

DEVELOPMENT OF A COMMERCIAL HOOK-AND-LINE FISHERY IN NORTH CAROLINA INFORMATION PAPER

Executive Summary October 19, 2010

The Marine Fisheries Commission (MFC) received a petition for rulemaking at its March 2010 Business Meeting in Kitty Hawk, NC. The petition specifically requested changes to existing rules for red drum and spotted seatrout, as well as a weakfish proclamation, to allow commercial levels of catch and sale via hook-and-line. The intent of the petition was to provide commercial fishermen who are physically unable to use other gears (i.e., gillnets, seines, etc.) the opportunity to continue to catch and sell these species in commercial quantities. After much discussion, the MFC directed Division of Marine Fisheries (DMF) staff to examine the broader implications of allowing and/or promoting a commercial hook-and-line fishery statewide, beyond the rule changes requested in the petition. Part of the incentive for doing so was the restricted use of gillnets as a result of unauthorized interactions with threatened and endangered sea turtles. Since then, a proposed rule has been issued by the National Marine Fisheries Service (NMFS) to list the Carolina population of Atlantic sturgeon as endangered, which could result in further restrictions on the use of gillnets.

A DMF staff workgroup has met monthly since April 2010 to research a variety of issues related to this topic. To address these issues, the following information paper has been broadly subdivided into three parts: Part I. Potential or Proposed Rule Changes; Part II. Summary of Commercial Hook-and-Line Fisheries in Other States; and Part III. Potential Impacts on Current Management and Existing Fishery Management Plans (FMPs). The major findings from each of these parts are summarized below.

Development of a commercial hook-and-line fishery is a complex issue and the purpose of the information provided in this paper is to illustrate a variety of management mechanisms, potential rule changes, and overlapping administrative processes that the MFC should consider in moving forward with this topic. A number of issues need to be carefully considered to ensure that any additional commercial fishing opportunity is not abused. These include: establishing restrictions or conditions to prevent “double-dipping” by the for-hire sector (i.e., a for-hire captain attempting to take commercial quantities/size limits of fish on a paying charter trip); establishing a means of easily distinguishing commercial hook-and-line fishermen from recreational hook-and-line fishermen; identifying geographic areas where conflicts might occur, etc. A number of administrative mechanisms might be necessary to appropriately manage a commercial hook-and-line fishery. Additionally, slightly different approaches might be needed in developing a commercial hook-and-line sector for each of North Carolina’s existing fisheries (e.g., spotted seatrout vs. striped mullet) depending on the characteristics of the fishery. Any changes in management would need to be coordinated with both the FMP review cycle and the annual rulemaking cycle.

Recommendations

Development of a commercial hook-and-line fishery has the potential to offset some of the economic hardship from recent gillnet restrictions as a result of protected species interactions. However, it would need to be set up very carefully, on a fishery-by-fishery basis in conjunction with the existing FMP review cycle. Should the MFC choose to move forward with the creation of a hook-and-line sector for a particular fishery, the Plan Development Team for that FMP should be responsible for developing the specifics of a hook-and-line program for that fishery.

Part I Summary: Potential Rule Changes

- Existing rules allow unlimited commercial hook-and-line catch in state and federal waters (with no federal permits) of the following species: bluefish, mullet (striped and white), kingfish (sea mullet) and Atlantic croaker. Unlimited commercial catch of flounder is allowed in internal waters only.
- Existing rules for red drum, spotted seatrout and American shad would require changes to allow commercial hook-and-line catch beyond the recreational bag limit.
- Hook-and-line gear is not currently an allowable commercial gear in the North Carolina striped bass fishery.
- Directed commercial hook-and-line catch of striped bass in the Albemarle Sound Management Area (ASMA) is inconsistent with the current state FMP, but not with the ASMFC FMP. Commercial harvest is not allowed in the Roanoke River Management Area (RRMA).

- Directed commercial hook-and-line catch of red drum is inconsistent with both the state FMP and the ASMFC red drum FMP. Allowing commercial hook-and-line catch up to the current 10 fish trip limit while maintaining the bycatch provision is allowable under both FMPs.
- Proposed rules to implement the draft N.C. Spotted Seatrout FMP will lower the bag limit from 10 to 6 fish, with only three fish greater than 24 inches total length. Further modification of the rule to allow commercial levels of hook-and-line catch beyond six fish will need to be reviewed by the Spotted Seatrout Advisory Committee.
- While the rule for American shad could be modified to allow commercial hook-and-line catch, sufficient levels of harvest would likely only occur in joint/inland waters. Under Wildlife Resources Commission (WRC) rules, American shad have gamefish status in inland waters.
- Any rule changes would need to occur within the confines of the annual rulemaking cycle and the FMP review cycle.

Part II Summary: Commercial Hook-and-Line Fisheries in Other States

- Commercial hook-and-line catch has accounted for a very low percentage (~1% or less) of commercial landings in North Carolina.
- For most states, hook-and-line gear is mainly supplemental and used in conjunction with other gears.
- Trip limits, permits, endorsements, decals and crew size restrictions were all tools employed to manage states' hook-and-line commercial fisheries. Some tools were used simultaneously or in conjunction with a permit.
- Massachusetts, Maryland and Virginia all have commercial hook-and-line permits, while South Carolina, Georgia and Florida do not. Only Maryland and Virginia require limited entry.
- Massachusetts hook-and-line permit holders are required to have species endorsements to harvest certain species of finfish. Requirements to obtain the endorsements vary by species.
- Maryland has limited entry permits for striped bass and flounder. However, these permits are issued for hook-and-line gear as well as other gear types. Approximately 30% of striped bass permit holders hold a hook-and-line gear permit.
- Virginia's limited entry hook-and-line permit was originally set up as a special commercial fishery. Fishermen are required to have a valid striped bass permit and show 1,000 lb of seafood sales over the previous two years.
- Florida has no hook-and-line permit, but does require a restricted species endorsement to harvest certain species of finfish. Fishermen can qualify under several criteria that employ sales, income and age limits.
- Display tags, decals and call-ins are all tools that can be used to aid enforcement efforts and distinguish between recreational and commercial hook-and-line fishermen.
- Crew size limitations have been used to prevent the sale of fish caught on charter vessels, as well as keep accurate counts of effort/participation. Some states have seen abuse of commercial hook-and-line limits by recreational vessels.
- Other states have had issues with competition for space between hook-and-line user groups. Virginia has had to implement rules establishing distances that commercial gear must be away from specific structures.

Part III Summary: Potential Impacts on Current Management and Existing Fishery Management Plans

- For all species managed under a state FMP, if an effort shift occurs, the use of hook-and-line gear commercially may reduce protected species interactions.
- Striped bass:
 - Hook-and-line is not an allowed commercial gear in North Carolina. For inland waters fisheries, this would need to be addressed through the current FMP revision and in conjunction with the Wildlife Resources Commission (WRC).
 - For Atlantic Ocean fisheries, allowing hook-and-line commercial catch would require adding a permit category. This could result in less use of other more expensive gears. This could also result in allocation issues without additional quota.
- Red Drum:
 - N.C. FMP intentionally prevents targeting of red drum commercially with bycatch requirement that red drum make up no more than 50% of catch by weight.

- One fish taken by hook-and-line is currently allowed for sale. Increasing this to the current 10 fish commercial trip limit while maintaining the bycatch provision would potentially increase landings, but not significantly due to 250,000 lb annual cap. It might offset some losses due to protected species measures.
- Southern Flounder:
 - Commercial hook-and-line fishing is already allowed without limit in internal waters, so implementation of new measures is unlikely to affect landings. Current hook-and-line landings in this fishery are 0.1% or less of the annual commercial landings from 1994 to 2009.
- Spotted Seatrout:
 - ASMFC has a FMP for this species, but no state compliance is required.
 - Currently, commercial hook-and-line catch is limited to 10 fish. Proposed rules for the draft N.C. FMP would reduce that to six fish, with no more than three fish over 24 inches TL.
 - Additional modifications to allow greater levels of commercial hook-and-line harvest must go through the FMP advisory committee.
 - Consideration would need to be given to the possibility of a significant increase in participants and potentially harvest at a time when overall reductions in harvest are required.
 - Commercial hook-and-line harvest might also increase user conflict with recreational fishermen.
- Kingfish (Sea Mullet)
 - A commercial hook-and-line fishery already exists and has no catch limits, therefore there would be little impact on this fishery. Hook-and-line commercial landings are currently minimal.
 - It is unlikely that hook-and-line fishery could recoup lost landings from potential future decreases in the gillnet fisheries due to attendance requirements or protected species measures.
- Striped Mullet
 - A commercial hook-and-line fishery already exists with no catch limits, therefore there would be little impact on this fishery.
 - There might be potential for impacts from the use of striped mullet as bait in other hook-and-line fisheries should such effort in those fisheries increase.

DEVELOPMENT OF A HOOK-AND-LINE COMMERCIAL FISHERY IN NORTH CAROLINA INFORMATION PAPER

PART I. Potential or Proposed Rule Changes

October 19, 2010

I. ISSUE

Current North Carolina Rules for Coastal Fishing Waters do not allow commercial hook-and-line catch and sale for several finfish species above the current recreational bag limits. The N.C. Marine Fisheries Commission (MFC) received a request to change two of these rules to allow for commercial hook-and-line catch and sale of speckled trout and red drum. The MFC decided to examine the broader implications of allowing a commercial hook-and-line fishery, and directed Division of Marine Fisheries (DMF) staff to study all issues related to the development of such a fishery in North Carolina. To that end, staff has developed this three-part information paper. Part I provides an analysis of all current rules that would require changes in order for such a fishery to operate, as well as the administrative processes and interjurisdictional (e.g., Atlantic States Marine Fisheries Commission) concerns that would need to be considered.

