

## Information Paper Related to Emergency Action Carry-Over

Note: This document provides additional guidance on carry-over, as requested by the Council in June 2020, to support further discussion of carry-over as a potential item for emergency action due to the pandemic.

### Background

The South Atlantic Fishery Management Council (SAFMC or Council) is considering adding carry-over in their Acceptable Biological Catch (ABC) Control Rule and has been awaiting guidance from the National Marine Fisheries Service (NMFS). The NMFS guidance published in July 2020 (Holland et al. 2020 <https://spo.nmfs.noaa.gov/sites/default/files/TMSPO203.pdf>). The guidance includes criteria for allowing carry-over, benefits of allowing carry-over, risks associated with carry-over, and examples of carry-over. This document will give a brief overview of the guidance and review how carry-over could be applied in the South Atlantic region. Because carry-over provisions are not currently included in any SAFMC Fishery Management Plans (FMPs), emergency actions will need to be requested to consider using carry-over to address pandemic effects.

Carry-over can benefit fisheries by improving safety (reduced race to catch all the stock before the end of the year), economic stability (relieve pressure during poor economic conditions), and management stability (more consistent multi-year seasons) (Holland et al. 2020). According to the carry-over and phase-in guidance document, for carry-over to be used in a fishery, carry-over provisions must be included in the ABC Control Rule for the fishery management plan. Carry-over criteria must either be comprehensively analyzed to evaluate the risks and benefits of including carry-over, or considered on a case-by-case basis with scenario planning or new projections using a catch stream with carry-over included (see **Appendix 1** for NMFS Guidance). The guidance indicates carry-over could be used if social or economic factors prevented the fishery from harvesting the annual catch limit (ACL) (not reduced stock size) or if an early closure resulted in an underage. The guidance further states that carry-over should not be used for stocks with unknown status or unknown reasons for harvesting below the ACL, nor for short lived species since their population size can be influenced by ecosystem factors. The carry-over must remain below the overfishing limit which limits the carry-over to the difference between the OFL and the ABC.

Using carry-over to increase the harvest of a stock in a rebuilding plan, or classified as overfished, could have negative impacts on the rebuilding plan and future yield to the fishery. Councils may consider limiting carry-over provisions to stocks that are neither overfished nor in a rebuilding plan. Some increases in the ACL could result in stocks in a rebuilding plan not being rebuilt within the specified timeframe. However, in other instances, harvest below the ABC could allow for adequate recovery within the timeframe and provide additional yield to the fishery. An analysis should be conducted to determine the impact of additional harvest on the rebuilding plan.

Carry-over is described under two different implementation scenarios: an increase in the ACL specified by the Council if the ACL is less than the ABC; or an increase in both the ACL and ABC, in concurrence with a Scientific and Statistical Committee (SSC), if the carry-over would exceed the ABC. In the first case, where the carry-over results in an ACL that remains less than the ABC, a temporary increase in the ACL could be used to increase the harvest on a larger biological stock since fewer fish were removed the previous year. No action by the SSC would be necessary since the Council's ACL is not exceeding the ABC. The guidance recommends running simulations under different landings scenarios or carry-over percentages to verify that the management strategy prevents overfishing.

An increase in the ACL requiring a temporary increase in the ABC must be done in conjunction with action by the SSC to modify the ABC (the MSA prevents ACLs from exceeding the SSC's ABC recommendation). This could be implemented for specific situations or criteria which have been thoroughly analyzed in the FMP's ABC Control Rule, or it could be done on a case-by-case basis in which different landings or ACL scenarios are investigated to determine if the carry-over could result in overfishing. The guidance recommends against using this scenario and temporarily increasing the ABC for stocks without an OFL because it is not possible to determine the overfishing impacts of this change.

