

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

APP



Draft Amendment 26 Decision Document

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MANAGEMENT ALTERNATIVES

Action 1 – Adjust the Management Boundary for Gulf of Mexico (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 2.1.1**).

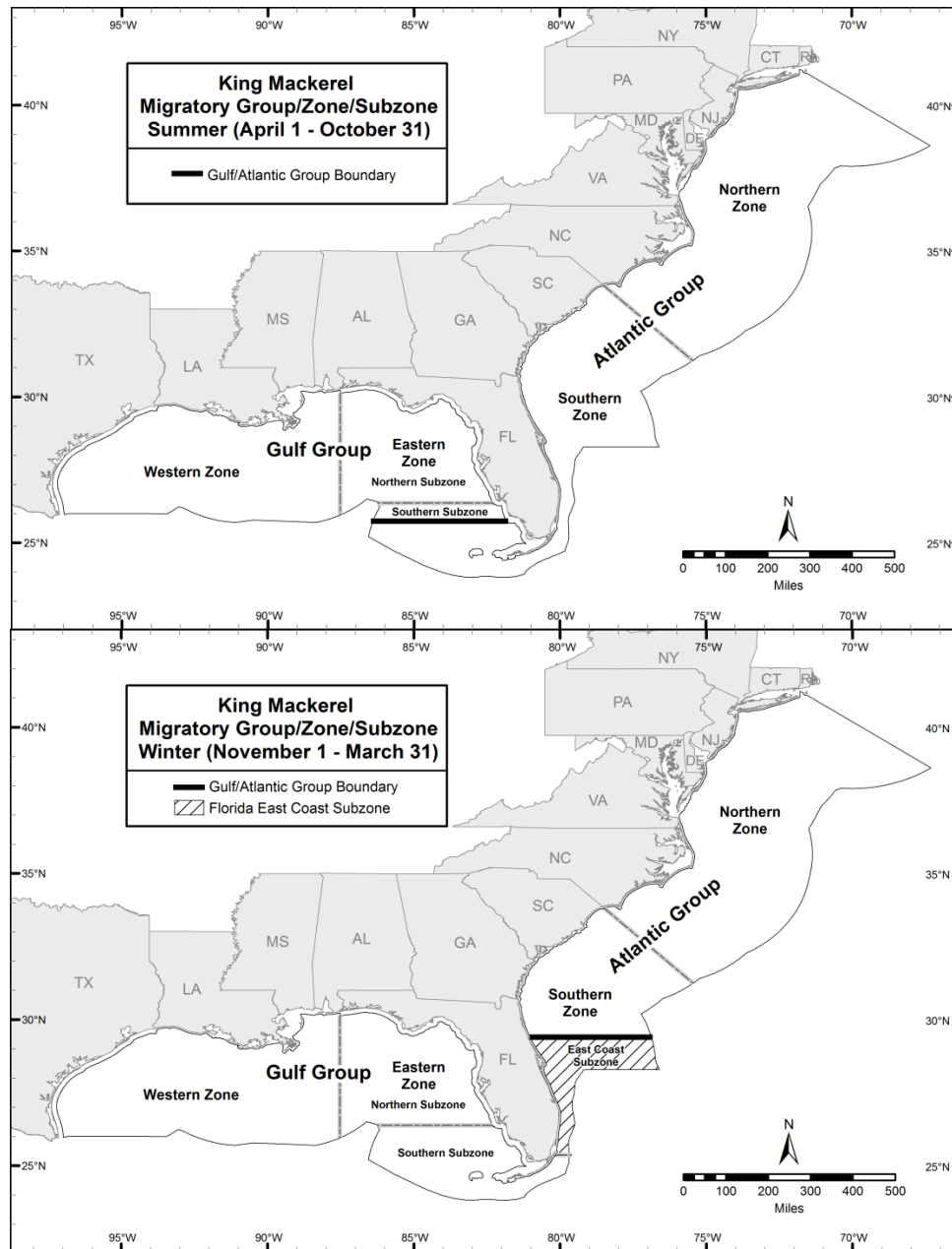


Figure 2.1.1. Alternative 1: Current seasonal management boundaries for Atlantic and Gulf migratory groups of king mackerel.

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 2.1.2**). The South Atlantic Council would be responsible for management measures in the mixing zone.