II. ORIGINATION

Public, Marine Fisheries Commission

III. BACKGROUND

The MFC has debated the issue of allowing the commercial catch and sale of fish by hook-and-line on several occasions. The result of these conversations has been a prohibition on the sale of hook-and-line caught striped bass and tarpon (which can only be caught by hook-and-line), as well as commercial hook-and-line landing limits that in most instances are identical to applicable creel limits. The last time this topic was addressed in an issue paper was October 20, 1998 at the MFC's Finfish Advisory Committee meeting, where the DMF presented six options: (1) no sale of hook-and-line caught species; (2) no sale of specific species caught by hook-and-line; (3) no sale of hook-and-line caught fish except by those with an Endorsement to Sell (ETS) or a non-vessel ETS (or a Standard Commercial Fishing License [SCFL] beginning July 1, 1999); (4) No sale of hook-and-line caught fish except by those with federal permits (e.g., National Marine Fisheries Service (NMFS) Coastal Migratory Permit, snapper-grouper permits); (5) No sale of hook-and-line caught fish except by those with federal permits or the sale of recreational bag limits by those with an ETS; (6) status quo. At that time, the DMF recommendation was Option 4 (no sale w/out a federal permit), as it would allow traditional hook-and-line fisheries for mackerel, dolphin and snapper-grouper to continue, while removing inconsistencies regarding hook-and-line sale of species not covered by federal permits. Based on Finfish Advisory Committee discussion, available data and further deliberations within the DMF, the DMF recommendation was changed to Option 5: no sale of hook-and-line caught fish w/out (1) a federal commercial permit or (2) if the harvester possesses a SCFL, the recreational bag limit could be sold, with the exception of striped bass (no sale ever) and billfish.

Subsequent to the decision above, a rules issue paper was developed to address recreational possession limits for Recreational Commercial Gear License (RCGL) holders. Included in this issue paper were changes to then-existing rules necessary to implement the preferred option above with regard to the commercial catch and sale of hook-and-line caught species. The proposed rule changes from that issue paper underwent minor edits (not captured in an issue paper) before becoming effective July 1, 1999.

In November 2009, the South Atlantic Fishery Management Council (SAFMC) received final approval from the Secretary of Commerce to implement Amendment 15B to the Snapper Grouper Fishery Management Plan (FMP), which prohibited the sale of bag limit-caught species in the federal snapper grouper complex. Previously, North Carolina fishermen with a SCFL, but without a federal snapper grouper permit, were allowed to land and sell the bag

limit of snapper grouper species managed by the SAFMC. North Carolina has complemented these regulations in state waters via proclamation authority (15A NCAC 03M .0512). Effective December 16, 2009 bag limit sales of snapper grouper species by SCFL holders without a federal snapper grouper permit is prohibited (see proclamation FF-66-2009).

At its March 2010 business meeting, the MFC reviewed a petition for rulemaking that requested changes to current rules for red drum and speckled trout, as well as a change to the weakfish proclamation to allow for commercial hook-and-line catch levels and sale of these species. Because of the significant restrictions to the use of gillnets as a result of recent protected species interactions, the MFC requested staff examine the issue of allowing a commercial hook-and-line fishery more broadly as a potential means of providing additional fishing opportunity. This information paper examines the specific rules that would need to be changed to allow for a commercial hook-and-line fishery in North Carolina.

IV. AUTHORITY

G.S. 113-134; 113-182; 113-221.1; 143B-289.52; 15A NCAC 03M .0512

V. DISCUSSION

The issue prompting the March 2010 request for rulemaking was a physical inability to pull a gill net, and the perceived discriminatory nature of specific finfish harvesting rules against SCFL holders with physical limitations (i.e., are only able to harvest via hook-and-line). However, an additional incentive for examining the issue of allowing and/or promoting a commercial hook-and-line fishery is the uncertain future use of gill nets (and potentially other net gears) in North Carolina waters. It is highly likely the recent gill net restrictions that were instituted to address interactions with federally-protected sea turtles will continue to be in place for the foreseeable future, limiting harvest opportunities in a number of fisheries. Additionally, the proposed uplisting of several other marine species (e.g., Atlantic sturgeon, sub-populations of bottlenose dolphins, etc.) has the potential to further restrict the use of net gears in North Carolina waters.

Existing rules allow unlimited commercial hook-and-line harvest of the following species in both state and federal waters: bluefish, mullet (striped and white), kingfish (sea mullet), spot and Atlantic croaker. In state waters only, commercial hook-and-line catch up to 3500 pounds is allowed for Spanish mackerel without a federal permit; in federal waters, commercial hook-and-line catch is limited to the federal recreational bag limit without a federal permit. Both spiny dogfish and scup (north of Hatteras) are subject only to the trip limit in state waters with no restrictions on the use of commercial hook-and-line gear. In internal coastal waters, unlimited catch of flounder is allowed with no restrictions on the commercial use of hook-and-line; in ocean waters zero to three miles offshore (state ocean waters), there is a 100 pound trip limit of flounder during the open season without a License to Land Flounder from the Atlantic Ocean. Both commercial and recreational harvest of cobia is subject to the same possession limit in state and federal waters. Finally, commercial hook-and-line catch of spotted seatrout, red drum, American shad and hickory shad are all subject to the recreational bag limit in state waters (see Table 1).

Changes to any of the aforementioned rules cannot be considered in isolation of either the FMP process or the annual rulemaking cycle. DMF strives to develop new rules and modify current rules in conjunction with the FMP development and/or revision process when at all possible. Several of the rules that would be impacted as described in this issue paper will not be on schedule for revision through the FMP process for several years. Additionally, any proposed rule creation or revision must also be carefully coordinated with the annual rulemaking cycle. DMF submits proposed rule changes once each year such that their effective date occurs just prior to the commercial license renewal season. This allows licensees to obtain a copy of the new rulebook at the same time they renew a license and provides the fishing public a consistent time of year to expect new rule changes.

Finally, several of the species being examined in this information paper are also managed under an Atlantic States Marine Fisheries Commission (ASMFC) FMP and/or a federal fishery management council FMP (see Table 2). Any rule changes would need to be consistent with these FMPs and might require review or approval by ASMFC or the councils.

Table 1. List of selected species and associated hook-and-line commercial catch and sale limits for fishermen holding only a SCFL

Species	Commercial Use of Hook/Line Gear Restricted in NC?	Commercial Hook/Line Catch and Sale Limit State Waters (SCFL Holder only)	Commercial Hook/Line Catch and Sale Limit Federal Waters (SCFL Holder only)
Bluefish	No	No limit	No limit
Cobia	No	Trip/bag limit*	Trip/bag limit*
Croaker	No	No limit	No limit
Dolphin	No	No sale w/out federal permit	No sale w/out federal permit
Flounder	No	None (internal waters); 100lb trip limit w/o license in ocean	100lb trip limit w/o license in ocean
King mackerel	No	Bag limit w/out federal permit	Bag limit w/out federal permit
Kingfish (sea mullet)	No	No limit	No limit
Mullet	No	No limit	No limit
Red drum	Yes	One fish**	Harvest prohibited
Scup (north of Hatteras)	No	Trip limit*	Trip limit*
Shad	Yes	Bag limit (internal waters)	Harvest prohibited
Snapper grouper	No	No sale w/out federal permit	No sale w/out federal permit
Spanish mackerel	No (state waters)	< 3500 lb w/out federal permit	Bag limit w/out federal permit
Spiny dogfish	No (state waters)	Trip limit***	Trip limit***
Spot	No	No limit	No limit
Spotted seatrout	Yes	Bag limit	None
Striped Bass	Yes	Commercial hook-and-line sale prohibited	All harvest prohibited
Wahoo	No	No sale w/out federal permit	No sale w/out federal permit
Weakfish	Yes	One fish	None^^

* Same trip and bag limit (2 fish) for both commercial and recreational sectors

** Only when commercial season open; fish must be 18-27"

*** Same trip limit in state and federal waters w/exception for spiny dogfish south of Brown's Inlet (500 lb state waters limit)

^^No limit in directed fisheries in federal waters currently; NMFS has proposed 100 lb bycatch limit for non-directed fisheries, although language is inconsistent. If proposed rule is implemented, will impose 100 lb directed trip limit in federal waters as well.

Table 2. List of authorities with fishery management plans for particular species. For species having a N.C. FMP, the next revision year is noted. Bolded species are included in the N.C. Interjurisdictional FMP.

Species	NC Species FMP/ next revision (year)	ASMFC FMP	Council FMP
Bluefish	No	Yes	MAFMC
Cobia	No	No	SAFMC
Croaker	No	Yes	No
Dolphin	No	No	SAFMC
Flounder*	Yes (Southern)/2010	Yes (Summer)	MAMFC (Summer)
King mackerel	No	No	SAFMC
Kingfish (Sea Mullet)	Yes/2013	No	No
Mullet	Yes/2010	No	No
Red drum	Yes/2013	Yes	No
Scup (north of Hatteras)	No	Yes	MAFMC
Shad	No	Yes	No
Snapper grouper	No	No	SAFMC
Spanish mackerel	No	Yes	SAFMC
Spiny dogfish	No	Yes	MAFMC
Spotted seatrout**	Yes/2010	Yes	No
Striped Bass^	Yes/2011	Yes	No
Wahoo	No	No	SAFMC
Weakfish	No	Yes	No

* The N.C. FMP specifically addresses southern flounder; ASMFC/MAFMC FMP addresses summer flounder

**The N.C. Spotted Seatrout FMP is currently under Secretarial and JLCSA review

^ The N.C. Estuarine Striped Bass FMP addresses the internal waters Albemarle Sound Management Area (ASMA), Roanoke River Management Area (RRMA) and Central/Southern Management Area (CSMA) stocks; management of the ocean (coastal migratory) stock is through ASMFC. ASMA and RRMA management is subject to approval by ASMFC.

Bolded species: These species are covered by the N.C. Interjurisdictional Fishery Management Plan, which incorporates by reference the applicable ASMFC and Council plans as minimum standards for management; North Carolina can at any time elect to develop a state-specific FMP for a particular species, while still maintaining that species in the IJ plan.

As noted previously, there is currently a mix of “allowable” commercial hook-and-line catch and sale. Traditionally, hook-and-line gear, as well as equipment such as gigs and spears, has been considered recreational gear in state waters. However, there are several federally-managed fisheries for which hook-and-line is the traditional method of commercial harvest, with the majority of landings coming from federal waters (e.g., snapper grouper, king and Spanish mackerel, dolphin and wahoo). Several of these fisheries have shifted towards a permit system in federal waters as a precursor to establishing limited-entry fisheries. To ensure compliance with the federal FMP, as well as ensure N.C. commercial fishermen are able to demonstrate a history of landings should limited-entry be instituted in the future, MFC rules require a SCFL holder to also have a federal permit when fishing for several of these species in state waters (e.g., 15A NCAC 03M .0515 and .0517). It is not advisable to change these rules, as this could place North Carolina fishermen at a competitive disadvantage in the future. It should be noted that although a federal permit is not required to harvest commercial quantities of Spanish mackerel in state waters, there are plans at the federal level to implement such a requirement in the future.