## Applying Carry-Over Guidance to South Atlantic Stocks to Address Pandemic Effects

### Carry-Over Actions the Council Could Consider

Since most stock ACLs are set at the ABC, and no FMP includes carry-over provisions, the Council will need to request emergency action and work with the SSC to increase ABC and ensure carry-over does not cause overfishing (ABC must be below OFL) or prevent a stock from rebuilding in the shortest timeframe possible. Several stocks are evaluated as potential candidates for carry-over through emergency action. One species, Yellowtail Snapper, is a species to consider for emergency action to carry-over some of the utilized commercial ACL to the 2020-2021 fishing year since the species is currently sustainable and there is a new assessment to consider a range of harvest levels.

### Carry-Over Provisions included in FMP

No FMPs in the South Atlantic region include provisions for carry-over in the ABC Control Rule.

### South Atlantic Stocks with ACL less than ABC

Four stocks in the South Atlantic region have an ACL set less than the ABC: Gag, Hogfish (GA-NC), Hogfish (FLK, EFL), and Red Porgy. The Gag ACL was set lower than the ABC based on concern over the stock status (close to overfishing levels) and fishermen expressed concern about the stock status during public comment for Regulatory Amendment 22, which updated the ACL. Hogfish (FLK, EFL stock) and Red Porgy are both overfished and in rebuilding plans. Hogfish (GA-NC) stock status is unknown but fishermen expressed concern about the stock status during public comment for Amendment 37, which established separate management units of Hogfish in

the South Atlantic region, specified fishing levels for both stocks, and developed stock specific management measures. NMFS guidance indicated that carry-over of the ACL should not occur if there are concerns regarding the stock status (Gag, Red Porgy, and Hogfish (FLK,EFL)) or if the stock status is unknown (Hogfish (GA-NC)).

Carry-over summary:

- Carry-over is not recommended for these stocks due to stock status concerns or existing rebuilding plans.

#### ACL not achieved due to Social or Economic Factors

The Council reviewed stocks relative to previous years' ACLs at the June Council meeting and recommended further review of Spanish Mackerel, Vermilion Snapper, and Yellowtail Snapper at the September meeting to evaluate continued impacts of the pandemic on the commercial fishery. Recreational fisheries are not included because landings for the recreational sector has not been estimated during the pandemic due to dockside sampling stoppages in most states during March and April. Some areas reported higher than average recreational fishing effort during the pandemic while other areas reported reduced effort.

*Spanish Mackerel* – The fishing year for Spanish Mackerel is March through February. The Spanish Mackerel commercial northern zone was closed to harvest in federal waters in August 2020. The harvest in the southern zone is less than 25% of the zone's quota, but this is not abnormal for September. Harvest in the southern zone occurs after the northern zone due to Spanish Mackerel migration patterns and the southern zone has been fully utilizing its ACL in recent years and is expected to do so in 2020. (See **Appendix 2** for more details on the fishery).

Carry-over summary for Spanish Mackerel:

- Unused ACL is unlikely.

*Vermilion Snapper* – The Vermilion Snapper commercial fishery carried over 176,126 pounds from season 1 (January through June) to season 2 (July through December) in 2020, while in prior years the fishery has been closed briefly at the end of season 1. There are no provisions in the FMP at this time for carrying-over unused ACL from one year to the next. Therefore, if the season 2 harvest does not reach the ACL with the additional pounds by the end of 2020, the ACL in 2021 will not be increased and those unused landings will be lost to the fishery. The Council could consider carrying-over a portion of any unused ACL from 2020 to 2021 through emergency action to address the unforeseen impacts of the pandemic. (Note: The Council requested emergency rule to increase the Vermilion Snapper commercial trip limit in June 2020).

The Council cannot set an ACL that exceeds the OFL, even if carry-over is applied. For Vermilion Snapper, the difference between the OFL and ABC in 2021, based on projections for SEDAR 55, is 78,000 pounds whole weight or 5.5% of the total ABC (both sectors are combined in the ABC). Therefore, if the Council pursues emergency action to carry-over unused ACL into 2021, the most that can be carried over is 78,000 pounds. Council is advised that NMFS guidance recommends maintaining a buffer between the OFL and ABC to account for management and scientific uncertainty (see [Information Paper from June 2020 Council Meeting](#)).

