

Mackerel AP Discussion Document

Coastal Migratory Pelagics Joint Amendment 26

(Changes in Allocations, Stock Boundaries and Sale
Provisions for Gulf of Mexico and Atlantic Migratory
Groups of King Mackerel)

South Atlantic Mackerel Advisory Pane
February 2016



January 20, 2016

ACTIONS FOR AMENDMENT 26

- Modify the management/stock boundary for Gulf and Atlantic migratory groups of king mackerel
- Update the biological reference points and revise the ABC, OY, ACLs and Recreational ACT for Atlantic group king mackerel
- Create an incidental catch allowance of Atlantic group king mackerel caught in the shark gillnet fishery
- Establish split season commercial quotas for harvest of Atlantic group king mackerel in the Southern Zone
- Establish a trip limit system for the Southern Zone
- Update the biological reference points and revise the ACL for Gulf group king mackerel
- Revise the commercial zone quotas for Gulf group king mackerel
- Revise the recreational and commercial allocation of Gulf group king mackerel
- Modify the recreational bag limit for Gulf group king mackerel

TENTATIVE TIMELINE FOR AMENDMENT 26

- ✓ January 2015- South Atlantic scoping
- ✓ January 2015- Gulf AP reviews potential actions and alternatives
- ✓ April 2015- South Atlantic Mackerel AP reviews actions and alternatives
- ✓ April 2015- Gulf scoping
- ✓ June 2015- Joint Gulf and South Atlantic meeting in Key West- review public input, provide direction on actions and alternatives
- ✓ August 2015- Gulf Council reviews document, selects preferred alternatives and provides direction to staff
- ✓ September 2015- South Atlantic Council reviews, modifies and selects preferred alternatives
- ✓ October 2015- Gulf Council reviews document, selects preferred alternatives, and approves for public hearings
- ✓ Nov 2015- Gulf Mackerel AP reviews the amendment
- ✓ December 2015- South Atlantic Council reviews document, selects preferred alternatives, and approves for public hearings
- January/February 2016- South Atlantic and Gulf public hearings
- February 2016- South Atlantic Mackerel AP reviews the amendment
- March 2016- South Atlantic reviews public comments and takes final action
- April 2016- Gulf Council reviews public comments and takes final action
- April/May 2016- Submit for Secretarial review

BACKGROUND

The stock assessment for Gulf and Atlantic king mackerel (SEDAR 38) was completed in 2014. SEDAR 38 used a different approach than the current management stock boundary to designate the Gulf and Atlantic stocks, and indicated a different area to be the ‘mixing zone.’ In addition to revising the management boundary to be aligned with the SEDAR 38 stock boundary, the Gulf of Mexico and South Atlantic Fishery Management Councils will need to update the catch limits for both stocks (and zone/subzone quotas) based on the assessment. All SEDAR 38 documents and reports are available online at: <http://sedarweb.org/sedar-38>

CMP Amendment 26 includes actions to modify the boundary for Gulf and Atlantic king mackerel to be aligned with the stock boundary under in SEDAR 38, along with actions to update the annual catch limits for Atlantic and Gulf king mackerel based on the stock assessment.

Because of the proposed change to the stock boundary, the Councils will need to revise some measures to reflect a new management system for each king mackerel stock. The potential new stock boundary would remove the Gulf Florida East Coast subzone, which will also remove any management measures in place for that subzone. For Atlantic king mackerel, the Councils will consider management measures for the Southern Zone (SC, GA and FL to the stock boundary), including split season commercial quotas and trip limits. For Gulf king mackerel, the Councils will need to review and revise the commercial allocations for the Gulf zones.

The Councils will also review the commercial and recreational allocation of Gulf king mackerel, consider increasing the bag limit for Gulf king mackerel, and establish an incidental catch allowance for Atlantic king mackerel caught in the shark gillnet fishery.

ACTION 1 - Adjust the Management Boundary for Gulf and Atlantic Migratory Groups of King Mackerel

Alternative 1: No action - Maintain the current shifting management boundary between the Gulf and Atlantic migratory groups of king mackerel (**Figure 1** (Amendment Figure 2.1.1)).

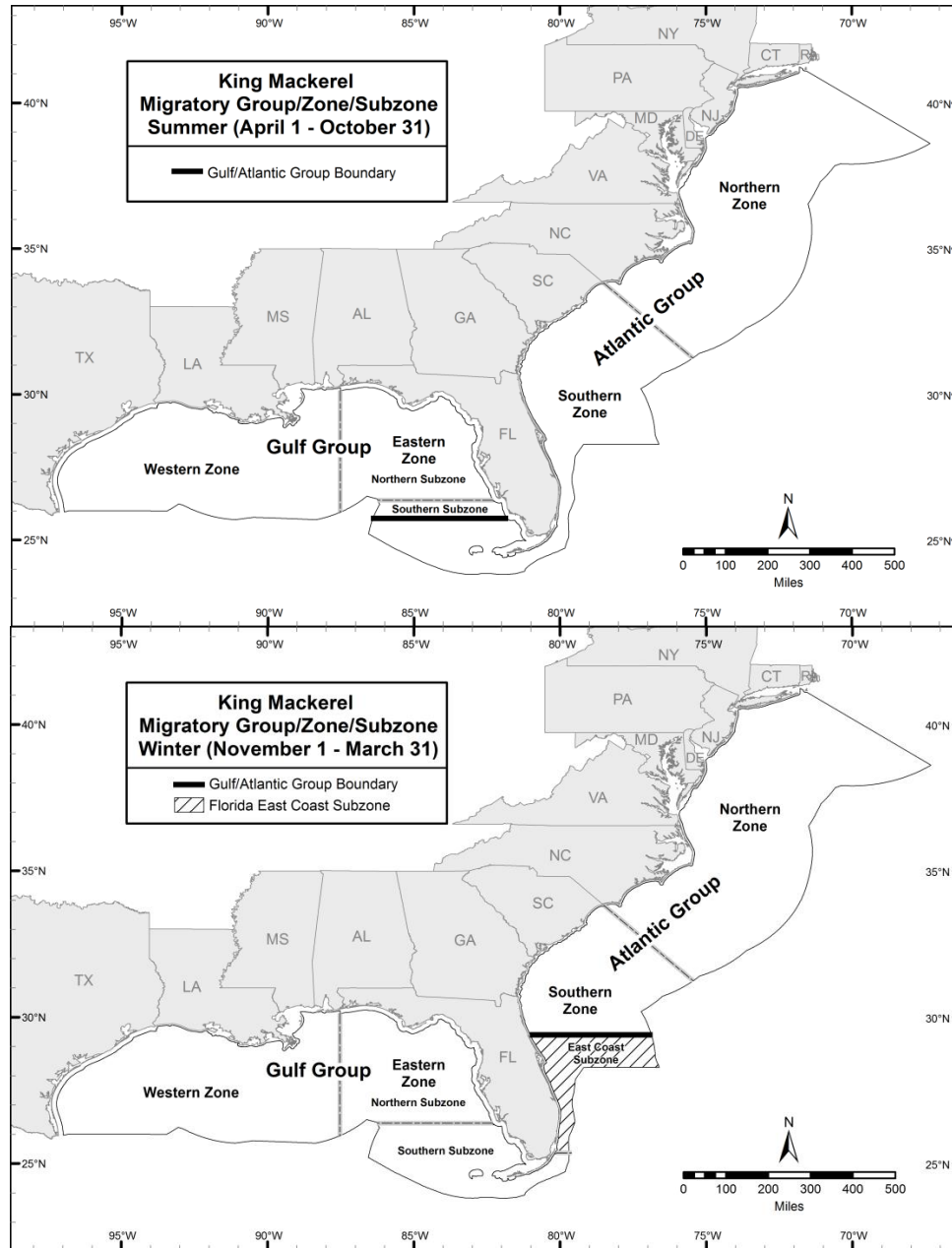


Figure 1. Alternative 1: Seasonal management boundaries for Atlantic and Gulf migratory groups of king mackerel.

Alternative 2: Establish a single year-round boundary for separating management of the Gulf and Atlantic migratory groups of king mackerel at the regulatory boundary between the Gulf and South Atlantic Fishery Management Councils (Councils) (**Figure 2** (Amendment Figure 2.1.2)). The South Atlantic Council would be responsible for management measures in the mixing zone.