One important component of the overall issue of allowing and/or promoting a hook-and-line commercial fishery is the definition of commercial fishing gear. Fisheries rule 15A NCAC 3I .0101(3)(c) defines commercial fishing equipment or gear as “all fishing equipment used in coastal waters except:...(vi) Hook-and-line and bait-and-line equipment other than multiple-hook or multiple-bait trotline...” There are several other sub-items in this rule that exempt a number of gears from being considered exclusively commercial fishing equipment. Excluding these gears from being solely commercial allows for their use for either recreational or commercial purposes, with the exception being if their use is specifically prohibited by rule or proclamation for a particular fishery. It may appear upon reading 15A NCAC 03I .0101(3)(c) that none of the gears mentioned can be legally used in a commercial operation. However, clarification that *any* gear is considered commercial fishing gear is found if one refers to General Statute (G.S.) 113-168(1) which states “‘Commercial fishing operation’ means any activity preparatory to, during, or subsequent to the taking of any fish, the taking of which is subject to regulation by the Commission [MFC], either with the use of commercial fishing equipment or gear, or **by any means if the purpose of the taking is to obtain fish for sale.**’ (emphasis added) It would be difficult to specifically define recreational gear in rule, as sometimes gear can be used commercially or recreationally, depending on the fishery.

Several species-specific rules would require modification to allow for commercial hook-and-line harvest, including striped bass, red drum, spotted seatrout and shad. For striped bass, 15A NCAC 03M .0201(b) would need to be modified to remove the prohibition on the use of hook-and-line as commercial gear, as well as the prohibition on the sale or purchase of hook-and-line caught striped bass. It should be noted that these proposed changes would create a directed hook-and-line fishery in internal waters of the ASMA and RRMA, which is contrary to the goals of the N.C. Estuarine Striped Bass FMP but allowable under the Atlantic States Marine Fisheries Commission (ASMFC) Striped Bass FMP. (Directed commercial fishing for striped bass in the CSMA is allowed under the state FMP, and does not require approval by ASMFC). To avoid this conflict, a new sub-item would need to be inserted into the rule specifically stating that it is unlawful to sell hook-and-line caught fish from internal waters of the ASMA and RRMA. The state FMP is currently undergoing a revision, and the concept of a commercial hook-and-line fishery may be discussed in an issue paper. Any revisions or updates to the stock assessment or management measures for the ASMA and RRMA through the state FMP must be approved by the ASMFC.

Additionally, fisheries rule 15A NCAC 03O .0501(f)(1), which identifies the allowable gears under the Atlantic Ocean Striped Bass Commercial Gear Permit, would require the addition of hook-and-line as a fourth gear category. This change could create additional controversy over further allocating what is already viewed by industry as a small coastal commercial striped bass quota.

A similar situation occurs for red drum. The most recent amendment to the N.C. Red Drum FMP (passed in November 2008) continues a prohibition on a directed commercial fishery and requires that red drum be landed as bycatch incidental to other species. The ASMFC Red Drum FMP does not have this requirement but does require North Carolina to maintain a daily trip limit set by the Fisheries Director in order to keep landings below the 250,000 pound commercial cap per fishing year. Currently, the commercial harvest of red drum is administered by proclamation and sets a daily trip limit (10 red drum) that is only allowed incidental to the harvest of other target species (with the exception of menhaden). Allowing commercial hook-and-line catch and sale above the currently allowed one fish limit in the red drum fishery requires modification of 15A NCAC 03M .0501(d). In order to be consistent with the state FMP, the commercial harvest proclamation would need to be modified to extend the requirement for other marketable target species to hook-and-line gear. Sub-item (b) of this rule, which prohibits the

taking of red drum via gigs and spears, was originally in proclamation (FF-40-2001) and was put into rule during the 2008 amendment to the FMP. This sub-item was intended to prevent directed harvest. This rule previously applied to the striped bass fishery as well.

A new state FMP for spotted seatrout has been developed and approved by the MFC for review by the Secretary of the Department of Environment and Natural Resources (DENR) and the Joint Legislative Commission on Seafood and Aquaculture (JLCSA). As part of the proposed rules to implement the FMP, fisheries rule 15A NCAC 03M .0504(a) will be amended to increase the size limit from 12 to 14 inches, while Sub-item (b) will be amended to decrease the recreational bag limit from 10 to six fish. Of these six fish, it is unlawful to possess more than three fish greater than 24 inches total length (TL). To allow hook-and-line harvest in commercial quantities, Sub-item (b) would require further amendment to remove the hook-and-line restriction. While the proposed rule changes from the Spotted Seatrout FMP will not be approved for notice of text until after DENR/JLCSA review, they will enter the same rule-making cycle as any proposed rule changes resulting from this issue paper. It should be noted that additional changes to this rule would need to be reviewed by the Spotted Seatrout Advisory Committee before notice of text could be approved.

With regard to American shad and hickory shad, Amendment 1 to the ASMFC Shad and River Herring FMP implemented a five-year phased closure of the American shad commercial ocean intercept fishery, with a complete coastwide closure by 2005. Commercial harvest of American shad is allowed only in internal coastal waters. North Carolina fisheries rule 15A NCAC 03M .0519(a) allows only hook-and-line harvest of shad from April 15 through December 31 of each year. This is a defacto "recreational only" harvest season, as the commercial season is set by proclamation and can occur any time between January 1 and April 14. In order to allow harvest of commercial quantities of shad by hook-and-line, Sub-item (b) of this rule would require modification to remove the hook-and-line harvest restriction. Possession of commercial quantities of shad taken by hook-and-line could still be limited by proclamation to the January 1 through April 14 timeframe. It should be noted that, with the possible exception of the southern district, the availability of shad in quantities sufficient to provide a decent economic return to commercial hook-and-line fishermen will most likely be limited to joint and/or inland waters, the latter being outside of MFC jurisdiction. Inland waters are under Wildlife Resources Commission (WRC) jurisdiction and American shad have gamefish status in those waters. Furthermore, the recent passage of Amendment 3 to the ASMFC Shad and River Herring FMP requires states to submit sustainable fishery plans for American shad to the ASMFC by August 1, 2011 for review. States that fail to do so risk a closure of their American shad fisheries beginning January 1, 2012.

All other species-specific rules either (a) give the Fisheries Director proclamation authority to establish means and methods under certain variable conditions, (b) establish the same harvest/possession limits for recreational and commercial fishermen, regardless of the gear used or (c) refer to federally managed and permitted species as noted previously.

Finally, the MFC may also need to consider the development of a new rule to address possession limits for multi-day trips with regard to a commercial hook-and-line fishery in state waters. Multi-day trips are allowed only for charter and head boats, not private boats. Currently, there is no existing MFC rule that deals with this issue; rather, DMF mirrors the federal multi-day trip regulations developed by the South Atlantic Fishery Management Council (SAFMC) for those species under council jurisdiction (i.e., king and Spanish mackerel, snapper grouper species). This is done by proclamation under the authority of fisheries rule 15A NCAC 03M .0512. Federal regulations currently allow no more than two daily bag limits for trips spanning more than 24 hours for both snapper grouper and king and Spanish mackerel. As stated previously, sale of bag-limit caught snapper grouper species is no longer allowed (as of December 2009) without a federal snapper grouper permit.

VI. SUMMARY FINDINGS

The following are potential rule changes the MFC could consider should it choose to move forward with establishment of a commercial hook-and-line fishery. These are reflective of the discussion above regarding consistency with current FMPs. As noted previously, any rule changes or new rules that are pursued require coordination with both the FMP and annual rulemaking processes.

15A NCAC 03M .0201 GENERAL

- (a) Striped bass is defined as striped bass (*Morone saxatilis*) and its hybrids taken in coastal and joint waters.
- (b) ~~Hook and line fishing equipment is not commercial fishing equipment in the striped bass fishery.~~ It is unlawful to sell or purchase hook-and-line caught striped bass harvested from internal coastal fishing waters of the Albemarle Sound Management Area or the Roanoke River Management Area. Striped bass taken legally with hook-and-line may be possessed and transported.
- (c) It is unlawful to possess or sell hook-and-line caught striped bass harvested from the Atlantic Ocean without an Atlantic Ocean Striped Bass Commercial Gear Permit for hook-and-line.
- ~~(d)~~ It is unlawful to possess striped bass imported from other states less than 18 inches long (total length).
- ~~(d)~~(e) It is unlawful to import, buy, sell, transport, offer to buy or sell, or possess striped bass except during any:
- (1) open striped bass season established for internal coastal waters;
 - (2) open striped bass season established for the Atlantic Ocean; or
 - (3) open striped bass season of another state without possession of the following:
 - (A) A bill of lading as described in 15A NCAC 03I .0114;
 - (B) A numbered, state-issued tag from the State of origin affixed through the mouth and gill cover. This tag must remain affixed until processed for consumption by the consumer.
- (e) The management units and recreational fishery management areas for estuarine striped bass fisheries in coastal North Carolina are designated in 15A NCAC 03R .0201.

History Note: Authority G.S. 113-134; 113-182; 143B-289.52;
Eff. January 1, 1991;
Amended Eff. March 1, 1994; September 1, 1991;
Temporary Amendment Eff. May 1, 2000;
Amended Eff. April 1, 2012; October 1, 2008; October 1, 2004; April 1, 2001.

15A NCAC 03O .0501 PROCEDURES AND REQUIREMENTS TO OBTAIN PERMITS

- (a) To obtain any Marine Fisheries permit, the following information is required for proper application from the applicant, a responsible party or person holding a power of attorney:
- (1) Full name, physical address, mailing address, date of birth, and signature of the applicant on the application. If the applicant is not appearing before a license agent or the designated Division contact, the applicant's signature on the application shall be notarized;
 - (2) Current picture identification of applicant, responsible party and, when applicable, person holding a power of attorney; acceptable forms of picture identification are driver's license, current North Carolina Identification card issued by the North Carolina Division of Motor Vehicles, military identification card, resident alien card (green card) or passport or if applying by mail, a copy thereof;
 - (3) Full names and dates of birth of designees of the applicant who shall be acting under the requested permit where that type permit requires listing of designees;
 - (4) Certification that the applicant and his designees do not have four or more marine or estuarine resource convictions during the previous three years;
 - (5) For permit applications from business entities, the following documentation is required:
 - (A) Business Name;
 - (B) Type of Business Entity: Corporation, partnership, or sole proprietorship;
 - (C) Name, address and phone number of responsible party and other identifying information required by this Subchapter or rules related to a specific permit;
 - (D) For a corporation, current articles of incorporation and a current list of corporate officers when applying for a permit in a corporate name;
 - (E) For a partnership, if the partnership is established by a written partnership agreement, a current copy of such agreement shall be provided when applying for a permit;
 - (F) For business entities, other than corporations, copies of current assumed name statements if filed and copies of current business privilege tax certificates, if applicable.
 - (6) Additional information as required for specific permits.
- (b) A permittee shall hold a valid Standard or Retired Standard Commercial Fishing License in order to hold a:
- (1) Pound Net Permit;
 - (2) Permit to Waive the Requirement to Use Turtle Excluder Devices in the Atlantic Ocean; or
 - (3) Atlantic Ocean Striped Bass Commercial Gear Permit.

