



Mid-Atlantic Fishery Management Council

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MEMORANDUM

Date: March 2, 2020
To: Chris Moore, Executive Director
From: José Montañez, Staff
Subject: Golden Tilefish Management Measures (2021 and 2022 interim)

Executive Summary

Our current 3-year specifications cycle (2018-2019-2020) ends with the 2020 fishing year (November 1, 2019 to October 31, 2020). Given the new stock assessment process the Northeast Regional Coordinating Council recently approved, the next management track assessment update for golden tilefish is currently scheduled for 2021. Therefore, the Council will need approve 2021 specifications using information contained in the 2020 NEFSC data update (Nitschke 2020). Additional relevant information about fishery performance and past management measures is presented in the 2020 Golden Tilefish Fishery Information Document prepared by Council staff and the 2020 Fishery Performance Report developed by the Council Tilefish Advisory Panel. Staff also recommend the Council set interim 2022 specifications because of potential timing constraints with the 2021 management track assessment. Specifically, if a peer review is needed for the 2021 management track assessment (peer review scheduled for June 2021), the Council will likely have to take final action in August of 2021; this may not provide adequate administrative time to have specifications in place for the 2022 fishing year which starts November 1, 2021. The 2021 management track assessment would then be used to revise the interim 2022 specifications and set specifications for the 2023 and 2024 fishing seasons.

Based on the results of the 2017 stock assessment update, the tilefish resource is not overfished and overfishing is not occurring in assessment terminal year (2016; Nitschke 2017).¹ The 2016 stock is at 89% of the accepted reference point (SSB_{MSY} proxy = $SSB_{38\%}$). The fishing mortality rate (F) in 2016 was 0.249, 20% below the fishing mortality threshold reference point F_{MSY} proxy = $F_{38\%} = 0.310$.²

There are no fishery independent surveys available for this stock, so commercial catch per unit effort (CPUE) is relied upon for indications of population abundance. CPUE can be generally explained with evidence of strong incoming year classes that track through the landings size composition over time. The

¹ Nitschke, P. 2017. Golden Tilefish, *Lopholatilus chamaeleonticeps*, stock assessment update through 2016 in the Middle Atlantic-Southern New England Region. NMFS/NEFSC, Woods Hole, MA. Found online at <http://www.mafmc.org/council-events/2017/march-2017-ssc-meeting>.

² See discussion under biological reference points section for further details.

2020 golden tilefish data update (Nitschke 2020) indicates that the CPUE in 2019 increased relative to 2018 as predicted from growth of a strong 2013 year class. Lastly, commercial Advisory Panel (AP) members reported an increase in the landings of extra-small tilefish (< 2 pounds) towards the last quarter of 2019 and the beginning of 2020. AP members also reported a wide range of fish landed in terms of size and weight when compared to the year before. According to AP member's observations, a new year class may have started to enter the fishery recently.

Staff recommends specifications be set for 2 years (i.e., 2021 and interim 2022). Staff recommends the acceptable biological catch (ABC) for each year be set at the *status quo* level or 1.636 million pounds (742 mt)³. This ABC has been in place since 2018 fishing year. Setting ABCs at the *status quo* level would provide for continued stability and allow for the fishery to continue to operate efficiently in 2021 and 2022, while the Council waits for the results of the 2021 management track assessment which will be used to revise the 2022 specifications and set specifications for the 2023 and 2024 fishing seasons. Given recent fishery and biological trends, there is no indication that the recommended *status quo* ABC for 2021 and 2022 would negatively affect the tilefish stock given recent fishery trends.

The FMP specifies that the annual catch limit (ACL) equals the ABC. After considering relevant sources of management uncertainty, 5 percent of the annual catch target (ACT) is allocated to the incidental sector of the fishery and the remaining 95 percent to the individual fishing quota (IFQ) sector. Staff recommends an IFQ ACT of 1.554 million pounds (705 mt) and an incidental ACT of 0.082 million pounds (37 mt) for each year. After removing projected incidental discards, the resulting IFQ total allowable landings (TAL) is 1.554 million pounds (705 mt) and the resulting incidental TAL is 0.070 million pounds (32 mt) for each year. These values, when compared to current ACTs and TALs are consistent for the IFQ fishery and near identical for the incidental fishery.

Staff do not recommend any changes to the current recreational possession limit (8-fish per angler per trip with no minimum size), or incidental trip limit (500 pounds live weight or 455 pounds gutted weight).

