

**South Atlantic Black Sea Bass Annual Catch Limit Closure Projection – 2011/12 Fishing Year**  
**Southeast Regional Office**  
**St. Petersburg, FL**  
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**SERO-LAPP-2011-05**

## **Background**

NOAA Fisheries Service published a final rule on December 30, 2010, implementing Amendment 17B to the Fishery Management Plan for the Snapper-Grouper Fishery of the South Atlantic Region. This final rule became effective January 31, 2011. The rule established annual catch limits (ACLs) and accountability measures (AMs) for nine snapper-grouper species, including black sea bass, as required by the Magnuson-Stevens Fishery Conservation and Management Act. ACLs are set at levels that prevent overfishing and AMs are management controls established to ensure that ACLs are not exceeded, or they may correct for overages if ACLs are exceeded during a fishing season. For recreational black sea bass, the ACL for the 2010/2011 fishing season (June 1-May 31) was 0.409 million pounds gutted weight (mp gw). This ACL was projected to be met in January 2011 and the recreational black sea bass sector was closed on February 12, 2011. The recreational sector remained closed until June 1, 2011. Landings reported for the 2010/11 fishing year indicated the ACL was exceeded by 0.067 mp gw. Accountability measures for black sea bass require the ACL in the following fishing season to be reduced by the amount of the overage in the prior fishing season. On October 4, 2011, NOAA Fisheries Service announced that the 2011/12 ACL would be reduced from 0.409 to 0.342 mp gw to account for the overage. The purpose of this analysis is to project when the adjusted 2011-2012 recreational black sea bass ACL will be met.

## **Data Sources**

Preliminary recreational black sea bass landings were obtained from two data sources:

1. Marine Recreational Fisheries Statistics Survey (MRFSS), including the For-hire charter survey; and,
2. Southeast Fisheries Science Center Headboat survey.

MRFSS and For-hire black sea bass landings are estimated using a combination of dockside intercepts (landings data) and phone surveys (effort data). Landings are estimated in both numbers and whole weight (lbs) by two-month wave (e.g., Wave 1 = Jan/Feb, ... Wave 6 = Nov/Dec), area fished (inland, state, and federal waters), mode of fishing (charter, private/rental, shore), and state (east Florida, Georgia, South Carolina, and North Carolina).

Headboat landings are collected through logbooks completed by headboat operators. Landings (numbers and lbs) are reported by vessel, day/month, and statistical reporting area (i.e., area 1 = Hatteras, N.C., ..., area 17 = Dry Tortugas (South Atlantic waters)).

## **Reported Landings**

The fishing year for recreational black sea bass is June 1 through May 31 each year. Preliminary 2011/12 landings from east Florida through North Carolina were available from MRFSS and the For-hire survey from May 1-June 30, 2011. Because landings are reported by two-month wave and not monthly,

landings during May-June were all assumed to come from the month of June because the recreational sector was closed during May. Landings from North Carolina were post-stratified to remove landings north of Cape Hatteras using MRFSS post-stratification procedures (T. Sminkey, pers. comm.). Preliminary headboat landings from Key West to North Carolina were provided by the SEFSC (NMFS Beaufort, pers. comm. September 30, 2011) for June 1-August 31, 2011. These landings are estimated to represent greater than 95% of the reported headboat landings during June-August. All landings for all modes were reported in pounds whole weight and converted to gutted pounds using a conversion factor of 1.18. This conversion factor is consistent with how the ACL was calculated in Amendment 17B. Reported landings are summarized in Table 1.

### **Projected Landings**

Charter and private boat black sea bass landings for July 1-August 31, will not be available until mid-October 2011, and charter and private boat black sea bass landings for September 1-October 30 will not be available until mid-December 2011. Additionally, headboat landings for September-October are currently not available. To project when the black sea bass ACL will be met, four projections were run. All projections used June 2011 MRFSS landings and June-August 2011 Headboat landings. Historical landings from the 2010/11 fishing season were then used to project unreported landings for the 2011/12 fishing season (Table 2). Projections differed in how historical landings were used to calculate landings not yet available for the 2011/12 fishing season. Projection #1 used 2010/11 historical landings data to estimate charter and private landings for July 1-October 31, and headboat landings for September 1-October 31. Projection #2 was similar to projection #1, but reduced 2010/11 landing estimates to account for the expected reduction in harvest resulting from the 15 to 5 fish bag limit reduction in mid-June 2011 (SAFMC 2011). Headboat landings were reduced by 14%, charterboat landings were reduced by 20%, and private vessel landings were reduced by 10%. Projection #3 used historical landings unadjusted for the bag limit reduction and set September 1-October 31, 2010 private vessel landings equal to July 1-August 31, 2010 landings. This was done because September 1-October 31, 2010 landings were unexpectedly higher than private vessel landings during July 1-August 31. Projection #4 projected unavailable 2011/12 landings by multiplying 2010/11 landings by wave/month by the ratios of reported landings by mode during 2011/12 relative to reported landings during the same time period in 2010/11 (i.e., June 2011 charter/private vs. June 2010 charter/private and June-August 2011 headboat vs. June-August 2010 headboat). To compute landings during a partial month or two-month wave, projected landings were multiplied by the number of days expected to be open in month or wave and then divided by the total number of days the season was estimated to be open during the month or wave.