- (c) A permittee and his designees shall hold a valid Standard or Retired Standard Commercial Fishing License with a Shellfish Endorsement or a Shellfish License in order to hold a:
- (1) Permit to Transplant (Prohibited) Polluted Shellfish;
 - (2) Permit to Transplant Oysters from Seed Management Areas;
 - (3) Permit to Use Mechanical Methods for Oysters or Clams on Shellfish Leases or Franchises;
 - (4) Permit to Harvest Rangia Clams from Prohibited (Polluted) Areas; or
 - (5) Depuration Permit.
- (d) A permittee shall hold a valid:
- (1) Fish Dealer License in the proper category in order to hold Dealer Permits for Monitoring Fisheries Under a Quota/Allocation for that category; and
 - (2) Standard Commercial Fishing License with a Shellfish Endorsement, Retired Standard Commercial Fishing License with a Shellfish Endorsement or a Shellfish License in order to harvest clams or oysters for depuration.
- (e) Aquaculture Operations/Collection Permits:
- (1) A permittee shall hold a valid Aquaculture Operation Permit issued by the Fisheries Director to hold an Aquaculture Collection Permit.
 - (2) The permittee or designees shall hold appropriate licenses from the Division of Marine Fisheries for the species harvested and the gear used under the Aquaculture Collection Permit.
- (f) Atlantic Ocean Striped Bass Commercial Gear Permit:
- (1) Application for an Atlantic Ocean Striped Bass Commercial Gear Permit must be made prior to November 1 of each year. A person shall declare one of the following gears for an initial Atlantic Ocean Striped Bass Commercial Gear Permit and at intervals of three consecutive license years thereafter:
 - (A) gill net;
 - (B) trawl; ~~or~~
 - (C) ~~beach seine~~-beach seine; or
 - (D) hook-and-line.

For the purpose of this Rule, a beach seine is defined as a swipe net constructed of multi-filament or multi-fiber webbing fished from the ocean beach that is deployed from a vessel launched from the ocean beach where the fishing operation takes place.

Gear declarations are binding on the permittee for three consecutive license years without regard to subsequent annual permit issuance.
 - (2) A person is not eligible for more than one Atlantic Ocean Striped Bass Commercial Gear Permit regardless of the number of Standard Commercial Fishing Licenses, Retired Standard Commercial Fishing Licenses or assignments held by the person.
 - (3) The annual, nonrefundable permit fee is ten dollars (\$10.00).
- (g) For Hire Fishing Permit:
- (1) The permittee shall hold a valid certification from the United States Coast Guard (USCG) that allows carrying six or fewer passengers or a certification from the USCG that allows carrying more than six passengers;
 - (2) The permittee shall provide valid documentation papers or current motor boat registration or copies thereof for the vessel engaged as for-hire. If an application for transfer of documentation is pending, a copy of the pending application and a notarized bill of sale may be submitted.
- (h) Applications submitted without complete and required information shall not be processed until all required information has been submitted. Incomplete applications shall be returned to the applicant with deficiency in the application so noted.
- (i) A permit shall be issued only after the application has been deemed complete by the Division of Marine Fisheries and the applicant certifies to abide by the permit general and specific conditions established under 15A NCAC 03J .0501, 03J .0505, 03K .0103, 03K .0104, 03K .0107, 03K .0206, 03K .0303, 03K .0401, 03O .0502, and 03O .0503 as applicable to the requested permit.
- (j) The Fisheries Director, or his agent may evaluate the following in determining whether to issue, modify or renew a permit:
- (1) Potential threats to public health or marine and estuarine resources regulated by the Marine Fisheries Commission;
 - (2) Applicant's demonstration of a valid justification for the permit and a showing of responsibility as determined by the Fisheries Director;

- (3) Applicant's history of habitual fisheries violations evidenced by eight or more violations in 10 years.
- (k) The applicant shall be notified in writing of the denial or modification of any permit request and the reasons therefore. The applicant may submit further information, or reasons why the permit should not be denied or modified.
- (l) Permits are valid from the date of issuance through the expiration date printed on the permit. Unless otherwise established by rule, the Fisheries Director may establish the issuance timeframe for specific types and categories of permits based on season, calendar year, or other period based upon the nature of the activity permitted, the duration of the activity, compliance with federal or state fishery management plans or implementing rules, conflicts with other fisheries or gear usage, or seasons for the species involved. The expiration date shall be specified on the permit.
- (m) To renew a permit, the permittee shall file a certification that the information in the original application is still valid, or a statement of all changes in the original application and any additional information required by the Division of Marine Fisheries.
- (n) For initial or renewal permits, processing time for permits may be up to 30 days unless otherwise specified in this Chapter.
- (o) It is unlawful for a permit holder to fail to notify the Division of Marine Fisheries within 30 days of a change of name or address.
- (p) It is unlawful for a permit holder to fail to notify the Division of Marine Fisheries of a change of designee prior to use of the permit by that designee.
- (q) Permit applications shall be available at all Division Offices.

History Note: Authority G.S. 113-134; 113-169.1; 113-169.3; 113-182; 113-210; 143B-289.52; Temporary Adoption Eff. September 1, 2000; May 1, 2000; Eff. April 1, 2001; Temporary Amendment Eff. October 1, 2001; Amended Eff. April 1, 2012; April 1, 2009; July 1, 2008; December 1, 2007; September 1, 2005; April 1, 2003; August 1, 2002.

15A NCAC 03M .0501 RED DRUM

- (a) It is unlawful to remove red drum from any type of net with the aid of any boat hook, gaff, spear, gig, or similar device.
- (b) It is unlawful to take or possess red drum taken by any boat hook, gaff, spear, gig, or similar device.
- (c) It is unlawful to possess red drum less than 18 inches total length or greater than 27 inches total length.
- (d) It is unlawful to possess more than one red drum per person per day ~~taken by hook and line~~ or for recreational purposes.
- (e) The annual commercial harvest limit (September 1 through August 31) for red drum is 250,000 pounds. The annual commercial harvest limit is allotted in two periods: September 1 through April 30 at 150,000 pounds, and May 1 through August 31 at 100,000 pounds plus any remainder from the first period allotment. Any annual commercial harvest limit that is exceeded one year will result in the poundage overage being deducted from the subsequent year's commercial harvest limit and the Fisheries Director shall adjust the period allotments accordingly. If the harvest limit is projected to be taken in any period, the Fisheries Director shall, by proclamation, prohibit possession of red drum taken in a commercial fishing operation for the remainder of that period.

History Note: Authority G.S. 113-134; 113-182; 113-221; 113-221.1; 143B-289.52; Eff. January 1, 1991; Amended Eff. March 1, 1996; October 1, 1992; September 1, 1991; Temporary Amendment Eff. May 1, 2000; July 1, 1999; October 22, 1998; Amended Eff. April 1, 2001; Temporary Amendment Eff. May 1, 2001; Amended Eff. April 1, 2012; April 1, 2009; October 1, 2008; August 1, 2002.

[Note: The following rule is currently under construction as part of the Spotted Seatrout FMP]

15A NCAC 03M .0504 TROUT

- (a) It is unlawful to possess spotted seatrout (speckled trout) less than 12 inches total length.
- (b) It is unlawful to possess more than 10 spotted seatrout per person per day ~~taken by hook and line or~~ for recreational purposes.

History Note: Authority G.S. 113-134; 113-182; 113-221; 143B-289.52;
Eff. January 1, 1991;
Amended Eff. March 1, 1996; March 1, 1995; February 1, 1992;
Temporary Amendment Eff. September 9, 1996;
Temporary Amendment Eff. October 1, 1996;
Amended Eff. April 1, 1997;
Temporary Amendment Eff. July 1, 1999;
Amended Eff. April 1, 2012; October 1, 2008; August 1, 2000.

15A NCAC 03M .0519 SHAD

- (a) It is unlawful to take American shad and hickory shad by any method except hook-and-line from April 15 through December 31.
- (b) It is unlawful to possess more than 10 American shad or hickory shad, in the aggregate, per person per day ~~taken by hook and line or~~ for recreational purposes.

History Note: Authority G.S. 113-134; 113-182; 113-221; 143B-289.4;
Eff. October 1, 2008;
Amended Eff. April 1, 2012.

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DEVELOPMENT OF A HOOK-AND-LINE COMMERCIAL FISHERY IN NORTH CAROLINA INFORMATION PAPER

Part II. Summary of Commercial Hook-and-Line Fisheries in Other States

October 19, 2010

I. BACKGROUND

As described in Part I (Potential Rule Changes) of this information paper, the MFC received a request to change existing rules to allow for commercial hook-and-line catch and sale of spotted seatrout and red drum above current bags limits, as well as alter an existing weakfish proclamation to allow commercial levels of hook-and-line catch and sale. The DMF staff, prompted by the issue illustrated in Part I of this information paper, contacted other states to gather information on their commercial hook-and-line fisheries. Massachusetts, Maryland, Virginia, South Carolina, Georgia, Florida, and California were contacted, and the following is a summary of those findings. In order to inform the MFC on how other states have dealt with these issues, the discussion is broken down into the following sections: trip limits, permits, markings and notification, crew size, charter/commercial fishermen, and competition for space. These findings were used to develop a number of possibilities that the MFC could consider in administering a commercial hook-and-line fishery in North Carolina and are presented at the end of this paper. As noted in the Executive Summary, the intent of this three-part information paper is to explore mechanisms for providing additional commercial fishing opportunities (given current restrictions on the use of gillnets as a result of protected species interactions).

