



Mid-Atlantic Fishery Management Council

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MEMORANDUM

Date: June 22, 2020

To: Chris Moore, Executive Director

From: Julia Beaty, Karson Coutré, Kiley Dancy, staff

Subject: Risk policy revisions and 2021 ABCs for summer flounder, scup, and black sea bass

In December 2019, the Mid-Atlantic Fishery Management Council (Council) approved a change to their risk policy. The risk policy specifies the acceptable level of risk (i.e., the probability of overfishing, or p^*) associated with the annual acceptable biological catch (ABC) for a given species. The Council's risk policy and ABC control rule work together to guide the Scientific and Statistical Committee (SSC) in recommending ABCs. The Council cannot set catch limits which exceed the ABCs recommended by the SSC. The recent change in the risk policy seeks to prevent stocks from being overfished by reducing the probability of overfishing as stock size falls below the target level, while also allowing for increased risk and greater economic benefits under higher biomass levels, particularly at very high biomass levels (e.g., for scup and black sea bass currently). The recent change in the risk policy results in an increased p^* at most biomass levels, compared to the previous risk policy (Figure 1). The change is greatest for stocks with biomass above the target level (B_{MSY}).

The SSC will discuss the recent risk policy revisions during their July 2020 meeting and may revise the 2021 ABCs for summer flounder, scup, and black sea bass based on this change. The table on the next page lists the 2021 ABCs for all three species which were previously approved by the SSC, the Council, and the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Management Board. It also lists the 2021 ABCs which would result from only a change in the p^* value based on the revised Council risk policy. The SSC will consider the revised risk policy, Advisory Panel input, recent fisheries dependent and independent data, and other information when considering whether to revise their previous 2021 ABC recommendations for all three species.

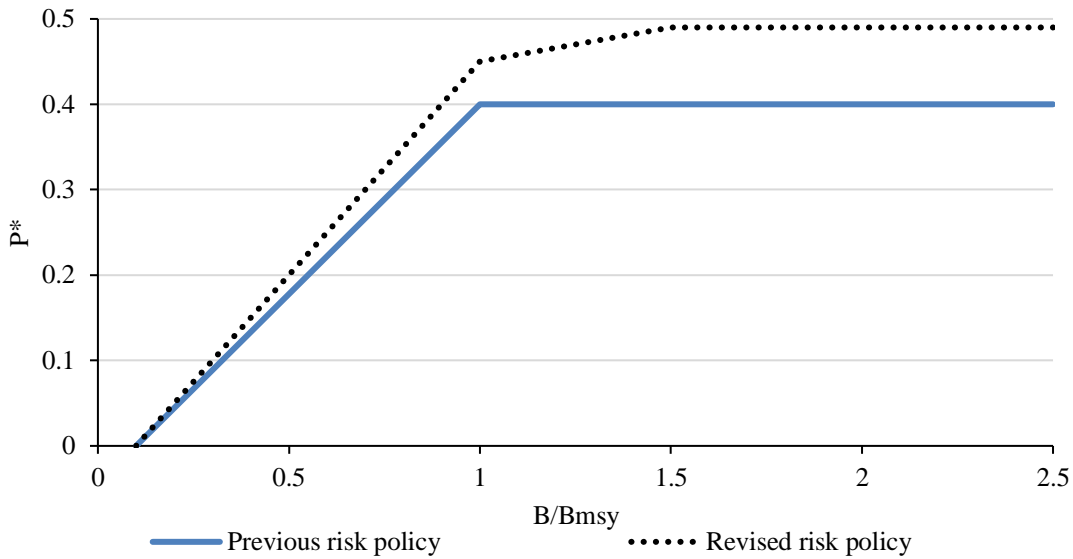


Figure 1: Acceptable probability of overfishing (p^*) at different biomass levels under the Council’s previous and revised risk policies. B/B_{MSY} refers to the estimated biomass level compared to the biomass target.

Table 1: 2021 ABCs for summer flounder, scup, and black sea bass, and associated metrics considered in the Council’s ABC control rule and risk policy, based on the previous recommendations of the SSC, as well as potential changes under the revised risk policy.

	Summer flounder	Scup	Black sea bass
B/B_{MSY} in 2021 based on stock assessment projections ^a	0.88	1.63	1.61
2021 OFL (mil lb; not affected by risk policy change) ^b	31.67	35.30	17.82
OFL CV (not affected by risk policy change) ^c	60%	60%	100%
P* under previous risk policy	34%	40%	40%
P* under revised risk policy	39%	49%	49%
Previously approved 2021 ABC (mil lb)	25.03	30.67	15.07
Potential revised 2021 ABC based only on revised P* (mil lb)	27.11	34.81	17.45
Difference between previously approved and potential revised ABC	+8%	+13%	+16%

^a This is the ratio of the projected biomass level in 2021 compared to the target biomass level. For summer flounder, this projection was calculated based on the 2018 benchmark stock assessment. For scup and black sea bass, these projections were based on the 2019 operational stock assessments.

^b The OFL, or overfishing limit, is derived from stock assessment projections.

^c The OFL coefficient of variation (CV) is determined by the SSC based on the level of scientific uncertainty associated with the stock assessment. A higher OFL CV results in a larger buffer between the OFL and the ABC.