Introduction

The Magnuson-Stevens Act (MSA) requires each Council's SSC (Scientific and Statistical Committee) to provide ongoing scientific advice for fishery management decisions, including recommendations for ABC, preventing overfishing, and maximum sustainable yield. The Council's catch limit recommendations for the upcoming fishing year(s) cannot exceed the ABC recommendation of the SSC. In addition, the Monitoring Committee (MC) established by the Fishery Management Plan (FMP) is responsible for developing recommendations for management measures designed to achieve the recommended catch limits.

Multi-year specifications may be set for golden tilefish for up to three years at a time. The SSC must recommend ABCs that addresses scientific uncertainty, while the MC must recommend ACTs that address management uncertainty. Based on the SSC and MC recommendations, the Council will make a recommendation to the National Marine Fisheries Service (NMFS) Greater Atlantic Regional

³ 1 mt = 2,204.6226 lb.

Administrator. In this memorandum, information is presented to assist the SSC and MC in developing recommendations for the Council to consider for the 2021-2022 fishing years for golden tilefish.

Additional relevant information about fishery performance and past management measures is presented in the 2020 Golden Tilefish Fishery Information Document prepared by Council staff and the 2020 Fishery Performance Report developed by the Council Tilefish Advisory Panel. The NMFS Northeast Fisheries Science Center provided a data update (through 2019) for golden tilefish to support this specifications process (Nitschke 2020).⁴

Catch and Landings Update

Commercial landings (calendar year) from 1970 to 2019 are presented graphically in Figure 1 of the 2020 Golden Tilefish Fishery Information Document (FID; MAFMC 2020) and landings for fishing years (FYs) 2005 through 2019 are presented in Table 1. Except for FY 2010 commercial golden tilefish landings have been below the commercial quota specified each year since the IFQ system was first implemented in 2009.

Commercial discards are described in the FID (page 15). According to VTR data, very little (< 0.03%) discarding was reported by longline vessels that targeted tilefish for the 2017 through 2019 period (Table 11 of the FID). According to the “Discard Estimation, Precision, and Sample Size Analysis” conducted by the Northeast Fisheries Science Center (NEFSC), discard estimations for commercial fisheries (mostly large/small mesh trawls and gillnets) appears to be low (several metric tons per gear type).⁵ For the last five years (2015-2019), on average 11,524 pounds (5.22 mt) of tilefish were discarded.

Recreational catches and landings are described in the FID (pages 18-22). A small recreational fishery briefly occurred during the mid-1970's, with less than 100,000 pounds annually (MAFMC 2000). Recreational catches have been low for the 1982 - 2019 period, ranging from zero for most years to approximately over 200,000 fish in 2010 according to NMFS recreational statistics (Table 13 of the FID). VTR data indicates that the number of tilefish caught by party/charter vessels from Maine through Virginia is low, ranging from 81 fish in 1996 to 8,297 fish in 2015 (Table 14 of the FID). On average, 2,700 tilefish were caught by party/charter vessels during the 1996-2019 period. In 2019, party/charter boats reported 2,733 fish landed, a 62% decrease from 2018 (7,101 fish landed). However, recreational catches have been traditionally considered an insignificant component of the removals and not included into the assessment. To improve tilefish management and reporting, the Greater Atlantic Regional Fisheries Office (GARFO)

⁴ These documents are available at: <http://www.mafmc.org/council-events/2020/march-ssc-meeting>.

⁵ 2015-2019 Discard Estimation, Precision, and Sample Size Analysis available at: <http://www.nefsc.noaa.gov/femad/fsb/SBRM/>.

Table 1. Summary of management measures and landings for FY^a 2005-2020.

Management Measures	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
ABC (m lb)	-	-	-	-	-	-	-	-	2.013	2.013	1.766	1.898	1.898	1.636	1.636	1.636
TAL (m lb)	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.755	1.887	1.887	1.627	1.627	1.627
Com. quota- (m lb)	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.755	1.887	1.887	1.627	1.626	1.626
Com. landings	1.497	1.898	1.777	1.672	1.887	1.997	1.946	1.856	1.839	1.830	1.354	1.060	1.487	1.626	1.562	-
Com. overage/underage (m lb)	-0.498	-0.097	-0.218	-0.323	-0.108	+0.002	-0.049	-0.139	-0.156	-0.165	-0.401	-0.827	-0.401	<-0.001	-0.064	-
Incidental trip limit (lb)	133	300	300	300	300	300	300	500	500	500	500	500	500	500	500	500
Rec. possession limit	-	-	-	-	-	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b

^a FY 2005 (November 1, 2001 - October 31, 2002).