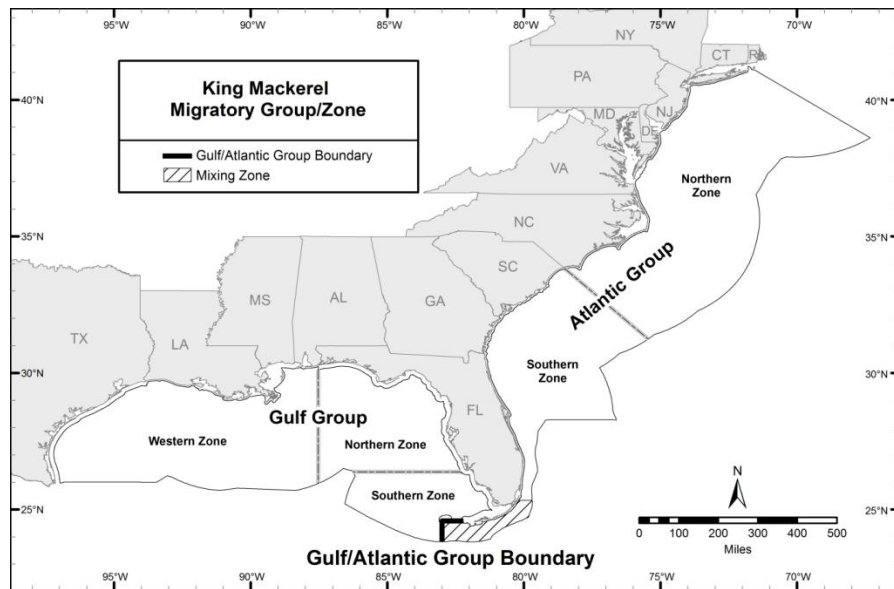


Figure 2. Alternative 2: Proposed management boundary for Atlantic and Gulf migratory groups of king mackerel.

Preferred Alternative 3: Establish a single year-round boundary for separating the Gulf and Atlantic migratory groups of king mackerel at the Miami-Dade/Monroe county line (**Figure 3** (Amendment Figure 2.1.3)). The Gulf Council would be responsible for management measures in the mixing zone. **(Gulf and South Atlantic AP Recommended)**

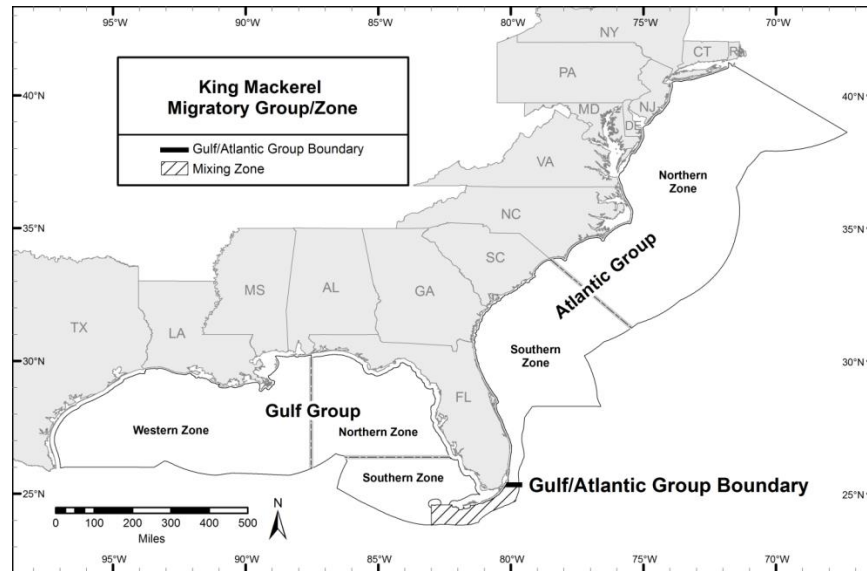


Figure 3. Preferred Alternative 3: Proposed management boundary for Atlantic and Gulf groups of king mackerel.

Discussion

This action would modify the management boundary so that it is consistent with the stock boundary used in SEDAR 38, as shown in **Figure 4**.



Figure 4. Regions used to aggregate landings for stock assessment of king mackerel in the GMFMC and SAFMC management areas (*Figure 4.2 from the SEDAR 38 Stock Assessment Report*).

Alternative 2 would set a year-round boundary in which each Council manages within its jurisdiction (which could result in separate management on each side of the Florida Keys). **Alternative 3** would set a year-round boundary so that the Gulf Council would manage all of the Florida Keys.

Advisory Panel Recommendations

- South Atlantic AP: Alternative 3 as the Preferred Alternative (April 2015)
- Gulf AP: Alternative 3 as the Preferred Alternative (March and November 2015)

ACTION 2 - Update Reference Points (MSY, MSST, MFMT/OFL), and Revise the Annual Catch Limit (ACL) and Recreational Annual Catch Target (ACT) for Atlantic Migratory Group King Mackerel

The South Atlantic Council has determined that the value for MSY is the value of yield at F_{MSY} from the most recent stock assessment. Currently $MSY = 10.4$ million pounds (mp) (SEDAR 16). In October 2014, the SSC recommended a proxy for MSY at 30% SPR (spawning potential ratio), which is 12.7 mp.

The South Atlantic Council has determined that the value for MSST is the value from the most recent stock assessment. Currently $MSST = 1,827.5$ million hydrated eggs (SEDAR 16). Based on the SEDAR 38 assessment, $MSST = 1,991$ million hydrated eggs. The South Atlantic Council has determined that the value for MFMT is the value of F_{MSY} or proxy from the most recent stock assessment. Currently $MFMT = F_{MSY} = F_{30\%SPR} = 0.256$ (SEDAR 16). Based on the SEDAR 38 assessment, $MFMT = F_{MSY} = F_{30\%SPR} = 0.157$.

Table 1. Recommendations from the October 2014 SSC meeting for Atlantic Migratory Group King Mackerel.

Criteria	Deterministic
Overfished evaluation	No, $SSB/SSB_{30\%SPR} = 1.86$
Overfishing evaluation	No, $F/F_{30\%SPR} = 0.17$
MFMT	$F_{30\%SPR} = 0.157$
$SSB_{30\%SPR}$ (unit)	2,372 million eggs
MSST (unit)	1,991 million eggs
MSY (1000 lb)	12.7 mp
ABC Control Rule Adjustment	17.5%
P-Star	32.5%

The SSC provided the following OFLs at their October 2014 meeting (**Table 2**).

Table 2. Recommendation for OFL from the October 2014 SSC meeting for Atlantic Migratory Group King Mackerel.

Fishing year	OFL (million pounds whole weight)
2016/17	19.8
2017/18	18.3
2018/19	16.7
2019/20	15.2

Action 2-1. Revise the Acceptable Biological Catch (ABC) for Atlantic Migratory Group King Mackerel

Alternative 1: No action - Retain the current ABC for Atlantic Migratory Group King Mackerel (10.46 mp).

South Atlantic Preferred Alternative 2: Revise the ABC for Atlantic Migratory Group King Mackerel for 2016/17 through 2019/20 based on the ABC levels recommended by the SSC for ABC under a high recruitment scenario. **(Gulf AP and South Atlantic AP Recommended)**

Alternative 3: Revise the ABC for Atlantic Migratory Group King Mackerel for 2016/17 through 2019/20 based on the ABC levels recommended by the SSC for ABC under a medium recruitment scenario.

Alternative 4: Revise the ABC for Atlantic Migratory Group King Mackerel for 2016/17 through 2019/20 based on the ABC levels recommended by the SSC for ABC under a low recruitment scenario.

Table 3. ABC recommendations from the October 2014 SSC meeting for Atlantic Migratory Group King Mackerel.

P star= 0.325	ABC HIGH Recruitment Scenario	ABC MED Recruitment Scenario	ABC LOW Recruitment Scenario	Buffer between ABC and OFL		
Fishing year	Alt 2	Alt 3	Alt 4	HI	MED	LO
2016/17	17.4 mp	16.5 mp	15.4 mp	12%	16%	22%
2017/18	15.8 mp	14.3 mp	12.9 mp	14%	22%	29%
2018/19	14.1 mp	12.9 mp	11.9 mp	15%	23%	28%
2019/20	12.7 mp	12.1 mp	11.6 mp	17%	21%	24%

**** NOTE:** Implementation of revised ABCs is not expected before the start of the 2016/17 fishing season.

Advisory Panel Recommendations

- South Atlantic AP: Alternative 2 as the Preferred Alternative (April 2015), with a review after two years to evaluate if it is the appropriate ABC level.
- Gulf AP: Alternative 2 as the Preferred Alternative (November 2015)

Scoping Comments (January 2015)

Several commenters that the Council set the ACL at the highest level possible (high recruitment ABC) because of the abundance of small fish and high recruitment in recent years; also some commenters supported the medium recruitment ABC.

Action 2-2. Revise the ACLs, Commercial Quotas, and Recreational ACT for Atlantic Migratory Group King Mackerel

Please see Appendix E in the draft Amendment 26 for details of how the Northern and Southern Zone quotas will work with the new stock boundary.

Alternative 1: No action - Retain the ACL and recreational ACT for Atlantic king mackerel based on the previous ABC. ACL = optimum yield (OY) = ABC.

