

Atlantic States Marine Fisheries Commission

PUBLIC INFORMATION DOCUMENT

**For the Interstate Fishery
Management Plan For Cobia**



November 2016



Vision: Sustainably Managing Atlantic Coastal Fisheries

**The Atlantic States Marine Fisheries Commission seeks your input on the initiation of an
Interstate Cobia Fishery Management Plan**

The public is encouraged to submit comments regarding this document during the public comment period. Comments must be received by **5:00 PM (EST) on January 6, 2017**. Regardless of when they were sent, comments received after that time will not be included in the official record. The South Atlantic State/Federal Fishery Management Board will consider public comment on this document when developing the first draft of the Fishery Management Plan.

You may submit public comment in one or more of the following ways:

1. Attend public hearings held in your state or jurisdiction, if applicable.
2. Refer comments to your state's members on the South Atlantic State/Federal Fishery Management Board or South Atlantic Advisory Panel, if applicable.
3. Mail, fax, or email written comments to the following address:

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If you have any questions please call Louis Daniel at (252) 342-1478.

**YOUR
COMMENTS
ARE INVITED**

The Atlantic States Marine Fisheries Commission (Commission) is developing an Interstate Fishery Management Plan (FMP) for Cobia. The Commission, under the Atlantic Coastal Fisheries Cooperative Management Act, is charged with developing FMPs which are based on the best available science and promote the conservation of the stock throughout its range.

This is the public's first opportunity to inform the Commission about changes observed in the fishery, management measures the public feels should not be included in the FMP, regulation, enforcement, research, development, enhancement and any other concerns the public has about the resource or the fishery. In addition, this is the public's chance to present possible reasons for the changes and concerns for the fishery.

**WHY IS THE
ASMFC
PROPOSING
THIS ACTION?**

At its August 2016 meeting, the Commission's South Atlantic State/Federal Management Board initiated the development of the first interstate Cobia FMP to be complementary with the South Atlantic Fishery Management Council's (SAFMC) Coastal Migratory Pelagic Fishery Management Plan.

Currently, the SAFMC and NOAA Fisheries manage cobia under the Coastal Migratory Pelagic (CMP) FMP through an allowable catch limit (ACL), combined with possession and minimum size limits. An overage of the recreational ACL occurred in 2015 and resulted in a shortened recreational season in 2016 for federal waters, consistent with the accountability measures (AMs) implemented by the SAFMC. The closure had measureable impacts to member states when their recreational fisheries were shut down at the peak of their season (Outer Banks of North Carolina and all of Virginia). The closures occurred at the peak of the Outer Banks fishery and the Virginia recreational fishery causing an economic loss. Concerned by these impacts and recognizing that a significant but variable proportion of reported recreational landings are harvested in state waters, the SAFMC requested the Commission consider complementary or joint management of the cobia resource.

The Commission's Interstate Fisheries Management Program Policy Board reviewed a white paper at its August 2016 Meeting and agreed Commission management of cobia was prudent. . The Commission tasked the development of an FMP to the South Atlantic State/Federal Fisheries Management Board, complementary with the SAFMC plan for cobia (*Rachycentron canadum*).

SAFMC management, based on current genetic information, addresses the management of Atlantic Migratory Group (AMG) of cobia that occur from Georgia through New York (Figure 1). Cobia that occur off the east coast of Florida are part of the Gulf stock, but the SAFMC manages the portion of that stock on the Florida east coast that occurs within its jurisdiction (Florida/Georgia (FL/GA) border to the Monroe County line). Tag recapture data suggested two main

stocks overlap at Brevard County Florida and corroborated the genetic findings. The genetic findings also determined there were two distinct population segments (DPS) in Port Royal Sound, South Carolina and Chesapeake Bay, Virginia. The main South Atlantic and Gulf stocks were separated for management purposes at the FL/GA border because genetic data suggested the split is north of the Brevard/Indian River County line and there was no tagging data to dispute this split. The FL/GA border was selected as the stock boundary based on recommendations from the commercial and recreational work groups of the Southeast Data Assessment and Review (SEDAR) 28 stock assessment (2013) as well as enforcement and administrative concerns.

Cobia occurring off the east coast of Florida are part of the Gulf Migratory Group (GMG) of cobia, but the Gulf of Mexico Fishery Management Council (GMFMC) allocated a portion of the GMG cobia ACL for the SAFMC to manage. SAFMC sets measures for the Florida east coast to achieve the sub-ACL set by the GMFMC. The Florida east coast boundary and the revised ACLs based on the stock boundary changes were implemented through Amendment 20B to the CMP FMP (GMFMC/SAFMC014). Collection of genetic samples from northern Florida (east coast) and Georgia continues and analysis will be used in a stock identification workshop planned for 2017 that will review the stock boundary between the south Atlantic and Gulf stocks.