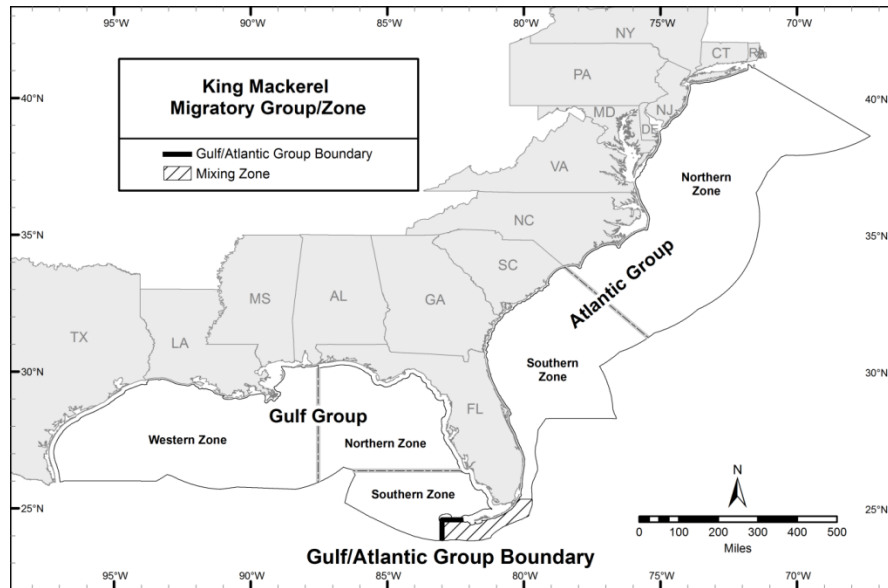


Figure 2.1.2. Alternative 2: Proposed management boundary for Atlantic and Gulf migratory groups of king mackerel.

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 2.1.3**). The Gulf Council would be responsible for management measures in the mixing zone. (**Gulf and South Atlantic AP Recommended**)

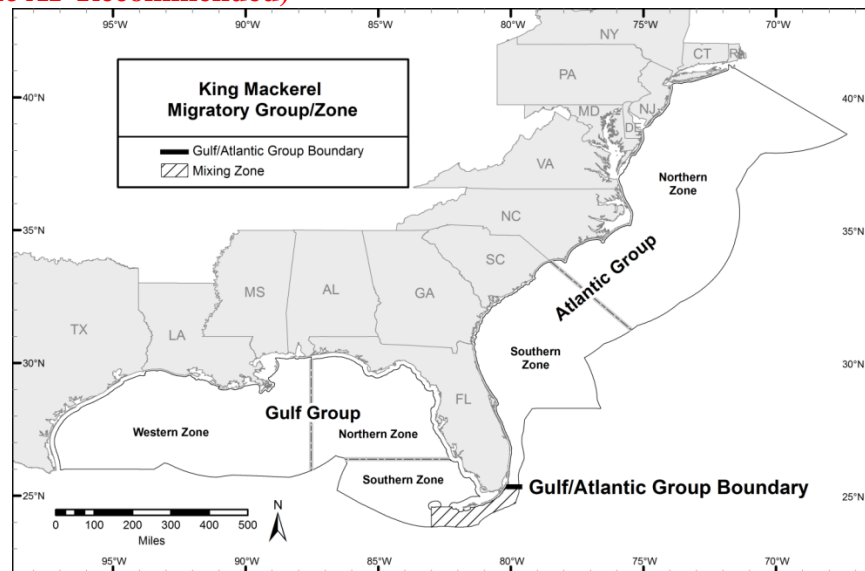


Figure 2.1.3. Alternative 3: Proposed management boundary for Atlantic and Gulf groups of king mackerel.

Action 2 – Update Reference Points 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 maximum sustainable yield (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 South Atlantic Council’s Scientific and Statistical Committee (SSC) recommended a proxy for MSY at 30% SPR (spawning potential ratio), which is 12.7 mp.

Table 2.2.1. Recommendations from the October 2014 South Atlantic 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	12.7 mp
ABC Control Rule Adjustment	17.5%
P-Star	32.5%

See the CMP Fishery Management Plan (GMFMC and SAFMC 1982) and Amendment 18 (GMFMC and SAFMC 2011) for more information about the biological parameters in this action.

The South Atlantic SSC provided the following overfishing levels (OFLs) for Atlantic king mackerel at their October 2014 meeting (**Table 2.2.2**).

Table 2.2.2. Recommendation for OFL from the October 2014 South Atlantic 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 king mackerel (10.46 million pounds (mp)).

Alternative 2: Revise the ABC for Atlantic king mackerel for 2016/17 through 2019/20 based on the ABC levels recommended by the SSC for ABC under a high recruitment scenario. **(South Atlantic AP Recommended)**

Alternative 3: Revise the ABC for Atlantic 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 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 2.2.1.1. Recommendations from the October 2014 South Atlantic SSC meeting for Atlantic king mackerel. ABC recommendations are in the shaded columns.

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

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

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 recreational ACL [0.5 or (1-PSE), whichever is greater]. **(South Atlantic AP Recommended)**

Table 2.2.2.1. Possible outcomes under **Alternative 2** based on alternatives in Action 2-1. The recreational allocation is 62.9% and the commercial allocation is 37.1%. The Northern Zone allocation is 23.04% and the Southern Zone allocation is 76.96% (see Appendix E for details on how the Northern and Southern Zone quota allocations were recalculated using the SEDAR 38 boundary).