Alternative 2: Revise the ACL and recreational ACT based on the ABC levels selected under Action 2-1. ACL = OY = ABC, recreational ACT = [0.5 or (1-PSE), whichever is greater]. (**Table 4**) (**South Atlantic AP Recommended**)

South Atlantic Preferred Alternative 3: Establish ACL = OY = Deterministic equilibrium yield at $F_{30\%SPR} = 12.7$ mp for fishing years 2016/17 through 2019/20. (**Recommended by the South Atlantic SSC and Gulf AP**)

Alternative 3	
Atlantic King Mackerel ACL	12.7 mp
Commercial ACL	4.7 mp
Northern Zone Quota	1,082,880 lbs
Southern Zone Quota	3,617,120 lbs
Recreational ACL	8.0 mp
Recreational ACT*	7.4 mp

*ACT value calculated based on formula from CMP Amendment 18, using the average PSE from 2005-2009.

Alternative 4: Establish ACL = OY = Deterministic equilibrium yield at 75% $F_{30\%SPR} = 11.6$ mp for fishing years 2016/17 through 2019/20.

Alternative 4	
Atlantic King Mackerel ACL	11.6 mp
Commercial ACL	4.3 mp
Northern Zone Quota	990,720 lbs
Southern Zone Quota	3,309,280 lbs
Recreational ACL	7.3 mp
Recreational ACT*	6.8 mp

*ACT value calculated based on formula from CMP Amendment 18, using the average PSE from 2005-2009.

Alternative 5: Establish ACL = OY = 90% ABC based on the ABC levels selected under Action 2-1. (**Table 5**)

Advisory Panel Recommendations

- South Atlantic AP: Alternative 2 as the Preferred Alternative (April 2015).

Most AP members supported setting the ACL equal to the high recruitment ABC. Some members had concerns about risk of negative effects on the stock if the high recruitment ABC was not appropriate, so the motion was amended to add the recommendation for an updated recruitment study.

Additionally, some AP members expressed concern about how long a framework amendment could take to be developed and implemented, if it was necessary to change the ACL.

- Gulf AP: Alternative 3 as the Preferred Alternative (November 2015). The Gulf AP felt that a constant catch may help protect the stock if there was an issue with recruitment, and that the more conservative ACL (compared to Alt 2) would not affect either sectors because landings have been below the ACLs in recent years.

Scoping Comments (January 2015)

Several commenters that the Council set the ACL at the highest level possible (high recruitment ABC) because of the abundance of small fish and high recruitment in recent years; also some commenters supported the medium recruitment ABC.

ALTERNATIVES

Alternative 1: No action - Retain the ACL and recreational ACT for Atlantic king mackerel based on the previous ABC. ACL = optimum yield (OY) = ABC.

Alternative 2: Revise the ACL and recreational ACT based on the ABC levels selected under Action 2-1. ACL = OY = ABC, recreational ACT = [0.5 or (1-PSE), whichever is greater]. **(South Atlantic AP Recommended)**

South Atlantic Preferred Alternative 3: Establish ACL = OY = Deterministic equilibrium yield at $F_{30\%SPR} = 12.7$ mp for fishing years 2016/17 through 2019/20. **(Recommended by the South Atlantic SSC and Gulf AP)**

Alternative 4: Establish ACL = OY = Deterministic equilibrium yield at 75% $F_{30\%SPR} = 11.6$ mp for fishing years 2016/17 through 2019/20.

Alternative 5: Establish ACL = OY = 90% ABC based on the ABC levels selected under Action 2-1.

Please see Appendix A in Attachment 2b for tables of all potential ACLs and quotas under each alternative.

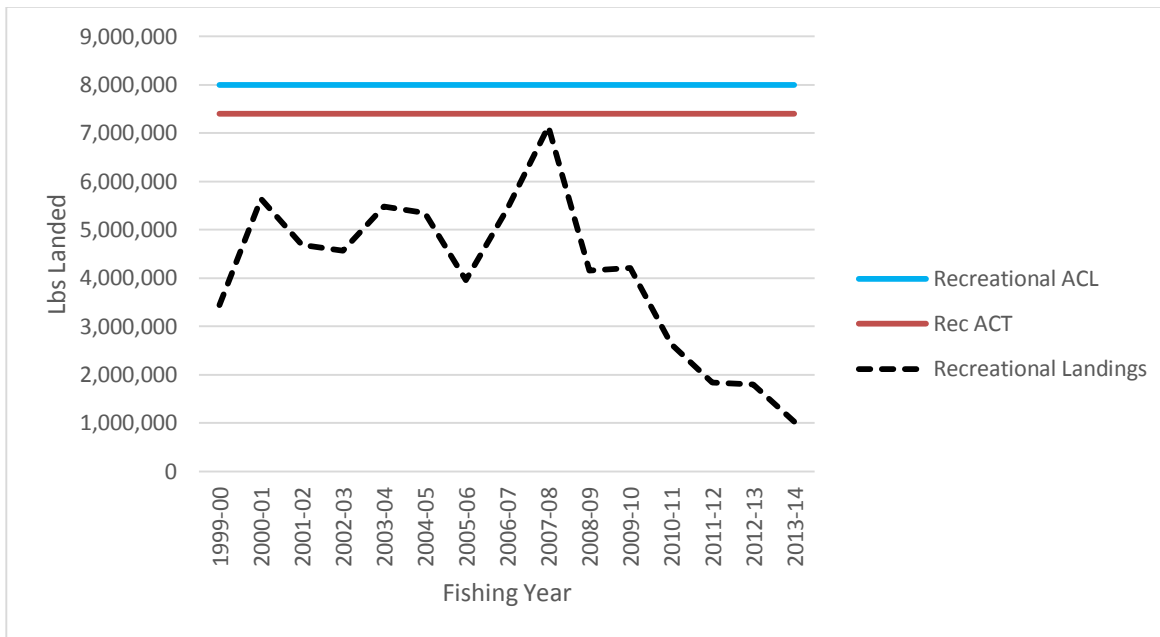


Figure 5. Recreational landings of Atlantic king mackerel compared to the recreational ACL and ACT under **South Atlantic Preferred Alternative 3**

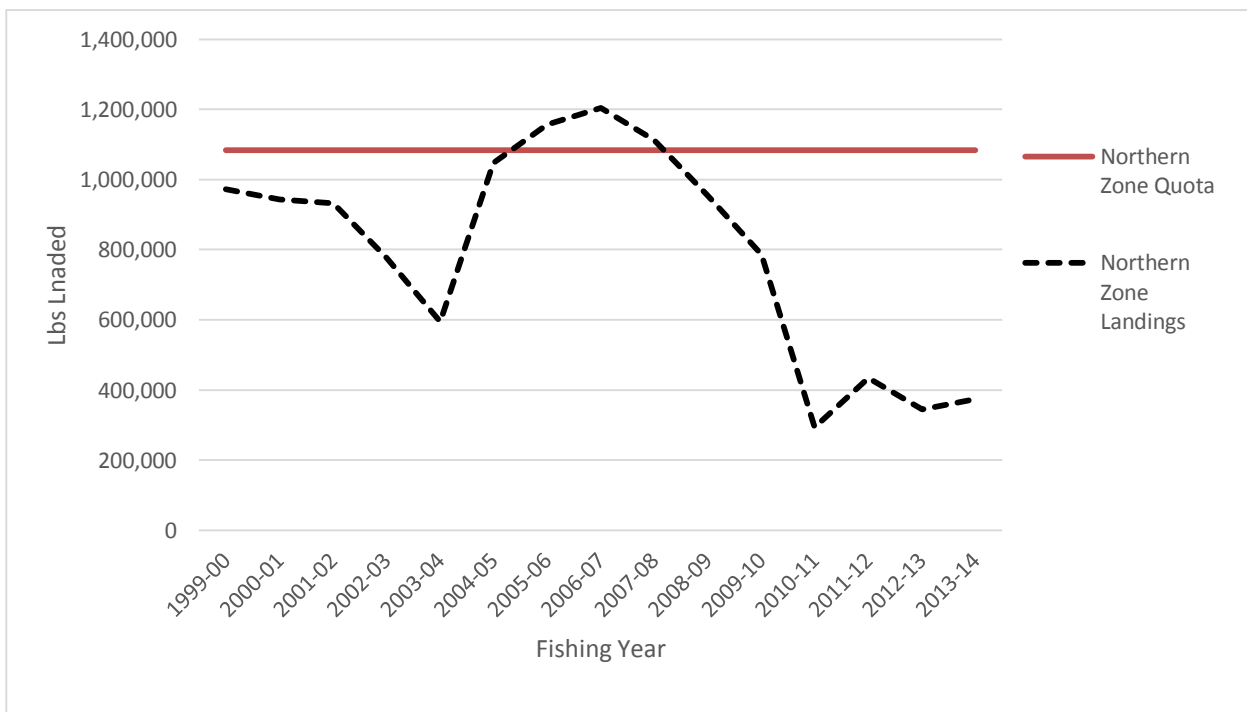


Figure 6. Northern Zone commercial landings of Atlantic king mackerel compared to Northern Zone quota under **South Atlantic Preferred Alternative 3**