Recreational cobia landings in 2015 were 1,565,186 pounds, well above the 2015 ACL of 630,000 pounds. This overage resulted in a June 20, 2016 closure of the fishery by NOAA Fisheries. Concern was expressed by individual states whose recreational seasons were reduced by the 2016 closure. North Carolina and Virginia developed alternate management strategies for harvest in state waters to avoid the June 20, 2016 closure enacted by NOAA Fisheries. Measures enacted by North Carolina and Virginia in 2016 resulted in a delay of state waters closures until September 30 in North Carolina and August 30 in Virginia. South Carolina recently implemented more restrictive measures to protect an inshore spawning population in southern South Carolina that was independent of the actions taken by NOAA fisheries.

Commercial cobia landings in 2015 were 71,790 pounds (landed weight) that exceeded the commercial ACL of 60,000 pounds (landed weight). Unusual fall landings occurred in 2015 that prevented a timely closure. Landings can be reported as both gutted or whole weight. Management uses "landed" weight to determine if the ACL has been met. Since landed weight includes both gutted and whole fish total weight harvested is likely underestimated.

**STATEMENT
OF THE
PROBLEM**

Historically, cobia has been managed through the federal Gulf of Mexico and Atlantic CMP FMP; the plan’s measures had been considered precautionary due to the low bag limits. Both sectors of the fishery have been managed with a two fish possession limit and 33” fork length (FL) minimum size since formal management began in 1990 (under Amendment 6). The ACLs and AMs were established through Amendment 18 and then updated in Amendment 20B (GMFMC/SAFMC 2012 and 2014). The 2013 stock assessment conducted through the SEDAR process indicated overfishing was not occurring and the stock was not overfished. However, biomass/abundance had been as trending steadily downward over the previous two decades. Additionally, the stock assessment used a different stock boundary than that in the FMP. The current ACL is a conservative approach to prevent the stock from reaching an overfished status. The recent overage in 2015 exceeded the SAFMC’s defined overfishing limit, meaning the stock is undergoing overfishing. Further, quota overages would continue to contribute to overfishing and could lead to the stock becoming overfished.

Efforts to more closely monitor state-specific harvest to ensure that quotas are not exceeded and that overfishing is averted is the Commission’s primary focus. Further, by developing a Commission plan, the impacts of a single, federal closure may be mitigated through state-specific measures designed to maintain traditional seasons at reduced harvest rates. The proposed interstate FMP considers potential management approaches to maintain a healthy resource while minimizing the socioeconomic impacts of seasonal closures.

**DESCRIPTION
OF CURRENT
MANAGEMENT**

SAFMC management of cobia is consistent for the AMG in federal waters with a two fish possession limit and 33” FL minimum size limit for commercial and recreational harvest. To reduce recreational harvest and attempt to extend seasons, some states have recently modified their state water measures (Table 1). Because cobia found in Florida waters are not a part of the AMG, they have a different set of management measures designed to achieve the sub-ACL.

Table 1. Recreational measures in 2016 for Cobia in Virginia, North Carolina, South Carolina, Georgia, and Florida.

State	Bag limit (Fish per person/ day)	Vessel limit (Fish per vessel per day)	Size Limit (inches)	Legal Gear
Virginia	1 *	2	40" TL, only 1 > 50" TL	No gaffing permitted
North Carolina	1 **	For-hire: 4/vessel or 1 person when less than 4 people on board Private: 2 fish on vessels with more than 1 person on board	37" FL	
South Carolina – north of Jeremy Inlet, Edisto Island	2	None	33" FL	
South Carolina- south of Jeremy Inlet, Edisto Island	1 (June 1- Apr 30) Catch and release only May 1-May 31	3, or 1 per person, whichever is lower	33" FL	
Georgia	2	None	33" FL	
Florida	1	1 per person or 6 per vessel, whichever is less	33" FL	spears, gigs, hook and line, seine, cast net

*VA State waters close 8/30/16.

**NC State waters close 9/30/16; private recreational can only retain cobia on Mondays, Wednesdays, and Saturdays. Shore based anglers may retain 1 fish per day, 7 days per week.

In September 2016, the SAFMC recommended NOAA Fisheries approve the following measures contained in Framework 4: recreational harvest limits of one fish per person per day or six per vessel per day, and a minimum size limit of 36" fork length (FL) for recreational harvest; a commercial harvest limit of two fish per person per day or six per vessel, whichever is more restrictive, but no change to the commercial minimum size limit of 33" FL.