Carry-over summary for Vermilion Snapper:

- Requires an emergency action
- No stock status concerns to prevent carry-over
- Requires temporarily increasing the ABC, therefore an SSC recommendation for a higher ABC is necessary
- Maximum carry-over is 78,000 pounds.
  - Should be further reduced to maintain an ABC-OFL buffer
  - Could be adjusted by the commercial allocation percent

*Yellowtail Snapper* – The Yellowtail Snapper commercial fishery landed 87% of the sector's ACL in the 2019-2020 fishing year (fishing year August through July). In recent years, the commercial sector has been harvesting the entire ACL and closing in June, before the fishing year ends on July 31. The pandemic likely had a significant impact on the commercial fishery and contributed to the fishery remaining open in 2021 and falling short of the commercial ACL by 200,000 lbs. The current stock status for Yellowtail Snapper indicates the population is neither overfished nor experiencing overfishing, and a new assessment (still under SSC review) does not suggest a change in stock status is pending. Carry-over for this fishery could be considered based on the stock status. Projected catch levels for the 2020-2021 fishing year should be compared to the observed levels to determine if increased harvest would result in overfishing.

Carry-over summary for Yellowtail Snapper:

- Requires an emergency action
- No stock status concerns to prevent carry-over
- May require joint action (with the Gulf SSC) to modify the ABC to support carry-over.
- The available carry-over amount cannot be determined until the SSC review is complete and OFL and ABC recommendations are available.

#### Literature Cited:

Holland, D., D. Lambert, E. Schnettler, R. Methot, M. Karp, K. Brewster-Geisz, J. Brodziak, S. Crosson, N. Farmer, K. Frens, J. Gasper, J. Hastie, P. Lynch, S. Matson, and E. Thunberg. 2020. National Standard 1 Technical Guidance for Designing, Evaluating, and Implementing Carry-over and Phase-in Provisions. NOAA Tech. Memo. NMFS-F/SPO-203, 41 p.

## Appendix 1. Carry-over provisions listed in Box 1 of Carry-Over and Phase-in guidance document (Holland et al. 2020)

NS1 guideline requirements for developing carry-over provisions within an ABC control rule:

- Describe within an FMP when the carry-over provision can and cannot be used, and how the provision prevents overfishing based on a comprehensive analysis.
- The resulting ABC recommended by the SSC must prevent overfishing and must consider scientific uncertainty consistent with the Council's risk policy.
- Consider the reason for the ACL underage.
- Evaluate appropriateness of carry-over provisions for stocks that are overfished and/or rebuilding, as the overriding goal for such stocks is to rebuild them in as short a time as possible.

Additional guidance to consider when developing carry-over provisions within an ABC control rule:

- Carry-over is not recommended for stocks that do not have a specified OFL.
- Consider which stocks are eligible for carry-over.
- Consider how ACL underages will be determined.
- Consider how underages will be accounted for when there are multiple fishery sectors.
- Consider having a minimum buffer between OFL and ABC.
- Consider establishing limits on the amount of unharvested ACL that can be carried over. Limits on the percent of quota that can be carried over are commonly included in existing carry-over programs.
- Consider establishing a process for making changes to the ABC and ACL.
- Consider identifying circumstances where precautionary measures should be used.
- Consult with the Scientific and Statistical Committee as well as the applicable NMFS Fisheries Science Center.
- Carry-over provisions within ABC control rules can be designed for specific individual stocks or stock complexes, or a comprehensive provision can be developed that applies to multiple stocks or FMPs.
- If the carry-over provision applies to multiple stocks, the SSC or relevant scientific advisory body should evaluate and approve the use of the carry-over provision for each individual stock or stock complex to ensure that it will prevent overfishing.
- Consider using simulation testing to ensure that carry-over will prevent overfishing in accordance with any established risk policy, preferably using a closed-loop management strategy evaluation.

Implementing and evaluating carry-over on a case-by-case basis:

- Rerun the stochastic projections that were used in the last stock assessment with revised catch estimates.
- Conduct a deterministic projection analysis with revised catch estimates.
- Use scenario planning within an assessment to evaluate a wide range of ACL underages, resulting in ranges of OFL and ABC recommendations for each year within each scenario.