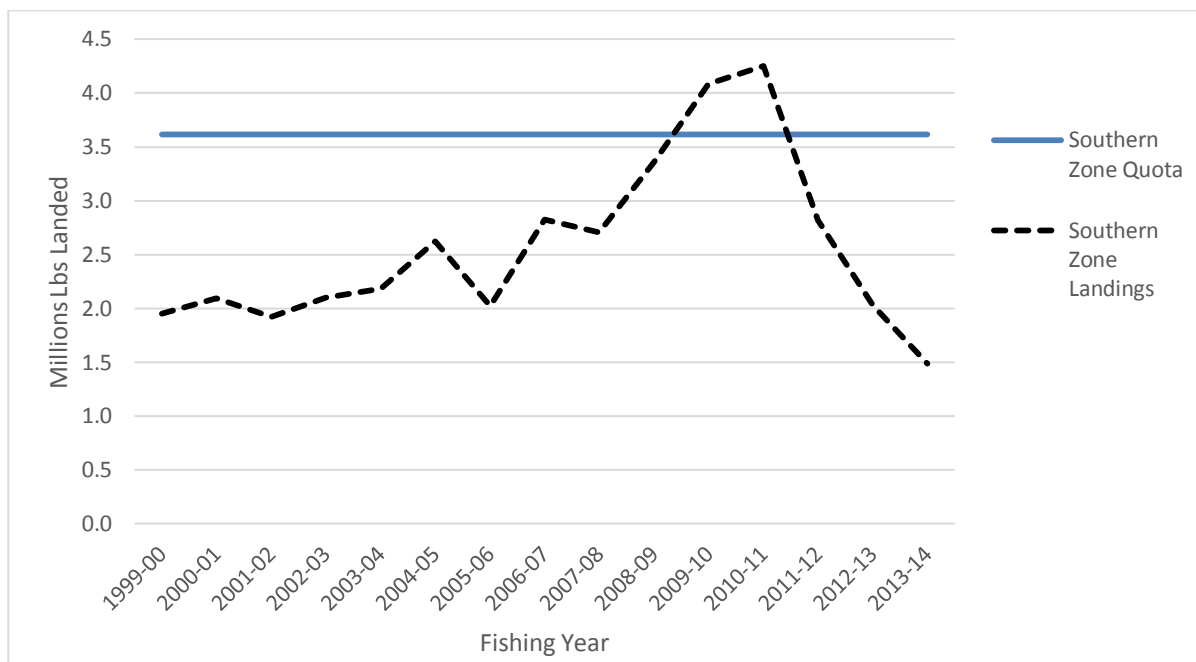


Figure 7. Southern Zone commercial landings of Atlantic king mackerel compared to Southern Zone quota under **South Atlantic Preferred Alternative 3**. NOTE: This figure compares Southern Zone commercial landings to potential Southern Zone ACLs that would be year-round. Action 4 considers split season quotas.

ACTION 3 - Incidental Catch Allowance of Atlantic Migratory Group King Mackerel Caught in the Shark Gillnet Fishery

Alternative 1: No action - Retention and sale of Atlantic migratory group king mackerel caught with gillnet as incidental catch in the gillnet portion of the commercial shark fishery remains prohibited.

Alternative 2: Allow retention and sale of Atlantic migratory group king mackerel caught with gillnet as incidental catch in the gillnet portion of the commercial shark fishery for any vessel with a valid shark directed commercial permit AND valid federal king mackerel commercial permit. The king mackerel must be sold to a dealer with the Southeast federal dealer permit. For shark gillnet trips in the EEZ off Florida, no more than 2 king mackerel per crew member can be on board, and no more than 2 king mackerel per crew member can be sold from the trip. For shark gillnet trips in the EEZ north of the GA/FL line, no more than 3 king mackerel per crew member can be on board, and no more than 3 king mackerel per crew member can be sold from the trip.

South Atlantic Preferred Alternative 3: Allow retention and sale of Atlantic migratory group king mackerel caught with gillnet as incidental catch in the gillnet portion of the commercial shark fishery for any vessel with a valid shark directed commercial permit AND valid federal king mackerel commercial permit. The king mackerel must be sold to a dealer with the Southeast federal dealer permit. For shark gillnet trips in the Southern Zone, no more than 2 king mackerel per crew member can be on board, and no more than 2 king mackerel per crew member can be sold from the trip. For shark gillnet trips in the Northern Zone, no more than 3 king mackerel per crew member can be on board, and no more than 3 king mackerel per crew member can be sold from the trip. **(Gulf AP and South Atlantic AP Recommended)**

NOTE:

The limits under Alternative 2 would be pre-20A status quo (Florida- 2 fish; other states- 3 fish)

The limits under Alternative 3 would make the limits in the Southern Zone consistent throughout the SZ.

Advisory Panel Recommendations

- South Atlantic AP: Alternative 3 as the Preferred Alternative (April 2015).
- Gulf AP: Recommended that the small coastal shark gillnet fishery in the South Atlantic be allowed to harvest and sell the recreational bag limit so long as the vessel has a federal commercial king mackerel permit and the commercial king mackerel season is open (March 2015). Recommended Alternative 3 as the Preferred (November 2015).

Scoping Comments (January 2015)

Several commenters supported allowing shark gillnet fishermen to sell a small amount of king mackerel.

Table 4. Information on gillnet trips landing shark and king mackerel in Florida from 2010-2014. Source: ACCSP

Year	# Gillnet Trips Shark ^a	# Gillnet Trips Shark and King Mackerel	# Participants with Shark/KM Gillnet Trips	Total Lbs King Mackerel Landed on Shark Gillnet Trips	Average Lbs King Mackerel Landed on Shark Gillnet Trips
2010	168	28	5	1255.3	44.8
2011	382	21	3	1039.0	49.5
2012	498	32	4	923.5	28.9
2013 ^b	298	33	5	2635.4	79.9
2014 ^c	161	23	4	2474.2	107.6
TOTAL	1507	137	--	8327.3	60.8

^a Small coastal sharks (SCS)—blacknose, sharpnose, bonnethead, and finetooth

^b SCS closed in September 30, 2013

^c SCS closed in July 28, 2014

Fisherman info on mesh size and king mackerel size (Florida):

5" mesh catches 8-13 lb king mackerel

6" mesh catches 12-17

7" mesh catches 16-22

8" mesh catches 18-25

- Most use 6-7" for sharks

Note that Alternative 3 would include the Southern Zone (FL, GA, SC) but there are no gillnet trips with shark and king mackerel in GA or SC in the last five years.

ACTION 4 - Establish Commercial Split Seasons for Atlantic Migratory Group King Mackerel in the Southern Zone

NOTE: The reorganization and language in Actions 4 and 5 were approved by the South Atlantic Council in September 2015 and the Gulf Council in October 2015.

Alternative 1: No action - The commercial fishing year for Atlantic king mackerel is March 1 – February 28. The Southern Zone quota is allocated for the entire fishing year. (**Gulf AP Recommended**)

South Atlantic Preferred Alternative 2. Allocate the Southern Zone quota for Atlantic king mackerel into two split season quotas: 60% to the period March 1 - September 30 (season 1) and 40% to the period October 1 – the end of February (season 2). Any remaining quota from season 1 would transfer to season 2. Any remaining quota from season 2 would not be carried forward. When the quota for the season is met or expected to be met, commercial harvest of king mackerel in the Southern Zone will be prohibited for the remainder of the season. (**South Atlantic Mackerel AP Recommended**)

Alternative 3. Allocate the Southern Zone quota for Atlantic king mackerel into two split season quotas: 60% to the period March 1 – October 31 (season 1) and 40% to the period November 1 – the end of February (season 2). Any remaining quota from season 1 would transfer to season 2. Any remaining quota from season 2 would not be carried forward. When the quota for the season is met or expected to be met, commercial harvest of king mackerel in the Southern Zone will be prohibited for the remainder of the season.

Alternative 4. Allocate the Southern Zone quota for Atlantic king mackerel into two split season quotas: 50% to the period March 1 – October 31 (season 1) and 50% to the period November 1 – the end of February (season 2). Any remaining quota from season 1 would transfer to season 2. Any remaining quota from season 2 would not be carried forward. When the quota for the season is met or expected to be met, commercial harvest of king mackerel in the Southern Zone will be prohibited for the remainder of the season.

Discussion:

With the new boundary to be established in Action 1, the Gulf Florida East Coast Subzone will no longer exist in the winter. That area will be part of the Atlantic management area year-round.

In April 2015, the South Atlantic Mackerel AP made recommendations for Florida east coast management, including the following recommendation on a split season for the Southern Zone:

The Southern Zone quota would have seasonal allocations. The first season would be March 1 – September 30 and would be allocated 60% of the Southern Zone quota. The second season would be October 1- February 28 and would be allocated 40% of the Southern Zone quota plus any unused quota from the first season. There would be no sub-quota for the FLEC subzone. Quota transfers between the Northern Zone and Southern Zone would still be allowed.