The SAFMC is also proposing modifications to the recreational AMs for AMG cobia. These changes are expected to be implemented in spring 2017. In December 2016, the Council will review and recommend to NOAA Fisheries approval of an amendment to change the recreational fishing year for AMG cobia, the current fishing year is January 1 – December 31. The amendment's preferred alternative would change the fishing year to May 1 – April 30.

The allocation of the SAFMC's ACL between commercial and recreational sectors is based on historical landings (50% is based on the average 2000-2008 landings and 50% is based on the average 2006-2008 landings). Beginning in 2016, the ACL is split 92% recreational and 8% commercial. The 2016 ACL for cobia is 670,000 pounds, with 620,000 comprising the recreational ACL and 50,000 comprising the commercial ACL. The ACL for 2015 was slightly higher at 690,000 pounds.

***LIFE HISTORY
AND STATUS
OF THE STOCK***

Cobia is a fast growing, moderately lived (14 years old) species, with most fish maturing by age two. Females grow faster and attain larger sizes than males, but become sexually mature later. Cobia migrate south to north as well as east to west. Spawning occurs when water temperatures reach 20-21° C from April through September with spawning occurring earlier in Florida and later in Virginia. Cobia form aggregations and spawn multiple batches of eggs throughout a relatively short season. Year class strength can be highly variable but trends in the data show a very strong year class occurs once in a decade. Both tag recapture and genetic data show cobia exhibit natal homing and are often recaptured on the same structure or in locations where they were caught years before. This natal homing and spawning aggregation behavior make them very predictable and easily located by fishermen.

The results of the SEDAR 28 stock assessment determined the FL/GA border as the demarcation between the Atlantic and Gulf of Mexico stocks. As previously mentioned, a workshop in early 2017 will evaluate all the current cobia genetic information. While cobia do frequent areas north of Virginia, the harvest is uncommon and sporadic. Landings have been episodically reported from Maryland, New York, New Jersey and Rhode Island and make up from 3-15% of the total Mid-Atlantic landings.

The SEDAR 28 stock assessment indicated overfishing was not occurring and the stock is not overfished. The current ACL is a precautionary approach to prevent

the stock reaching an overfished status. The recent overage in 2015, exceeded the Council defined overfishing limit, meaning overfishing is occurring. The stock assessment does indicate concerns. While the terminal year of the assessment was 2011, spawning stock biomass (SSB) experienced a general decline from 2002 forward (Figure 2). Further, recreational landings have increased over the latter portion of the time series that may increase potential overfishing issues in the next assessment. The Council proposed cobia be included in the 2019 SEDAR schedule for a research track assessment which will give guidance on the appropriate data and models to be used in the 2020 stock assessment.

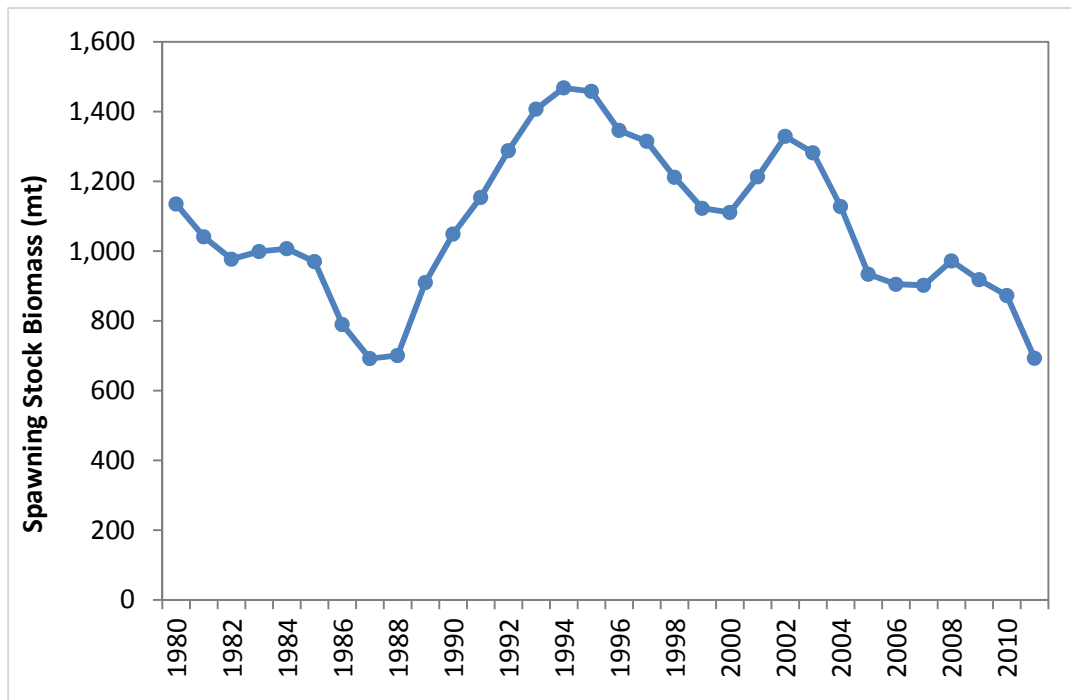


Figure 2. Cobia spawning stock biomass, 1980-2011.

