

Mid-Atlantic Fishery Management Council

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MEMORANDUM

Date: February 23, 2020

To: Dr. Chris Moore, Executive Director

From: Matthew Seeley, Staff

Subject: 2022-2024 Blueline Tilefish Specifications

Summary

This memo supports the March 2021 Scientific and Statistical Committee (SSC) meeting for setting blueline tilefish specifications for up to three years (2022-2024). Given stock status is still unknown in the Mid-Atlantic, the next assessment is not scheduled until 2024/2025, and a lack of Northeast Fisheries Science Center data update through 2020, staff recommends a status quo Acceptable Biological Catch (ABC) of 100,520 pounds (45.60 mt) for the 2022-2024 fishing years.

Introduction

The Magnuson-Stevens Act requires each Council's SSC to provide, among other things, ongoing scientific advice for fishery management decisions, including recommendations for ABCs. The SSC recommends ABCs to the Mid-Atlantic Fishery Management Council (Council) that address scientific uncertainty such that overfishing is unlikely to occur per the Council's risk policy. The Council's ABC recommendations to the National Marine Fisheries Service (NMFS) for the upcoming fishing year(s) cannot exceed the ABC recommendation of the SSC. As such, the SSC's ABC recommendations form the upper limit for catches of Council-managed species.

Once the SSC meets and decides on an ABC, the Tilefish Monitoring Committee will convene to discuss if changes to other management measures should be recommended. These measures include annual catch limits (ACL), annual catch targets, discard calculations, management measures and accountability measures. The Council will then make recommendations to the NMFS Northeast Regional Administrator based on the SSC and Monitoring Committee recommendations.

Regulatory Review

In June of 2015 emergency regulations were put into place in the Mid-Atlantic to temporarily constrain fishing effort on the blueline tilefish stock. These regulations consisted of a 300-pound commercial trip limit and a recreational seven fish bag limit and were extended through the 2016 fishing year.

In 2016, based on the output of the DLM Toolkit, which simulates stock responses to different harvest strategies, the SSC recommended a 2017 blueline tilefish ABC of 87,031 pounds as meeting the Council's risk policy to best avoid overfishing when guidance from a standard stock assessment is not available. This toolkit has been used previously by the SSC to develop ABC recommendations for black sea bass and Atlantic mackerel. Details on the analysis and rationale of the SSC can be found in the working group's report, available here (see subcommittee report and SSC presentation). This document also notes that due to the limited information on recreational blueline tilefish catch, the recreational catch histories used in the toolkit resulted from a Delphi Approach workshop with fishermen to develop an approximation of 2015 recreational catch. Then, a time series was created based on the Delphi Approach estimate and other available data.

In Spring 2017 the SSC recommended a status quo ABC of 87,031 pounds for 2018. Specifications were only recommended for one year as the 50th Southeast Data, Assessment, and Review (SEDAR) benchmark assessment was anticipated to be completed late in 2017, which could change the biological reference points.

The 2017 SEDAR 50 benchmark assessment for blueline tilefish was split into two separate stocks, north and south of Cape Hatteras, North Carolina. ABC recommendations were set for the region south of Cape Hatteras (not overfished, overfishing not occurring), but data limitations restricted an ABC recommendation for the region north of Cape Hatteras, which encompasses part of the South Atlantic and the Mid-Atlantic management areas. To assist in developing an ABC recommendation, the Mid- and South Atlantic Councils/SSCs, as well as staff from the Northeast and Southeast Fisheries Science Centers developed a joint subcommittee to rerun the DLM Toolkit for the region north of Cape Hatteras. The results were partitioned at the Council boundaries using coastwide catch data from the pilot tilefish survey funded by the MAFMC out of SUNY Stony Brook.

As a result of rerunning the DLM Toolkit and partitioning the overlapping region (Cape Hatteras, NC to the VA/NC line), the SSC recommended an ABC of 100,520 pounds (45.60 mt). The current ABC has remained status quo since the recommendation in 2018.

Biological Reference Points, Stock Status, and Projections

At the March 2018 SSC meeting, the SSC reviewed the output from the most recent blueline tilefish DLMTool runs (as recommended by the Joint Mid- and South Atlantic Blueline Tilefish Subcommittee) as well as the output from the SEDAR 50 benchmark stock assessment and provided recommendations for annual overfishing limit (OFL) and ABC levels for 2019-2021². The SSC also concluded that the maximum sustainable yield (MSY) estimate based on the DLMTool analysis for the region north of Cape Hatteras is an estimate of the OFL, not the ABC (as recommended by the joint subcommittee), which enabled the SSC to use the P* approach and the Council's risk policy in setting ABC specifications. This was considered a reasonable recommendation for 2019-2021 (with annual reviews) due to limited data and broad uncertainties

¹ http://www.mafmc.org/briefing/april-2016

² The March 2018 SSC meeting report is available at: http://www.mafmc.org/ssc.

(e.g. max age, short time series, no estimate of recruitment, etc.) within the fishery. Since the SSC lacked information on the estimate of stock biomass relative to B_{MSY}, a ratio of B/B_{MSY} = 1 was applied as a default value for the P* (i.e., P* = 0.4 under the MAFMC's risk policy *in 2018*). The SSC also assumed a typical life history (similar to golden tilefish). Based on this application of the Council's risk policy, the resulting SSC-recommended ABC was 179,500 pounds for 2019-2021 for the region north of Cape Hatteras. The SSC then followed the recommendation of the joint Mid- and South Atlantic Blueline Tilefish Subcommittee to allocate 56% of that ABC to the MAFMC (VA/NC border – north) and 44% to the South Atlantic Fishery Management Council. The basis for this percentage breakdown came from the catch results and random stratified design of the Pilot Blueline Tilefish Longline Survey (SUNY Stony Brook-Frisk et al. 2018). Using the 56% allocation, the MAFMC ABC for 2019-2021 was 100,520 pounds.