^b Eight fish per angler per trip.

is initiating recreational reporting for private tilefish anglers. This action was approved in late 2017, but with delayed implementation. A final rule is expected to be published by May 1, 2020. Extensive outreach will be provided by GARFO and the Council leading up to the final rule.

Review of SSC Recommendations from March 2017

In March 2017, the SSC met to recommend an ABC for tilefish for FYs 2018, 2019, and 2020. The SSC deemed that the golden tilefish benchmark stock assessment (SAW/SARC 58; NEFSC 2014)⁶ was a Level 3 assessment.

Based on the results of the 2017 stock assessment update, the Golden Tilefish resource is not overfished and overfishing is not occurring in assessment terminal year (2016). In 2016, the stock was at 89% of the accepted reference point ($SSB_{MSY\text{ proxy}} = SSB_{38\%}$) and the fishing mortality rate (F) in 2016 was 0.249, 20% below the fishing mortality threshold reference point $F_{MSY\text{ proxy}} = F_{38\%} = 0.310$.

The SSC accepted the overfishing limit (OFL) estimate provided in the assessment, and determined the level of uncertainty of OFL in the assessment requires an SSC-specified coefficient of variation (CV) of 100%. The SSC maintained its 2014 determination based on consistency between input data and model dynamics, the available model diagnostics, and the lack of a pathological retrospective pattern.

Based on the $F_{MSY\text{ proxy}}$ of $F=0.31$ ($F_{38\%}$), the SSC identified an overfishing limit (OFL) for golden tilefish for 2018, 2019, and 2020 of 2.332 million pounds (1,058 mt; $P^*=0.34$), 2.420 million pounds (1,098 mt; $P^*0.32$), and 2.290 million pounds (1,039 mt; $P^*0.34$), respectively.

The SSC recommends a three-year ABC specification using the Council's revised approach to its risk policy, which seeks to maintain consistency in catch advice. The average ABC over the three-year period ($ABC = 1.635$ million pounds or 742 mt) was calculated based on the $F_{MSY\text{ proxy}}$, an assumed lognormal coefficient of variability around OFL of 100%, the assumption that the ABC is taken each year, and applying the Council's risk policy for a typical life history. This ABC was then applied for each year of the three-year specification period to calculate the related OFLs and P^* s.

The SSC identified the following to be the most significant sources of uncertainty associated with determination of OFL and ABC:

- Reliance on fishery-dependent data in the assessment.
- Reliability of the $F_{MSY\text{ proxy}}$ and its relationship to potential SPR-based reference points.
- The dome-shape selectivity curve that makes a strong assumption about the presence of older fish in the population, for which strong empirical evidence is lacking.

⁶ Northeast Fisheries Science Center. 2014. 58th Northeast Regional Stock Assessment Workshop (58th SAW) Assessment Report. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 14-04; 784 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026, or online at <http://nefsc.noaa.gov/publications/>.

- The extent of site fidelity of individuals, uncertainty in the stock range and distribution, and the consequences of the newly closed areas on stock dynamics that increase uncertainty and potential bias in assessment results.
- The lack of reliable recreational catch information.
- The use of a pooled age-length key that may lead to misspecification of age structure and reduced ability to both follow and estimate the size of year classes.
- The lack of a recruitment index that places a heavy burden on the estimation of past recruitments from size composition in the landings.

Biological Reference Points

The biological reference points for golden tilefish were updated during the 2017 stock assessment update, as a result of a change to the recruitment penalty used in the assessment model (i.e., likelihood constant turned off).⁷ The fishing mortality threshold for golden tilefish is $F_{38\%}$ (as $F_{MSY\ proxy}$) = 0.310, and $SSB_{38\%}$ ($SSB_{MSY\ proxy}$) is 21 million pounds (9,492 mt).

