DIRECTOR'S REPORT

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

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Director

January 24, 2020

MEMORANDUM

TO: N.C. Marine Fisheries Commission

FROM: Steve Poland, Executive Assistant for Councils

SUBJECT: Information on Recreational Hook and Line Modifications

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Issue
Information on the efficacy of circle hook and barbless treble hook requirements in North Carolina coastal waters.

Action Needed
For informational purposes only, no action is needed at this time.

Overview
The following information paper summarizes the most recent scientific information related to hook modifications in the recreational fishery to reduce dead discards from catch-and-release fishing and provides commentary on potential considerations for the implementation of circle and barbless treble hook requirements in North Carolina coastal waters. Summary findings from the information paper include:

- In general, science supports the use of circle hooks as a means to reduce hook trauma and discard mortality
    - Aside from extensive research on red drum, few studies have been conducted in North Carolina that evaluate the effectiveness of circle hooks
    - Studies suggests that off-set circle hooks negate the positive benefits of circle hooks
- Very little research exists on the effects of hook trauma by treble hooks
- No industry standard exists for circle hook style and size
    - If circle hook use is required, a clear definition is needed
- Other management jurisdictions that require the use of circle hooks focus on single species/fisheries or complexes to implement hook requirements
    - Reduces unintended consequences, i.e. live bait trolling, exclusion of species with unique mouth physiologies, etc.
    - Increases the likelihood of compliance and enforcement
- Consider positive and negative social and economic effects
    - Potential decrease in angler satisfaction through decreased catch rates for some species
    - Positive impact to catch rates if population responds to reduced discard mortality
    - Economic impact to anglers and tackle shops

Information on requiring the use of circle hooks and bent-barbed treble hooks in North Carolina

January 28, 2020

Prepared by the Recreational Hook-and-line Discard Work Group

I. ISSUE

Provide summary scientific information on the efficacy of using circles hooks and bent-barbed treble hooks to reduce discard mortality of captured-and-released fish in North Carolina joint, coastal, and Atlantic Ocean waters out to three nautical miles. Additionally, provide input on the pros and cons of implementation of circle hook and bent barbed requirements including summary information of neighboring states and jurisdictions, expected benefits and limitations, and enforcement applicability.

II. ORIGINATION

At the August 2019 meeting of the Marine Fisheries Commission, the Chairman asked for the consideration of a motion to instruct the Division of Marine Fisheries to initiate rulemaking to require the use of circle hooks larger than 2/0 when fishing with natural bait and that all treble hooks have barbs pinched down. After discussion and a withdrawal of the motion, the Chair asked the Division to provide information on the science supporting the use of circles hooks, bent-barbed treble hooks and input on the efficacy of requiring their use in North Carolina waters.

III. BACKGROUND

Literature Review

The location of hook-related injuries is an important factor in determining catch-and-release mortality. A number of studies have shown the use of circle hooks in marine recreational fisheries reduce deep hooking and release mortality in marine finfish species (Grover et al. 2002; Lukacovic and Uhhoff 2002; Skomal et al. 2002). The first use of circle hooks in modern fisheries were by long line fisherman in the Pacific Ocean in the 1970s. However, the basic style of the hook pre-dates this use by thousands of years, evidenced by the discovery of circle hooks fashioned from shell and bone discovered throughout ancient Polynesia, Japan, and Latin America. The style hook was adopted by commercial fisherman in an effort to increase retention of target species in longline and trot line fisheries and to reduce mortality of bycatch and regulatory discards. The basic mechanics of a circle hook are explained by Johanes (1981). As a fish consumes a baited-circle hook and moves away, the hook naturally slides to the edge of the mouth in an orientation that allows for the gap to position around the jaw (Figure 1). As the pressure begins to increases, the hook point begins to "bite" against the soft flesh around the mandible or hinge. As pressure further increases, the hook rotates fully around and the fish is hooked. The circular design with the hook pointed back towards the shank prevents the hook from backing out completely while steady pressure is applied. Because the orientation of the hook point is not the same as the shank (Figure 1), when pressure is applied to the hook via the fishing line, the point does not catch as it would with a traditional style "J" hook. This reduces the chance of deep hooking when a hook is swallowed past the esophageal sphincter (Kerstetter and Graves 2006).

Hook size, fishing style, fish feeding mode, and mouth morphology are all elements that contribute to the effectiveness of circle hooks. In a study on bluegills, circle hooks permanently impaired vision of up to 22% of the fish, much more than J-hooks (Cooke et al. 2003). Conversely, Graves and Horodysky (2008) state that the post-release survival of white marlin captured using circle hooks is significantly higher than J-hooks. There was no significant difference in survival among different configurations of non-offset circle hooks commonly employed in the white marlin troll fishery (i.e. offset, bite, gap, bend, etc.) suggesting that the use of a non-offset circle hook, regardless of configuration, is better. These varying factors make the implementation of circle hook regulations as a universal solution to reduce release mortality for all fisheries in coastal waters complex. Several studies have recommended that management agencies focus on recommending circle hooks only for instances for which appropriate scientific data exist (Cooke and Suski 2004, Serafy et al. 2012). While the use of circle hooks may present a conservation benefit in some of these fisheries, only the adult red drum fishery in Pamlico Sound has been fully evaluated comparing large J-hooks to circle hooks in our coastal waters (Beckwith and Rand 2005).

Literature for the effects of treble hooks on the survival of captured and released fish is limited and at this time, few studies have been reviewed for species that occur in the state. Studies in Texas, showed no significant differences in release mortality for red drum and spotted seatrout between J-hooks and treble hooks (Matlock et al. 1993; Stunz and McKee 2006). Unfortunately, these studies did not include circle hooks as a gear type for comparison.

Defining a circle hook

A growing body of literature suggests that the use of circle hooks by recreational saltwater anglers reduces discard mortality (Cooke et al. 2012). Despite this general consensus, inconsistency exists regarding the definition of a circle hook among federal, regional, and state management authorities (Table 1). This complicates the implementation of management actions across regulatory jurisdictions. However, an overlapping characteristic across all circle hook definitions include *"the point turned perpendicularly back to the shank"*.