**DESCRIPTION
OF THE
FISHERY**

Data collection programs vary by state and will be further described in the upcoming draft FMP. However, research efforts at the state level are confounded by the observation that cobia only occur in specific state jurisdictions in aggregations for a brief period each year and often in locations conflicting with the peak of recreational fishing. Directed sampling efforts are difficult outside of the primary recreational season that extends from April through August, because fish are migrating from spawning locations and not found in large concentrations.

Recreational Fishery

Cobia supports a valuable recreational fishery throughout the South Atlantic and into the Mid-Atlantic region. Known for their readiness to take a bait, tough fighting abilities and excellent table fare, the fishery is popular in the recreational sector. Current information indicates a variable proportion of landings come from

state waters and can range from 0 to 100% (Table 2). The 10 year average, annual percentage of cobia taken in state waters with and without east coast Florida included are 66% and 51% respectively (Tables 3 and 4).

Recreational fisheries are prosecuted similarly along the coast. The directed cobia fishery is prosecuted in two distinct ways. Bottom fishing with live or dead baits, often while chumming, in estuarine waters or around inlets or offshore around structure, buoys, markers, natural and artificial reefs. More recently, an active method of searching for fish traveling alone or in small groups on the surface or associated with schools of Atlantic menhaden or other bait fishes has grown in popularity. This newer method has resulted in the further development of the for-hire sector for cobia, as well as the development of specific artificial baits and boat modifications (e.g., towers) to facilitate spotting and catching the fish. A third method primarily prosecuted in offshore waters is to target large rays, large sharks, sea turtles or floating debris around which cobia congregate. This more active method likely confounds reported landings being in state or nearshore federal waters as vessels tend to move in and out of state and federal waters following the bait or the fish. Additionally, the Atlantic coast of Florida is starting to see more directed spearfishing pressure on cobia. Specifically, spearfishers are chumming for bull shark and then diving/free-diving to spear cobia that associate with them. Spearfishing also occurs off North Carolina, along with a popular pier fishery.

The recreational fishery also takes cobia as bycatch in offshore bottom fisheries such as snapper/grouper, nearshore trolling for king mackerel, bluefish, and dolphin and any other fishery that employs live or dead bait fished on or near the bottom. While the directed fishery appears to focus more on the spring-summer spawning migration, bycatch, especially offshore, can yield cobia virtually year-round.

Recreational landings for cobia have varied with little trend since 2005; landings did hit a time series high in 2015 resulting in a significant overage of the federal ACL (Figure 3). Since 2005, the highest landings have occurred in the east coast of Florida, North Carolina and Virginia. The three year average landings (2103-2015) in the east coast of Florida, North Carolina and Virginia were approximately 446,218, 466,944 and 429,179 pounds, respectively. In 2015, the three states with the highest recreational landings were Virginia (718,647 pounds), North Carolina (630,373 pounds) and Florida (east coast) (481,956 pounds) (Table 4).

Table 2. Percentage of cobia in the recreational fishery harvested in state waters (zero implies all were harvested from federal waters). All data are final MRIP estimates, which may differ from SEFSC estimates.

	Florida	Georgia	South Carolina	North Carolina	Virginia
2006	22	0	98	30	100
2007	9	0	0	47	100
2008	14	0	0	50	100
2009	53	0	0	58	100
2010	59	39	41	75	94
2011	33	0	0	90	50
2012	21	80	0	49	42
2013	9	0	61	79	83
2014	17	0	52	82	100
2015	13	0	6	92	97

Table 3. 10-year average percentage of cobia harvested in state waters with and without east coast Florida. All data are final MRIP estimates, which may differ from SEFSC estimates.