Considerations:

- A large proportion (90% or higher) of the Southern Zone quota is landed on the Florida east coast.
- A commercial split season for the Southern Zone would ensure that a portion of the Southern Zone quota would be available in the later months of the fishing year, even if there is a high level of harvest in the earlier months.
- In general, landings patterns for the Southern Zone show that landings are at high levels in the spring and start to decrease in the summer. The months of September through November usually have the lowest landings levels of the year, followed by an increase starting in November or December (**Figure 5**, (Figure 2.4.1 in the amendment document)).
- Fishermen report that although landings in the fall months usually start to increase in November, in some years the king mackerel become abundant in October.
- In years of high landings (2009/10), there may be high landings in March that may affect season 1 landings reaching a split season quota.
- Please see the draft CMP Amendment 26 (**Attachment 1**), Section 2.4 for more details.

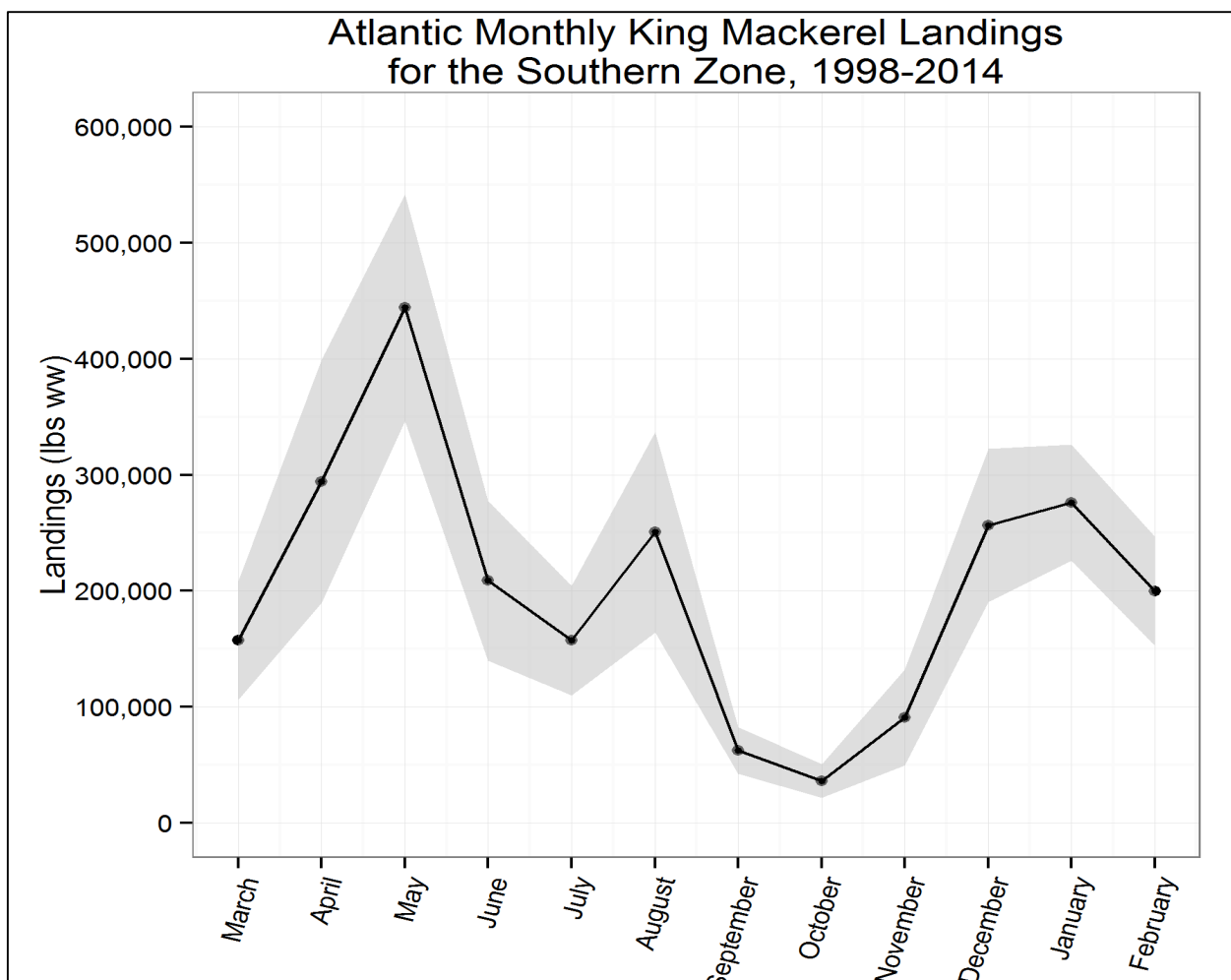


Figure 8. King mackerel commercial landings in the Southern Zone by month for fishing years 1998-99 through 2013-14. The solid line shows the average pounds per month, and the gray shaded area includes pounds per month with CI= 95%.

Source: NMFS ALS

Table 5. Examples of possible split season quotas for the Southern Zone (in lbs) with a 60/40 allocation (Alternatives 2 (**SA Preferred**) and 3).

	ACL=ABC ¹ High Recruitment ²		ACL=ABC ¹ Medium Recruitment ³		South Atlantic Preferred Alternative for ACL (Action 2-2) ACL=Deterministic Equilibrium Yield at F _{30%SPR} ⁴	
	Season 1 (60%)	Season 2 (40%)	Season 1 (60%)	Season 2 (40%)	Season 1 (60%)	Season 2 (40%)
2016/17	3,001,440	2,000,960	2,816,736	1,877,824	2,170,272	1,446,848
2017/18	2,724,384	1,816,256	2,447,328	1,631,552		
2018/19	2,401,152	1,600,768	2,216,448	1,477,632		
2019/20	2,170,272	1,446,848	2,077,920	1,385,280		

¹ Alternative 2 under Action 2-2

² Alternative 2 under Action 2-1, ABC under High Recruitment Scenario

³ Alternative 3 under Action 2-1, ABC under Medium Recruitment Scenario

⁴ Alternative 3 under Action 2-2

Table 6. Examples of possible split season quotas for the Southern Zone (in lbs) with a 50/50 allocation (Alternative 4).

	ACL=ABC ¹ High Recruitment ²	ACL=ABC ¹ Medium Recruitment ³	South Atlantic Preferred Alternative for ACL (Action 2-2) ACL=Deterministic Equilibrium Yield at F _{30%SPR} ⁴
	Season 1 or 2 (50%)	Season 1 or 2 (50%)	Season 1 or 2 (50%)
2016/17	2,501,200	2,347,280	1,808,560
2017/18	2,270,320	2,039,440	
2018/19	2,000,960	1,847,040	
2019/20	1,808,560	1,731,600	

¹ Alternative 2 under Action 2-2

² Alternative 2 under Action 2-1, ABC under High Recruitment Scenario

³ Alternative 3 under Action 2-1, ABC under Medium Recruitment Scenario

⁴ Alternative 3 under Action 2-2

Based on landings patterns for the Southern Zone, the risk that the season 1 or season 2 quota would be met and result in an early closure will vary, because landings for king mackerel in the Southern Zone fluctuate from year to year depending on stock dynamics, environmental factors, and fishing effort.

Please see Appendix B Attachment 2b for tables and figures comparing the potential split season quotas.

Advisory Panel Recommendations
- South Atlantic AP: Alternative 2 would align with AP recommendations (April 2015).
- Gulf AP: Recommended Alternative 1 (No Action) as the Preferred, with trip limits to manage the rate of harvest (November 2015).

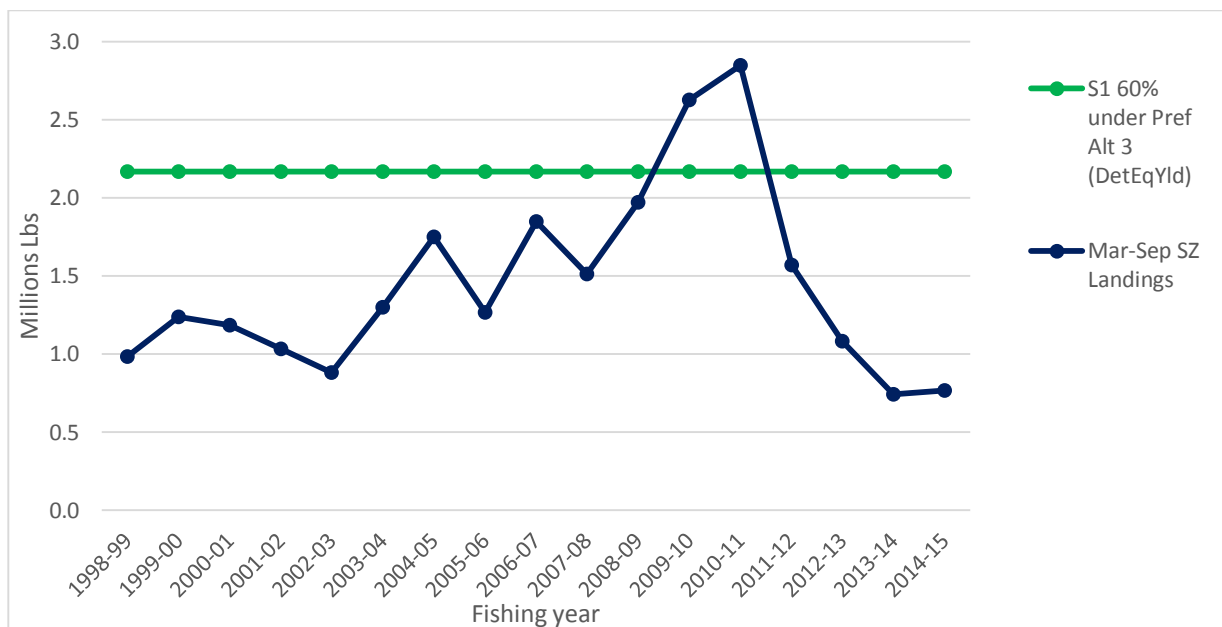


Figure 9. Southern Zone landings in the period of March through September compared to the proposed Season 1 quota under **South Atlantic Preferred Alternative 2**, based on the ACL under the preferred alternative in Action 2-2