Table 1. Definitions of a Circle Hook across multiple management authorities

National Marine Fisheries Service (NMFS) Highly Migratory Species Division (HMS)*: A circle hook is defined as "A hook with the point turned perpendicularly back to the shank to form a generally circular or oval shape." An offset circle hook is further defined as "a circle hook originally designed and manufactured so that the barbed end of the hook is displaced relative to the parallel plane of the eyed-end, or shank, of the hook when laid on its side."(50 C.F.R. § 635.2)*
Atlantic States Marine Fisheries Commission (ASMFC)*: A circle hook is defined as "Non-offset hook with the point turned perpendicularly back to the shank."*
Gulf of Mexico Fishery Management Council (GMFMC) and South Atlantic Fishery Management Council (SAFMC): *A circle hook is defined as "A fishing hook designed and manufactured so that the point is turned perpendicularly back to the shank to form a generally circular, or oval, shape" (50 C.F.R. § 622.2)*
North Carolina Marine Fisheries Commission (MFC): *A circle hook is defined as "A hook with the point of the hook directed perpendicularly back toward the shank, and with the barb either compressed or removed". (15A NCAC 03J.0306)*

Inconsistency among management authorities is further complicated by non-uniformity in circle hook design among and within major hook manufacturers. While hooks may have the same basic anatomy (Figure 1), extensive combinations of attributes (gap, bite, shank length, total length, gap, eye, barb, bend), and barb orientation (offset or inline) make it almost impossible to adequately classify a hook by the manufacturer sizing.

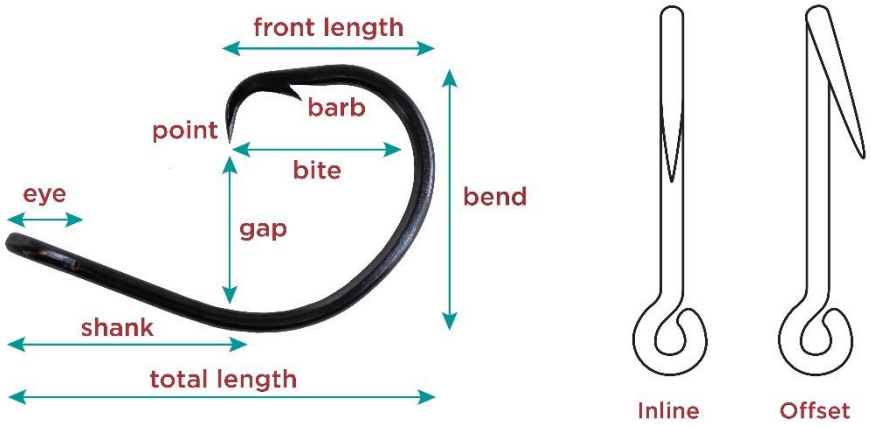

Figure 1. Basic hook anatomy and barb orientation. Reproduced from: www.in-fisherman.com/editorial/all-about-hooks/154924.

Hooks are manufactured from a myriad of metal and alloys (vanadium, high-carbon steel, stainless steel, etc.) and may come with an assortment of coatings for color preference and/or corrosion resistance. Most importantly, there is no size standardization within and among manufacturers. Figure 2 presents 4/0 hooks from three manufacturers (Eagle Claw, Mustad, Owner) with gap measurements ranging from 10mm to 14mm. The largest difference in gap shown is from two separate models of Eagle Claw 4/0 hooks. The same holds true for J-hook sizing as well. Although offerings are limited at this time, most hook manufactures do offer barbless versions of circle hooks and treble hooks.

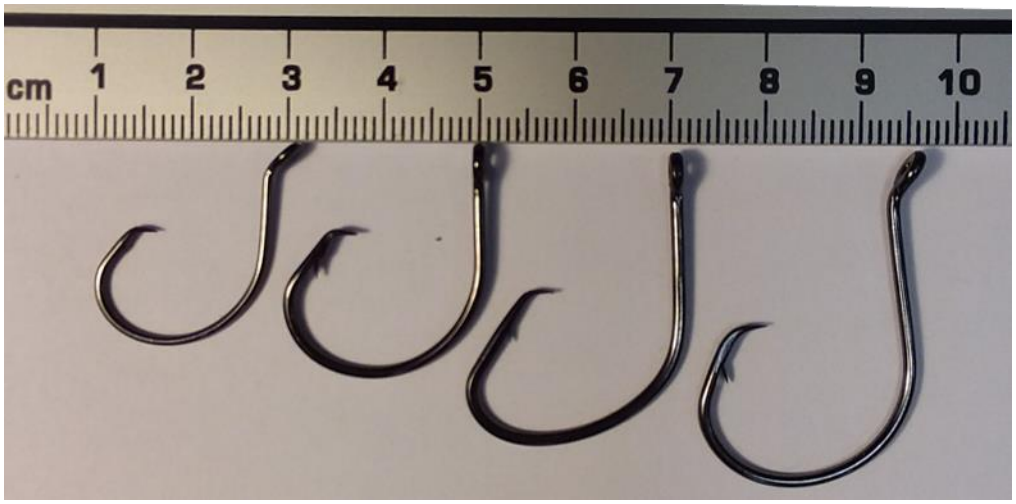

Figure 2. Left to right; Eagle Claw L2004EL, Mustad 3994-BN, Owner 5114T-141, Eagle Claw L7228BPG.

Other Jurisdictions

The Wildlife Resources Commission (WRC) restricts the use of multiple hooks and barbed hooks in the inland waters of the Roanoke River upstream of the U.S. 258 bridge. Only a single barbless hook or a lure with a single barbless hook may be used from April 1 to June 30. "Barbless" means that the hook either does not have a barb or that the barb is bent down. Tandem rigs are prohibited.

Many Atlantic coast states have rules that limit the time and area certain species can be harvested using traditional and/or barbed hooks and restrictions on the style of hooks used. The Florida Fish and Wildlife Commission (FWC) prohibits the harvest of Florida and African pompano, sheepshead, permit, spotted sea trout, snook, tarpon, flounder, and red and black drum with any multiple point hook in conjunction with live or natural bait. Multiple point hooks are defined as a hook with two or more points that share a common shaft. The FWC also requires angler who are shark fishing from shore or private vessel to use non-offset, non-stainless steel circle hooks when using live or dead natural bait. Further, an angler must also have in their possession a device that is capable of quickly cutting the hook or leader, i.e. bolt cutters, lineman pliers, cable cutters, etc.