### **Results**

Reported landings indicate 218,520 lbs gw have been landed. This landings amount represents 64% of the adjusted recreational ACL and excludes landings estimated by MRFSS during July 1-August 31, 2011, which are currently not available. Projected closure dates for black sea bass ranged from September 10 to October 19, 2011 (Tables 3-6).

### **Discussion**

Projected when the ACL will be met is contingent on how well 2010/11 recreational black sea bass landings predict 2011/12 landings. Closure dates varied by over a month. Projection 4 predicted the earliest closure date - September 10. This date was based on landings observed in 2011/12 compared to

landings observed in 2010/11, and did not account for reductions in the bag limit that may affect angler catches. Projection 2 estimated an October 1 closure date and assumed unavailable 2011/12 landings would match 2010/11 landings exactly. Projection 3 predicted an October 9 closure date and attempted to account for reductions in black sea bass harvest associated with a reduction in the black sea bass bag limit. Evaluation of preliminary 2011/12 landings indicates the bag limit likely had little effect on slowing the rate of black sea bass harvest. The latest closure date, October 17, was based on Projection 3 and assumed private landings for September-October 2011 would be significantly lower than September-October 2010 landings. If this occurs, and landings for July-August 2011 are similar to 2010/11 then the recreational sector would meet its ACL in mid-October. Despite differences in projection methods, all projections indicate the ACL will be met by mid-October or earlier necessitating closure of the recreational sector. Additional MRFSS data for July-August will be available in mid-October and can be used to validate the accuracy of projected landings for black sea bass summarized herein.

Table 1. Available South Atlantic recreational black sea bass landings (lbs gw) for fishing year 2011-2012.

Month(s)	Headboat	Charter	Private	Total
Jun 1-30	65,178	29,367	60,789	155,334
Jul 1-Aug 31	63,186			63,186
Total	128,364	29,367	60,789	218,520

Table 2. Historical recreational South Atlantic black sea bass landings by mode for 2010/11.

Month(s)	Headboat	Charter	Private	Total
Jun 1-30	33,693	30,809	30,181	94,683
Jul 1-Aug 31	69,184	16,580	36,680	122,445
Sep 1-Oct 31	38,208	11,794	93,511	143,512
Total	141,085	59,182	160,373	360,640

Table 3. Projection #1 reported and projected black sea bass landings. Projected landings are highlighted in gray. Projection uses reported 2011/12 landings when available and 2010/11 historical landings when 2011/12 landings are not available.

Month(s)	Landings (lbs gw)			
	Charter	Private	Headboat	Total
Jun	29,367	60,789	65,178	155,334
Jul	8,290	18,340	41,778	68,408
Aug	8,290	18,340	21,408	48,038
Sept	5,800	45,989	15,304	67,093
Oct	193	1,533	739	2,465
Total	51,940	144,991	144,407	341,339
ACL				341,747
Date ACL met				1-Oct

Table 4. Projection #2 reported and projected black sea bass landings. Projected landings are highlighted in gray. Projection uses reported 2011/12 landings when available and 2010/11 historical landings when 2011/12 landings are not available. Historical landings were reduced to account for the June 2011 reduction in the bag limit.

Month(s)	Landings (lbs gw)			
	Charter	Private	Headboat	Total
Jun	29,367	60,789	65,178	155,334
Jul	6,632	16,506	41,778	64,916
Aug	6,632	16,506	21,408	44,546
Sept	4,640	41,390	13,161	59,192
Oct	1,237	11,037	5,083	17,358
Total	48,508	146,229	146,609	341,346
ACL				341,747
Date ACL met				8-Oct

Table 5. Projection #3 reported and projected black sea bass landings. Projected landings are highlighted in gray. Projection uses reported 2011/12 landings when available and 2010/11 historical landings when 2011/12 landings are not available. Historical landings for July-August 2010 were used in place of September-October 2010 landings.

Month(s)	Landings (lbs gw)			
	Charter	Private	Headboat	Total
Jun	29,367	60,789	65,178	155,334
Jul	8,290	18,340	41,778	68,408
Aug	8,290	18,340	21,408	48,038
Sept	5,800	18,040	15,304	39,144
Oct	3,673	11,425	14,038	29,136
Total	55,420	126,934	157,706	340,061
ACL				341,747
Date ACL met				19-Oct

Table 6. Projection #4 reported and projected black sea bass landings. Projected landings are highlighted in gray. Projected landings based on 2010/11 landings multiplied by the ratio of reported landings by mode during 2011/12 relative to reported landings during the same time period in 2010/11

Month(s)	Landings (lbs gw)			
	Charter	Private	Headboat	Total
Jun	29,367	60,789	65,178	155,334
Jul	7,902	36,940	41,778	86,620
Aug	7,902	36,940	21,408	66,250
Sept	1,783	29,880	4,492	36,155
Total	46,954	164,548	132,856	344,358
ACL				341,747
Date ACL met				10-Sep

## References

SAFMC. 2011. Regulatory Amendment 9 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region and Environmental Assessment. South Atlantic Fishery Management Council, Charleston, SC. 279 pp.