2.1 Action 1: Revise the Annual Catch Limits for Golden Tilefish

Alternative 1 (No Action). The total annual catch limit for golden tilefish is equal to the yield at 75% of F_{MSY} when the population is at equilibrium. The current total annual catch limit for golden tilefish is 323,000 pounds gutted weight, as established temporarily through an interim rule for golden tilefish implemented on January 2, 2017 (83 FR 65). The interim rule value is based on projected yield of 75% of F_{MSY} . This interim rule is valid through July 1, 2018, and may be extended for an additional 186 days. Once the interim rule expires, the ACL will revert back to the previous ACL of 558,036 pounds gutted weight.

Alternative 2. Revise the golden tilefish annual catch limits. The total annual catch limit would equal the acceptable biological catch. (The acceptable biological catch recommendation from the South Atlantic Fishery Management Council's Scientific and Statistical Committee is $P^*=30\%$.)

Alternative 3. Revise the golden tilefish annual catch limits. The total annual catch limit =90% of ABC. (The acceptable biological catch recommendation from the South Atlantic Fishery Management Council's Scientific and Statistical Committee is $P^*=30\%$.)

Alternative 4. Revise the golden tilefish annual catch limits. The total annual catch limit = 80% of ABC. (The acceptable biological catch recommendation from the South Atlantic Fishery Management Council's Scientific and Statistical Committee is P*=30%.)

	Alternative 1 No Action	Alternative 2 (ACL=ABC)	Alternative 3 (ACL=90% of ABC)	Alternative 4 (ACL=80% of ABC)
2019	Interim rule:	251,000	225,900	200,800
2020	323,000	285,000	256,500	228,000
2021	When interim	314,000	282,600	251,200
2022	rule expires:	338,000	304,200	270,400
2023	558,036	356,000	320,400	284,400
2024		368,000	331,200	294,400

Table 2.1.1. The total annual catch limit alternatives for golden tilefish for years 2019-
2024. All values in pounds gutted weight (lbs gw).

	Alternative 1 No Action	Alternative 2 (ACL=ABC)	Alternative 3 (ACL=90% of ABC)	Alternative 4 (ACL=80% of ABC)
2019	Interim rule:	182,602	164,342	146,082
2020	(235,982)	207,337	186,604	165,870
2021	When interim	228,435	205,591	182,748
2022	rule expires:	245,895	221,305	196,716
2023	405,971	258,990	233,091	207,192
2024		267,720	240,948	214,176

Table 2.1.2 Total annual catch limit alternatives for golden tilefish commercial longline sector for years 2019-2024.¹

Table 2.1.3 Total annual catch limit alternatives for golden tilefish commercial hook and line sector for years 2019-2024²

	Alternative 1 No Action	Alternative 2 (ACL=ABC)	Alternative 3 (ACL=90%	Alternative 4 (ACL=80% of ABC)
			of ABC)	
2019	Interim rule	60,868	54,781	48,694
2020	78,328	69,113	62,201	55,290
2021	When interim	76,145	68,531	60,916
2022	rule expires:	81,965	73,769	65,572
2023	135,324	86,330	77,697	69,064
2024		89,240	80,316	71,392

Table 2.1.4 Total annual catch limit alternatives for golden tilefish recreational sector for years 2019-2024, in numbers of fish.³

	Alternative 1 No Action	Alternative 2 (ACL=ABC)	Alternative 3 (ACL=90% of ABC)	Alternative 4 (ACL=80% of ABC)
2019	Interim rule:	1,699	1,529	1,359

¹ These values are based on the Council's Scientific and Statistical Committee's recommendation for acceptable biological catch of P*=30%, based on the SEDAR 25 Update 2016). The Council has previously determined that the total ACL is allocated between the commercial sector (97%) and the recreational sector (3%). The Council further allocated the commercial ACL between the golden tilefish longline sector (75%) and to the hook-and-line sector (25%) (Amendment 17B,SAFMC 2010; and Amendment 18B, SAFMC 2012a).

² Due to standard rounding, the commercial hook-and-line and longline ACLs for Alternatives 2-3 results in a change of 0.5 pounds for each component. Rounding up would cause the commercial ACL to be exceeded. Therefore, the hook-and-line ACL was rounded up to the nearest whole pound, and the longline component ACL was rounded down to the nearest whole pound.

³ The recreational sector ACL is reported in numbers of fish. A conversion rate of 6.21 was used to convert lbs ww into numbers of fish (Regulatory Amendment 12, SAFMC 2012b).