## Appendix 2. Information on Atlantic Spanish Mackerel for Discussion on Potential Responses to the Pandemic

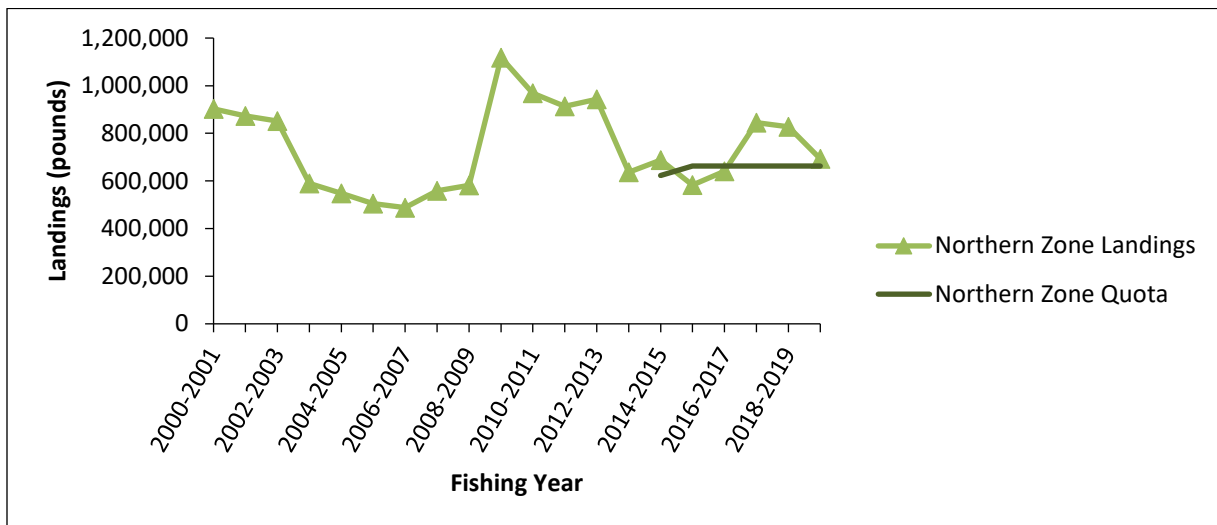
Pandemic-related closures began in the South Atlantic region in mid-March 2020. As a result, fishermen, their communities, and fishing-related businesses have encountered unprecedented challenges. At the June 2020 meeting, the Council indicated that they wanted to wait until the September 2020 meeting to review current season landings and discuss a possible emergency rule request or carryover to help mitigate the results of the pandemic on the Spanish mackerel fishery. The 2020-2021 fishing season runs from March 1, 2020 through February 28, 2021. The commercial Northern Zone closed on July 22, 2020. As of August 19, 2020, the commercial Southern Zone has harvested 10.6% of their quota. Recreational catch limits are currently unavailable (**Table 1**). In recent years, both the commercial Northern Zone and Southern Zone have met or exceeded their quotas (**Figure 1** and **Figure 2**). The recreational sector has remained below its annual catch limit (**Figure 3**). Current commercial management measures are closely tied to each zone’s individual quota, while recreational management measures apply throughout the management zone (**Table 2**).

**Table 1.** Preliminary commercial and recreational landings of Atlantic migratory group Spanish mackerel for the current season (March 2020 through the end of February 2021).

Sector (Area)	Current Landings (lbs)	ACL (lbs)	Percent ACL Landed
Commercial (Northern)	803,185*	662,670	121.2%
Commercial (Southern)	283,449	2,667,330	10.6%
Recreational	Unknown	2,727,000	Unknown

\*The Northern Zone closed to commercial harvest on July 22, 2020.