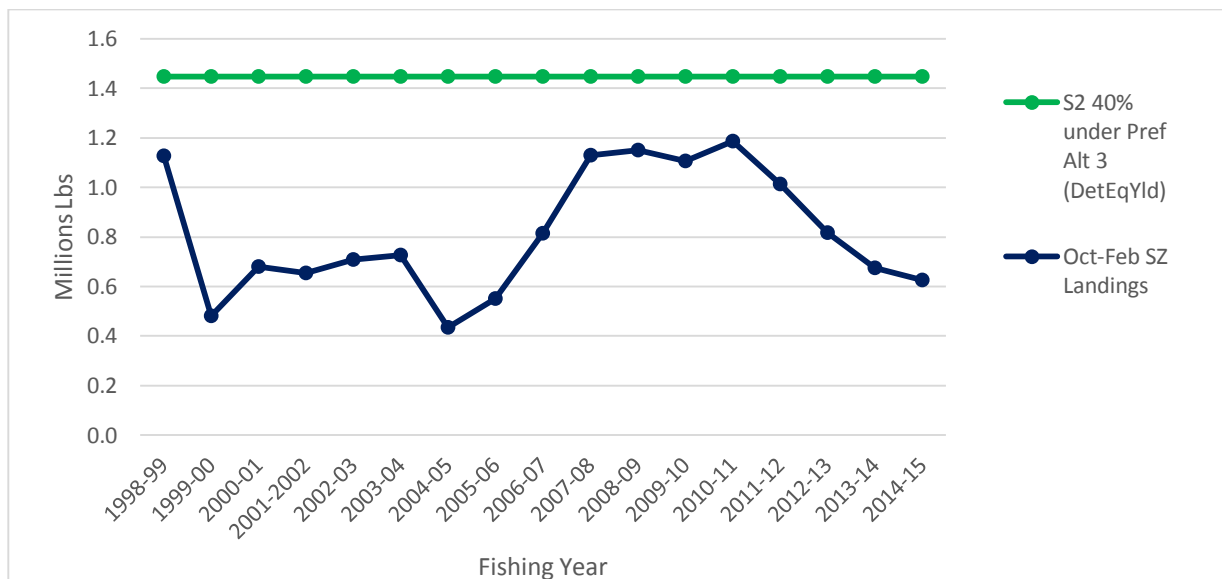


Figure 10. Southern Zone landings in the period of October through February compared to the proposed Season 2 quota under **South Atlantic Preferred Alternative 2**, based on the ACL under the preferred alternative in Action 2-2

ACTION 5 - Establish trip limits for the Southern Zone

Alternative 1: No action. The trip limits for the Southern Zone will remain:

North of the Flagler/ Volusia county line, the trip limit is 3,500 lbs year-round.

In the area between the Flagler/ Volusia county line and the Volusia/Brevard county line, the trip limit is 3,500 lbs from April 1 through October 31.

In the area from the Volusia/Brevard county line to the Miami-Dade/Monroe county line, the trip limit is 75 fish from April 1 through October 31.

From November 1 through March 31, no trip limit is in place for the area between the Flagler/Volusia county line to the Dade/Monroe county line.

Alternative 2: In the Southern Zone, the trip limit north of the Flagler/Volusia county line is 3,500 lbs. For the area south of the Flagler/Volusia county line, establish a year-round trip limit of 75 fish for Atlantic king mackerel.

Alternative 3: In the Southern Zone, the trip limit north of the Flagler/Volusia county line is 3,500 lbs. For the area south of the Flagler/Volusia county line, establish a trip limit of 50 fish from March 1- March 31, and 75 fish for the remainder of season 1 (as designated in Action 4).

Option 3a. Beginning on August 1 and continuing through the end of season 1, if 75% of the season 1 quota has been taken, the trip limit will be 50 fish.

Option 3b. At any time during season 1, if 75% of the season 1 quota has been taken, the trip limit will be 50 fish.

Alternative 4: In the Southern Zone, the trip limit north of the Flagler/Volusia county line is 3,500 lbs. For the area south of the Flagler/Volusia county line, establish a trip limit of 50 fish for season 2 (as designated in Action 4).

Option 4a. Beginning on February 1 and continuing through the end of February--

(1) If 70 % or more of the season 2 quota has been taken, the trip limit is 50 fish.

(2) If less than 70 % of the season 2 quota has been taken, the trip limit is 75 fish.

Option 4b. Beginning on January 1 and continuing through the end of February--

(1) If 70 % or more of the season 2 quota has been taken, the trip limit is 50 fish.

(2) If less than 70 % of the season 2 quota has been taken, the trip limit is 75 fish.

Option 4c. Beginning on February 1 and continuing through the end of February--

(1) If 80 % or more of the season 2 quota has been taken, the trip limit is 50 fish.

(2) If less than 80 % of the season 2 quota has been taken, the trip limit is 75 fish.

NOTE: In December 2015, the South Atlantic Council modified Action 5. The Gulf Council will review the changes at their January 2016 meeting.

Discussion:

In April 2015, the South Atlantic Mackerel AP provided the following recommendations for management on the Florida east coast:

March 1 through September 30

- The FLEC subzone would be from the Volusia/Brevard county line to the Dade/Monroe county line.
- The commercial trip limit in the FLEC subzone would be 75 fish with a possible step-down to 50 fish on May 1. The step-down could apply for only the month of May or through the summer.
- The commercial trip limit north of the Volusia/Brevard county line could be 3,500 lbs.

October 1 through February 28/29

- The FLEC subzone would be from the Flagler/Volusia county line to the Dade/Monroe county line.
- The commercial trip limit in the FLEC subzone would be 50 fish with a possible increase to 75 fish if X% of the quota has not been met by [date].
- The commercial trip limit north of the Flagler/Volusia county line could be 3,500 lbs.

Potential Effects for Season 1 trip limits (Alternative 3)

-Under a period of High Landings (such as 2009/2010 year), there could be closures under the current **South Atlantic Preferred** ACL/SZ Quota (Action 2-2) and the **South Atlantic Preferred** Split Season Quotas (Action 4)

- Under a period of Average Landings or Low Landings (such as 2013/14 year), there would be no expected early closures under any Season 1 trip limits in Alternative 3.

Table 7. Predicted closure dates for commercial season alternatives for Action 4 with the trip limit options stated in **Alternative 3**. The closure dates were predicted for the Atlantic migratory group in the Southern Zone using the landings from 2009/2010.

	Split Season Quota Alternatives from Action 4	
	Alternative 1 (No Split Seasons) Mar-Feb	Action 4, Alternative 2 (South Atlantic Preferred) Mar-Sep 60%
HIGH Quota	5,002,400	3,001,440
75% of Quota	3,751,800	2,251,080
Predicted Date to Reach 75% of Quota	29-Jan	17-Aug
Option 3a Closure Date	No Closure	No Closure
Option 3b Closure Date	No Closure	No Closure
MEDIUM Quota	3,694,080	2,216,448
75% of Quota	2,770,560	1,662,336
Predicted Date to Reach 75% of Quota	30-Sep	2-Jul
Option 3a Closure Date	No Closure	15-Aug
Option 3b Closure Date	No Closure	17-Aug

Table 7, continued		
LOW Quota	3,001,440	1,800,864
75% of Quota	2,251,080	1,350,648
Predicted Date to Reach 75% of Quota	15-Aug	9-Jun
Option 3a Closure Date	8-Dec	15-Jul
Option 3b Closure Date	8-Dec	16-Jul

During periods of average or low landings (2013/14 fishing year), there would be no expected closures for the trip limits proposed for season 1 (Alternative 3) under a year-round quota or under a split season quota.

Potential Effects for Season 2 trip limits (Alternative 4)

When compared to landings patterns for October through February, none of the options in Alternative 4 would have resulted in an early closure, even under the lowest possible Season 2 quota.

