184	160	90
CT	111	146	45	35	47	62	268 <sup>b</sup>	115 <sup>b</sup>	81 <sup>b</sup>	218
NY	844	609	298	331	349	482	501	491 <sup>b</sup>	366 <sup>b</sup>	713
NJ	1,040	752	817	551	719	905	1,095 <sup>b</sup>	1,046	462	610
DE	101	33	78	50	56	44	49	86	44	82
MD	44	34	64	14	10	19	36	27	43	19
VA	342	243	275	235	301	249	171	118 <sup>b</sup>	131	75
NC	104	25	59	50	40	31	30	25	29	10

<sup>a</sup> Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 18, 2016.

<sup>b</sup> In August 2016 MRIP revised some estimates to address small sample size issues. Revised estimates are only available at the annual level. Thus, some landings are excluded from the following wave/mode/state results due to insufficient sample sizes, including: 2013 CT, NJ, and RI charter, 2014 CT, NY, and VA charter, 2015 CT and NY charter.

**Table 4:** Summer flounder recreational landings (in thousands of fish) by state for all waves (January-December), 2007-2016.<sup>a</sup>

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 (proj) <sup>b</sup>
ME	-	-	-	-	-	-	-	-	-	-
NH	-	<1	-	-	-	<1	-	-	-	-
MA	138	232	50	45	58	76	31	113	79	64
RI	176	204	72	118	161	103	128	185	164	92
CT	112	146	45	35	47	63	270	120	93	239
NY	866	609	299	334	376	509	518	508	492	796
NJ	1,067	762	825	552	737	1,130	1,232	1,175	497	656
DE	108	35	87	54	67	45	58	93	51	96
MD	104	58	65	25	15	23	53	80	44	19
VA	397	260	289	260	318	260	186	139	159	89
NC	139	44	75	77	60	63	45	46	46	14

<sup>a</sup> Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 14, 2016 and October 28, 2016.

<sup>b</sup> Projected using proportion by wave from 2015 MRIP data and 2016 MRIP wave 1-4 data.

**Table 5:** Percentage of landings (in number of fish) by wave and state, 2014 and 2015 combined. This table does not account for seasonal regulation differences and is provided as additional context for the recommended non-preferred coastwide and precautionary default measures.

	<b>Wave 2 (Mar-Apr)</b>	<b>Wave 3 (May-June)</b>	<b>Wave 4 (Jul-Aug)</b>	<b>Wave 5 (Sept-Oct)</b>	<b>Wave 6 (Nov-Dec)</b>
<b>MA</b>	0.00%	8.00%	85.20%	6.81%	0.00%
<b>RI</b>	0.00%	59.59%	39.18%	1.24%	0.00%
<b>CT</b>	0.00%	40.00%	54.21%	5.79%	0.00%
<b>NY</b>	0.00%	38.41%	53.75%	7.84%	0.00%
<b>NJ</b>	0.00%	18.03%	72.15%	9.82%	0.00%
<b>DE</b>	0.18%	19.72%	70.34%	9.67%	0.08%
<b>MD</b>	0.00%	19.38%	37.08%	43.45%	0.09%
<b>VA</b>	2.79%	45.92%	35.32%	15.27%	0.69%
<b>NC</b>	0.00%	21.37%	40.44%	37.07%	1.13%
<b>Coast</b>	<b>0.21%</b>	<b>29.08%</b>	<b>60.30%</b>	<b>10.32%</b>	<b>0.08%</b>

Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 14, 2016 and October 28, 2016.