Stock Status

The last full assessment update was completed in February 2017. This update indicates that the golden tilefish stock was not overfished and overfishing was not occurring in 2016, relative to the newly updated biological reference points. Fishing mortality in 2016 was estimated at $F=0.249$; 20% below the fishing mortality threshold of $F=0.310$ ($F_{MSY\ proxy}$). SSB in 2016 was estimated at 18.69 million pounds (8,479 mt), and was at 89% of the biomass target ($SSB_{MSY\ proxy}$).

2020 Data Update

Commercial landings per unit effort is the only index of abundance for golden tilefish. Landings per unit of effort in 2019 increased relative to 2018 as predicted from growth of the strong 2013 year class.

Tracking of the strong 2013 year class is also reflected in the landings market category proportions and the landings at length distributions (Tables 2 and 3, and Figures 2 and 3, of the 2020 data update).⁸

⁷ Incorporation of likelihood constants into the objective function can cause biases in assessment models. This bias can result in reductions in the estimated recruitment and biomass. For additional details see: Nitschke, P. 2017. Golden Tilefish, *Lopholatilus chamaeleonticeps*, stock assessment update through 2016 in the Middle Atlantic-Southern New England Region. NMFS/NEFSC, Woods Hole, MA. Available at: <http://www.mafmc.org/council-events/2017/march-2017-ssc-meeting>.

⁸ Nitschke, P. 2020. Golden Tilefish, *Lopholatilus chamaeleonticeps*, data update through 2019 in the Middle Atlantic-Southern New England Region NMFS/NEFSC, Woods Hole, MA. 8 pp. Found online at <http://www.mafmc.org/council-events/2020/march-ssc-meeting>.

Advisory Panel Fishery Performance Report

Some relevant key points of the 2020 Fishery Performance Report for consideration include:

- Fishermen are not moving around much as they are finding a healthy mix of animals in traditional fishing grounds.
- Industry members have observed a new year class coming into the fishery in 2019. Specifically, they have seen larger landings in the extra-small size category. They have also seen a wide range of fish landed in terms of size and weight when compared to the year before.
- Industry indicated that they experience an increase in CPUE in 2019. Fishing has gotten better, outside/external conditions affecting fishery have gotten worse. In general terms, it was reported that these factors may have impacted CPUE:
 1. Dogfish interactions in 2019 continued to be high but at the same level seen in 2018
 2. Skates interactions increased in 2019 when compared to 2018 (increased size of skates and numbers)
 3. Smooth dogfish have increased in recent years (e.g., encountering more animals and further east)
 4. Weather in 2019 continued to be poor, winter started earlier in 2019 (October) when compared to 2018 conditions
 5. Catching more fish and fishing is improving.
- Dogfish, skate, and smooth dogfish interactions affect fishing practices.
- Severe winter conditions experienced in the Northeast in 2013-2019 significantly affected the effectiveness of tilefish operations/practices, resulting in longer fishing trips.
- Constant harvest strategy worked well in rebuilding the fishery. Industry would like to get back to a constant ACL in the future given healthy trends in the catch. Industry does not want to see different ACL every year.
- Industry members indicated that for-hire trips targeting golden tilefish went down in 2019. This decreased in effort was due to weather factors. Also, improved tuna and swordfish fishing conditions in 2019 when compared to 2018 also caused less trips targeting golden tilefish.
- Consider implementing golden tilefish specifications for a longer time period if possible (e.g., 5 year specifications cycle).
- Some AP members would like the Council to consider a differential trip limit (for hire vs private) and longer recreational trips. In addition, they suggested that the Council considers recreational management strategies (e.g., longer recreational trips), structured after the Gulf of Mexico regulations.
- Some AP members would like the Council to consider a recreational allocation.
- Some AP members indicated concerns about relaxing recreational regulations (as they could potentially lead to higher recreational landings) while the commercial quota could remain at *status quo* levels or potentially decrease in the future.
- All commercial AP members expressed concerns over increasing any effort, bag limit or quota in the fishery at this time. They felt it would be unfair to allow for an increase in effort/bag limit in the recreational sector while maintaining *status quo* for the commercial sector.