Advisory Panel Recommendations
<p>- South Atlantic AP: In Action 5-1, Alternative 3/Option 3b and Alternative 4/Option 4a would align with AP recommendations (April 2015). In Action 5-2, Alternatives 3 and 4 would align with AP recommendations (April 2015).</p> <p>- Gulf AP: In Action 5-1, recommended Alternative 3/Option 3b and Alternative 4/Option 4a as the Preferred Alternatives/Options (November 2015). However, the Gulf AP did not support a split season quota in Action 4 so the season dates specified in Alternatives 3 and 4 would not be aligned with split season quotas, but just for seasonal management measures in the Florida East Coast zone. The Gulf AP did not make any recommendations for Action 5-2.</p>

ACTION 6 - Modify the ACL for Gulf Migratory Group King Mackerel

Alternative 1: No action – Do not modify the ACL for Gulf migratory group king mackerel. The ACL of 10.8 million pounds will remain.

[Commercial ACL= 3.456 mp; Recreational ACL= 7.433 mp]

Preferred Alternative 2: Set the Gulf migratory group king mackerel ACL equal to the ABC recommended by the Gulf Scientific and Statistical Committee for 2015-2019. **(Gulf AP Recommended)**

ABC values are in millions of pounds, whole weight:

Year	ABC (mp ww)
2015	9.62
2016	9.21
2017	8.88
2018	8.71
2019	8.55

Alternative 3: Establish a constant catch scenario for the Gulf migratory group king mackerel ACL for one of the following time periods. The ACL during the selected time period may not exceed the ABC recommended by the Gulf SSC for any year during the selected time period.

Option a: A three-year period (2015-2017)

Option b: A five-year period (2015-2019)

It is important to remember that even though the OFL and ABC projections are lower than the current ACL, the amount of area for which the *new* OFL and ABC recommendations applies is in fact smaller than the area for which the *old* ACL applies.

Advisory Panel Recommendations

- Gulf AP recommends that the Council set the ACL equal to the ABC for 2015 (9.62 million pounds), and that the SSC annually readdress the ABC every year thereafter (March 2015).
- Gulf AP recommended Alternative 2 as the Preferred Alternative (November 2015).

ACTION 7 - Revise the Commercial Zone Quotas for Gulf Migratory Group King Mackerel

Alternative 1: No action – Maintain the current commercial zone quotas for Gulf migratory group king mackerel (Western Zone: 31%; Northern Zone: 5.17%; Southern Zone Handline: 15.96%; Southern Zone Gillnet: 15.96%; Florida East Coast Zone: 31.91%).

Alternative 2: Revise the commercial zone quotas for Gulf migratory group king mackerel by dividing the Florida East Coast Zone's quota into four equal parts, to be added to each of the remaining Gulf commercial zones.

Alternative 3: Revise the commercial zone quotas for Gulf migratory group king mackerel by dividing each individual zone's quota percentage by the sum of the quota percentages for all Gulf commercial zones *except* the Florida East Coast Zone, with each resultant percentage becoming that respective zone's new commercial quota.

Alternative 4: Revise the commercial zone quotas for Gulf migratory group king mackerel as follows: 40% for the Western Zone; 18% for the Northern Zone; 21% for the Southern Zone Handline component; and 21% for the Southern Zone Gillnet component. **(Gulf and South Atlantic AP Recommended)**

Table 8. Current commercial fishing zone allocations for Gulf migratory group king mackerel.

Gulf King Mackerel: Commercial Zone Allocations	
Zone	Percent of Comm Allocation
Western	31%
Northern	5.17%
Southern: Handline	15.96%
Southern: Gillnet	15.96%
FL East Coast	31.91%

Table 9. Options for redistribution of commercial zone allocation for Gulf migratory group king mackerel by percentage.

Zone	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Western	31%	38.98%	45.53%	40%
Northern	5.17%	13.15%	7.61%	18%
Southern: H/L	15.96%	23.93%	23.43%	21%
Southern: Gillnet	15.96%	23.93%	23.43%	21%
FL East Coast	31.91%			

Table 10. Options for redistribution of commercial zone allocation for Gulf migratory group king mackerel in pounds of fish. Assumes the ACL = ABC as in Alternative 2 of Action 6, and sector allocations represented by Alternative 1 in Action 8.

Zone	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Western	1,071,360	1,199,883	1,401,596	1,231,360
Northern	178,675	404,733	234,266	554,112
Southern: H/L	551,578	736,892	721,269	646,464
Southern: Gillnet	551,578	736,892	721,269	646,464
FL East Coast	1,102,810			

Advisory Panel Recommendations

- Gulf AP recommended Alternative 4 as the Preferred Alternative (March 2015 and November 2015).
- South Atlantic AP also recommended Alternative 4 as the Preferred Alternative (April 2015),

ACTION 8 - Revise the Recreational and Commercial Allocations of Gulf Migratory Group King Mackerel

Alternative 1: No action – Maintain the current recreational and commercial allocations for Gulf migratory group king mackerel (68% recreational, 32% commercial). **(Gulf CMP AP Recommended)**

Alternative 2: Revise the recreational and commercial allocations for Gulf migratory group king mackerel by dividing the stock ACL using one of the options below.

Option a: 63% to the recreational sector, and 37% to the commercial sector.

Option b: 58% to the recreational sector, and 42% to the commercial sector.

Option c: 48% to the recreational sector, and 52% to the commercial sector.

Alternative 3: Revise the recreational and commercial allocations for Gulf migratory group king mackerel by transferring a percentage of the stock ACL to the commercial allocation annually until such a time that the recreational sector lands 80% of its allocation, after which no additional allocation will be transferred from the stock ACL to the commercial allocation.

Option a: Transfer 2% of the stock ACL annually to the commercial allocation.

Option b: Transfer 5% of the stock ACL annually to the commercial allocation.

Alternative 4: Conditionally transfer a certain percentage (*Options a-d*) of the stock ACL to the commercial sector until such a time that recreational landings reach a predetermined threshold (*Options e-g*). If this threshold is met, the recreational and commercial allocations will revert to 68% for the recreational sector and 32% for the commercial sector.

Conditional Quota Transfer (MUST CHOOSE ONE):

Option a: Transfer 5% of the stock ACL to the commercial sector.

Option b: Transfer 10% of the stock ACL to the commercial sector.

Option c: Transfer 15% of the stock ACL to the commercial sector.

Option d: Transfer 20% of the stock ACL to the commercial sector.

Recreational ACL Threshold (MUST CHOOSE ONE):

Option e: Revert to the status quo sector allocations if 80% of the adjusted recreational sector ACL is landed.

Option f: Revert to the status quo sector allocations if 90% of the adjusted recreational sector ACL is landed.

Option g: Revert to the status quo sector allocations if 100% of the adjusted recreational sector ACL is landed.

Alternative 5: Establish a sunset provision for any change in the sector allocations for Gulf migratory group king mackerel. After the predetermined time period, any change in sector allocations would revert back to the allocations specified in the original Coastal Migratory Pelagics Fishery Management Plan for the Gulf of Mexico (68% for the recreational sector and 32% for the commercial sector).

Option a: Sunset any change in sector allocations after a five year period (2016-2020).

Option b: Sunset any change in sector allocations after a ten year period (2016-2025).

Option c: Sunset any change in sector allocations after a fifteen year period (2016-2030).

Discussion:

The Councils are considering modifying the sector allocations for Gulf migratory group king mackerel. Over the past ten years, the commercial sector has consistently landed near the commercial ACL while the recreational sector has landed decreasingly lower proportions of the recreational ACL.

Table 11. Proportion of sector ACLs landed and proportion of total ACL landed for Gulf migratory group king mackerel, including those landings attributed to the Florida East Coast Zone (FLEC). The FLEC landings are included here since there is not a recreational allocation specifically for the FLEC Zone.

Fishing Year	Total TAC/ACL	Comm ACL	Comm Landings	Rec ACL	Rec Landings	% of Sector ACL Landed		Total ACL Landed
						Comm ¹	Rec ²	
2001-02	10.2 mp	3.264 mp	2.902 mp	6.936 mp	3.669 mp	88.9%	52.9%	64.7%
2002-03	10.2 mp	3.264 mp	3.186 mp	6.936 mp	2.816 mp	97.6%	40.6%	59.3%
2003-04	10.2 mp	3.264 mp	3.094 mp	6.936 mp	3.211 mp	94.8%	46.3%	62.7%
2004-05	10.2 mp	3.264 mp	3.215 mp	6.936 mp	2.532 mp	98.5%	36.5%	56.4%
2005-06	10.2 mp	3.264 mp	2.983 mp	6.936 mp	2.996 mp	91.4%	43.2%	58.9%
2006-07	10.8 mp	3.456 mp	3.231 mp	7.344 mp	3.305 mp	93.5%	45.0%	60.5%
2007-08	10.8 mp	3.456 mp	3.459 mp	7.344 mp	2.629 mp	100.1%	35.8%	56.3%
2008-09	10.8 mp	3.456 mp	3.833 mp	7.344 mp	2.350 mp	110.9%	32.0%	57.6%
2009-10	10.8 mp	3.456 mp	3.674 mp	7.344 mp	3.525 mp	106.3%	48.0%	68.0%
2010-11	10.8 mp	3.456 mp	3.522 mp	7.344 mp	2.181 mp	101.9%	29.7%	53.0%
2011-12	10.8 mp	3.456 mp	3.428 mp	7.344 mp	2.438 mp	99.2%	33.2%	54.3%
2012-13	10.8 mp	3.456 mp	3.539 mp	7.344 mp	2.710 mp	102.4%	36.9%	57.9%
2013-14	10.8 mp	3.456 mp	3.055 mp	7.344 mp	2.916 mp	88.4%	39.7%	55.3%

¹Commercial allocation = 32%

²Recreational allocation = 68%

Source: SERO

Table 12. Resultant allocations based on options presented in Action 8. Alternative 3 would be dependent upon the landings reported in the year during which the recreational sector landed 80% of its allocation.