II. DISCUSSION

Hook-and-line gear can be an effective method to catch commercial quantities of many fish species. N.C. Rules for Coastal Fishing Waters, however, have restricted the commercial catch of red drum, shad, spotted seatrout, striped bass, and weakfish to the recreational bag limit or less (Table 2). These restrictions were put in place to reduce conflicts that may arise when commercial fishermen have a different bag limit than recreational fishermen. The hook-and-line restriction on striped bass was first listed in the N.C. Fisheries Regulations for Coastal Waters in 1986, red drum and weakfish in the 1996-1997 version, spotted seatrout in the 1997-1998 version, and American shad and hickory shad in the 1998 Supplement to the 1997-1998 version. Trip Ticket data exist for the periods when species limited to the recreational creel limit (listed above) could be landed commercially. The landings data during this time period can be used to gain some inference into the landings by hook-and-line commercial fishermen. Prior to hook-and-line regulations for commercial fishermen, this gear accounted for 0 to 1% of the total coastal waters commercial landings for American shad, 0.6% of red drum landings, 1.1 to 2.7% of spotted seatrout landings, and 0% of weakfish landings (Table 3). Since 2000, when all of these fish had limited harvest with hook-and-line gear, the percent of landings with hook-and-line has remained less than 0.3% of the total commercial landings for these species except for speckled trout which has remained less than 1%.

Most other states along the Atlantic Coast allow commercial catch of finfish with hook-and-line gear. Some states limit the amount of fish that can be taken commercially with hook-and-line gear, while other states limit species that can be taken with the gear. Massachusetts, Maryland, Virginia, South Carolina, Georgia, and Florida all allow hook-and-line gear to be used to harvest finfish, but only Massachusetts, Maryland, and Virginia have a hook-and-line permit, and only two of those states require limited entry (Maryland and Virginia). In talking with representatives from each of these states, it was indicated that their hook-and-line gears are mainly supplemental, thus are used along with other types of commercial gear permits to take finfish. South Carolina, Georgia, and Florida landings were ranked to provide insight into the potential impact of a hook-and-line fishery (Table 4). Unfortunately, many of the species limited to recreational bag limits for the commercial hook-and-line fishery in North Carolina are also limited or not allowed in these states.

Management Tools

In interviewing colleagues from other states regarding their hook-and-line commercial fisheries, it was clear that several basic tools are used to manage the fisheries: trip limits, permits, decals and crew size. Some states use these tools in conjunction with gear type and some states use them in conjunction with a permit. In some cases, all of these tools are employed simultaneously. The following sections describe the use of these tools in different states' fisheries as an illustration of mechanisms the MFC could consider for managing a commercial hook-and-line fishery in North Carolina. The following sections on permits, markings and notification, crew size, and competition for space are summarized in Table 1. Although, Florida, Georgia, and South Carolina allow hook-and-line gear to be used to harvest finfish, they do not have a hook-and-line permitted fishery and therefore were not included in the table.

Table 1. Summary findings from other states which have a hook-and-line permitted fishery.

	Massachusetts	Maryland	Virginia
H-N-L permit	not limited entry	limited entry/not limit entry*	limited entry (ITQ)
# of permits	1,121	Striped bass 1,231** (~30%) Yellow perch 50-60** (1%) Flounder 7** (0%)	200^
Permit requirements	Commercial license and required to obtain a species endorsement to harvest certain species of finfish	Must have a commercial license before receiving a permit	1000 lbs of seafood landed over two years and a valid striped bass permit
Display tags	No tag	Flag	License plate
Crew size	Each crew member must have a permit	1 permit holder is allowed three additional non- permit holders onboard. 2 permit holders are allowed to have one additional non-permit holder (each) onboard.	All crew members must be registered with the Commission on an annual basis
Competition for space	Yes, but no rules to limit where and when permit holders can fish	Yes	Yes, Have set up rules designed to help reduce conflicts

* Striped bass and flounder are limited entry, but yellow perch is not

** pertains to all the gears that can be used to harvest striped bass, yellow perch, and flounder not just hook-and-line gear. (%) percentage of permit holders that used hook-and-line gear.

^ Only about half of the permit holders are fishermen actively involved in commercial fishing operations.

(ITQ) individual transferable quota

Trip Limits

Trip limits have been established for several commercial species. A number of North Carolina trip limits specific to hook-and-line gear are listed in Table 2. Several other states use hook-and-line specific regulations. South Carolina does not allow commercial harvest of American shad with hook-and-line gear. They also have gamefish status for striped bass, spotted seatrout, and red drum, which means these species can only be caught with hook-and-line gear. Hook-and-line is technically not an allowable commercial gear to harvest finfish in Georgia's state waters, however some sale does occur. Since no true commercial fishery exists in Georgia's state waters, all fishermen harvesting fish with hook-and-line gear are restricted to recreational bag limits and cannot be sold commercially.

Florida limits harvest of several species to just hook-and-line or hook-and-line and/or cast nets. The trip limit for species caught with hook-and-line gear is 75 spotted seatrout (gillnets cannot be aboard the boat with possession of spotted seatrout), 10 tripletail per person or vessel, 10 American shad per person, and two African pompano. Red drum is listed as gamefish in Florida and cannot be harvested commercially.

These gear specific trip limits can be used to increase the commercial hook-and-line bag limits in North Carolina but need to ensure that stocks with a "concerned" or "depleted" status are not adversely impacted by the increased catch limits. Of the species with hook-and-line limited bag limits listed in Table 3, only red drum has a recovering stock status. Increasing the current trip limits for the other species may require a reduction in harvest with other gear types.

Table 2. List of selected species and associated hook-and-line commercial catch and sale limits for fishermen holding only a SCFL

Species	Commercial Use of Hook/Line Gear Restricted in NC?	Commercial Hook/Line Catch and Sale Limit State Waters (SCFL Holder only)	Commercial Hook/Line Catch and Sale Limit Federal Waters (SCFL Holder only)
Bluefish	No	No limit	No limit
Cobia	No	Trip/bag limit*	Trip/bag limit*
Croaker	No	No limit	No limit
Dolphin	No	No sale w/out federal permit	No sale w/out federal permit
Flounder	No	None (internal waters); 100lb trip limit w/o license in ocean	100lb trip limit w/o license in ocean
King mackerel	No	Bag limit w/out federal permit	Bag limit w/out federal permit
Kingfish (sea mullet)	No	No limit	No limit
Mullet	No	No limit	No limit
Red drum	Yes	One fish**	Harvest prohibited
Scup (north of Hatteras)	No	Trip limit*	Trip limit*
Shad	Yes	Bag limit (internal waters)	Harvest prohibited
Snapper grouper	No	No sale w/out federal permit	No sale w/out federal permit
Spanish mackerel	No (state waters)	< 3500 lb w/out federal permit	Bag limit w/out federal permit
Spiny dogfish	No (state waters)	Trip limit***	Trip limit***
Spot	No	No limit	No limit
Spotted seatrout	Yes	Bag limit	None
Striped Bass	Yes	Commercial hook-and-line sale prohibited	All harvest prohibited
Wahoo	No	No sale w/out federal permit	No sale w/out federal permit
Weakfish	Yes	One fish	None^^

* Same trip and bag limit (2 fish) for both commercial and recreational sectors

** Only when commercial season open; fish must be 18-27"

*** Same trip limit in state and federal waters w/exception for spiny dogfish south of Brown's Inlet (500 lb state waters limit)

^^No limit in directed fisheries in federal waters currently; NMFS has proposed 100 lb bycatch limit for non-directed fisheries, although language is inconsistent. If proposed rule is implemented, will impose 100 lb directed trip limit in federal waters as well.

Table 3. Percent of selected species caught commercially with hook-and-line gear in North Carolina coastal waters from 1994-2009 (NC TTP).

Species	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Red drum	0.6%	0.6%	0.9%	0.5%	1.1%	0.2%	0.3%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%
Shad	1.0%	0.6%	0.5%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Weakfish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.1%
Spotted seatrout	2.7%	1.2%	1.1%	2.1%	1.1%	0.7%	0.5%	0.6%	0.6%	0.4%	0.9%	0.5%	0.6%	0.4%	1.0%	0.9%

Percentages in bold are landings prior to hook-and-line regulations for commercial fishermen

Table 4. Rank of landings harvested with hook-and-line gear by state (Florida, Georgia, and South Carolina) from 2005-2009 (ACCSP).

State	Species	2005	2006	2007	2008	2009
SC	Bluefish	26	24	14	14	17
	Black drum				32	
	Red Drum*					
	Spotted Seatrout*					
	Striped Bass*					
	Weakfish					
	Total Number of Species Landed via Hook-and-Line	32	34	31	36	35
GA	Bluefish	10	17	9	21	16
	Black drum	21	14	20	13	9
	Red drum	17	9	17	10	7
	Spotted seatrout	12	6	11	6	11
	Striped Bass					
	Weakfish	29	11		23	
	Total Number of Species Landed via Hook-and-Line	32	26	24	27	25
FL	Bluefish	12	13	13	13	11
	Black drum	30	33	18	16	22
	Spotted Seatrout	10	9	8	12	10
	Striped Bass					
	Red drum*					
	Weakfish	41	34	22	25	38
	Total Number of Species Landed via Hook-and-Line	92	93	90	99	95

*Denotes Gamefish

Permits/Endorsement

Permits or endorsements are used to control the number of fishermen, the amount of effort in the fishery and enable better tracking of trends in commercial fisheries. Four of the states contacted (Massachusetts, Maryland, Virginia, and Florida) have a hook-and-line permit or endorsement. Of these states, Maryland and Virginia have a limited entry fishery. For North Carolina to establish a limited entry fishery in internal coastal waters, a statute change would be needed.

Massachusetts

Massachusetts has a rod-and-reel permit, but it is not limited entry. Currently they have 1,121 permit holders. Permit holders are required to have a species endorsement to harvest certain species of finfish. The requirement to obtain a species endorsement varies by species. For striped bass, flounder, and cod, a fisherman must submit a landing history for that particular species of fish by a certain cut-off date annually or he will be shut out of the fishery the following year. Other species of finfish require the payment of a fee and the fisherman receives an endorsement without having to show a landings history.