Basics for 2021-2022 ABC Recommendation

Our current 3-year specifications cycle (2018-2019-2020) ends with the 2020 fishing year (November 1, 2019 to October 31, 2020). Given the stock assessment process and timing changes the Northeast Regional Coordinating Council recently approved, the next management track assessment update for golden tilefish is currently scheduled for 2021. Therefore, the Council will need approve 2021 specifications utilizing information contained in the 2020 NEFSC data update (Nitschke 2020) and additional relevant information about fishery performance and past management measures is presented in the 2020 Golden Tilefish Fishery Information Document prepared by Council staff and the 2020 Fishery Performance Report developed by the Council Tilefish Advisory Panel. Staff also recommend the Council set interim 2022 specifications because of potential timing constraints with the 2021 management track assessment. If a peer review is needed for the 2021 management track assessment (peer review scheduled for June 2021), the Council will likely have to take final action in August of 2021; this may not provide adequate administrative time to have specifications in place for the 2022 fishing year which starts November 1, 2021. By having default specifications already in place for 2022, we would be in a much better position to implement new specifications for the next specifications cycle after November 1, 2021. The 2021 management track assessment would then be used to revise the interim 2022 specifications and set specifications for the 2023 and 2024 fishing seasons. Lastly, the Council will use the results from the next research track stock assessment for golden tilefish, currently scheduled for spring of 2024, to set specifications for the 2025-2026-2027 multi-year specifications cycle.

Given the stock status from the last full assessment update completed in February 2017, the 2020 NEFSC data update and recent fishing trends, setting ABC at the current *status quo* level for 2021 and 2022 (interim) would allow the fishery to continue to operate efficiently while not likely negatively impacting the status of the stock.

Staff recommend measures be developed for 2-years, to provide for continued stability in the fishery and markets. This will also provide management measures to be in place until the 2021 management track assessment update is completed.

Staff recommend ABCs for 2021 and 2022 (interim) at the *status quo* level. The recommended ABC in each 2021 and 2022 (interim) is 1.636 million pounds (742 mt) to provide for continued stability in the fishery and markets (Table 2).

Other Management Measures

Annual specification process - the MC shall review the ABC recommendation of the SSC, golden tilefish landings and discards information, and any other relevant available data to determine if the golden tilefish ACL and ACT and/or TAL for the IFQ and/or incidental sectors of the fishery require modification to respond to any changes to the golden tilefish stock's biological reference points or to ensure any applicable rebuilding schedule is maintained. The MC will consider whether any additional management measures or revisions to existing measures are necessary to ensure that the IFQ and/or incidental TAL will not be exceeded. Based on that review, the MC will recommend golden tilefish ACL, ACTs, and TALs to the Council.

Annual Catch Limits

As defined in the Framework Adjustment 2 to the Tilefish FMP, ABC is equivalent to the total allowable catch (ACL; Figure 1). Table 2 shows the ACLs associated with the staff recommendations for ABC based on *status quo* level for tilefish.