Maryland Department of Natural Resources require the use of non-offset circle hooks while fishing in the Chesapeake Bay and its tidal tributaries when live-lining or chumming from May 16 to December 15. The use of treble hooks is prohibited when using other natural or processed baits while not live-lining or chumming. Additional restrictions on terminal tackle apply when fishing for striped bass depending on season and area. Some of these restrictions include the prohibition on using "stinger" hooks, use of barbless hooks when trolling, limited to six trolling lines per vessel, and require use of circle and J hooks with less than ½-inch gap.

The New York State Department of Environmental Conservation prohibits the take of sharks by baited hooking except with the use of non-stainless steel, non-offset circle hooks. Additionally, no person shall conduct, sponsor, or participate in any fishing tournament that offers a prize for sharks unless the tournament rules require the exclusive use of non-stainless steel, non-offset circle hooks.

Federal and interstate requirements for the use or restriction of certain types of hooks and terminal gear exist. The South Atlantic Fishery Management Council (SAFMC) requires the use of non-offset, non-stainless steel circle hooks North of 28^{o} latitude when in possession of any snapper-grouper species. The SAFMC recently approved Regulatory Amendment 29 to the Snapper-Grouper Fishery Management Plan which requires the use of non-stainless steel hooks throughout the South Atlantic and possession of a descender device.

For Highly Migratory Species (HMS) managed by NOAA Fisheries Highly Migratory Species Division, anglers aboard federally permitted vessels fishing recreationally for sharks are required to use non-offset, non-stainless steel circle hooks, except when fishing with flies or artificial lures. Anglers participating in Atlantic billfish tournaments must use only non-offset circle hooks when deploying natural bait or natural bait/artificial lure combinations. A billfish tournament is defined as any fishing tournament that awards points or prizes for billfishes, even if billfishes are not the main species targeted in the tournament. Billfish tournament anglers may deploy "J"-hooks only if they are fishing with artificial lures.

The Atlantic States Marine Fisheries Commission requires the use of non-offset, corrodible, non-stainless steel circle hooks when fishing for sharks recreationally, except when fishing with flies or artificial lures in state waters from Maine through the east coast of Florida. States must implement these management measures no later than July 1, 2020. The Atlantic States Marine

Fisheries Commission also requires the use of circle hooks when recreational fishing for striped bass with natural bait from Maine through North Carolina. In North Carolina, this measure only applies to striped bass fishing in ocean waters. States must implement these management measures no later than January 1, 2021.

Current circle hook regulation in North Carolina

Harvest of red drum greater than 27 inches in total length has been prohibited in North Carolina since 1998, however, recreational fishing for adult red drum for catch and release continues to be very popular. Given the popularity, release mortality of adult red drum in the recreational fishery has long been a management concern. Of particular concern is the tendency for a high incidence of deep hooking that occurs in the Pamlico Sound summer fishery where large adult red drum are aggregate prior to spawning. In this fishery, bait fishing on the bottom is a commonly employed method used from boats. This fishery creates somewhat of a unique scenario because the lack of strong currents often results in slack fishing lines and as a result can lead to a high incidence of deep hooking and elevated release mortality.

Each of the two prior FMPs for this species considered how to address this issue. The 2001 North Carolina Red Drum FMP considered various methods to reduce release mortality, but ultimately the plan opted to develop educational information on conservative angling practices for red drum, including the promotion of circle hooks and proper handling methods. Subsequent to the plan, educational information was provided by the Division and North Carolina Sea Grant including educational seminars to recreational fishing clubs, video productions, magazine and newspaper articles, as well as, distributing various types of educational pamphlets and other promotional giveaways. The plan also included research recommendations to characterize the adult red drum fishery and assess the mortality associated with the recreational releases of adult red drum.

In 2002, the Division and North Carolina Sea Grant conducted a survey of 456 anglers who target adult red drum in order to better characterize this fishery (unpublished data, NCDMF). Overall (all areas and modes of fishing), 56% of the respondents indicated that they always use circle hooks when fishing for adult red drum and another 27% occasionally used circle hooks. The results were similar for anglers in Pamlico Sound, with 52% of the respondents using circle hooks exclusively and 16% sometimes using circle for adult red drum.

Specific research was also conducted in the Pamlico Sound adult red drum fishery to estimate recreational release mortality, determine factors contributing to release mortality and determine the differences in deep hooking events between circle hooks and J-style hooks (Aguilar 2003, Beckwith and Rand 2004a, Beckwith and Rand 2004b). Studies by Aguilar (2003) and Beckwith and Rand (2004a) had overall mortality rates ranging from 3.8% to 6.7% based on adult red drum that were held for three days after being caught using either circle hooks or J-style hooks. Considering just fish that were deep hooked mortality rates were much higher (>15%) and all mortalities in the study showed evidence of internal bleeding from being deep hooked (Aguilar 2003, Beckwith and Rand 2004a). Aguilar (2003) found that circle hooks had a significantly lower incidence of deep hooking than J-style hooks when both were fished on standard bottom fishing rigs. Beckwith and Rand (2004b) advanced these findings and found that a large (Mustad 14/0 and 16/0 circle hook style: 39960D) or intermediate (Eagle Claw 8/0 circle hook (Style: L2004EL) sized circle hook combined with a short leader and a fixed weight resulted in the lowest incidence of deep hooking (4%) in the study. This was compared to greater than 50% deep hooking with a 7/0 J-style hook rigged with a standard leader and a slip weight (Beckwith and Rand 2004a).