ACL = ABC HIGH Recruitment Scenario Action 2-1, Alt 2						
Fishing year	Total Atl KM ACL	Commercial			Recreational	
		Comm ACL	Northern Zone Quota (lbs)	Southern Zone Quota (lbs)	Rec ACL	Rec ACT
2016/17	17.4 mp	6.5 mp	1,497,600	5,002,400	10.9 mp	10.1 mp
2017/18	15.8 mp	5.9 mp	1,359,360	4,540,640	9.9 mp	9.2 mp
2018/19	14.1 mp	5.2 mp	1,198,080	4,001,920	8.9 mp	8.3 mp
2019/20	12.7 mp	4.7 mp	1,082,880	3,617,120	8.0 mp	7.4 mp
ACL = ABC MEDIUM Recruitment Scenario Action 2-1, Alt 3						
Fishing year	Total Atl KM ACL	Commercial			Recreational	
		Comm ACL	Northern Zone Quota (lbs)	Southern Zone Quota (lbs)	Rec ACL	Rec ACT
2016/17	16.5 mp	6.1 mp	1,405,440	4,694,560	10.4 mp	9.7 mp
2017/18	14.3 mp	5.3 mp	1,221,120	4,078,880	9.0 mp	8.4 mp
2018/19	12.9 mp	4.8 mp	1,105,920	3,694,080	8.1 mp	7.5 mp
2019/20	12.1 mp	4.5 mp	1,036,800	3,463,200	7.6 mp	7.1 mp

Table 2.2.2.1 continued on the next page

Table 2.2.2.1 continued						
ACL = ABC LOW Recruitment Scenario Action 2-1, Alt 4						
Fishing year	Total Atl KM ACL	Commercial			Recreational	
		Comm ACL	Northern Zone Quota (lbs)	Southern Zone Quota (lbs)	Rec ACL	Rec ACT
2016/17	15.4 mp	5.7 mp	1,313,280	4,386,720	9.7 mp	9.0 mp
2017/18	12.9 mp	4.8 mp	1,105,920	3,694,080	8.1 mp	7.5 mp
2018/19	11.9 mp	4.4 mp	1,013,760	3,386,240	7.5 mp	7.0 mp
2019/20	11.6 mp	4.3 mp	990,720	3,309,280	7.3 mp	6.8 mp

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

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)**

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.

Note: 75% of F_{MSY} (which is the same as 75% $F_{30\%SPR}$ because 30% SPR is the proxy for MSY) is usually in the terms of reference (TORs) of all assessments. 75% F_{MSY} was the old OY, as yield at the long term F_{MSY} (MSY) was the old OFL. It is still part of the TORs in case the South Atlantic Council wants to choose that strategy to have stable catches rather than following the P recommendation and have changing catch levels each year.*

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 2.2.2.2. Possible outcomes under **Alternative 5** based on alternatives in Action 2-1. The recreational allocation is 62.9% and the commercial allocation is 37.1%. The Northern Zone is 23.04% and the Southern Zone allocation is 76.96% (see Appendix E for details on how the Northern and Southern Zone quota allocations were recalculated using the SEDAR 38 boundary).

ACL = 90% ABC HIGH Recruitment Scenario Action 2-1, Alt 2						
Fishing year	Total Atl KM ACL	Commercial			Recreational	
		Comm ACL	Northern Zone Quota (lbs)	Southern Zone Quota (lbs)	Rec ACL	Rec ACT
2016/17	15.7 mp	5.8 mp	1,336,320	4,463,680	9.9 mp	9.2 mp
2017/18	14.2 mp	5.3 mp	1,221,120	4,078,880	8.9 mp	8.3 mp
2018/19	12.7 mp	4.7 mp	1,082,880	3,617,120	8.0 mp	7.4 mp
2019/20	11.4 mp	4.2 mp	967,680	3,232,320	7.2 mp	6.7 mp
ACL = 90% ABC MEDIUM Recruitment Scenario Action 2-1, Alt 3						
Fishing year	Total Atl KM ACL	Commercial			Recreational	
		Comm ACL	Northern Zone Quota (lbs)	Southern Zone Quota (lbs)	Rec ACL	Rec ACT
2016/17	14.9 mp	5.5 mp	1,267,200	4,232,800	9.4 mp	8.7 mp
2017/18	12.9 mp	4.8 mp	1,105,920	3,694,080	8.1 mp	7.5 mp
2018/19	11.6 mp	4.3 mp	990,720	3,309,280	7.3 mp	6.8 mp
2019/20	10.9 mp	4.0 mp	921,600	3,078,400	6.9 mp	6.4 mp
ACL = 90% ABC LOW Recruitment Scenario Action 2-1, Alt 4						
Fishing year	Total Atl KM ACL	Commercial			Recreational	
		Comm ACL	Northern Zone Quota (lbs)	Southern Zone Quota (lbs)	Rec ACL	Rec ACT
2016/17	13.9 mp	5.2 mp	1,198,080	4,001,920	8.7 mp	8.1 mp
2017/18	11.6 mp	4.3 mp	990,720	3,309,280	7.3 mp	6.8 mp
2018/19	10.7 mp	4 mp	921,600	3,078,400	6.7 mp	6.2 mp
2019/20	10.4 mp	3.9 mp	898,560	3,001,440	6.5 mp	6.0 mp

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

Action 3 – Incidental Catch of Atlantic Migratory Group King Mackerel Caught in the Shark Drift Gillnet Fishery

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

Alternative 2: Allow retention and sale of Atlantic king mackerel caught with drift 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.

Alternative 3: Allow retention and sale of Atlantic king mackerel caught with drift 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.

Table 2.3.1. Information on gillnet trips landing shark and king mackerel in Florida from 2010-2014.