2020	2,187	1,930	1,737	1,544
2021	When interim	2,126	1,913	1,701
2022	rule expires:	2,288	2,060	1,831
2023	3,019	2,410	2,169	1,928
2024		2,492	2,242	1,993

Results of the 2016 update assessment (SEDAR 25 Update 2016) revealed that the golden tilefish stock in the South Atlantic is undergoing overfishing but is not overfished. As such, the South Atlantic Council requested an interim measures to reduce the ACL for golden tilefish while long term measures could be developed in this amendment. The interim measures are effective for 180 days upon publication with a possible extension of 186 days. The interim rule published on January 2, 2018 (83 FR65) and are expected to be extended until January 2, 2019. Alternative 1 (No Action) would retain the ACL reduction implemented through the interim rule. Under Preferred Alternative 2-Alternative 4, the total ACL for golden tilefish would be reduced based upon results from the updated assessment and recommendations from the South Atlantic Fishery Management Council's (Council) Scientific and Statistical Committee. Preferred Alternative 2 would change the golden tilefish total ACL to the projected yield at P* at 30% for years 2019-2024. The recommended ABC was the projected yield at P* at 30% so under this alternative ABC=ACL. Alternative 3 would revise the golden tilefish total ACL at ACL=90% of ABC projected from 2019-2024. Alternative 4 would revise the golden tilefish total ACL ACL=80% of ABC projected through 2019-2024. Alternative 5 would allow the ACL to be set to pre-interim rule values of 558,036 pounds gutted weight however, this value no longer represents the best scientific information and would not reduce overfishing of golden tilefish. This alternative would not end overfishing of golden tilefish and Tables 2.1.1 and 4.1.1 show the total commercial and recreational ACLs for each of the alternatives. Tables 2.1.2, 2.1.3 and 4.1.1 also illustrate the portions of the commercial ACL allocated to the hook-and-line and longline sectors for each of the alternatives. Table 2.1.4 show the recreational sector ACL, in numbers of fish, under each of the alternatives. For comparison, Tables 4.1.2 and 4.1.3 present commercial and recreational landings of golden tilefish from 2002 through 2016. Relative to Alternative 1 (No Action), biological benefits for golden tilefish would be greatest for Alternative 4 since it would have the greatest reduction in the total ACL, followed by Alternative 3 and Alternative 2. Alternative 5 would result in negative biological benefits to the stock because it does not end overfishing.

In general, the higher the ACL, the greater the short-term economic and social benefits, assuming harvest does not result in overfishing and long-term management goals are met. However, the ACL does not have direct economic or social negative impacts unless the ACL is achieved or projected to be met; thereby, triggering accountability measures such as closures or other restrictive measures. The immediate, short-term ACLs proposed under each alternative are lower than what is specified under Alternative 1 (No Action) (Table 2.1.1), with Alternative 4 being least restrictive followed by Preferred Alternative 2 and Alternative 3. Assuming commercial fishing behavior does not change, it is likely that the commercial longline sector and possibly the hook-and-line commercial sector would experience a closure due to reaching their quotas (Table 4.1.2). The projected closure dates differ among the alternatives. Therefore, there are more expected differences in terms of realized economic effects on the commercial sector

among the alternatives, with **Alternative 3** resulting in the largest negative economic effects. For the recreational sector, **Alternative 3** has the largest anticipated negative economic effect, as it has the lowest recreational ACL. Although **Preferred Alternative 2**, and **Alternatives 3**, and **4** would be expected to result in negative short-term economic effects relative to **Alternative 1** (**No Action**), they would start the process of reducing overfishing so that long-term measures from Amendment 45 would be expected to result in less onerous economic effects than if measures under **Alternative 1** (**No Action**) were to remain the same.

Adhering to sustainable harvest through an ACL is assumed to result in net long-term positive social and economic benefits. Additionally, adjustments to an ACL based on updated information from a stock assessment would be the most beneficial in the long term to fishermen and communities because catch limits would be based on the current conditions, even if the updated information indicates that a lower ACL is appropriate to sustain the stock. **Preferred Alternative 2**, and **Alternatives 3 - 4** would reduce overfishing of golden tilefish, and may be more beneficial in the long term to communities and fishermen than **Alternative 1** (No Action).

Since mechanisms are already in place for monitoring and enforcing the current ACL, any increase in the administrative burden from **Preferred Alternative 2-Alternative 4** would be expected to be minimal. As with any changes to regulations, administrative costs could occur associated with disseminating information and educating the public.