Amendment 1 to the North Carolina Red Drum FMP reconsidered the issue of targeting adult red drum and the associated release mortality in light of this new research. Management options included hook requirements (size and type), seasonal closures and area closures. The primary focus was in protecting spawning aggregations of red drum in Pamlico Sound where catch rates were high and deep hooking and elevated mortality was known to be an issue. Impacts to other fisheries both in terms of species affected, seasons and areas played a major role in crafting the final rule that was adopted. Also, because the majority of the effort in the adult red drum fishery using bait occurred primarily at night, the final option limited the circle hook requirements to nighttime fishing to avoid conflicts with anglers using J-hooks to target tarpon. A further concern in rule adoption was the enforceability of a specific hook size given the lack of standardization in the tackle industry and the need to specifically define what constituted a circle hook. The benefit to the stock however was given paramount importance over these obstacles at the time the rule was passed. Efforts were made to educate the public on what constituted a legal rig both by giving rigs away at boating access points and by publishing the rig configuration on the Division website. The final rule was worded as follows:

15A NCAC 03J .0306 HOOK-AND-LINE
It is unlawful to use any hook larger than 4/0 from July 1 through September 30 in the internal coastal fishing waters of Pamlico Sound and its tributaries south of the Albemarle Sound Management Area as defined in 15A NCAC 03R .0201 and north of a line beginning at a point 34° 59.7942' N - 76° 14.6514' W on Camp Point; running easterly to a point 34° 58.7853' N - 76° 09.8922' W on Core Banks while using natural bait from 7:00 p.m. to 7:00 a.m. unless the terminal tackle consists of:

(1) A circle hook defined as a hook with the point of the hook directed perpendicularly back toward the shank, and with the barb either compressed or removed; and
(2) A fixed sinker not less than two ounces in weight, secured not more than six inches from the fixed weight to the circle hook.

History Note: Authority G.S. 113-182; 113-182.1; 143B-289.52;
Eff. April 1, 2009.

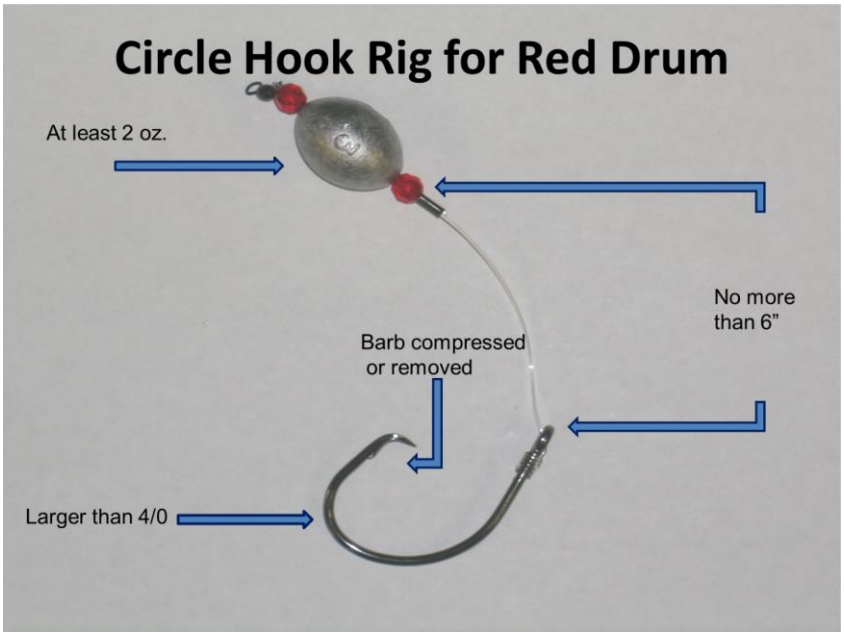

Figure 3. Current configuration of red drum natural bait rig described in Marine Fisheries Commission rule 15A NCAC 03J .0306.

IV. AUTHORITY

G.S. 113-182. Regulation of fishing and fisheries.

(a) The Marine Fisheries Commission is authorized to authorize, license, regulate, prohibit, prescribe, or restrict all forms of marine and estuarine resources in coastal fishing waters with respect to:
  (1) Time, place, character, or dimensions of any methods or equipment that may be employed in taking fish;
  (2) Seasons for taking fish;
  (3) Size limits on and maximum quantities of fish that may be taken, possessed, bailed to another, transported, bought, sold, or given away.

(b) The Marine Fisheries Commission is authorized to authorize, regulate, prohibit, prescribe, or restrict and the Department is authorized to license:
  (1) The opening and closing of coastal fishing waters, except as to inland game fish, whether entirely or only as to the taking of particular classes of fish, use of particular equipment, or as to other activities within the jurisdiction of the Department; and
  (2) The possession, cultivation, transportation, importation, exportation, sale, purchase, acquisition, and disposition of all marine and estuarine resources and all related equipment, implements, vessels, and conveyances as necessary to implement the work of the Department in carrying out its duties.
  (3) The possession, transportation, importation, exportation, sale, purchase, acquisition, and disposition of all fish taken in the Atlantic Ocean out to a distance of 200 miles from the State's mean low watermark, consistent with the Magnuson Fishery Conservation and Management Act, 16 U.S.C. § 1801, et seq., as amended. (1915, c. 84, s. 21; 1917, c. 290, s. 7; C.S., s. 1878; 1925, c. 168, s. 2; 1935, c. 35; 1945, c. 776; 1953, cc.774, 1251; 1961, c. 1189, s. 1; 1963, c. 1097, s. 1; 1965, c.957, s. 2; 1973, c. 1262, s. 28; 1995, c. 507, s. 26.5(c); 1997-400, s. 6.6.

V. DISCUSSION

Compliance with regulations requiring the use of circle hooks and bent barbs on treble hooks can only be achieved if the following factors are met; 1) enforceable rules for the use and modification of the gear including clear and quantifiable definitions of circle hooks and barbless treble hooks, 2) readily available gear that complies with aforementioned definition, 3) reasonable exclusions for fisheries and activities where catch rates may be disproportionally affected using the new required gear, 4) extensive public education on the proper use of new gear, and 5) clearly articulated benefits relative to current conservation and management strategies employed for our marine resources. Failing to consider or act on these factors will significantly curtail compliance with any regulations prescribing the use of circle hooks and bent barbed treble hooks and potentially undermine the conservation benefits of employing such practices.