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

Source: ACCSP

Action 4 – Establish Commercial Split Seasons for Atlantic Migratory Group King Mackerel in the Southern Zone

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.

Alternative 2. Allocate the Southern Zone quota for Atlantic king mackerel into two quotas: 60% to the period March 1 - September 30 (season 1) and 40% to the period October 1 – February 28 (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 Southern Zone 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**)

NEW Alternative 3. Allocate the Southern Zone quota for Atlantic king mackerel into two quotas: 60% to the period March 1 – October 1 (season 1) and 40% to the period November 1 – February 28 (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 Southern Zone 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.

NEW Alternative 4. Allocate the Southern Zone quota for Atlantic king mackerel into two quotas: 50% to the period March 1 – October 1 (season 1) and 50% to the period November 1 – February 28 (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 Southern Zone 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.

NOTE: *Alternatives 3 and 4 were added by the South Atlantic Council in September 2015. The Gulf Council will review the new alternatives in October 2015.*

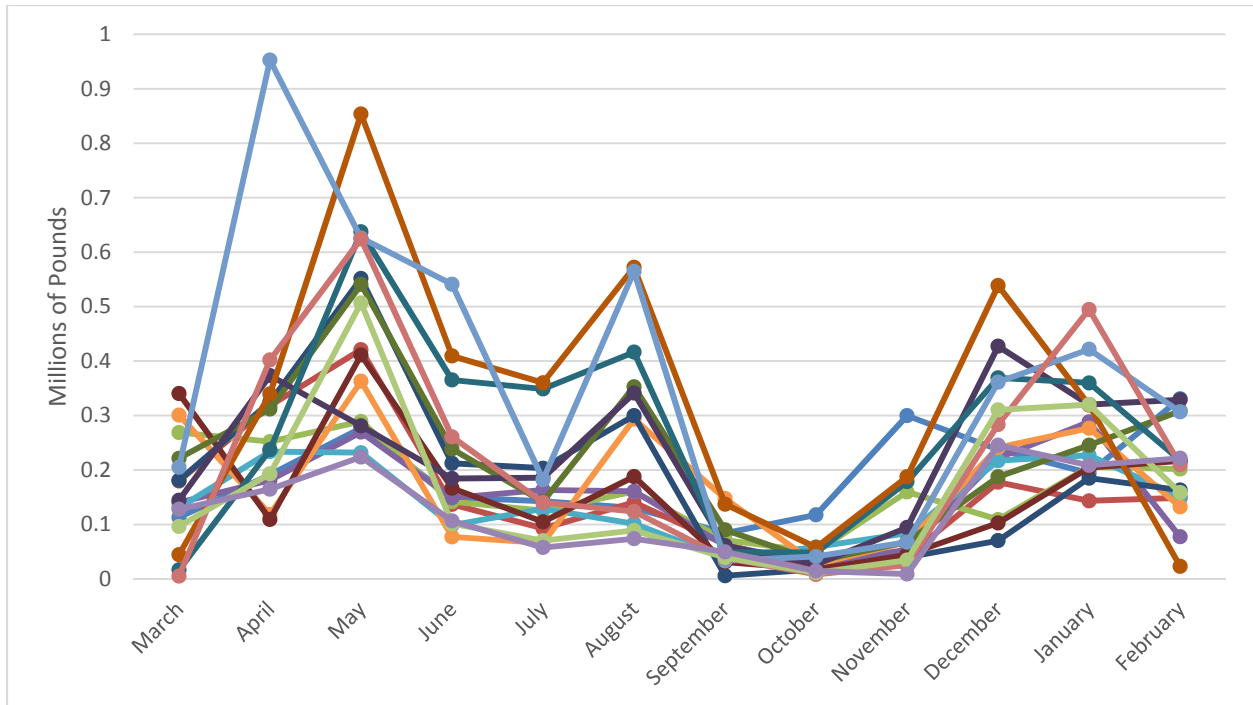


Figure 2.4.1. King mackerel commercial landings in the Southern Zone by month for fishing years 1998-99 through 2013-14. Source: NMFS ALS

Table 2.4.1. Examples of possible split season quotas for the Southern Zone (in lbs) with a 60/40 allocation (Alternatives 2 and 3).

	ACL=ABC ¹ High Recruitment ²		ACL=ABC ¹ Medium Recruitment ³		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 Acton 2-2

Table 2.4.2. 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	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 Acton 2-2

Table 2.4.3. Total king mackerel commercial landings from the Southern Zone, and percentages of the total landings under the potential split seasons.