Maryland

Maryland issues hook-and-line permits for the harvest of striped bass, yellow perch, and flounder (all separate permits). Due to declines in the striped bass stock in the early 80's, Maryland implemented a moratorium on commercial and recreational striped bass harvest. Recovery of the striped bass stocks in 1994 prompted Maryland state law makers to cap the number of commercial licensees able to participate in the striped bass fishery at the current number of participants (1,231) to prevent overfishing. As a migratory species, striped bass are monitored by the Atlantic States Marine Fisheries Commission (ASMFC) which sets harvest quotas for each of the Atlantic states. Maryland then further divides their portion of the quota among different gear types assigned to different seasons. These laws were intended to prevent overfishing and have proven to be a huge step in restoring the striped bass population. The striped bass fishery is a limited entry (1,231 permits), but the number of permits pertains to all the gears that can be used to harvest striped bass (Table 5). Two types of permits can be used to harvest striped bass with hook-and-line: 1) a combined hook-and-line /gill net permit or 2) a hook-and-line only gear permit. An interested party may obtain a permit in one of two ways: If the fisherman already has a commercial fishing license that allows him to harvest finfish, then he may apply to be placed on the waiting list. As permit holders leave the fishery, the next-in-line fisherman (on the waiting list), replaces him, or a current permit holder may transfer their permit to a new fisherman. A fisherman must have all commercial licenses before receiving a permit transfer. The main issue Maryland deals with in their hook-and-line permit is the fact that fishermen are required to immediately tag the fish once it is harvested. This rule was put in place because fishermen were using the hook-and-line permit to fish out of pound nets to obtain their harvest limits with the hook-and-line permit, and also harvest their limits with the pound net permit (actually "double dipping").

The yellow perch permit is not limited entry and again is not limited to just hook-and-line gear. Currently, there are between 50-60 permit holders and only about half of those are actively fishing. The majority of the participants (99% fyke nets, 1% hook-and-line) in this fishery use this permit to harvest yellow perch once the striped bass season is over. A commercial fisherman may obtain a yellow perch permit in one of two ways: declare his intent to participate in the upcoming year's fishery if he currently holds a yellow perch permit or he must fill out a form and is required to have a current commercial fishing license for a new permit. The yellow perch permit was set up to mitigate conflict issues between user groups. With this permit in place, Maryland has been able to monitor the number of participants allowed in the fishery as well as harvest levels.

The flounder permit is limited entry and currently has seven participants. Again, this permit is not solely for the use of hook-and-line gear and currently the seven participants in the fishery use trawl gear to harvest flounder.

Table 5. Harvest by gear type in the Maryland commercial striped bass fishery, 2007-2009 (Maryland Department of Natural Resources Commercial Striped Bass monitoring program). Data include both ocean and bay/tributaries water quotas.

Gear permits	<u>2007</u>			<u>2008</u>			<u>2009</u>		
	Participants	Total fish	Total pounds	Participants	Total fish	Total pounds	Participants	Total fish	Total pounds
Gill net	289	323,778	1,068,439	344	328,778	1,220,552	443	286,982	1,050,188
Hook-and-line	287	255,419	626,049	278	141,973	676,449	390	191,760	650,013
Pound net	142	209,142	454,819	136	172,525	563,708	94	170,291	566,898
Trawl or gill net	68	13,349	112,791	64	14,318	119,997	62	13,409	127,327
Haul seine	0	0	0	*	*	*	0	0	0

* Landing data cannot be reported due to confidentiality policy

Virginia

Virginia only allows 200 hook-and-line permit holders. To obtain this permit, a fisherman must hold a valid and current striped bass permit and have reported sales of at least 1,000 pounds of seafood during the course of the previous two years. The hook-and-line fishery was initially set up as a special fishery for the commercial fishermen. The fishery now consists of only about 100 fishermen actively involved in commercial fishing, with the rest of the permit holders being recreational fishermen who have obtained the permit legally. One of the main uses of the hook-and-line permit by commercial fishermen is to harvest flounder during the summer months when prices are higher due to the trawl fishery being closed.

Florida

Florida, which has no hook-and-line permit, does require a species endorsement to harvest certain species of finfish. In order to receive a restricted species endorsement, a fisherman must qualify under one of the following criteria:

1. Show \$5,000 in sales to a licensed wholesale dealer, under a valid Saltwater Products License, in any 12 consecutive months of the previous 36 months.
2. Twenty-five percent of the fisherman's annual income must be from sales of seafood to a wholesale dealer, under a valid Saltwater Products License. Sales must have occurred during the same 12 month period as covered in the fisherman's tax return.
3. Charter boat operation must have at least 50% of their annual income derived from charter fishing and \$2,500 in seafood sales.
4. Fishermen, 62 and older, may obtain a Restricted Species endorsement if they have qualified for such an endorsement for at least three out of the last five years.
5. Fishermen, 70 and older, may obtain a Restricted Species endorsement if they have held a Saltwater Product License for at least three of the five license years.

Markings and Notification

Display tags have been used by some states to enable quick differentiation of recreational and commercial fishermen particularly when commercial fishermen are limited in areas and days they can fish. Both Maryland and Virginia require hook-and-line permit holders to display some type of flag or license plate on their boat while operating under the hook-and-line permit. This not only helps law enforcement in identifying the individuals with permits, but it also alerts other boaters, both recreational and commercial, to determine whether or not a particular vessel is fishing legally. If an individual is not fishing legally, then the violator can be reported for any illegal activities to law enforcement. The tag/flag makes it easier to spot violators. In the past, decals have been the standard protocol used by DMF (for display tags). Examples of a current DMF permit or license that requires the use of a decal are the For-Hire fishing permit, For-Hire Blanket Coastal Recreational Fishing License, and the Commercial Fishing Vessel Registration. An additional option the MFC could consider (instead of using a decal system) is having a call-in policy similar to the one that is set up for use with a Scientific and Educational collection permit, or the Pamlico Sound Gill Net Restricted Area permit. These types of policies require the boat owner/fisherman to call into the marine patrol office to notify the officer/dispatcher as to where and when they will be/have been fishing. However, the current number of fishermen involved in the call-in system is low. With the possibility of a large number of commercial fishermen involved in a proposed hook-and-line fishery, this call-in requirement could become very cumbersome for marine patrol to track. Both types of reporting systems (decals or call-in) would help reduce the resources needed to track down possible illegal activities.

Crew size

Crew size regulations limit the number of fishermen allowed to fish on a vessel. This management method has been used to deter the selling of fish caught on chartered vessels, enable accurate counts of fishermen operating in the fishery, and to limit effort and harvest in the fishery. The number of crew members on board while operating under a hook-and-line permit varies by state. Massachusetts only allows permit holders to harvest commercial bag limits, therefore each crew member must have a permit to harvest fish. In Maryland, the number of crew members depends on the number of permit holders. The state of Maryland requires that there can be no more than two permit holders

on a vessel and no more than two non-permitted crew members on a vessel. Thus, the maximum total crew for one permit holder is three, and the maximum crew total for two permit holders is four. The permit is assigned to the captain and is not tied to a specific vessel. Virginia only allows three crew members on board at any one time and permit holders are required to register all crew members with the commission on an annual basis and in advance of any fishing year. Commercial hook-and-line fishermen may revise their list twice per year. In recent years, Virginia has had problems with recreational fishermen who have legally obtained a hook-and-line permit but use this permit to take paying customers on charters, which allows their customers to harvest commercial sizes and bag limits. Some permit holders have listed over 200 crew members on their annual crew lists, indicating they are not using this permit for commercial purposes. North Carolina also limits the number of crew members allowed aboard vessels in the snapper/grouper, king and Spanish mackerel fisheries. Vessels with a South Atlantic Federal Commercial Vessel Snapper/Grouper Permit and a Snapper/Grouper Permit for charter or head boats, or vessels with a South Atlantic King or Spanish Mackerel Commercial Vessel Permit and a Coastal Migratory Pelagic Permit for Charter or Head Boats are not allowed to fish commercially with more than three persons on board (including captain and mate) to exceed the recreational creel limit (Proclamation FF-71-2010 and 15A NCAC 03M .0301 (c)).

The majority of the species in North Carolina that are limited to the recreational bag limit for commercial hook- and-line fishermen are estuarine species. Most charter trips fishing inshore have two to three clients with one captain aboard. There may be exceptions in the ocean striped bass fishery where larger vessels are used, making it harder to determine if the trip is recreational or commercial.

Other Management Issues

While the previous section reviewed administrative mechanisms that could be used to manage a commercial hook-and-line fishery, there are other issues that require careful consideration. These include user conflicts between commercial and recreational for-hire hook-and-line fishermen or double-counting of a trip as both commercial and recreational and thus, cannot necessarily be resolved with a tool such as a permit. The following sections describe two of the most common issues and the means by which they have been addressed in other states.

Charter/Commercial Fishermen

Some commercial fishermen in North Carolina have for-hire licenses and some charter boat captains have commercial licenses. These fishermen would have a distinct advantage if they are able to take clients out on a chartered “commercial” trip where the clients were not subjected to the recreational trip limits. Virginia experienced this problem when recreational fishermen who had obtained a hook-and-line permit increased the names on their amendable crew list from just a few to over 200 as mentioned above. To avoid problems such as this, an enforceable regulation is needed to avoid the potential of chartered trips which have commercial captains exceeding the recreational bag limit. N.C. General Statute (N.C.G.S.) 113-174(2a) defines a for hire boat as “a charter boat, head boat, dive boat, or other boat hired to allow individuals to engage in recreational fishing.” Commercial fishing operation is defined in N.C.G.S. 113-168(1) as “any activity preparatory to, during, or subsequent to the taking of any fish, the taking of which is subject to regulation by the Commission, either with use of commercial fishing equipment or gear, or by any means if the purpose of the taking is to obtain fish for sale.” This definition distinguishes between the two sectors and keeps the two sectors harvest regulations independent.

Virginia, which has had issues with charter captains taking clients on trips using commercial limits, defines a commercial fisherman, (in the Code of Virginia) as “any person who fishes in tidal waters using any gear and who sells, trades or barter his catch or gives his catch to another in order that it may be sold, traded or bartered.” A definition is lacking for recreational and for hire fishermen in the Code of Virginia (28.2-302.1 recreational and 28.2-302.8 for hire). Since there is no definition to distinguish between the two sectors then charter fishermen may be able to obtain a commercial license and retain commercial bag limits.