**Table 6:** Summary of federal management measures for the summer flounder recreational fishery, 1993-2017.

Measure	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
ABC (m lb)	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational ACL (land+disc; m lb)	-	-	-	-	-	-	-	-	-	-	-	-	-
Harvest Limit (m lb)	8.38	10.67	7.76	7.41	7.41	7.41	7.41	7.41	7.16	9.72	9.28	11.21	11.98
Landings (m lb)	8.83	9.33	5.42	9.82	11.87	12.48	8.37	16.47	11.64	8.01	11.64	11.02	10.92
Possession Limit	6	8	6/8	10	8	8	8	8	3	a	a	a	a
Size Limit (TL in)	14	14	14	14	14.5	15	15	15.5	15.5	a	a	a	a
Open Season	5/15 - 9/30	4/15 - 10/15	1/1 - 12/31	1/1 - 12/31	1/1 - 12/31	1/1 - 12/31	5/29 - 9/11	5/10 - 10/2	4/15 - 10/15	a	a	a	a
Measure	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 <sup>c</sup>	
ABC (m lb)	-	-	-	21.50	25.50	33.95	25.58	22.34	21.94	22.57	16.26	11.30	
Recreational ACL (land+disc; m lb)	-	-	-	-	-	-	11.58	10.23	9.07	9.44	6.83	4.72	
Harvest Limit (m lb) - landings only	9.29	6.68	6.22	7.16	8.59	11.58	8.49	7.63	7.01	7.38	5.42	3.77	
Landings (m lb)	10.51	9.34	8.15	6.03	5.11	5.96	6.49	7.01	7.40	4.72	6.28 <sup>d</sup>	-	
Possession Limit	a	a	a	a	a	a	a	a	b	b	b	-	
Size Limit (TL in)	a	a	a	a	a	a	a	a	b	b	b	-	
Open Season	a	a	a	a	a	a	a	a	b	b	b	-	

<sup>a</sup> State-specific conservation equivalency measures.

<sup>b</sup> Region-specific conservation equivalency measures.

<sup>c</sup> Proposed.

<sup>d</sup> Projected

**Table 7:** Summer flounder recreational management measures and landings (in number of fish; 2016 projected) by state and region, 2015 and 2016.

Region	State	2015				2016				
		Min. Size (in)	Poss. Limit	Open Season	Landings ('000 fish)	State	Min. Size (inches)	Poss. Limit	Open Season	Proj. Landings ('000 fish)
1	<b>MA</b>	16	5 fish	May 22-Sept. 23	79	<b>MA</b>	16	5 fish	May 22-Sept. 23	64
2	<b>RI</b>	18	8 fish	May 1-Dec. 31	164	<b>RI</b>	18	8 fish	May 1-Dec. 31	92
3	<b>CT</b>	18	5 fish	May 17- Sept. 21	93	<b>CT</b>	18	5 fish	May 17- Sept. 21	239
		16 (41 designated shore sites)					16 (41 designated shore sites)			
	<b>NY</b>	18	5 fish	May 17- Sept. 21	492	<b>NY</b>	18	5 fish	May 17- Sept. 21	796
	<b>NJ</b>	18	5 fish	May 22-Sept. 26	497	<b>NJ</b>	18	5 fish	May 21-Sept. 25	656
16 (1 shore site)		2 fish	16 (1 shore site)				2 fish	17 (NJ Delaware Bay)		
4	<b>DE</b>	16	4 fish	Jan. 1- Dec. 31	51	<b>DE</b>	16	4 fish	Jan. 1- Dec. 31	96
	<b>MD</b>	16	4 fish	Jan. 1- Dec.31	44	<b>MD</b>	16	4 fish	Jan. 1- Dec.31	19
	<b>PRFC</b>	16	4 fish	Jan. 1- Dec.31	--	<b>PRFC</b>	16	4 fish	Jan. 1- Dec.31	--
	<b>VA</b>	16	4 fish	Jan. 1- Dec. 31	159	<b>VA</b>	16	4 fish	Jan. 1- Dec. 31	89
5	<b>NC</b>	15	6 fish	Jan. 1- Dec. 31	41	<b>NC</b>	15	6 fish	Jan. 1- Dec. 31	14