Source: ACL Monitoring Webpage, August 19, 2020

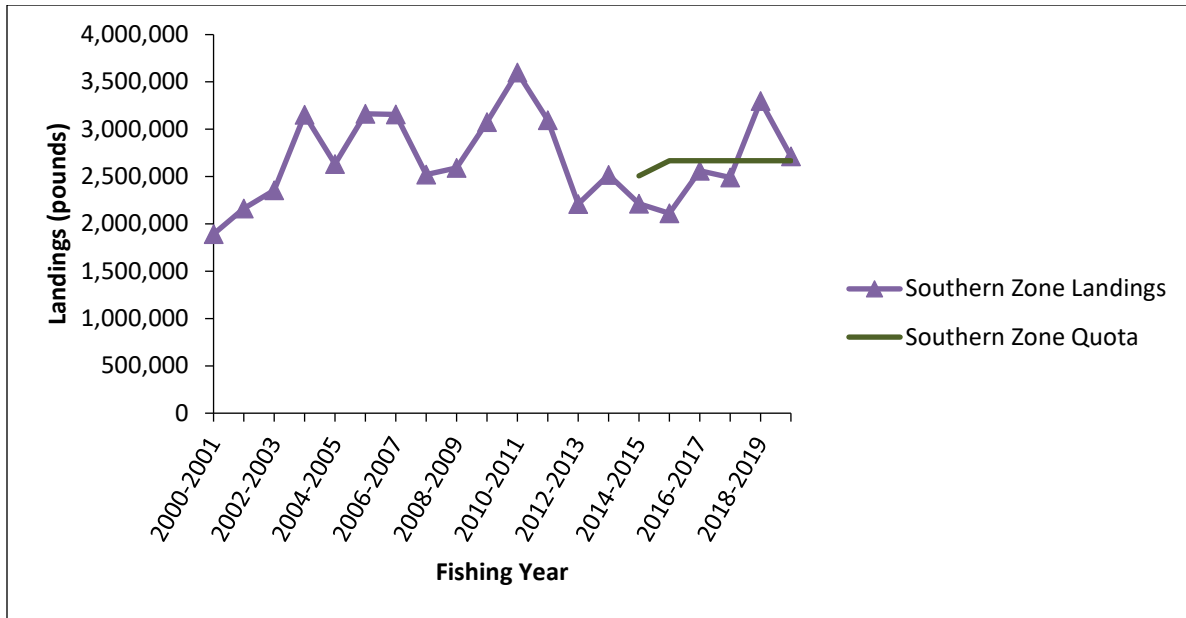


**Figure 1.** Commercial landings (pounds) of Atlantic migratory group Spanish mackerel in the Northern Zone from 2000 through 2019 (green line) and Northern Zone quota (black line).

\*From 2000-2004 the fishing year started on April 1<sup>st</sup>. In subsequent years, the fishing year started on March 1<sup>st</sup>.

\*\*Landings from the 2018-2019 and 2019-2020 fishing years are preliminary.

Source: ALS and ACL Monitoring Webpage.