	Percent of Cobia Harvested in State Waters GA-NY	Percent of Cobia Harvested in State Waters FL-NY
2006	87	68
2007	52	34
2008	29	22
2009	80	71
2010	75	68
2011	56	40
2012	34	28
2013	77	59
2014	83	47
2015	85	71

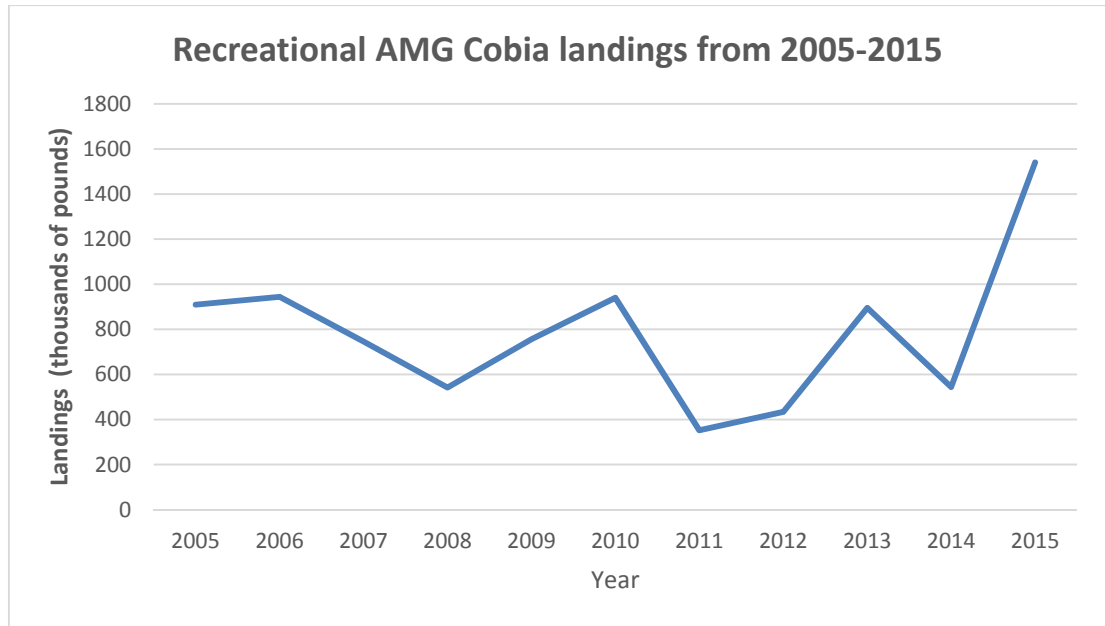


Figure 3. Recreational landings of AMG cobia (2005-2015)

Commercial Fishery

The commercial fishery has traditionally been a bycatch in other directed fisheries such as the snapper/grouper hook and line fishery and troll fisheries for various species (e.g., king mackerel, dolphin, wahoo, amberjack). Directed fisheries are generally precluded as a result of the low possession limits, but do occur, specifically Virginia’s commercial hook and line fishery. Cobia from for-hire trips may also be sold commercially, depending on the state’s permit requirements for selling fish.

Commercial harvest has been increasing in North Carolina since 2011 and in the Mid-Atlantic since 2012 (Figure 4). Commercial harvest has remained stable in Georgia and South Carolina since 2010. Commercial cobia landings on the east coast of Florida ranged from 57,003 to 156,069 pounds (avg. = 88,278 pounds) during the 2007-2011 time series. Commercial landings in Georgia and South Carolina were low and values for the two states were combined from 2010-2015 to avoid confidentiality issues and averaged 3,867 pounds per year (Table 5).

The commercial cobia fishery closed December 11, 2014. The 2015 overages would have been deducted if the stock were overfished; however, given they are not overfished, the commercial quota for 2016 remains 50,000 pounds (Figure 4). In 2015, North Carolina landings (52,684 pounds) accounted for nearly the entire commercial quota and would have exceeded the 2016 quota (Table 5).

Commercial landings for the Mid-Atlantic region (Virginia, Maryland, New Jersey, New York,) and Rhode Island are combined in Table 6 to avoid confidentiality issues in several Mid-Atlantic states. The majority of the Mid-Atlantic landings

come for Virginia. The average landings from 2010-2015 were 14,732 pounds per year.