**Table 8:** Procedures for establishing summer flounder recreational management measures.

	<b>August</b>	
		Council/Commission's Board recommend recreational harvest limit.
	<b>October</b>	
		MRIP data available for current year through wave 4.
	<b>November</b>	
		Monitoring Committee meeting to develop recommendations to Council: Overall % reduction required. Use of coastwide measures or state conservation equivalency. *Precautionary default measures. **Coastwide measures.
	<b>December</b>	
		Council/Board meeting to make recommendation to NMFS State Conservation Equivalency OR Coastwide measures
<b><i>State Conservation Equivalency Measures</i></b>		<b><i>Coastwide Measures</i></b>
	<b>Late December</b>	
		<b>Early January</b>
Commission staff summarizes and distributes <u>state-specific and multi-state conservation equivalency</u> guidelines to states.		Council staff submits recreational measure package to NMFS. Package includes: -Overall % reduction required. -Coastwide measures.
	<b>Early January</b>	
Council staff submits recreational measure package to NMFS. Package includes: - Overall % reduction required. - Recommendation to implement conservation equivalency and precautionary default measures (Preferred Alternative). -Coastwide measures (Non-preferred Alternative).		<b>February 15</b>
States submit conservation equivalency proposals to ASMFC.		NMFS publishes proposed rule for recreational measures announcing the overall % reduction required and Coastwide measures.
	<b>January 15</b>	
ASMFC distributes <u>state-specific or multi-state conservation equivalency proposals</u> to Technical Committee.		<b>April</b>
	<b>Late January</b>	
ASMFC Technical Committee meeting: -Evaluation of proposals. -ASMFC staff summarizes Technical Committee recommendations and distributes to Board.		NMFS publishes final rule announcing overall % reduction required and Coastwide measures.  *Precautionary default measures - measures to achieve at least the % required reduction in each state, e.g., one fish possession limit and 15.5 inch bag limit would have achieved at least a 41% reduction in landings for each state in 1999. **Coastwide measures - measure to achieve % reduction coastwide.
	<b>February</b>	
Board meeting to approve/disapprove proposals and submits to NMFS within two weeks, but no later than end of February.		
	<b>March 1 (on or around)</b>	
NMFS publishes proposed rule for recreational measures announcing the overall % reduction required, <u>state-specific or multi-state conservation equivalency</u> measures and precautionary default measures (as the preferred alternative), and coastwide measures as the non-preferred alternative.		
	<b>March 15</b>	
During comment period, Board submits comment to inform whether conservation equivalency proposals are approved.		
	<b>April</b>	
NMFS publishes final rule announcing overall % reduction required and one of the following scenarios: - <u>State-specific or multi-state conservation equivalency</u> measures with precautionary default measures, or -Coastwide measures.		

**Table 9:** Number of summer flounder recreational fishing trips, harvest limit, landings, and fishery performance (i.e., percent overage or underage) from Maine through North Carolina, 1996 to 2017.

Year	Number of Summer Flounder Directed Trips (millions) <sup>a</sup>	Percentage of Directed Trips Relative to Total Trips <sup>a,b</sup>	Recreational Harvest Limit (million lb) <sup>c</sup>	Recreational Landings of Summer Flounder (million lb) <sup>d</sup>	Percentage Overage (+)/ Underage(-)
1996	4.89	17.9%	7.41	9.82	+33%
1997	5.60	18.8%	7.41	11.87	+60%
1998	5.27	20.5%	7.41	12.48	+68%
1999	4.22	16.8%	7.41	8.37	+13%
2000	5.80	16.7%	7.41	16.47	+122%
2001	6.13	16.6%	7.16	11.64	+63%
2002	4.56	14.8%	9.72	8.01	-18%
2003	5.62	16.0%	9.28	11.64	+25%
2004	4.86	14.3%	11.21	11.02	-2%
2005	5.85	16.0%	11.98	10.92	-9%
2006	4.99	13.6%	9.29	10.51	+13%
2007	5.49	14.5%	6.68	9.34	+40%
2008	4.93	13.4%	6.21	8.15	+31%
2009	4.60	15.6%	7.16	6.03	-16%
2010	4.45	15.1%	8.59	5.11	-41%
2011	4.50	16.8%	11.58	5.96	-49%
2012	4.24	16.4%	8.59	6.49	-24%
2013	3.73	14.6%	7.63	7.36	-4%
2014	4.06	15.6%	7.01	7.39	+5%
2015	3.39	15.4%	7.38	NA	-36%
2016	NA	NA	5.42	NA	NA
2017	NA	NA	3.77	NA	NA

<sup>a</sup> Estimated number of recreational fishing trips (expanded) where the primary target species was summer flounder, Maine through North Carolina. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 14, 2016.