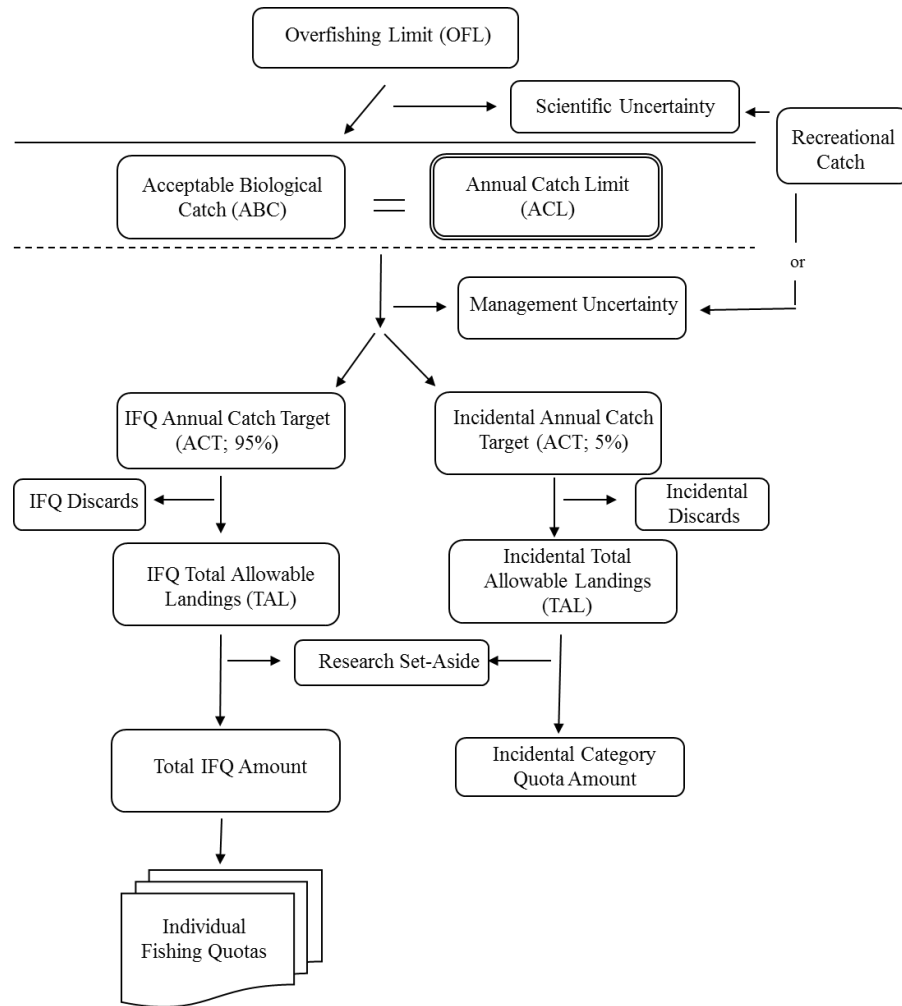


Figure 1. Flowchart for tilefish catch and landings limits.

Table 2. Staff recommendation for catch and landings limits for golden tilefish for 2021 and 2022 (interim) compared to 2020 measures.

	2020 (Current)	2021	2022 (interim)	Basis (2021-2022)
OFL	2.290 m lb (1,039 mt)	NA	NA	NA
ABC	1.636 m lb (742 mt)	1.636 m lb (742 mt)	1.636 m lb (742 mt)	Staff recommendation, based on recent fishing trends and scheduled 2021 management track assessment update
ABC % of OFL	72%	NA	NA	
ACL	1.636 m lb (742 mt)	1.636 m lb (742 mt)	1.636 m lb (742 mt)	ABC = ACL
IFQ ACT	1.554 m lb (705 mt)	1.554 m lb (705 mt)	1.554 m lb (705 mt)	95% ACL
Incidental ACT	0.082 m lb (37 mt)	0.082 m lb (37 mt)	0.082 m lb (37 mt)	5% ACL
IFQ Discards	0	0	0	Discards in the IFQ fishery are prohibited
Incidental Discards	0.009 m lb (4 mt)	0.011 m lb (5 mt)	0.011 m lb (5 mt)	Avg. discard (2015-2019) mostly sm/lg mesh OT and Gillnet gear
IFQ TAL	1.554 m lb (705)	1.554 m lb (705 mt)	1.554 m lb (705 mt)	IFQ ACT - IFQ Discards
Incidental TAL	0.072 m lb (33 mt)	0.070 m lb (32 mt)	0.070 m lb (32 mt)	Incidental ACT - Incidental Discards

Annual Catch Targets

The Tilefish MC is responsible for recommending ACTs for the IFQ and incidental sectors of the fishery, which are intended to account for management uncertainty, for the Council to consider. The ACTs, technical basis for ACTs considerations, sources of management uncertainty should be described and technical approaches to mitigating these sources of uncertainty should be defined and provided to the Council. The relationship between the ACTs and other catch/landing components are given in Figure 1.

Management uncertainty is comprised of two parts: uncertainty in the ability of managers to control catch and uncertainty in quantifying the true catch (i.e., estimation errors). Management uncertainty can occur because of a lack of sufficient information about the catch (e.g., due to late reporting, underreporting, and/or misreporting of landings or discards) or because of a lack of management precision (i.e., the ability to constrain catch to desired levels).

Staff recommend the MC consider past specific landings performance, as a basis for quantifying management uncertainty (i.e., implementation error) and as an indicator of future ability to achieve catch target when developing the 2021-2022 ACT recommendation for the IFQ and incidental sectors

(Table 2). The MC should also consider the potential imprecision/variability in expected observed commercial and recreational catch⁹ to ensure the ACLs are not exceeded.

The tilefish fishery is managed via an IFQ system and managers believe that all tilefish commercial landings values under this program are reliable. The IFQ monitoring system is timely and successful in managing the landings. The commercial landings performance for the last nine years has been near or below the commercial quotas. The recreational catch is minimal. Staff recommend no reduction in catch from the ACL. The recommended ACTs in each 2021 and 2022 are 1.554 million pounds (705 mt) for the IFQ fishery and 0.082 million pounds (37 mt) for the incidental fishery (Table 2).