Option	Commercial Allocation	Recreational Allocation
Alternative 1	32%	68%
Alternative 2, Option a	37%	63%
Alternative 2, Option b	42%	58%
Alternative 2, Option c	52%	48%
Alternative 3		
Alternative 4, Option a	37%	63%
Alternative 4, Option b	42%	58%
Alternative 4, Option c	47%	53%
Alternative 4, Option d	52%	48%

Gulf King Mackerel Landings and ACLs: 2000-2013

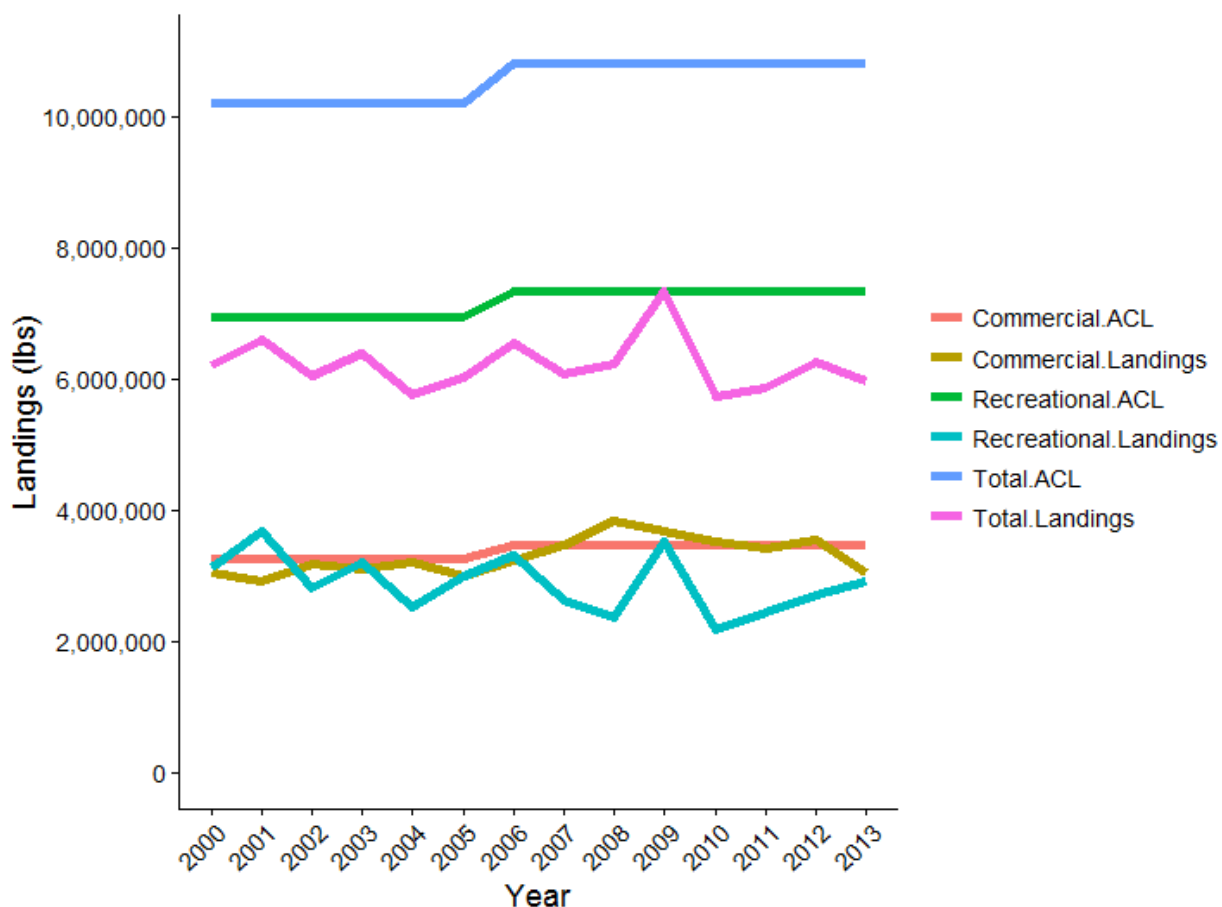


Figure 11. Trends in Gulf migratory group king mackerel landings by sector for the 2000-01 to the 2013-14 fishing seasons. Landings are in pounds.

Advisory Panel Recommendations

- Gulf AP recommended that the Council abstain from reallocating any king mackerel from the recreational sector to the commercial sector until such a time that additional options for utilizing excess quota are explored for the recreational sector (March 2015).
- Gulf AP recommended Alternative 1, or if not, then Alternative 5 Option a (November 2015).

ACTION 9 - Modify the Recreational Bag Limit for Gulf Migratory Group King Mackerel

Alternative 1: No action - Maintain the current recreational bag limit of two fish per person per day.

Alternative 2: Increase the bag limit to three fish per person per day. **(Gulf CMP AP Recommended)**

Preferred Alternative 3: Increase the bag limit to four fish per person per day.

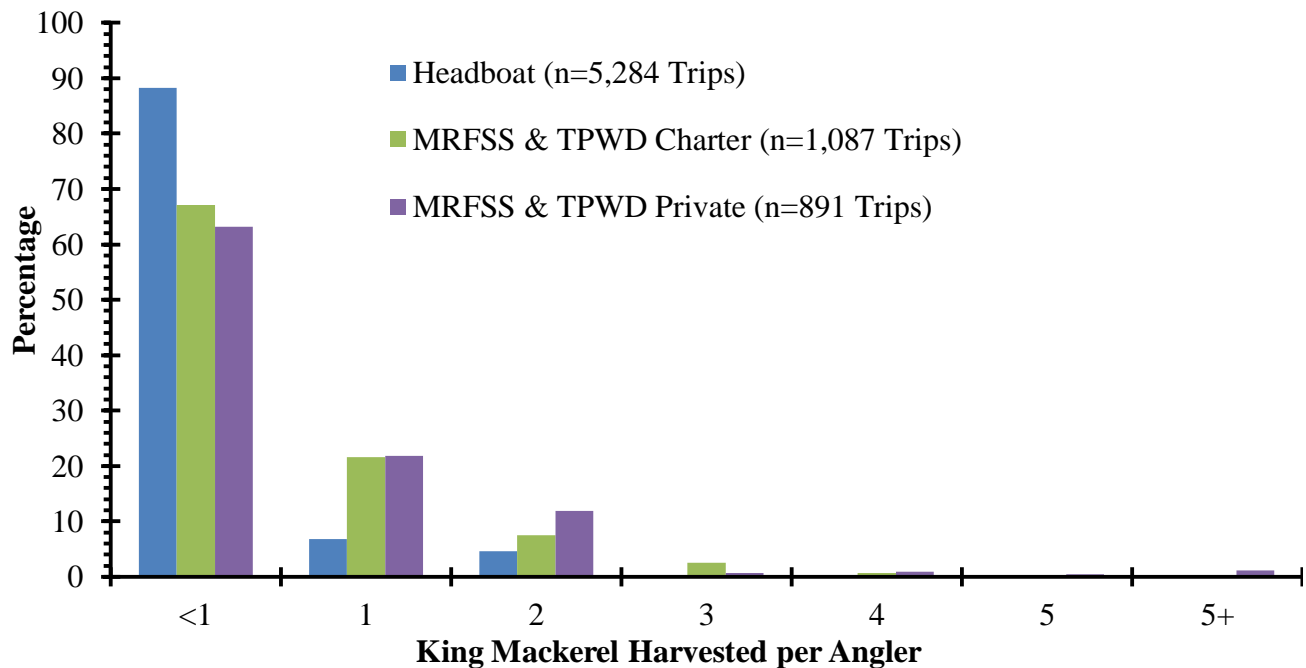


Figure 12. Distribution of Gulf of Mexico migratory group king mackerel harvested per angler by mode from 2011 through 2013.

Source: NMFS SERO LAPP/DM Branch.

Advisory Panel Recommendations

- Gulf AP recommended Alternative 2 as the Preferred Alternative (March 2015 and Nov 2015). Additionally, the Gulf AP recommends that there be no closed season for the recreational sector under any management measures (November 2015).