<sup>b</sup> Source of total trips for all species combined: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 14, 2016.

<sup>c</sup> RHLs for 2003 through 2014 are adjusted for research set-aside; this program was suspended starting in 2015.

<sup>d</sup> Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 14, 2016.

NA = Data not available.

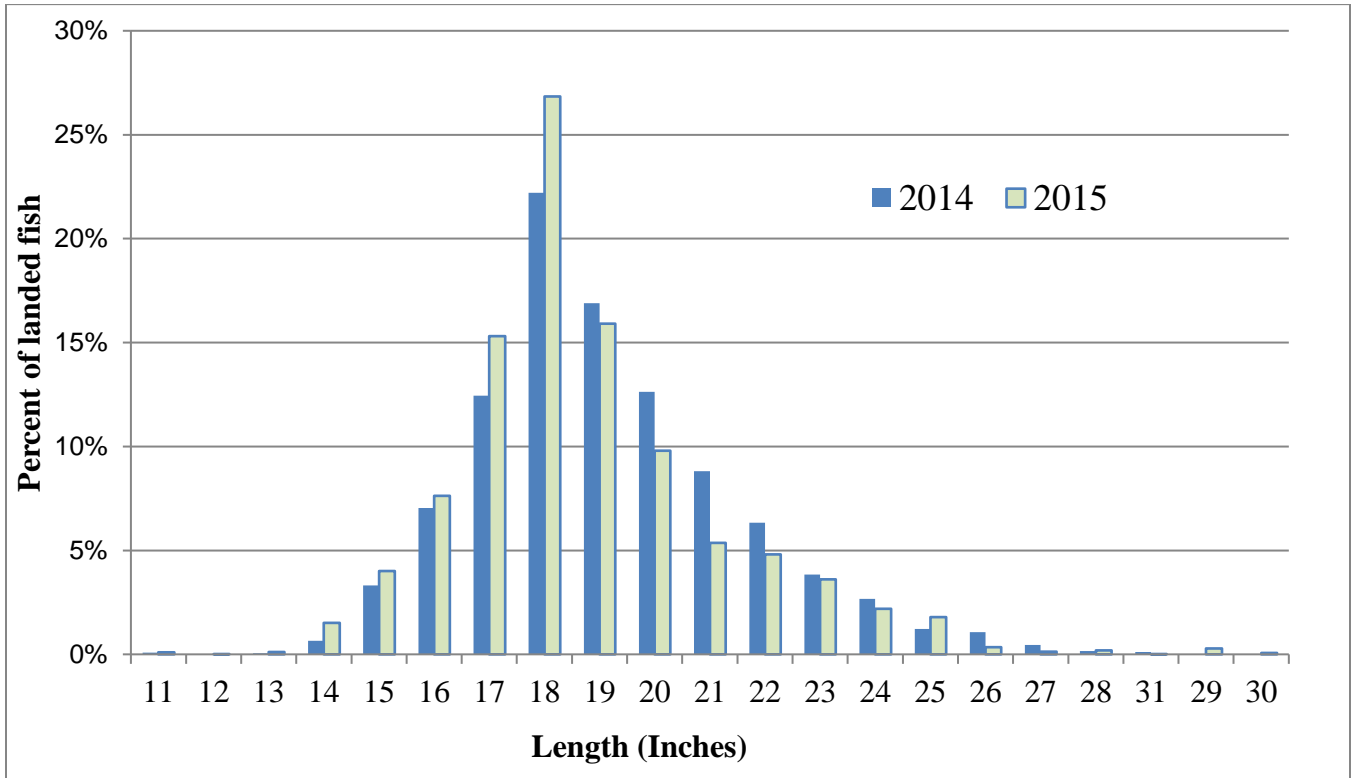


Figure 1: Expanded length frequencies of landed summer flounder from 2014 and 2015 MRIP data, as a percentage of total landed fish. Each length bin contains fish from X.0 to X.99 inches. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, October 14, 2016.