Fishing Year	Total SZ Landings	Mar- Sep ¹ Landings	Oct- Feb ¹ Landings	Mar-Oct ² Landings	Nov- Feb ² Landings
1998-99	2,268,020	1,087,858	1,180,162	1,205,471	1,062,549
1999-00	1,882,497	1,352,567	529,930	1,371,907	510,590
2000-01	2,034,291	1,308,891	725,400	1,358,444	675,847
2001-02	1,794,925	1,124,947	669,978	1,153,715	641,210
2002-03	1,699,936	962,863	737,073	1,021,530	678,406
2003-04	2,110,632	1,365,949	744,683	1,393,093	717,539
2004-05	2,253,822	1,778,407	475,415	1,795,750	458,072
2005-06	1,936,527	1,350,872	585,655	1,368,436	568,091
2006-07	2,738,512	1,896,802	841,710	1,929,071	809,441
2007-08	2,767,803	1,570,897	1,196,906	1,597,353	1,170,450
2008-09	3,243,900	2,070,303	1,173,597	2,118,706	1,125,194
2009-10	3,842,670	2,716,313	1,126,357	2,774,083	1,068,587
2010-11	4,302,830	3,104,614	1,198,216	3,145,611	1,157,219
2011-12	2,615,883	1,594,660	1,021,223	1,602,782	1,013,101
2012-13	1,930,041	1,095,609	834,432	1,106,881	823,160
2013-14	1,502,679	803,797	698,882	818,231	684,448

¹Potential seasons for Alternatives 2 and 3

²Potential seasons for Alternative 4

Action 5 – Establish trip limits for the Florida East Coast Management Zone

Action 5-1. Establish Boundaries for the Florida East Coast Management Zone for Atlantic Migratory Group King Mackerel

Alternative 1: No action - Do not establish a Florida east coast management zone.

Alternative 2: Establish a Florida east coast management zone that exists year-round with boundaries at:

Option 2a: Flagler/Volusia county line and Dade/Monroe county line.

Option 2b: Volusia/Brevard county line and Dade/Monroe county line.

Option 2c: Volusia/Brevard county line and the Council jurisdictional boundary (as designated Action 1).

Alternative 3: Establish a Florida east coast management zone that exists for season 1 (as designated in Action 4) with boundaries at:

Option 3a: Flagler/Volusia county line and Dade/Monroe county line.

Option 3b: Volusia/Brevard county line and Dade/Monroe county line. **(South Atlantic AP Recommended)**

Option 3c: Volusia/Brevard county line and the Council jurisdictional boundary (as designated in Action 1).

Alternative 4: Establish a Florida east coast management zone that exists for season 2 (as designated in Action 4) with boundaries at:

Option 4a: Flagler/Volusia county line and Dade/Monroe county line. **(South Atlantic AP Recommended)**

Option 4b: Volusia/Brevard county line and Dade/Monroe county line.

Option 4c: Volusia/Brevard county line and the Council jurisdictional boundary (as designated in Action 1).

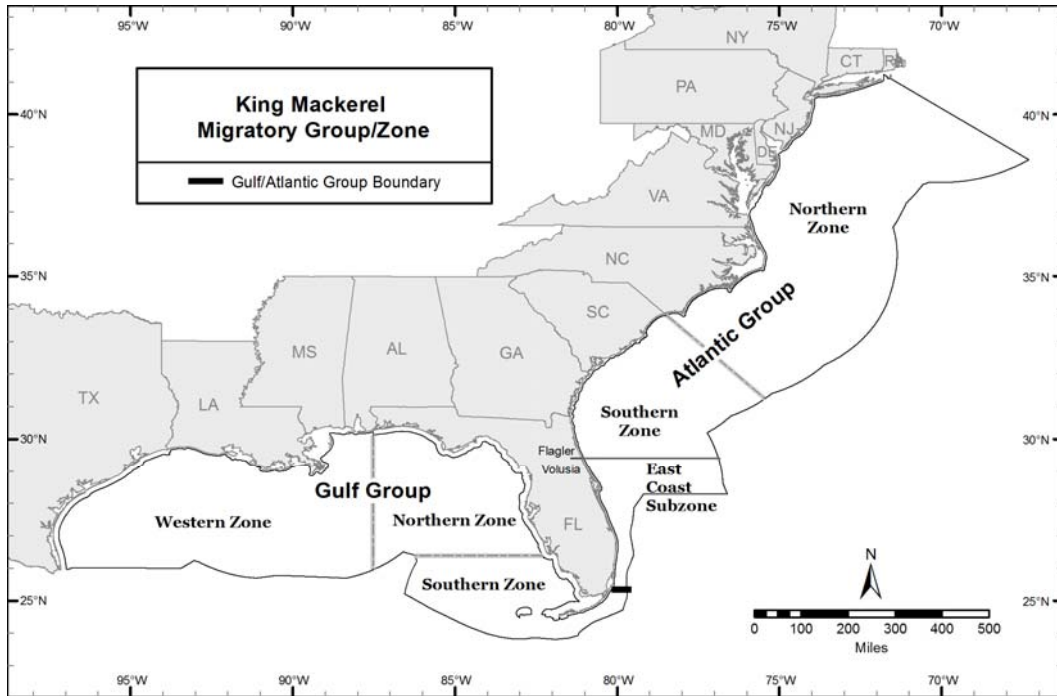


Figure 2.5.1. Boundaries for the Florida east coast management zone under Options 2a, 3a, and 4a (Flagler/Volusia County line and Dade/Monroe County line).