To ensure effective and enforceable regulations, a definition of a circle hook including quantifiable metrics must be established. Numerous management agencies, including the NCDMF, already define what a circle hook is in rule with some variation. The circle hook requirements for sharks and striped bass are based on the Atlantic States Marine Fisheries Commission's circle hook definition (Table 1). The current Commission rule (*15A NCAC 03J.0306*) that defines a circle hook does not require the use of a non-offset hook but does require that the barb be pinched down. Research evaluating the effectiveness of circle hooks in reducing deep hooking suggests that the gear loses its intended effectiveness if the point is offset (Prince et al 2002). Additionally, rule *15A*

NCAC 03J.0306 requires the use of hooks larger than 4/0. As described previously, hook manufacturers do not standardize the sizes of their hook offerings. If hook size is to be considered, a definition including "the point turned perpendicularly back to the shank" and establishing discrete measurements for gap and offset should be included. In order for officers to testify in a court of law to the size of a circle hook, a gauge or measuring device will be needed similar to what is currently used for crabs, oysters, clams, and finfish. The current Commission rule defining a circle hook and prescribing its use is considered un-enforceable as written given the aforementioned inconsistencies in hook size. Officers can inspect the tackle relative to rig requirements listed in the rule but are unable to enforce hook size requirements. If the rule was modified to remove the size requirement, essentially making circle hooks a requirement regardless of size, an officer would have more discretion to enforce the regulation.

Circle hooks outperform J-hooks in reducing deep hooking of fish when using natural baits due to the manner in which natural bait is typically fished. These baits are often fished suspended or on the bottom with slack line which allows the fish to swallow the bait and hook without the tension or movement of the line or bait rig spooking or otherwise preventing the fish from consuming the bait. To aid in enforcement and ensure that anglers are using circle hooks when fishing with such bait, a clear definition of what does and does not constitutes natural bait is needed. Natural bait is not currently defined in rule so a definition will need to be developed if required use of circle hooks is subject to natural bait. Other jurisdictions have defined natural and artificial bait for the purpose of requiring or excluding their use in certain fisheries or areas. The Wildlife Resources Commission defines bait in mountain trout waters as "any living or dead organism (plant or animal), or parts thereof, or prepared substances designed to attract fish by the sense of taste or smell" (15A NCAC 10C .0205). Anglers are prohibited from using natural bait in mountain trout waters which includes not only live or dead bait, but also prepared or synthetic baits and attractants. A definition this broad applied to coastal waters could impact access to certain fisheries by limiting certain bait and lure configurations or undermine any conservation benefits to circle hooks by creating unintentional "loop holes" to avoid their use. Additionally, it could go beyond the intent of the rule by prohibiting fishing practices that do not pose a conservation concern. Careful consideration is needed in crafting an appropriate definition for natural bait that allows for its use or prohibition as intended.

Catch rates are another factor to consider with the implementation of circle hook regulations. Depending on the species targeted and style of fishing, rates of hook-up and landings can differ greatly between J- hooks and circle hooks. In a Maryland striped bass study, anglers using J-hooks landed a fish 42% of the time they detected a strike. When using non-offset circle hooks, anglers landed a fish 27% of the time. J-hooks were 52% more efficient than non-offset circle hooks in landing a fish once a strike was detected (Lukacovic and Uphoff 2002). The reduction in catch especially in trolling fisheries may present a significant concern with compliance. Trolling for king mackerel with strip baits or dead ballyhoo requires the use of 7/0 to 9/0 J-hooks. Catch rates for king mackerel using circle hooks while trolling has been shown to be reduced significantly (Rudershausen et al. 2011). Additionally, live bait trolling using barbed and barbless treble hooks have not been evaluated for differences in catch rates. Sheepshead are typically targeted using natural baits and either small, short shanked J-hooks or small treble hooks. Their hard mouth and dentition often require anglers to forcibly set the hook to ensure proper hooks set. A circle hook in this situation would not set. Catch rates may not differ using barbless treble hooks but there has been no research to evaluate the effectiveness of different hook types or the incidence of deep hooking using traditional methods and gear for this species. Another notable species that some anglers target in North Carolina using natural bait are flounder. They can be harvested drifting cut bait, fishing live bait, and with jigs in combination with natural or synthetic baits. Flounder are

ambush predators and engulf baits and prey as they drift or swim by and do not typically swim off after consuming a bait. It is up to the angler to set the hook either actively or passively by drifting by. The effectiveness of circle hooks for flounder fishing will depend on the fishing method with circle hooks likely more effective when anchored or shore fishing than from a drifting boat. No studies have evaluated the efficacy of circle hooks on the capture and survival of flounder in North Carolina. A study conducted on summer flounder in New York and Virginia tested for difference in hook type and survival in the recreational fishery and observed no significant difference between circle hooks and J-hooks (Malchoff and Lucy 1998).

The effective implementation of new gear regulations and best fishing practices will require an extensive public outreach and education campaign to educate anglers on the correct use of the new gear. A Texas study that evaluated hook types as well as rig configurations, bait, and angler experience level found that the only significant predictor of post release mortality was angler skill level with higher mortality associated with beginner/novice fisherman (Stunz and McKee 2006). The NC DMF has long prompted the use of ethical angling practices including the use of circle hooks. NC DMF publishes and distributes a pamphlet titled Ethical Angling: A Guide to Responsible Fishing, which details the use of circle hooks, catch and release, and proper handling of fish. NC DMF also distributes bumper stickers depicting a red drum and circle hook encouraging anglers to fish responsibly. Partnerships with the SAFMC, the FishSmart program supported by the Angler Action Foundation, and others have provided numerous other informational brochures and tackle giveaways to promote the use of circle hooks and other gears, such as fish descending devices, and information on best handling practices. Division staff have distributed over 500 red drum short leader rigs (with circle hook) obtained through its partnership with FishSmart. In addition to efforts by FishSmart, the NMFS Recreational Fisheries Policy Program provide 7,000 circle hooks of various sizes for distribution by the NC DMF. Staff assembled these hooks into "inshore" and "offshore" packages along with informational pamphlets for distribution. Over half of these were distributed during 2019. While it is challenging to quantify the impacts of information campaigns on angler use of circle hooks, anecdotal reports by Marine Patrol indicate that most anglers are using circle hooks while bait fishing in Pamlico Sound for red drum during the day, while regulations only require use at night.