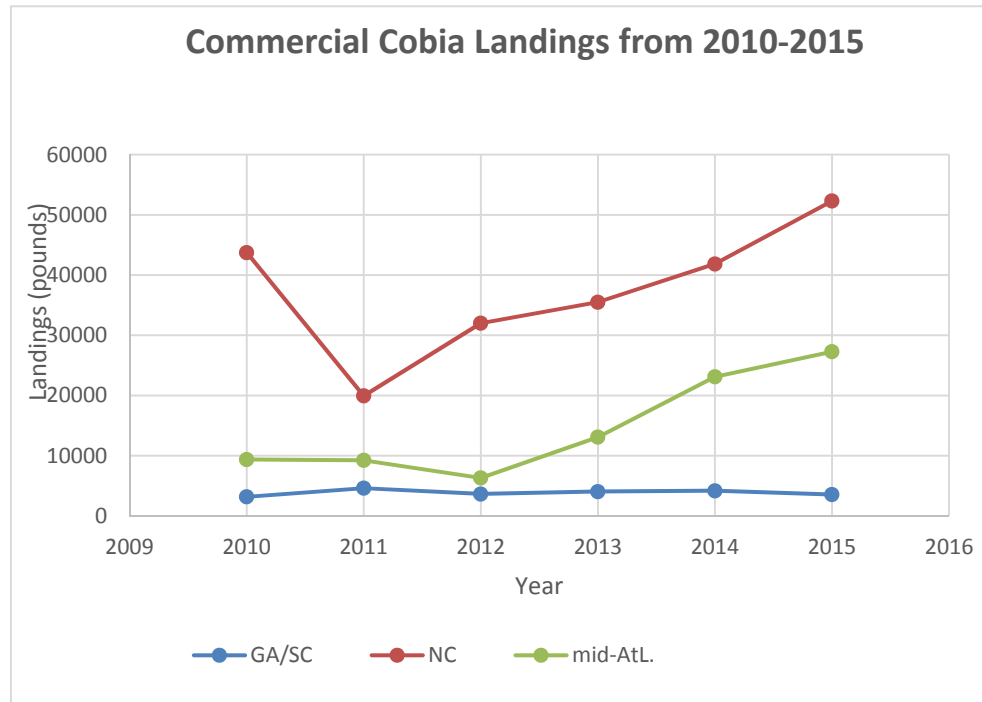


Figure 4. Commercial landings of cobia (2010-2015)

Table 4. Recreational landings of AMG cobia from 2005-2015 in pounds. Data sources: SEFSC

Year	Virginia	North Carolina	South Carolina	Georgia	Total AMG (VA-GA)	East Coast of Florida
2005	577,284	322,272	5,793	3,358	908,707	287,267
2006	733,740	104,259	101,018	4,824	943,841	493,334
2007	322,887	90,197	268,677	64,708	746,469	580,632
2008	167,949	66,258	50,108	257,690	542,006	438,621
2009	552,995	123,061	76,229	3,997	756,282	361,120
2010	232,987	561,486	65,688	79,855	940,015	745,228
2011	136,850	121,689	3,565	90,375	352,488	761,440
2012	36,409	68,657	224,365	105,193	434,623	370,373
2013	354,463	492,969	19,130	29,224	895,786	274,276
2014	214,427	277,489	31,927	20,642	544,485	582,423
2015	718,647	630,373	123,952	67,804	1,565,186	481,956

* There are no MRIP-estimated recreational landings of AMG cobia in states north of Virginia.

Table 5. Commercial cobia landings (pounds) and revenues (2014 dollars) by state/area, 2010-2015.

Year	GA/SC	NC	Mid-Atlantic*	Total
Commercial Landing in Pounds				
2010	3,174	43,737	9,364	56,275
2011	4,610	19,950	9,233	33,793
2012	3,642	32,008	6,309	41,959
2013	4,041	35,496	13,095	52,632
2014	4,180	41,848	23,111	69,139
2015	3,555	52,315	27,277	71,790
Average	3,867	37,559	14,732	56,158
Dockside Revenues (2014 dollars)				
2010	\$11,377	\$70,377	\$19,976	\$101,730
2011	\$19,666	\$37,893	\$21,666	\$79,224
2012	\$15,554	\$66,887	\$14,597	\$97,038
2013	\$15,639	\$79,397	\$35,792	\$130,828
2014	\$13,320	\$95,462	\$67,972	\$176,754
2015	\$11,151	\$147,160	\$75,360	\$233,672
Average	\$14,451	\$82,863	\$39,227	\$136,541

Georgia and South Carolina landings are combined to avoid confidentiality issues.

Source: SEFSC Commercial ACL Dataset (December 2015) for 2010-2014 data; D. Gloeckner (pers. comm., 2016) for 2015 data.

*Mid-Atlantic States include Virginia, Maryland, New York, New Jersey.

**WHAT IS THE
PROCESS FOR
DEVELOPING A
FMP?**

The publication of this document and announcement of the Commission’s intent to develop a Cobia FMP is the formal, first step of the FMP development process. Following the initial phase of information gathering and public comment, the Commission will evaluate potential management alternatives and the impacts of those alternatives. The Commission will then develop a draft FMP, incorporating the identified management alternatives, for public review. Following the review and public comment, the Commission will specify the management measures to be included in the FMP, as well as a timeline for implementation.