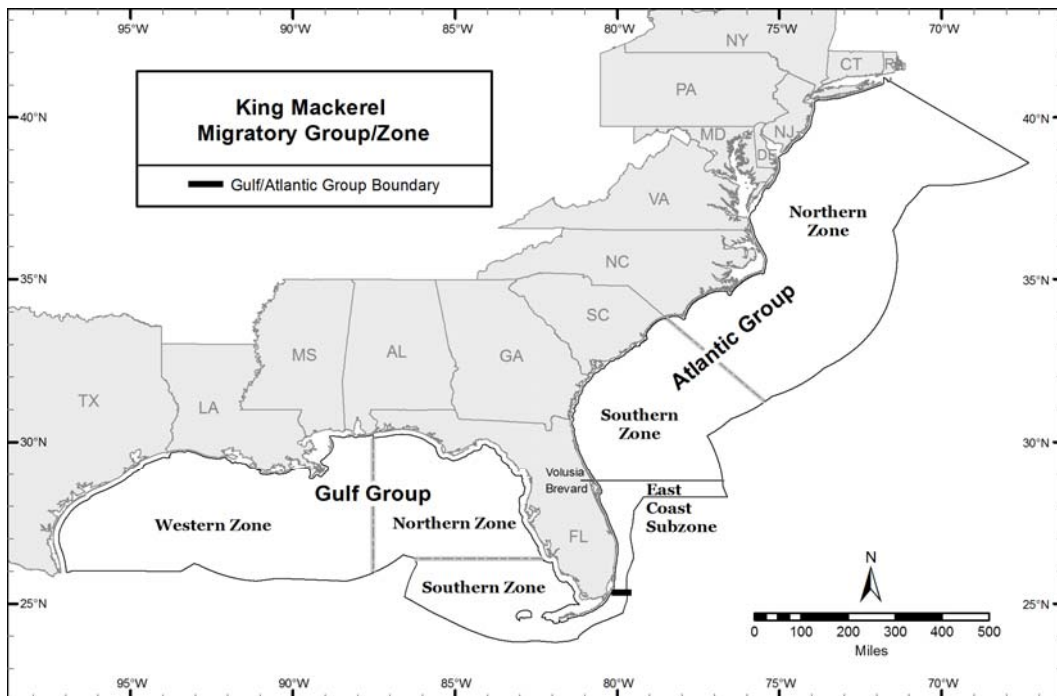


Figure 2.5.2. Boundaries for the Florida east coast management zone under Options 2b, 3b, and 4b; or under Options 2c, 3c, and 4c if Action 1/Alternative 3 is selected (Volusia/Brevard County line and Dade/Monroe County line).

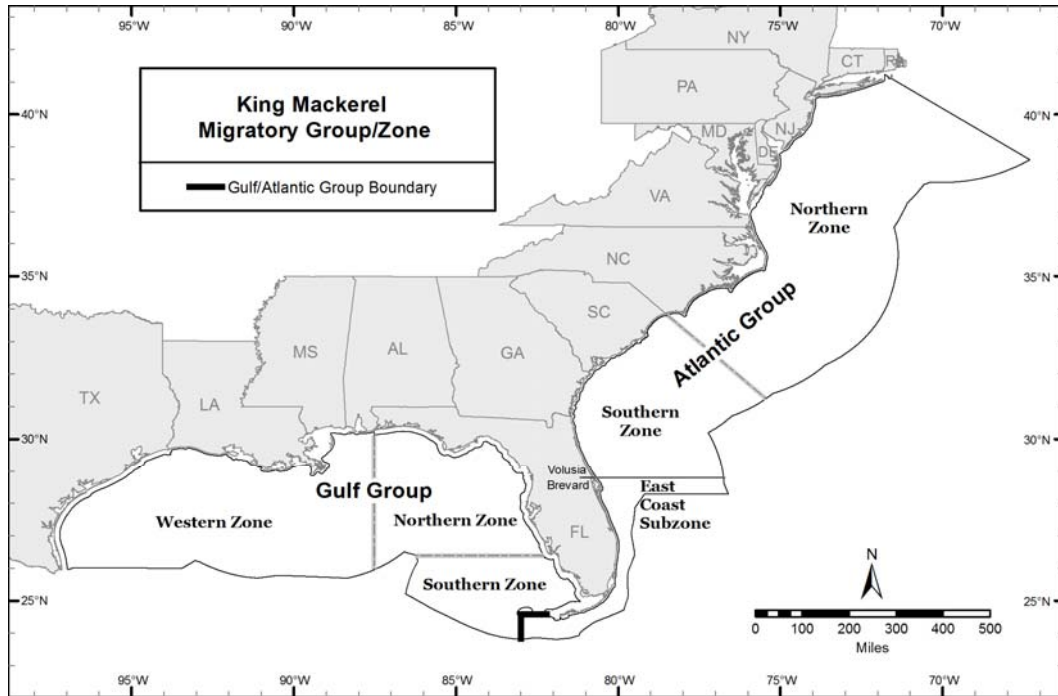


Figure 2.5.3. Boundaries for the Florida east coast management zone under Options 2c, 3c, and 4c or if Action 1/Alternative 2 is selected (Volusia/Brevard County line and Gulf/South Atlantic Council boundary).

Action 5-2. Establish a trip limit system for the Florida East Coast Management Zone

Alternative 1: No action. Do not establish commercial trip limits for the Florida east coast management zone for Atlantic migratory group king mackerel. The trip limit will remain:

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 November 1 through March 31, no trip limit is in place for Atlantic migratory group king mackerel.