The promotion of barbless treble hooks as a conservation measure has largely been replaced by the use of single inline hooks. The eye of this style of hook is turned inline and is meant to replace treble hooks on topwater and suspending hard baits. Their use has been promoted for a variety of reasons – less damage to fish, ease of unhooking, fish hooked more securely, less likely to collect grass or debris, and angler safety. This trend is gaining ground in the industry. Many manufacturers have started selling lures already rigged with single hooks. A local tackle shop in Eastern North Carolina advertised a promotion in June 2019 where anglers could bring 5 lures and have the trebles swapped out for inline single hooks. This trend is being driven by the tackle industry, retailers, and conservation-minded anglers. A coordinated public information campaign by NCDMF and tackle shops may shift the needle toward the use of single inline hooks in specific fisheries such as artificial lures for speckled trout.

Several North Carolina General Statutes (NCGS) address the authority for and requirements of implementing MFC rules. NCGS 113-134 authorizes the MFC to adopt rules to implement requirements of NCGS 113, Subchapter IV, Conservation of Marine and Estuarine and Wildlife Resources. The N.C. Fisheries Reform Act (FRA) of 1997 restructured the way North Carolina managed its coastal fisheries and enacted general statutes for the MFC, Coastal Habitat Protection Plan, Fishery Management Plans (FMPs), Marine Fisheries Law Enforcement, and Commercial Fishing Licenses. NCGS 143B-289.52 requires the MFC to adopt rules to be

followed in the management, protection, preservation, and enhancement of the marine and estuarine resources within its jurisdiction, including commercial and sports fisheries resources. NCGS 113-182.1 requires the NCDMF to develop FMPs for adoption by the MFC with the goal of the plans to ensure the long-term viability of North Carolina's commercially and recreationally significant species or fisheries. The N.C. Administrative Procedure Act (APA; NCGS 150B) applies to an agency's exercise of its authority to adopt a rule and states a rule is not valid unless it is adopted in substantial compliance with the requirements of the APA.

Currently, there are six species on the state FMP schedule that would be affected by changes in hook requirements. Estuarine Striped Bass, Kingfish, Red Drum, Sheepshead, Southern Flounder and Spotted Seatrout all support significant recreational fisheries and any changes to hook requirements could have potential impacts on the fisheries and associated anglers. Variations in size, location, and fishing techniques as they apply to the above species would require specific considerations when selecting appropriate hook size, shape, materials, etc. These variations make assigning one circle hook requirement across the board for various species problematic. What might work for one species may not be suitable for another. Additionally, given that paucity of research for state managed species and the current and potential future un-quantified metrics of use with circle hooks and barbless treble hooks the NC DMF may be unable to incorporate the positive effects of these management measures into stock assessments. Rather, any conservations gains realized by the required use of these gears will have to indirectly inferred from multiple assessments.

The FMP development process is a slow deliberate process that requires significant public input and legislative review. Considering the significant variability in effectiveness of circle hook requirements, developing this issue within each state FMP may be a more effective approach. This would allow the Division to evaluate existing literature, data, and current management to develop circle hook requirements that are specific to that species and associated fisheries and potentially evaluate their effectiveness directly. Development of FMP Amendments for Spotted Seatrout, Striped Bass, and Southern Flounder are currently underway, and consideration of circle hook and barbless treble hook requirements could be addressed in those upcoming amendments. Addressing hook requirements on a species-specific basis is also consistent with upcoming requirements for sharks and striped bass by the Atlantic States Marine Fisheries Commission and for snapper-grouper complex species by the South Atlantic Fishery Management Council.

VI. SUMMARY OF FINDINGS

- In general, science supports the use of circle hooks as a means to reduce hook trauma and discard mortality
    - Aside from extensive research on red drum, few studies have been conducted in North Carolina that evaluate the effectiveness of circle hooks
    - Studies suggests that off-set circle hooks negate the positive benefits of circle hooks
- Very little research exists on the effects of hook trauma by treble hooks
- No industry standard exists for circle hook style and size
    - If circle hook use is required, a clear definition is needed
- Other management jurisdictions that require the use of circle hooks focus on single species/fisheries or complexes to implement hook requirements
    - Reduces unintended consequences, i.e. live bait trolling, exclusion of species with unique mouth physiologies, etc.
    - Increases the likelihood of compliance and enforcement

- Consider positive and negative social and economic effects
    - Potential decrease in angler satisfaction through decreased catch rates for some species
    - Positive impact to catch rates if population responds to reduced discard mortality
    - Economic impact to anglers and tackle shops

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Atlantic States Marine Fisheries Commission

2020 Winter Meeting Summary

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

2020 Winter Meeting
Arlington, VA
February 4 – 6, 2020

Toni Kerns, ISFMP, or
Tina Berger, Communications
For more information, please contact
the identified individual at
703.842.0740

Meeting Summaries, Press Releases and Motions

TABLE OF CONTENTS:

ATLANTIC HERRING MANAGEMENT BOARD (FEBRUARY 4, 2020)

Press Release

ASMFC Atlantic Herring Board Approves Draft Addendum III for Public Comment

Arlington, VA – The Commission's Atlantic Herring Management Board approved Draft Addendum III to Amendment 3 of the Interstate Fishery Management Plan for Atlantic Herring for public comment. The Draft Addendum proposes options to better manage the Area 1A (inshore Gulf of Maine) sub-annual catch limit (ACL) under low quota scenarios. This action responds to the challenges encountered in managing the reduced sub-ACL based on the 2018 benchmark stock assessment, which highlighted declining trends in recruitment and spawning stock biomass.

Currently, the Board can allocate the sub-ACL throughout the fishing season using bi-monthly, trimester, or seasonal quota periods to meet the needs of the fishery. For the 2019 fishing season, the Board implemented a bimonthly quota period approach to maximize use of the reduced sub-ACL when demand for bait is high. Due to the low quota, the 2019 fishery experienced frequent closures to avoid an overage. The 2020 sub-ACL (3,344 mt) is lower than in 2019, creating further challenges in distributing the quota throughout the fishing season. The Draft Addendum considers additional tools to provide the Board more flexibility in specifying the allocation under low quota scenarios and meet the needs of the herring fishery moving forward.

Additionally, the Draft Addendum considers expanding landing provisions across different permit categories within the days out program. The Board utilizes days out of the fishery and weekly landing limits to adjust the rate of Area 1A catch. The Draft Addendum includes options that apply weekly landing limits to all vessel categories landing herring in Area 1A throughout the entire fishing season.