The timeline for completion of the FMP is as follows:

	Oct 2016	Nov 2016 – Jan 2017	Feb 2017	Mar – May 2017	May 2017	May – Aug 2017	Aug 2017
Approval of Draft PID by Board	X						
Public review and comment on PID <i>Current Step</i>		X					
Board review of public comment; Board direction on what to include in the Draft FMP			X				
Preparation of the Draft FMP				X			
Review and approval of Draft FMP by Board for public comment					X		
Public review and comment on Draft FMP						X	
Board review of public comment on Draft FMP							X
Review and approval of the final FMP by the Board, Policy Board and Commission							X

WHAT IS THE PURPOSE OF THIS DOCUMENT?

The purpose of this document is to inform the public of the Commission’s intent to gather information concerning the cobia fisheries, develop management measures to assist the SAFMC in maintaining harvest levels within the prescribed ACL, and provide management flexibility to the states to minimize the impact of potential closures. The PID provides an opportunity for the public to identify and/or comment on issues and alternatives relative to the management of cobia. Input received at the start of the FMP development process can have a major influence on the final outcome of the FMP. This document is intended to draw out observations and suggestions from fishermen, the public, and other interested parties, as well as any supporting documentation and additional data sources.

To facilitate public input, this document provides an overview of issues identified for consideration in the FMP, as well as background information on the cobia stock, fisheries and management. The underlying question for public comment is: **“How would you like the cobia fishery and population to look in the future?”** The Commission is looking for both general comments on cobia management in state waters and any comments specific to the issues listed in this document.

**WHAT
ISSUES WILL
BE
ADDRESSED?**

The primary issues considered in the PID are:

- Complementary Management with the SAFMC
- Management Objectives
- Coastwide, Regional or State-by-State Approach to Management
- Commercial and Recreational Management Tools

**ISSUE 1:
COMPLEMENTARY
MANAGEMENT
WITH THE COUNCIL**

Background: The SAFMC manages cobia through the CMP FMP with consistent bag, trip and size limits in federal waters. A recent ACL has been employed to protect the resource and minimize the possibility of cobia being subjected to overfishing or becoming overfished. Complementary management of cobia is intended to increase flexibility and management reaction time, while providing states the ability to more actively and adequately manage the fishery in their respective states. It is anticipated Commission would adopt the ACLs and biological reference points established by the benchmark cobia stock assessment developed by the SAFMC.

States have historically mirrored the SAFMC's size and bag limit regulations in state waters. The recreational closure in 2015 resulted in Virginia and North Carolina modifying their regulations in order to reduce the impacts of the June 20, 2016 federal closure. South Carolina has developed various, additional regulations based on area-specific genetic work and concern over the condition of a DPS that occurs in its southern waters.

A complementary management plan separates the management processes between the two bodies (Federal/Council and ASMFC Board) and attempts to have measures that are consistent and not in direct conflict. Specifically, the Commission develops its own management documents that may contain aspects of the plan that are consistent with the Council but it is not required. Under a complementary plan, States are the responsible party for monitoring quotas and closing state waters once quota is reached. Stock assessments are conducted with the SEFSC/Council/Commission. Typically, the SEFSC is the lead for the stock assessment.

Management Questions:

- It is the intention of the Commission develop a complementary Cobia FMP to the SAFMC's CMP FMP. Do you think the Commission should have a different approach?
- What federal management measures should be required in the Commission plan?
- What states should be included in the management unit?

- Given the upcoming genetic workshop in 2017, should the FMP provide the flexibility to make changes to management and stock units to reflect changes in the science?

**ISSUE 2:
MANAGEMENT
OBJECTIVES AND
GOALS**

- **Background:** The first step in proactive fisheries management is to decide what is meant by optimizing the benefits for a fishery. Goals and objectives can be divided into four subsets: biological, ecological, economic, and social, where social includes political and cultural goals. The biological and ecological goals can be thought of as constraints in achieving desired economic and social benefits. Examples of goals under each of these categories include:
 - Maintain the target species at or above the levels necessary to ensure their continued productivity (biological);
 - Minimize the impacts of fishing on the physical environment and on non-target (bycatch), associated and dependent species (ecological);
 - Maximize the net incomes of the participating fishers (economic); and
 - Maximize employment opportunities for those dependent on the fishery for their livelihoods (social).

Identifying such goals is important in clarifying how the fish resources are to be used. Without such goals, there is no guidance on how the fishery should operate, which results in a high probability of ad hoc decisions and poor use of the resources (resulting in lost benefits), and increases the probability of conflicts among user groups.

The Commission could consider the following management objectives for the Cobia FMP and is soliciting other ideas or options that could be raised.