Alternative 2: Establish a year-round trip limit of 75 fish for Atlantic king mackerel in the Florida east coast management zone (designated in Action 5-1).

Alternative 3: Establish a trip limit of 75 fish for Atlantic king mackerel in the Florida east coast management zone (designated in Action 5-1) for season 1 (as designated in Action 4).

Option 3a. Reduce the trip limit to 50 fish from May 1- May 31.

Option 3b. Reduce the trip limit to 50 fish from May 1- August 31.

Option 3c. Reduce the trip limit to 50 fish from April 15- May 15.

[The step-down in Options 3a-3c was recommended to reduce harvest during spawning.]

Alternative 4: Establish a trip limit of 50 fish for Atlantic king mackerel in the Florida east coast management zone (designated in Action 5-1) 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.

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.

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

Note: Constant catch scenarios require an allocation determination in order to be calculated. This alternative is not feasible until an allocation scenario is established. The Councils should consider providing direction to staff on this issue. If constant catch scenarios are developed using the current allocation, and then the Councils select a different allocation in Action 8, then the constant catch scenarios will no longer be accurate.

Table 2.6.1. Stock benchmarks as proposed by the SEDAR 38 stock assessment of Gulf migratory group king mackerel.

Criteria	Deterministic
Overfished evaluation	No, SSB/SSB _{30%SPR} = 2.10
Overfishing evaluation	No, F/F _{30%SPR} = 0.507
F ₂₀₁₂	0.08
MFMT (F _{30%SPR})	0.157
SSB ₂₀₁₂	2353 metric tons
SSB _{MSY} (SSB _{30%SPR})	1120 metric tons
P-Star	0.5 (OFL); 0.43 (ABC)

The Gulf SSC then recommended the following OFL and ABC values:

Table 2.6.2. Gulf SSC recommendations for ABC for Gulf migratory group king mackerel, using data resultant from SEDAR 38 (2014). OFL and ABC values are in millions of pounds whole weight.

Year	OFL	ABC
	<i>P* = 0.50</i>	<i>P* = 0.43</i>
2015	10.11	9.62
2016	9.61	9.21
2017	9.27	8.88
2018	9.11	8.71
2019	8.95	8.55

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 CMP AP Recommended)**

Table 2.7.1. 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 2.7.2. Options for redistribution of commercial zone allocation for Gulf migratory group king mackerel.

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%			

Action 8 – Revise the Recreational and Commercial Allocations for the 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 transferring a percentage of the recreational allocation to the commercial sector.

Option a: Transfer 5% of the recreational allocation to the commercial sector.

Option b: Transfer 10% of the recreational allocation to the commercial sector.

Option c: Transfer 20% of the recreational allocation to the commercial sector.

Alternative 3: Revise the recreational and commercial allocations for Gulf migratory group king mackerel by transferring a percentage of the recreational allocation 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 recreational allocation to the commercial allocation.

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

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

Alternative 4: Conditionally transfer a certain percentage (*Options a-c*) of the recreational allocation to the commercial sector until such a time that recreational landings reach a predetermined threshold (*Options d-f*). 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 recreational allocation to the commercial sector.

Option b: Transfer 10% of the recreational allocation to the commercial sector.

Option c: Transfer 20% of the recreational allocation to the commercial sector.

Recreational ACL Threshold (MUST CHOOSE ONE):

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

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

Option f: 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).