Total Allowable Landings

Management uncertainty can occur because of insufficient information about discards (Figure 1). Development of a time series of discards was not done in the assessment model since discarding was considered negligible and information on discards do not exist for most of the time series. Therefore, discards have not been included in the assessment due to the high uncertainty associated with the discard estimates over the time series. Very low or insignificant discards have been estimated for recent years according to the discard estimation, precision, and sample size analysis conducted by the NEFSC (see page 3 for additional information). There is higher uncertainty (CVs) on the low recent discard estimates since the discarding of tilefish is a rare event on observed trips. Therefore, an average of several years was used to judge recent relative magnitude of discarding for this fishery. For the last five years (2015-2019), on average 11,524 pounds (5.22 mt) of tilefish were discarded according to the discard estimation, precision, and sample size analysis conducted by the NEFSC. Commercial discards are not generated by the IFQ fishery due to the fact that all fish caught (given the standard hook size/type use by the industry) are marketable. In addition, even though there is a price differential for various sizes of golden tilefish landed, golden tilefish fishermen land all fish caught as the survival rate of discarded fish is very low (Nolan, pers. comm. 2006; Kitts et al. 2007). Furthermore, Amendment 1 to the Tilefish FMP prohibited the practice of highgrading (MAFMC 2009). It is estimated that most of the discards that have occurred in recent years have been by large/small mesh trawls and gillnets used by the incidental fishery. Staff recommends a reduction in catch from the incidental ACT to account for discards in that component of the fishery. Staff recommends no reduction in catch from the IFQ ACT. The recommended IFQ TAL is 1.554 million pounds (705 mt) and the resulting incidental TAL is 0.070 million pounds (32 mt) for each 2021 and 2022 (Table 2).

Recreational Bag Limit

A recreational bag limit was implemented under Amendment 1 in 2009 (MAFMC 2009). Current regulations require an 8-fish recreational bag-size limit per angler per trip. This limit was set at the upper range of mean effort observed during the 1996-2005 period. VTR data indicates that mean effort for the 2006 to 2019 period has ranged from 1.2 to 4.6 fish per angler. The recreational bag limit may be changed through specifications based on the recommendations of the MC. Staff does not recommend any changes to the recreational bag limit.

⁹ Recreational tilefish trips appear to be limited and a minor component of the catch as indicated in the FID, the FPR, and the 2017 Golden Tilefish Assessment Update (Nitschke 2017).

Incidental Trip Limit

The current 500 pound incidental trip limit has been in place since 2012. Fishing regulations state that if the incidental harvest exceeds the incidental TAL for a given fishing year, the incidental trip limit specified may be reduced in the following fishing year. In addition, the harvest of the tilefish incidental TAL monitoring is based on dealer reports and other available information, and determines the date when the incidental tilefish TAL has been landed. The Regional Administrator publishes a notice in the Federal Register notifying vessel and dealer permit holders that, effective upon a specific date, the incidental tilefish fishery is closed (in-season closure of the incidental fishery) for the remainder of the fishing year. Golden tilefish incidental commercial fishery landings in FY 2020 are slightly behind FY 2019 landings for the same time period (Figure 4 of the FID; for data reported through January 22, 2020). Incidental golden tilefish commercial landings for the last six years are shown in Table 3. Staff does not recommend any changes to the incidental trip limit.

Table 3. Incidental golden tilefish commercial landings for fishing year 2013-2019.

Fishing year	Landings (pounds)	Incidental quota (pounds)	Percent of quota landed (%)
2013	36,442	99,750	37
2014	44,594	99,750	45
2015	18,839	87,744	21
2016	20,929	94,357	22
2017	60,409	94,357	64
2018	61,254	72,752	84
2019	22,246	72,752	31

Source: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/quota-monitoring-greater-atlantic-region>.

2020 Golden Tilefish Survey Update

The Council, in collaboration with industry and the NEFSC are in the process of conducting a fishery-independent bottom longline survey for the Mid-Atlantic Golden tilefish stock. The 2020 survey design was developed using the findings from the pilot golden and blueline tilefish survey conducted in the summer of 2017 by SUNY Stony Brook. The goal of this 2020 initial bottom longline survey design is to develop an abundance index for the golden tilefish stock.

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