

# Framework Amendment 1 to the Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and South Atlantic Region

Spanish Mackerel Annual Catch Limits



**May 29, 2014**



**Final Environmental Assessment    Regulatory Impact Review    Regulatory Flexibility Analysis**

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Comprehensive ACL Amendment (SAFMC 2011a) and red grouper in Amendment 24 to the Snapper Grouper FMP (SAFMC 2011b). CMP Amendment 18, as well as the South Atlantic snapper grouper amendments, considered alternatives that set ACL below the ABC; however, the South Atlantic Fishery Management Council (South Atlantic Council) and Gulf of Mexico Fishery Management Council (Gulf Council) chose as their preferred alternative ACL=ABC=OY.

The Councils and NMFS are not considering options beyond the two alternatives listed because: 1) setting ACL=ABC=OY was the preferred alternative in CMP Amendment 18 (GMFMC/SAFMC 2011) and snapper grouper amendments; 2) the Councils and NMFS have approved, and NMFS will implement on August 7, 2014, an amendment that will require dealers to report landings electronically once a week (GMFMC/SAFMC 2013a), which will improve the timeliness of data collection; and 3) recreational landings have remained well below the recreational ACL since it was implemented through CMP Amendment 18 (GMFMC/SAMFC 2011). Therefore, the Councils and NMFS determined it is not reasonable to include additional alternatives that incorporate a buffer between the ABC and ACL.

### **Discussion:**

In Amendment 18 to the CMP FMP (GMFMC/SAFMC 2011), the ACL and OY for Atlantic migratory group Spanish mackerel were set equal to the ABC recommended by the South Atlantic Council's SSC. Amendment 18 also established a recreational ACT based on the recreational ACL. When the SSC reviewed information for Atlantic migratory group Spanish mackerel during meetings in 2010 and 2011, the ABC value was based on landings data rather than assessment information. The SSC developed a new interim approach for determining ABC at their April 2011 meeting and recommended using the 80<sup>th</sup> percentile, or in this case the third highest point in landings over a ten-year period (1999-2008) for use as the ABC. The SSC determined the overfishing limit (OFL) for Atlantic migratory group Spanish mackerel to be unknown.

Southeast Data, Assessment, and Review (SEDAR 28) included a benchmark assessment for Atlantic migratory group Spanish mackerel that was completed in 2012 (and revised in 2013). In April 2013, the SSC reviewed the results. The SSC accepted the benchmark assessment as representing the best available scientific information on the status of Spanish mackerel in South Atlantic waters and considered it appropriate for South Atlantic Council management decisions.

The current stock status in the base run from the Beaufort Assessment Model (BAM) was estimated to be  $SSB_{2011}/MSST=2.29$ , and  $SSB_{2011}/SSB_{MSY}=1.49$ . MSST is the overfished threshold and is equal to 65% of  $SSB_{MSY}$ , where  $MSST=1-\text{natural mortality rate} * SSB_{MSY}$ . The MSY level is set at 6.063 mp. The current level of fishing is  $F_{2009-2011}/F_{MSY} = 0.526$ , with  $F_{2011}/F_{MSY} = 0.521$ <sup>1</sup>.  $F_{30\%SPR}$  was used as a proxy for  $F_{MSY}$  in the stock assessment. The SSC concluded the Atlantic migratory group Spanish mackerel stock is not overfished or experiencing overfishing. Because this assessment falls under Tier 1 of the SSC's ABC control

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<sup>1</sup>  $SSB_{2011}$  = Static Stock Biomass in fishing year 2011; MSST = Minimum Stock Size Threshold;  $F_{2009-2011}$  = Fishing Mortality in fishing years 2009-2011; MSY = Maximum Sustainable Yield;  $F_{MSY}$  = Fishing Mortality at Maximum Sustainable Yield. Results and additional details about the model are available in the SEDAR 28 report (<http://www.sefsc.noaa.gov/sedar/>).

rule, ABC was obtained according to a P\* (P-star) value.<sup>2</sup> A summary of results from applying the ABC control rule is presented below:

Assessment Information: Tier 2 (2.5%)  
 Uncertainty Characterization: Tier 2 (2.5%)  
 Stock Status: Tier 1 (0%)  
 Risk Analysis: Tier 2 (5%)  
 Total adjustment 10%  
 P\* value: 40%

At the June 2013 South Atlantic Council meeting, the SSC recommended using five-year projections at P\*=50% for OFL and at P\*=40% for ABC. When the South Atlantic Council received the projections from the Southeast Fisheries Science Center (SEFSC) at their June 2013 meeting, the South Atlantic Council requested the SSC review the Spanish mackerel projections and revisit the recommendations for OFL and ABC. The South Atlantic Council asked the SSC to consider basing OFL and ABC on equilibrium projections of the maximum sustainable yield (MSY), in light of effects of selectivity and recruitment patterns on short-term yield estimates. The additional language was added to provide guidance and clarification was provided to the SSC’s recommendation: ‘SSC as follows: “Considering the high degree of confidence that the stock is healthy (not overfished nor experiencing overfishing). Current biomass is high (SSB/MSST = 2.29) and exploitation is low (F/F<sub>MSY</sub> = 0.53) and the stock has not experienced overfishing over the assessment period, the Council believes that use of a less risk-averse reference point such as the equilibrium MSY, (6.063 million pounds (mp)) as OFL for 2013-2015 is justified. Due to the exploitation history and stock status, the Council believes such a reference point does not significantly increase the probability of overfishing during these years.”’

In October 2013, the SSC reviewed projections and recommended the OFL and ABC values for Atlantic migratory group Spanish mackerel shown in **Table 2.1**.

**Table 2.1.** SSC recommendations for Atlantic migratory group Spanish mackerel, October 2013.

Fishing Year (March-February)	OFL (Landings-mp)	ABC (Landings-mp)
2014-2015	7.03	6.063
2015-2016	6.62	6.063
2016-2017	6.52	6.063

**Comparison of Alternatives:**

**Alternative 1 (No Action)** would not modify the Atlantic group Spanish mackerel ACL based on the results of the stock assessment. **Preferred Alternative 2** would modify the ACL by using the new ABC in the formula of ACL = OY = ABC. Thus, the total ACL would be 6.063 mp. The commercial ACL, recreational ACL, and recreational ACT would be adjusted accordingly, based on existing sector allocations and the formula used for the recreational ACT in

<sup>2</sup> P\* refers to the probability for overfishing to occur at the harvest level. For example, e.g., when the SSC requests projections for P\*=50%, the SEFSC provides projections for landings that are expected to result in only a 50% probability of causing overfishing of the stock. Lower selected P\* values will produce more restrictive projections for landings because the risk of overfishing occurring is lower.