Interested groups are encouraged to provide input on the Draft Addendum either by attending state public hearings or providing written comment. The Draft Addendum will be available on the Commission website (www.asmfc.org) under Public Input by February 12, 2020. Public comment will be accepted until 5:00 PM on March 25, 2020 and should be forward to Kirby Rootes-Murdy, Senior FMP Coordinator, 1050 N. Highland St., Suite 200 A-N, Arlington, Virginia 22201; 703.842.0741 (fax) or at comments@asmfc.org (Subject line: Atlantic Herring Draft Addendum III). It is anticipated some states will conduct public hearings on the Draft Addendum; the details of which will be released via a press release once they are finalized.

For more information, please contact Kirby Rootes-Murdy at krootes-murdy@asmfc.org or 703.842.0740.

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PR20-03

Motions

Move to approve Atlantic Herring Draft Addendum III for public comment as amended today.
Motion made by Mr. White and seconded by Mr. Train. Motion passes (8 in favor, 1 opposed).

Move to approve the following Atlantic herring specifications for 2020 as recommended by the New England Fishery Management Council contingent on the final rule being published by NOAA Fisheries:

Annual Catch Limit (ACL) = 11,571 mt
Domestic Annual Harvest = 11,571 mt
Border Transfer = 100 mt
Area 1A Sub-ACL = 3,344 mt

Area 1B Sub-ACL = 498 mt
Area 2 Sub-ACL = 3,217 mt
Area 3 Sub-ACL = 4,513 mt
Fixed Gear Set-Aside= 30 mt
Motion made by Ms. Ware and seconded by Mr. Kane. Motion passes by unanimous consensus. (Roll Call: In Favor – ME, NH, MA, RI, CT, NY, NJ, NEFMC, NMFS.)

Motion to elect Cheri Patterson as Vice Chair of the Atlantic Herring Management Board.
Motion made by Mr. White and seconded by Mr. Kane. Motion passes by unanimous consensus.

ATLANTIC STRIPED BASS MANAGEMENT BOARD (FEBRUARY 4, 2020)

Meeting Summary
The Atlantic Striped Bass Management Board met to review and consider implementation plans and conservation equivalency (CE) proposals for Addendum VI. The Addendum aims to address overfishing and reduce fishing mortality (F) to the F target by 2020. Any states and jurisdictions submitting for CE were required to demonstrate that the proposed measures achieve at least an 18% reduction in total removals at the state-level (i.e., recreational and commercial fisheries combined). The Striped Bass Technical Committee (TC) reviewed all proposed measures based on the technical merit of the analyses used to calculate the expected reductions in total removals and to ensure the proposals met state-specific target reductions. The TC also developed a list of uncertainties and caveats that should be considered.

A number of states submitted multiple CE proposals which resulted in a wide range of measures being considered, and raised questions about consistency, equitability, and accountability if CE measures didn't meet their respective targets. Furthermore, the Board quickly recognized that the effects of combined CE measures had the potential to fall short of the 18% reduction needed to achieve F target in 2020. These realizations led to focused discussion on a few proposals that relied heavily on assumptions regarding angler behavior, and proposals that would achieve a lower percent reduction at the state-level under CE measures than under the Addendum VI measure.

After lengthy deliberations, and while acknowledging the need for CE to address unique state and regional differences, the Board pared down the number of measures being considered and approved implementation plans and CE proposals on a state-by-state basis (see list of motions below).

During deliberation, the Board discussed the need to revisit the CE provision in the next management document, which will be considered at the Spring Meeting, and the need for unique accountability measures for this predominantly recreational fishery. The Board will also consider accountability measures with Addendum VI at the Spring Meeting.

Lastly, the Board required states to submit implementation plans for recreational circle hook provisions by August 15th. The Plan Review Team will review circle hook provisions for Board consideration at Annual Meeting.

For more information, please contact Max Appelman, Fishery Management Plan Coordinator, at mappelman@asmfc.org or 703.842.0740.

Motions

Main Motion

Move that state implementation of the Addendum VI conservation equivalency proposals approved today be contingent upon a Technical Committee analysis documenting that the combined effect of the states' selected measures is at least a projected 18% reduction from 2017 total removals. Failure to achieve a projected 18% reduction shall result in mandatory implementation of the Addendum VI management measures.

States will advise ASMFC of their selected conservation equivalency measures by March 6. The Board will be advised of the results of the Technical Committee's analysis by March 13. The implementation deadline for fishery regulations remains April 1.

Motion made by Mr. McKiernan and seconded by Mr. White.

Motion to Substitute

Move to substitute to approve the conservation equivalency plans and implementation plans as approved by the Technical Committee.

Motion made by Mr. Clark and seconded by Mr. Luisi. Motion fails (4 in favor, 12 opposed). (Roll Call: In favor – NJ, DE, MD, PRFC; Opposed – ME, NH, MA, RI, CT, NY, PA, DC, VA, NC, NMFS, USFWS)

Main Motion

Move that state implementation of the Addendum VI conservation equivalency proposals approved today be contingent upon a Technical Committee analysis documenting that the combined effect of the states' selected measures is at least a projected 18% reduction from 2017 total removals. Failure to achieve a projected 18% reduction shall result in mandatory implementation of the Addendum VI management measures.

States will advise ASMFC of their selected conservation equivalency measures by March 6. The Board will be advised of the results of the Technical Committee's analysis by March 13. The implementation deadline for fishery regulations remains April 1.

Motion to Table

Move to table the motion.

Motion made by Mr. White and seconded by Mr. Keliher. Motion carries without objection.

Revisit Tabled Motion

Move that state implementation of the Addendum VI conservation equivalency proposals approved today be contingent upon a Technical Committee analysis documenting that the combined effect of the states' selected measures is at least a projected 18% reduction from 2017 total removals. Failure to achieve a projected 18% reduction shall result in mandatory implementation of the Addendum VI management measures.

States will advise ASMFC of their selected conservation equivalency measures by March 6. The Board will be advised of the results of the Technical Committee's analysis by March 13. The implementation deadline for fishery regulations remains April 1.

Motion to Substitute
Motion to substitute to approve the Addendum VI recreational measures for the coast and the Chesapeake bay/producer areas (Hudson and Delaware estuaries) conservation equivalency measures as perfected today.
Motion made by Mr. Miller and second by Mr. Keliher. Motion split.