Competition for Space

Competition for space and fishery resources occurs among commercial and recreational fishing sectors as well as within the fishing sectors. These conflicts arise because many economically important fishery resources will school in limited areas. This leads to competition for the limited space the fishery resource typically occupies. Examples of the competition for space in North Carolina include the jetties at Cape Lookout and Masonboro Inlets, the beach

north of Oregon Inlet during the striped bass and bluefish runs, and conflicts between gillnet and recreational fishermen fishing for spotted seatrout during the winter months. To address some of the competition issues, North Carolina has established distances that commercial gears must be away from several structures as listed in 15A NCAC 03J .0402 of the Rules for Coastal Fishing Waters. Other states did indicate that they have conflict issues between user groups as well. The state of Virginia has set up rules designed to help reduce such conflicts. These rules make it unlawful for hook-and-line permit holders to do the following:

1. Fish within 300 yards of any bridge, bridge-tunnel, jetty or pier from 6 p.m., Friday through 6 p.m., Sunday.
2. Fish within 300 yards of any fixed fishing device.
3. Harvest black drum within 300 yards of the Chesapeake Bay-Bridge Tunnel, at any time.
4. It shall be unlawful for any person to use a commercial hook-and-line within 300 feet of any bridge, bridge-tunnel, jetty, or pier during Thanksgiving Day and the following day or during any open recreational striped bass season in the Chesapeake Bay and its tributaries except during the period midnight, Sunday through 6:00 a.m., Friday.

Should a commercial hook-and-line fishery be pursued in North Carolina, further consideration might be needed to address competition in additional areas.

III. AUTHORITY

G.S. 113-134; 113-182; 113-221.1; 143B-289.52; 15A NCAC 03M .0512

IV. SUMMARY FINDINGS

The intent of this part of the information paper is to illustrate and summarize some of the ways by which other states have managed their commercial hook-and-line fisheries. As illustrated by the information above, there are a variety of administrative mechanisms that North Carolina could consider in pursuing a commercial hook-and-line fishery. However, a number of issues would need to be carefully addressed to ensure that any additional commercial fishing opportunity is not abused. These include: establishing restrictions or conditions that prevent “double-dipping” by the for-hire sector (i.e., a for-hire captain attempting to take commercial quantities/size limits of fish on a paying charter trip); establishing a means of easily distinguishing commercial hook-and-line fishermen from recreational hook-and-line fishermen; identifying geographic areas where conflicts might occur; consideration of changes in protocol for dockside for-hire sampling, etc. A combination of administrative mechanisms might be needed to ensure that a commercial hook-and-line fishery is appropriately managed.

Potential Administrative Options

The following options for administering a commercial hook-and-line fishery are based on the research summarized above and are provided as potential management mechanisms for the MFC to consider. This list is not exhaustive and additional options may be developed.

1. Status Quo
 - + No rule changes needed
 - + Conflict between commercial and recreational fishermen not increased at “hot spots”
 - Does not increase the number of fish allowable with hook-and-line gear
 - Does not allow fishermen to switch into a different fishery due to increased gillnet regulations
2. Allow commercial limits of striped bass, red drum, spotted seatrout, weakfish, and American shad with hook-and-line gear
 - + Allows fishermen to increase harvest with hook-and-line gear
 - + Fishermen have a different gear to use to offset the impact of gillnet regulations
 - Harvest may be substantial and cause overfishing
 - May increase conflicts between commercial and recreational fishermen

- Difficult to distinguish between recreational and commercial fishermen
 - Different commercial and recreational size limits for certain species
 - May increase effort in commercial fisheries if fishermen can fish two gears simultaneously
 - ± Divides commercial quota (for species with a quota) among additional user groups
3. Allow commercial harvest limits for above species and require display tags/call-in policy for hook-and-line commercial fishermen
 - + Allows fishermen to increase harvest with hook-and-line gear
 - + Easily identifies a commercial hook-and-line fisherman
 - + Fishermen have a different gear to use to offset the impact of gillnet regulations
 - Additional equipment required for commercial hook-and-line fishermen
 - Harvest may be substantial and cause overfishing.
 - May increase effort in commercial fisheries if fishermen can fish two gears simultaneously
 - May increase conflict between recreational and commercial fishermen
 - May increase the number of phone calls to the marine patrol dispatch office
 - ± Divides commercial quota (for species with a quota) among additional user groups
 4. Allow commercial harvest limits for above species and hook-and-line and gillnets cannot be onboard at the same time
 - + Allows fishermen to increase harvest with hook-and-line gear
 - + Reduces amount of gillnets if fishermen choose to use hook-and-line gear
 - + Potential to reduce conflicts between hook-and-line and gill net fishermen
 - Harvest may be substantial and cause overfishing.
 - Potential to increase competition between recreational and commercial hook-and-line fishermen.
 - ± Divides commercial quota (for species with a quota) among additional user groups
 5. Allow commercial harvest limits for above species and commercial hook-and-line fishermen cannot fish in areas where commercial fishing is restricted
 - + Allows fishermen to increase harvest with hook-and-line gear
 - + Reduces competition between recreational and commercial fishermen
 - Harvest may be substantial and cause overfishing.
 - Commercial fishermen cannot harvest in “hot spots”
 - ± Divides commercial quota (for species with a quota) among additional user groups
 6. Allow commercial harvest limits for above species with a limited entry permit
 - + Allows a group of fishermen to increase harvest with hook-and-line gear
 - + Controls the expansion of the new fishery
 - + Easier tracking of the landings
 - + Potentially reduces conflicts if other commercial gear use is reduced
 - Requires documentation that fishery cannot be controlled by any other means, to be legal
 - Does not give all fishermen ability to enter into the fishery
 - Acceptable quota and number of entrants for the new fishery is unknown
 - Could charge for permit ,but would require a statute change
 - ± Divides commercial quota (for species with a quota) among additional user groups
 - ± A statute change would be needed to have a limited entry fishery
 7. Allow commercial harvest limits for above species with a license endorsement
 - + Allows fishermen to increase harvest with hook-and-line gear
 - + Potentially reduces conflicts if other commercial gear use is reduced
 - + Monitor the number of endorsement holders
 - Harvest may be substantial and cause overfishing
 - Potential to increase competition between recreational and commercial hook-and-line fishermen
 - ± Divides commercial quota (for species with a quota) among additional user groups
 - ± Could charge for endorsement, but would require a statute change
 - ± An endorsement would require a statute change to be issued

8. Allow commercial harvest limits for above species and require for-hire vessels to declare crew on yearly basis on permit
- + Prevents for-hire permit holders from using the same trip for both commercial and recreational purposes
- + Allows for-hire permit holders to fish commercially via hook-and-line
- Potential to increase competition between recreational and commercial hook-and-line fishermen
- ± Divides commercial quota (for species with a quota) among additional user groups
- ± Limits the number of crew members

RESEARCH RECOMMENDATIONS

- Is selectivity in commercial hook-and-line fishery similar to recreational or other commercial fisheries
- Determine discard amount and discard mortality rate for commercial hook-and-line fisheries
- Will changing the commercial hook-and-line regulations change harvest

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DEVELOPMENT OF A HOOK-AND-LINE COMMERCIAL FISHERY IN NORTH CAROLINA INFORMATION PAPER

PART III. Potential Impacts on Current Management and Existing Fishery Management Plans October 19, 2010

I. BACKGROUND

As noted in Parts I and II of this information paper, the Marine Fisheries Commission (MFC) received a request to allow for commercial levels of hook-and-line catch and sale of spotted seatrout and red drum, and decided to examine the broader implications of pursuing a commercial hook-and-line fishery in North Carolina. Part I of this information paper examined potential rule changes that would need to be considered, as well as the applicable administrative processes and interjurisdictional authorities. Part II provided a summary of management of commercial hook-and-line fisheries in other states, along with a variety of mechanisms that the MFC could consider in administering a hook-and-line fishery in North Carolina. The intent of this piece (Part III) of the information paper is to provide a broad view of the potential impacts of a commercial hook-and-line fishery on current management structures and existing state fishery management plans (FMPs). The following paragraphs offer this perspective for all N.C. finfish FMPs with the exception of river herring (blueback herring and alewife), as all harvest is currently prohibited for these species.

II. DISCUSSION

Atlantic Striped Bass

North Carolina has commercial striped bass fisheries in both the Atlantic Ocean as well as the internal waters of the state. North Carolina has managed the Atlantic Ocean striped bass fishery under the Atlantic States Marine Fisheries Commission (ASMFC) Atlantic Striped Bass FMP and amendments and addendums since 1981. A separate state FMP exists for striped bass in North Carolina internal waters. Currently, North Carolina does not allow the use of hook-and-line as a commercial gear in the striped bass fishery and also prohibits the sale of hook and line caught striped bass. Allowance of a hook-and-line commercial fishery would affect the Atlantic Ocean fisheries and the internal fisheries differently.

North Carolina currently manages the commercial Atlantic Ocean striped bass fishery under a 480,480 lb total allowable catch (TAC) and a 28 inch total length (TL) minimum size limit. The quota is allocated on a seasonal basis from December 1- November 30. The TAC is allocated equally among three different fisheries; beach seine, gill net and trawl. Overages in any one fishery are deducted from that fishery's portion of the TAC the following season. From 1995/1996- 2003/2004, there were five seasonal TAC adjustments due to overages. However, since the 2004/2005 season, North Carolina landings have averaged 105,205 pounds below the TAC. Milder winters and warmer ocean water temperatures have kept the Atlantic striped bass farther north and offshore with fewer fish in North Carolina coastal waters.

In 2009 the North Carolina Division of Marine Fisheries (DMF) implemented an Atlantic Ocean Striped Bass Commercial Gear Permit in order to identify participants and assist with setting appropriate quotas for each fishery. Fishermen were required to obtain a permit and declare which fishery (beach seine, gill net or trawl) they would be participating in. The fishermen would then be "locked" into that fishery for the next three years. Allowance of hook-and-line as a commercial gear in the Atlantic Ocean striped bass fishery would require a revision of the commercial gear permit to add hook-and-line as a fourth gear category. In addition, allocation for this category would have to come from a 480,480 pound TAC already assigned to the three other fisheries/gears. Further consideration would have to be given to the possibility of the hook-and-line category considerably increasing the number of participants and creating additional difficulties in allocating and controlling the small Atlantic Ocean commercial quota. As an example, the number of permits issued for the 2010/2011 fishing year is currently 769, with two weeks remaining for participants to obtain a permit. Limited entry into this fishery or category would likely have to be considered to control participant numbers. It is also possible that some fishermen may chose to

utilize the hook-and-line gear thereby reducing the amount of beach seine, gill net or trawl gear in the water. The addition of a hook-and-line category in this fishery would not require ASMFC approval.