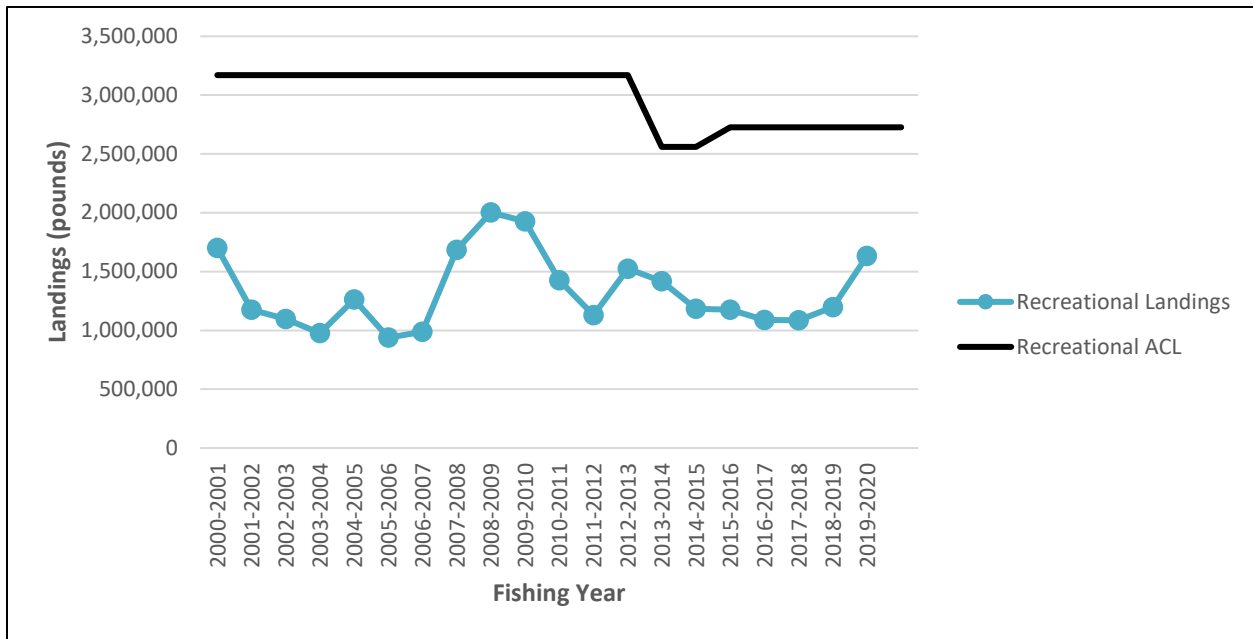


**Figure 2.** Commercial landings (pounds) of Atlantic migratory group Spanish mackerel in the Northern Zone from 2000 through 2019 (green line) and Northern Zone quota (black line).

\*From 2000-2004 the fishing year started on April 1<sup>st</sup>. In subsequent years, the fishing year started on March 1<sup>st</sup>.

\*\*Landings from the 2018-2019 and 2019-2020 fishing years are preliminary.

Source: ALS and ACL Monitoring Webpage.



**Figure 3.** Commercial landings (pounds) of Atlantic migratory group Spanish mackerel in the Northern Zone from 2000 through 2019 (green line) and Northern Zone quota (black line).

\*From 2000-2004 the fishing year started on April 1<sup>st</sup>. In subsequent years, the fishing year started on March 1<sup>st</sup>.

\*\*Landings from the 2018-2019 and 2019-2020 fishing years are preliminary.

Source: ALS and ACL Monitoring Webpage.

**Table 2.** Current Spanish Mackerel Regulations

<b>Regulation</b>	<b>Commercial</b>	<b>Recreational</b>
<b>Zones</b>	Northern Zone (NY/CT/RI state line to the NC/SC state line) Southern Zone (NC/SC state line to the Miami-Dade /Monroe County Line, Florida)	None
<b>Allocations</b>	<ul style="list-style-type: none"> <li>• Total Commercial: 55%                             <ul style="list-style-type: none"> <li>○ Northern Zone: 20%</li> <li>○ Southern Zone: 80%</li> </ul> </li> </ul>	45%
<b>Annual Catch Limit</b>	<ul style="list-style-type: none"> <li>• Total Commercial: 3,300,000 pounds                             <ul style="list-style-type: none"> <li>○ Northern Zone: 662,670 pounds</li> <li>○ Southern Zone: 2,667,330 pounds</li> </ul> </li> </ul>	2,727,000 pounds
<b>Season</b>	March 1 <sup>st</sup> to the end of February	March 1 <sup>st</sup> to the end of February
<b>Trip/Bag Limit</b>	<b>Northern Zone</b>	15-fish per person
	3,500 pounds year-round	
	<b>Southern Zone</b>	
	Adjusted Quota = 2,417,330 pounds <ul style="list-style-type: none"> <li>• Starting March 1st until 75% of the adjusted quota is reached: 3,500 pounds</li> <li>• From 75% until 100% of the adjusted quota is reached: 1,500 pounds</li> <li>• From 100% adjusted quota until 100% of the full quota is reached: 500 pounds</li> </ul>	
<b>Minimum Size Limit</b>	12-inches FL	12-inches FL