Landings

Commercial dealer landings through 2020 are presented in Table 1. Commercial landings (Maine-Virginia) were generally very low (less than 20,000 pounds) throughout the time series except for 2013-2015, when regulations south of Virginia, the lack of regulations in federal waters from Virginia north, and the lack of state regulations in New Jersey drove effort northward and into New Jersey. In 2018, the Council approved an increase in trip limit from 300 to 500 pounds. Additionally, a trigger to reduce the commercial trip limit back to 300 pounds was implemented to assist in ensuring the ACL was not exceeded within this new data limited fishery. As indicated by the advisors, this approach worked well in 2019 because there was an opportunity for fishermen to target more fish without creating a large directed fishery. However, given the COVID-19 pandemic and the inherent quota monitoring challenges associated with this fishery, the commercial ACL was exceeded by ~16% (2020 Catch: 31,583, 2020 ACL: 27,140). NMFS quota monitoring is in the process of validating this overage and identifying if/when accountability measures will be triggered.

Recreational catch described by combined party/charter vessel trip reports (VTRs) is reported in Table 2. Reported catch and discards have remained between approximately 10,000 – 15,000 fish since 2012. Previous work with the advisors and other blueline tilefish recreational fishermen has suggested VTR reporting compliance began to encompass at least the primary headboats in 2012. Private recreational angler landings are available from the Marine Recreational Information Program (except for 2020 due to COVID-19), but blueline tilefish intercepts are rare occurrences and the estimates are often associated with very high percent standard errors. As an alternative approach to estimating private angler performance, the Monitoring Committee previously recommended using the Delphi³ percentage of 105.16% of charter vessel landings to estimate private angler landings (Table 3). This approach will be revisited again at the upcoming March Monitoring Committee meeting.

³ The Delphi method was run in 2016 and offered recreational landings for charter, headboat, and private anglers. The Delphi method was used to develop a recreational time series for blueline tilefish through extrapolation of survey results. A ratio was used to back calculate private recreational landings in relation to charter landings from vessel trip reports. This method had been peer reviewed and accepted as best available science by SEDAR 50 and further recommended by the MC in 2019.

Private Recreational Permitting and Reporting

To improve tilefish management, the Greater Atlantic Regional Fisheries Office initiated private recreational permitting and reporting for tilefish anglers in August 2020. Given the recreational fishing season runs from May 1st to October 31st, limited data was gathered over the first 3 months. Ultimately, this initiative should allow for improved monitoring of the recreational fishery and provide ample data necessary to improve the future stock assessment process.

OFL/ABC Recommendations

Following the 2018 approach detailed in the Biological Reference Points, Stock Status, and Projections section, the SSC previously recommended an ABC of 100,520 pounds (45.60 mt) to the Mid-Atlantic management area for 2019-2021. Considering this recommendation, recent fishery performance, lack of an updated assessment, the need to streamline the Mid-Atlantic specifications cycle with a SEDAR assessment scheduled for 2024/2025, and the high degree of uncertainty within the recreational sector, Council staff recommends a status quo ABC of 100,520 pounds (45.60 mt) for the 2022-2024 specifications package.

Table 1. Commercial blueline tilefish landings (live weight) from Maine-Virginia, 2000-2020. Source: NMFS unpublished dealer data.

Year	Landings (Pounds)		
2000	2,446		
2001	955		
2002	269		
2003	7,601		
2004	5,827		
2005	2,031		
2006	3,039		
2007	21,068		
2008	8,495		
2009	9,626		
2010	8,388		
2011	8,179		
2012	9,624		
2013	26,781		
2014	215,928		
2015	73,644		
2016	14,235		
2017	10,734		
2018	13,068		
2019	22,759		
2020	31,270		

Table 2. Blueline tilefish party/charter VTR landings and reported discards from Maine-Virginia, 2012-2020. Source: NMFS unpublished VTR data.

Year	Number of Trips	Landings (Numbers of Fish)	Reported Discards (Numbers of Fish)
2012	103	10,051	338
2013	120	11,838	128
2014	138	15,849	254
2015	170	14,391	292
2016	158	15,493	246
2017	129	10,164	115
2018	221	12,432	99
2019	166	10,711	176
2020	143	9,600	174

Table 3. Recreational blueline tilefish catch (Maine-Virginia) using VTRs (party/charter: 2015-2020, private rental: 2020) and MRIP (private/rental: 2015-2019), as well as estimates of private/rental catch using the Delphi method (Delphi – 105.16% of charter).

Year	Party (Numbers)	Charter (Numbers)	Private Rental (MRIP 2015-2019, VTR 2020 Numbers)	Private Rental (Delphi - Numbers)
2015	12,381	2,298	4,663	2,417
2016	13,746	2,057	116,833	2,163
2017	8,735	1,632	12,122	1,716
2018	4,796	7,885	2,989	8,291
2019	3,247	7,679	4,839	8,075
2020	6,166	3,626	84	3,813