The commercial striped bass fishery in the internal waters of NC is managed under a joint MFC/North Carolina Wildlife Resources Commission (WRC) state FMP. The FMP was revised in 2004 and is currently undergoing revision. There are two management areas, Albemarle Sound Management Area (ASMA), and Central Southern Management Area (CSMA) and only ASMA management measures must comply with the ASMFC Striped Bass Interstate FMP. The current TAC for the internal striped bass commercial fisheries in the ASMA is 275,000 pounds. There is a spring and fall season in the ASMA. The ASMA commercial TAC has not been reached since 2004 despite longer seasons and higher daily landing limits. Gill net trip numbers have remained steady from 2004-2009. The current N.C. FMP requires that the commercial striped bass fishery in the ASMA be conducted as a bycatch fishery and requires that striped bass be taken in conjunction with other commercially important finfish and limited to 50% by weight, of the combined daily harvest.

The CSMA is managed under a 25,000 pound TAC which is harvested during a spring season only. Since 2004 the commercial TAC in the CSMA has been harvested each year except 2006 and 2008. The commercial fishery in the CSMA allows low level directed harvest in the rivers and is prosecuted as a bycatch fishery in the sounds where striped bass must be taken in conjunction with other commercially important finfish and limited to 50% by weight of the combined daily harvest.

Implementation of a hook-and-line commercial fishery in the ASMA and CSMA, although contrary to the 2004 N.C. FMP management strategy, could be considered in the revision to the FMP that is currently ongoing. This would allow opportunity for striped bass harvest in some areas that may otherwise not be available due to recently implemented gill net restrictions.

Atlantic Ocean Fishery

- increase opportunity for fishermen to use less expensive gear
- reduce the amount of gill nets, seines, and trawls being used
- reduce bycatch
- reduce interactions with protected species
- addition of participants to an already “crowded” fishery
- allocation of the hook and line quota (adding participants not quota will be very problematic; this issue could be addressed with the adoption of Addendum II to Amendment 6 of the ASMFC Striped Bass FMP which allows for an increase in the Atlantic Ocean commercial quota)
- consider limited entry with this category
- charter boats with commercial license/multiple trips captain and mate/customer limits sold

Internal State Waters

- Provide opportunities for fishermen displaced from gill net fisheries (listing sturgeon could increase this number significantly in internal waters)
- Decrease amount of gill nets used in internal waters
- State FMP is developed jointly with WRC
- State FMP bycatch provision for ASMA and CSMA in the sounds (could be addressed in current FMP revision)
- Increase number of participants
- Reduce bycatch
- Charter boats with commercial license (same as AO fishery)

Red Drum

North Carolina currently manages red drum under Amendment 1 to the North Carolina Red Drum Fishery Management Plan (NCRDFMP). In addition, the ASMFC also imposes restrictions on North Carolina’s commercial red drum fishery through Amendment 2 to the ASMFC Red Drum Fishery Management Plan. Currently these two plans complement each other with regard to harvest restrictions. Specifically, the red drum fishery in North Carolina is limited to a 250,000 lb annual cap (fishing year September 1 to August 31) and a daily harvest limit on fish between 18 and 27 inches total length. The 250,000 lb annual cap was implemented in the early 1990’s to

prevent expansion of commercial fisheries in North Carolina beyond levels traditionally harvested at a time when other states were eliminating all commercial harvest of red drum. The daily trip limit (currently 10 fish) was implemented more recently as a measure to meet the harvest reductions necessary to prevent overfishing.

In general, trip limits, implemented originally as part of the original 2001 NCRDFMP, were intentionally designed to prevent targeting of red drum commercially in North Carolina. Additionally, harvest of red drum was further restricted to bycatch by requiring that red drum make up no more than 50% of the total catch by weight for all finfish landed. Species allowed to offset the weight of red drum have typically been any finfish species other than menhaden. The DMF Director has the authority to change harvest limits and bycatch requirements as needed to both maintain harvest within the 250,000 lb annual cap and to prevent excessive discards of red drum in the fishery. Harvest over the past decade is primarily from anchored gill nets (>90% of catch by weight).

Red drum taken by hook-and-line in North Carolina are currently limited to the recreational bag limit of one fish between 18 and 27 inches total length. Landings by commercial hook-and-line are minimal as expected given the restrictive harvest limit. Increasing the commercial hook-and-line harvest limit to a level that is equal to the current commercial trip limit (10 fish) while still imposing the current bycatch provision would potentially increase landings by commercial hook-and-line. It is difficult to know by what amount, but it is not likely that the harvest increase would be significant. Any changes to the commercial hook-and-line limits that would allow for directed fishing (i.e., without the above bycatch provision) of red drum would likely require an additional amendment to the NCRDFMP. There is a potential loss of red drum commercial landings due to estuarine gill net restrictions being imposed to protect endangered sea turtles. Increases in the commercial red drum hook and line fishery might serve to offset some of these losses in landings.

With regard to ASMFC compliance, allowing directed commercial harvest via hook-and-line without the bycatch provision would also require an Addendum or Amendment to the ASMFC Red Drum FMP, as maintaining current harvest restrictions is a compliance requirement. Increasing the commercial hook-and-line allowance to the current 10 fish trip limit while maintaining the bycatch provision would not require ASMFC action. North Carolina would simply need to inform the ASMFC South Atlantic Board of the change by providing a copy of the proclamation.

Southern Flounder

North Carolina currently manages southern flounder under the North Carolina Southern Flounder Fishery Management Plan, which was adopted in 2005. Amendment 1 to this FMP is currently underway. A commercial hook-and-line fishery for southern flounder should have little to no impact on the stock status because this fishery already exists and the landings are very minimal (0.1% or less of the annual commercial landings from 1994 to 2009). Gill nets and pounds nets account for over 90% of the annual southern flounder commercial landings. If gill net and pound net landings are further reduced due to protected species management measures or from reduced fishing effort, it is unlikely that increased effort in the commercial hook-and-line fishery could recoup lost landings from pound nets and gill nets.

Spotted Seatrout

The ASMFC adopted a FMP for spotted seatrout in 1984 and the Board approved Amendment 1 to this FMP in November 1991, but the ASMFC FMP does not currently require state compliance through the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA). ASMFC is in the process of developing an omnibus amendment to bring several species, including spotted seatrout, under the ACFCMA in order to establish compliance criteria and provide consistent management for all its species. North Carolina has also developed a state FMP for the management of spotted seatrout in North Carolina.

In North Carolina, it is currently not legal to harvest more than 10 spotted seatrout per person per day taken by hook-and-line or for recreational purposes. This rule went into effect in the 1997-1998 season. Prior to 1997, there was no limit on the number of spotted seatrout that could be taken by commercial hook-and-line. Commercial hook-and-line harvest accounted for only a small portion of the total commercial harvest, and at most, accounted for 6% of the commercial landings in both 1986 (191,514 lbs) & 1987 (315,380 lbs). After 1997-1998, when the commercial hook-and-line fishery was restricted to the recreational bag limit, hook-and-line harvest accounted for 0.4-1% of the commercial landings and ranged from 595 to 3,648 lbs, annually.

A commercial hook-and-line fishery for spotted seatrout should have little to no impact on the stock status because this fishery already exists and the landings are very minimal. In recent years, estuarine gill nets accounted for 78% of the annual spotted seatrout commercial landings. It is possible that some fishermen may choose to utilize the hook-and-line gear thereby reducing the amount of gill net in the water, and/or it might provide opportunities for fishermen displaced from gill net fisheries, but it is unknown if an increased effort in the commercial hook-and-line fishery could recoup lost landings from gill nets. A hook-and-line commercial fishery should help to reduce bycatch associated with other commercial fishing gears. A hook-and-line fishery would be a separate commercial fishery with trip/size/area limits that would mirror the other commercial gear restrictions. However, consideration would have to be given to the possibility of a significant increase in participants and how that may affect harvest. A commercial hook-and-line fishery may also increase competition and conflict between recreational and commercial fishermen. The competition and conflict between these two user groups was the driving force for the commercial hook-and-line bag limit.

Kingfish (Sea Mullet)

A commercial hook-and-line fishery for kingfishes should have little to no impact on the stock because this fishery already exists and the landings are very minimal. The commercial landings with hook-and-line gear have not exceeded 600 pounds in any year and have been less than 0.01% of the commercial landings from 1994 to 2009. Gill nets account for a majority of the commercial landings since the closure of flynets south of Cape Hatteras. If effort in the gill net fishery is reduced due to attendance requirements in the small mesh fishery or protected species management measures in the large mesh fishery, it is unlikely that increased effort by fishermen switching into the commercial hook-and-line fishery could recoup lost landings from gill nets.

Striped Mullet

North Carolina currently manages striped mullet under the North Carolina Striped Mullet Fishery Management Plan adopted in 2006. A commercial hook-and-line fishery for striped mullet should have little to no impact on the stock status. Gill nets, beach seines, and cast nets account for over 98% of annual striped mullet commercial landings (average for period 1994-2009). Striped mullet typically feed on detritus, plant material, and microorganisms and are seldom fished for using hook-and-line. The greatest concern for striped mullet would come from potential use of striped mullet as bait in other hook-and-line fisheries. However, the expected impact would be minimal as striped mullet are already used as bait in commercial and recreational fisheries.

III. SUMMARY FINDINGS

As noted previously, the intent of Part III of this information paper was to provide perspectives on potential impacts of a commercial hook-and-line fishery on existing state FMPs and management objectives for finfish species. In many instances, it is difficult to project the impacts of an increase in hook-and-line commercial effort on stock status or management objectives. In some fisheries, there may be no discernable increase in commercial hook-and-line landings, while other fisheries may experience substantial changes in landings composition. As stated in Part I of this information paper, any changes to current management regimes (whether or not rule changes are involved) need to be done through the FMP review process. Each FMP is required by law to be reviewed at least once every five years. Currently, the Estuarine Striped Bass and Striped Mullet FMPs are undergoing or at the beginning of the review process and consideration of commercial hook-and-line fishing could be introduced in an issue paper to the respective advisory committees. Development of a hook-and-line sector for each fishery will likely require specific modifications for that species or FMP that can only be addressed through the FMP review process.

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