

Fact Sheet:

Summer Flounder Catch and Landings Limits: 2017-2018 Reductions

Summary

Recent stock assessment information for summer flounder suggests a continuation of the negative stock trends described in last year's assessment update. The most recent stock assessment update for summer flounder indicates that the stock has been experiencing overfishing for the past several years. Although the stock is not overfished at this time, the estimated biomass continues to trend downward, closer to the overfished threshold.

These results appear to be driven in part by low recruitment. The stock has experienced below-average year classes each year for the past six years (2010-2015). The assessment update also indicates that fishing mortality rates have been underestimated in recent years, and stock biomass has been overestimated. The exact causes of this pattern are unknown. In addition, there may be sources of mortality that are not being fully accounted for in the assessment, such as illegal/underreported landings, and/or incorrect assumptions regarding discard mortality and natural mortality rates.

Fishery managers are required to set catch and landings limits that will prevent overfishing. Last year, based on the results of the 2015 assessment update, managers were faced with possible cuts in catch of approximately 45%. Because this would have had severe economic impacts, the Council requested that the Scientific and Statistical Committee (SSC) recommended

Definitions

Overfishing – Overfishing occurs whenever a stock or stock complex is subjected to a rate or level of fishing mortality that jeopardizes the capacity of a stock or stock complex to produce maximum sustainable yield (MSY) on a continuing basis.

Overfished - A stock or stock complex is considered overfished when its population size falls below the minimum stock size threshold (MSST). A rebuilding plan is required for stocks that are deemed overfished.

multi-year catch limits that phased in the required catch reduction over a period of three years. The Council recommended, and the National Marine Fisheries Service implemented, 2016-2018 catch limits that followed this phased-in approach. The implemented 2016 catch limit represented a 29% reduction from 2015 levels.

Due to the most recent assessment results and revised Acceptable Biological Catch (ABC) recommendations from the SSC, summarized below, the currently implemented specifications for 2017 and 2018 will need to be revised. Commercial quotas and recreational harvest limits, which were reduced in 2016 as the result of the 2015 assessment update, will need to be further reduced.

Assessment Background and Trends

Summer flounder catch and landings limits are established on an annual basis for up to three years at a time, based on current estimates of stock size and projections for upcoming years. The last peer-reviewed benchmark stock assessment was conducted in the summer of 2013. The assessment concluded that in 2012 the summer flounder stock was not overfished and that overfishing was not occurring (SAW/SARC 57, 2013). The SSC and Council used the information provided in the 2013 benchmark stock assessment to set summer flounder catch and harvest levels for 2014 and 2015.

In June 2015 and again in June 2016, the Council received a <u>stock assessment update</u> ("assessment update") from the Northeast Fisheries Science Center (NEFSC). Assessment updates incorporate new data (through the most recent complete year) into the existing population model approved during the previous benchmark

assessment. Both the 2015 and 2016 assessment updates indicate that in recent years, the summer flounder stock was not overfished but that overfishing has been occurring.

Although reported landings in recent years have typically been within the commercial quotas and recreational harvest limits, there is evidence that there may be substantial harvest in the form of unreported, underreported, or misreported landings.

2016 Assessment Update: Key Findings

The key findings of the stock assessment update include:

- Fishing mortality rates for summer flounder continue to exceed the fishing mortality threshold, meaning that the stock is experiencing overfishing. The fishing mortality rate in 2014 was estimated to be 16% above the fishing mortality threshold reference point. In 2015, fishing mortality was estimated to be 26% above the threshold. With the exception of 2007, the update assessment reveals a consistent pattern of overfishing since 1981, albeit at a greatly reduced level in last 15 years.
- Estimated biomass has been trending down since 2010. The 2015 estimate of spawning stock biomass is at 58% of the biomass target and only 16% above the minimum stock size threshold. If the stock were to fall below the minimum stock size threshold, the stock would be considered "overfished," which, under the Magnuson-Stevens Act, would require the development of a rebuilding plan to reduce fishing mortality rates and rebuild stock biomass. If overfishing continues, "overfished" status could potentially be triggered as early as next year.
- In terms of recruitment, the stock has experienced below-average year classes each year for the past six years (2010-2015). Recruitment has also been overestimated in several of the most recent years. For example, in the 2015 update, 2014 recruitment appeared average, but has since been adjusted downward with the most recent update. Recruitment in 2015 is also estimated to be below average.
- For the past several years the assessment has shown a "retrospective pattern," in this case meaning a consistent pattern of underestimating fishing mortality rates, overestimating spawning stock biomass, and overestimating recruitment. In other words, when the assessment is updated, it reveals that past projections of fishing mortality rates have been exceeded, while projections of spawning stock biomass and recruitment have not been reached. This result is in part due to below-average recruitment to the stock for year classes from 2010-2015, and could also be due to mortality that is not being properly accounted for the assessment.
- Nearly all fishery-independent federal and state survey indices (including recruitment indices) have been decreasing from their most recent peaks over the last 5-7 years, some substantially.

Scientific and Statistical Committee Recommendations

The Council's Scientific and Statistical Committee (SSC) met July 20-21, 2016 to review the 2016 assessment update and reconsider previously-implemented ABCs for 2017-2018. The SSC is required to recommend ABCs at a level that is expected to address scientific uncertainty and prevent overfishing.

After considering the above assessment information, the SSC recommended abandoning the "phase-in" approach and reverting to the typical application of the Council risk policy. The SSC noted in its discussions that continuing to overfish in a period of consistent poor recruitment represents substantial risk to the stock, and in addition, triggering a rebuilding plan would result in more severe economic consequences than current proposed catch reductions. Thus, the SSC recommended a revised ABC for 2017 of 11.30 million lb (5,125 mt). This would represent a 30% decrease from the 2016 catch limit. The SSC also recommended a revised ABC for 2018 of 13.23 million lb (5,999 mt).

Management Implications – What Happens Next?

In August 2016 the Council and the Atlantic States Marine Fisheries Commission reviewed the SSC and Monitoring Committee recommendations and approved revisions to the previously-implemented summer flounder specifications for 2017 and 2018. Combined, the commercial and recreational ACLs cannot exceed the ABC recommended by the SSC. Based on the revised ABC, the Council and Commission recommended a commercial quota of 5.66 million pounds and a recreational harvest limit of 3.77 million pounds for 2017, an approximate 30% decrease from 2016. For 2018, the Council and Commission recommended a commercial quota of 6.63 million pounds and a recreational harvest limit of 4.42 million pounds. Specifications for 2018 may be adjusted based on changes in the fishery or new scientific information. The table below shows the revised 2017-2018 specifications relative to the Council and Commission's original recommendations.

	2017		2018	
	Original	Revised	Original	Revised
	millions of pounds			
Acceptable Biological Catch	15.86	11.30	15.68	13.23
Commercial Quota	7.91	5.66	7.89	6.63
Recreational Harvest Limit	5.28	3.77	5.26	4.42

The Council and Commission's recommendations will then be submitted to NMFS for review. A proposed rule will publish later this fall, and final specifications are expected to be in place by January 1.

Resources

- 2016 Assessment Update
- 2016 SSC Meeting Materials and Report
- 2015 Assessment Update
- 2014 Summer Flounder Data Update
- 57th Northeast Regional Stock Assessment Workshop (57th SAW) Assessment Summary Report
- Guide to Fisheries Stock Assessments