- Provide a management plan that achieves the long-term sustainability of the resource and strives, to the extent practicable, to implement and maintain consistent coastwide measures, while allowing the states the flexibility to implement alternative strategies to accomplish the objectives of the FMP
- Provide for sustainable recreational and commercial fisheries.
- Maximize cost effectiveness of current information gathering and prioritize state obligations in order to minimize costs of monitoring and management.
- Adopt a long-term management regime which minimizes or eliminates the need to make annual changes or modifications to management measures.

Management Questions

What should be the objectives in managing the cobia fisheries through the Commission?

ISSUE 3:

Background: States currently manage their cobia fisheries independently. The Commission is considering coordinating the management of cobia in order to

**COASTWIDE,
REGIONAL OR
STATE-BY-STATE
MANAGEMENT**

avoid states being disadvantaged based on where they occur along the migratory route, while maintaining harvest at the SAFMC's ACL level.

States have been disadvantaged by geography in the past when they occur on the northern or southern end of a migratory range, often resulting in early closures or no fishery at all. While consistent, coastwide measures may be desirable, they may result in disproportionate impacts to certain states.

More flexibility to individual states may be available through state-by-state allocations of the cobia ACLs. Allocations can allow limits and seasons to be imposed that maximize the individual state fishery needs, and reduce the impact of other state overages.

Management Questions:

- Are consistent, state-specific management measures, coordinated by the Commission, needed for cobia?
- Are there regional differences in the fishery and/or resource that need to be considered when implementing management measures?
- Should the FMP require a coastwide closure if the SAFMC ACL is met?
- Should the FMP require a coastwide measures (e.g., size and bag limit)?
- Should the FMP require regional measures?
- Should the FMP develop a suite of options for the allocation of state-specific quotas, and allow states to adopt unique size, bag, and season measures?
- Should states be permitted to submit proposals for alternative management that is conservationally equivalent to the required management program (e.g., a less restrictive bag limit given a more restrictive minimum size limit)?

**ISSUE 4:
RECREATIONAL
MANAGEMENT
TOOLS**

Background: Cobia supports a valuable recreational fishery throughout the South Atlantic and into the Mid-Atlantic region. Current information indicates a variable proportion of landings come from state waters and can range from 0 to 100% (Table 2). The 10 year average, annual percentage of cobia taken in state waters with and without east coast Florida included are 66% and 51% respectively (Tables 3 and 4).

In federal waters there is a two fish possession limit and 33" fork length (FL) minimum size, but the states have differing measures (Table 1). A complementary recreational measures for cobia could provide the states the flexibility to respond to changes in the fishery and stock that meet their state fisheries needs without impacting federal fisherman while meeting the goals and objectives of the FMP.

Recreational cobia landings collected through the Marine Recreational Information Program, but landings estimates for this document are generated from the Southeast Fisheries Science Center (SEFSC). The SEFSC data are used for the following two reasons. The SEFSC data includes landings from the Southeast Headboat Survey that are not included in the MRIP data. In addition, MRIP data use two different methodologies to estimate landings in weight over the time series. To apply a consistent methodology over the entire recreational time series, the SEFSC implemented a method for calculating average weights for the MRIP landings, which they believe is a better representation of the weight of the cobia catch.

Management Options:

- What are the appropriate recreational measures for cobia? Potential management tools include: minimum size restrictions, maximum size restrictions, bag/trip/boat limits, seasons or gear restrictions.
- Should the FMP consider gear restrictions, e.g. circle hooks for all live and dead bait fisheries for cobia or prohibition on gaffing cobia?
- Are there other management options that should be considered (e.g., slot limits, spawning season closures, etc.)?
- When using recreational data should averaging of the data be permitted to set measures or determine if the RHL has been met? (e.g average the total harvest over 3-5 year to compare to the RHL in a given year, in some cases this could help to minimize impacts caused by overages. In other cases, years with very high overages, impacts would continue to be carried forward for several years
- Should the FMP consider some level of *de Minimis* or threshold landings where cobia harvest is minimal?

**ISSUE 5:
COMMERCIAL
MANAGEMENT
TOOLS**

Background: The commercial fishery is managed consistently throughout state and federal jurisdictions with a two fish possession limit and 33" FL minimum size limit. Through the FMP process, the Commission could consider changes to the commercial fishery measures.

Management Options:

- What issues face the commercial fishery now and what potential issues could arise in the fishery?
- What tools should be included in the FMP for managers to address these issues?
- What are the appropriate commercial measures for cobia? Potential management tools include: minimum size restrictions, maximum size restrictions, bag/trip/boat limits, seasons or gear restrictions.
- Should the FMP consider some level of *de Minimis* or threshold landings where cobia harvest is minimal or episodic?

ISSUE 6:
OTHER ISSUES

The public is asked to comment on any other issues for consideration in the development of the Commission's Draft Fishery Management Plan for Cobia.