Table 2.8.1. 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

Gulf King Mackerel Landings and ACLs: 2000-2013

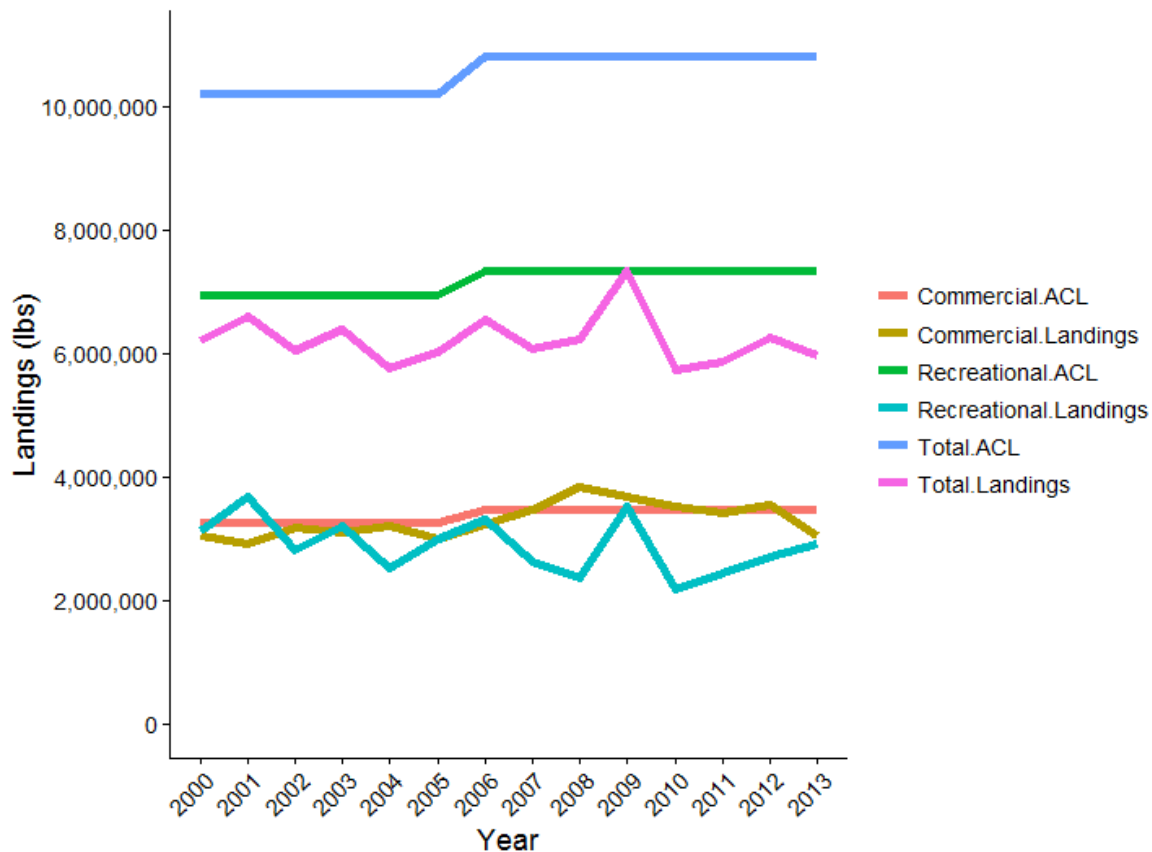


Figure 2.8.1. Trends in Gulf migratory group king mackerel landings by sector for the 2000-01 to the 2013-14 fishing seasons. Landings are in pounds.

Table 2.8.2. 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	52%	48%

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)**

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

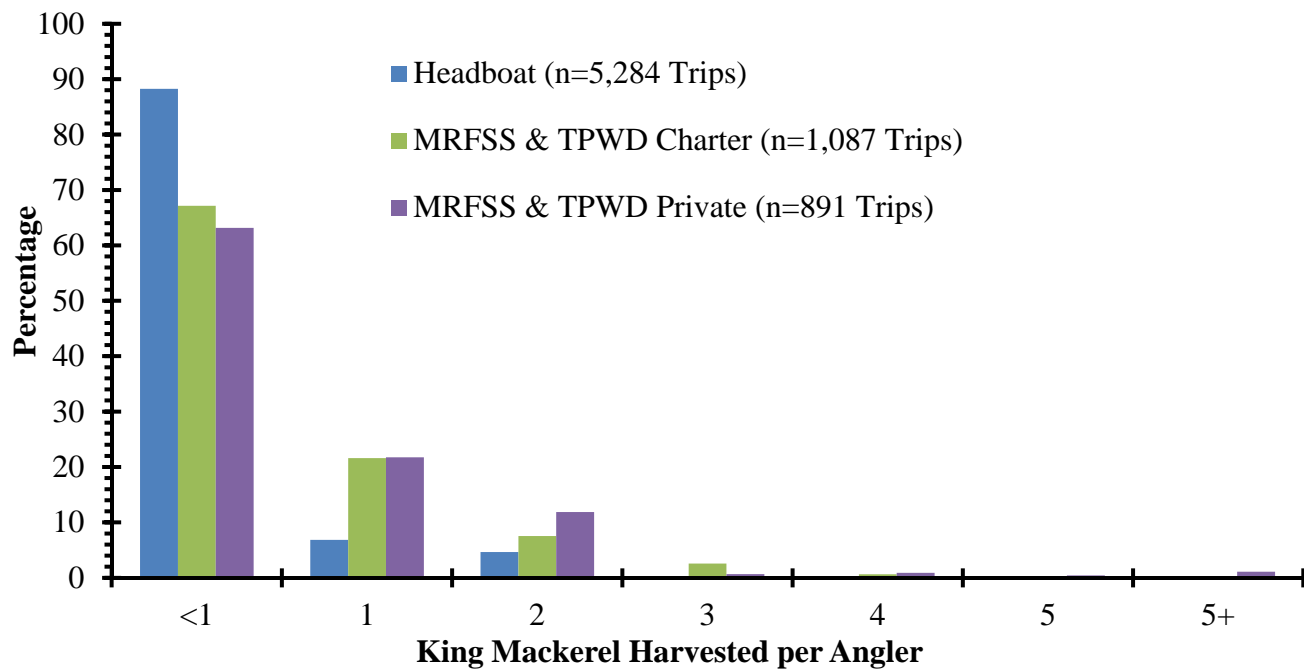


Figure 2.9.1. Distribution of Gulf of Mexico migratory group king mackerel harvested per angler by mode from 2011 through 2013.

Source: NMFS SERO LAPP/DM Branch.

Table 2.9.1. Estimated percent increase in Gulf of Mexico king mackerel recreational landings with an increase in the bag limit (based on 2011-2013 data). Estimates were weighted based on the percentage of landings each mode contributed to the overall landings during 2011-2013. See Appendix C for more details.

Bag Limit	Method 1	Method 2
3 fish per person per day	10.1%	0.9%
4 fish per person per day	21.1%	3.1%

Source: NMFS SERO LAPP/DM Branch