Motion to Split
Move to split the question to take up the coastal measures separately from the Chesapeake Bay and producer area measures.
Motion made by Mr. Luisi and seconded by Mr. Geer. Motion adopted by unanimous consensus.

Motion to postpone indefinitely all previous motions
Motion made by Mr. Abbott and seconded by Sen. Miramant. Motion approved by Board consent.

At this point in the meeting, the Board proceeded to consider implementation plans and conservation equivalency proposals on a state-by-state basis:

The Board approved state implementation plans and conservation equivalency proposals for ME, NH, MA, CT, PA, DE, DC, PRFC, VA, and NC by unanimous consent.

Motion to approve the Rhode Island conservation equivalency proposals.
Motion made by Dr. McNamee and seconded by Mr. Nowalsky. Motion carries (9 in favor, 4 opposed, 2 abstentions).

Motion to approve New York's NY-1, NYD-1, NYH-1 options under recreational measures, and NY-D2 under commercial measures.
Motion made by Dr. Davis and seconded by Mr. Abbott. Motion carries (11 in favor, 2 opposed, 2 abstentions).

Move to approve New Jersey's R3 and R6 options under recreational measures and the suite of commercial options.
Motion made by Mr. Nowalsky and seconded by Mr. Clark. Motion fails (3 in favor, 8 opposed, 3 abstentions, 1 null).

Move to approve New Jersey's option R3 and the suite of commercial options.
Motion made by Mr. Keliher and seconded by Mr. Abbott. Motion carries (10 in favor, 3 opposed, 2 abstentions).

Move to reconsider the RI vote.
Motion made by Sen. Miramant and seconded by Mr. Abbott. Motion fails for lack of two-thirds majority (6 in favor, 7 opposed, 2 abstentions). (Roll Call: in Favor – ME, NH, MA, CT, NY, PA; Opposed – RI, NJ, DE, MD, PRFC, VA, NC; Abstentions – NMFS, USFWS.)

Move to approve Maryland's MD-1, MD-2d, MD-3a, MD-4a options for recreational and commercial fisheries in the ocean and Chesapeake Bay.
Motion made by Mr. Luisi and seconded by Mr. Clark. Motion carries (10 in favor, 3 opposed, 2 abstentions).

Move to approve a slot limit for New Jersey to develop one conservation equivalency option that would achieve at least an 18% reduction with a maximum slot size limit of no more than 40'', pending Technical Committee approval.
Motion made by Mr. Nowalsky and seconded by Mr. Hasbrouck. Motion carries (9 in favor, 4 opposed, 2 abstentions).

Move to approve as part of New York State's conservation equivalency option to have an opt-in slot limit for the for-hire fishery 30"-40'', monitored by license, pending Technical Committee approval.
Motion made by Mr. Gilmore and seconded by Mr. Luisi. Motion fails (5 in favor, 5 opposed, 4 abstentions, 1 null).

Motion to approve the RI-CT-NY regional proposal Option B.
Motion made by Dr. McNamee and seconded by Mr. Abbott. Motion fails (5 in favor, 6 opposed, 4 abstentions).

Move that states submit implementation plans for circle hook requirements by August 15, 2020 and Board approval at 2020 Annual Meeting.
Motion made by Dr. McNamee and seconded by Mr. Kane. Motion carries.

Move to task the Plan Review Team to review state reductions in the Fishery Management Plan Review of the 2020 fishing year. If a state is below their predicted target reduction, the Board may direct a state to modify measures for the next fishing year to achieve the target reduction.
Motion made by Mr. Keliher and seconded by Mr. Hasbrouck. Postponed to Spring Meeting.

Motion to postpone to the Spring Meeting.
Motion made by Mr. Luisi and seconded by Mr. Gary. Motion carries (10 in favor, 3 opposed, 2 abstentions).

COASTAL SHARKS MANAGEMENT BOARD (FEBRUARY 4, 2020)

Meeting Summary

The Coastal Sharks Management Board met to receive a presentation on the Convention on the International Trade in Endangered Species (CITES) Appendix II listing for Atlantic shortfin mako. CITES is a global treaty that aims to ensure international trade of plants and animals do not threaten their survival in the wild. Species protected under CITES are listed in one of three appendices. In 2019 shortfin mako was listed under CITES Appendix II, which includes species that, although not currently threatened with extinction, may become so without trade controls. Effective Nov 26, 2019, a CITES export permit is required to export shortfin mako out of the U.S. as part of international trade; a CITES import permit is not required. No CITES permits are needed for domestic trade. CITES export permits can be obtained by application from USFWS, are valid for 6 months, and are renewable. The new permit requirements will be in place unless shortfin mako is removed from Appendix II. The next opportunity to adjust which species are listed under Appendix II will be at the CITES Conference of the Parties in 2022.

The Board also received an update on 2019 the International Commission for the Conservation of Atlantic Tunas (ICCAT) Meeting specific to shortfin mako. The ICCAT Standing Committee on Research and Statistics

(SCRS) provided updated projections to include two generations (2070) as opposed to the generation (2040) in the original 2018 benchmark assessment. This information was considered by the member countries and based on the results, there was agreement to extend the current management measures for an additional year while a comprehensive rebuilding program is developed. New measures could be considered and made at the 2020 ICCAT Meeting.

For more information, please contact Kirby Rootes-Murdy, Senior Fishery Management Plan Coordinator, at krootes-murdy@asmfc.org or 703.842.0740.

Motions
No motions made.

BLUEFISH MANAGEMENT BOARD (FEBRUARY 4, 2020)

Meeting Summary
The Bluefish Management Board met to consider approval of conservation equivalency (CE) proposals submitted by New Jersey and Georgia proposing alternative measures for the 2020 recreational bluefish fishery. The Commission's CE Policy allows states to submit proposals for alternative measures in state waters that achieve the same reduction in recreational landings that would have been achieved under the coastwide regulations approved by the Board in December 2019. The coastwide regulations include a 5-fish bag limit for the for-hire sector and a 3-fish bag limit for shore-based anglers and private fishermen.

Staff presented Technical Committee and Law Enforcement Committee recommendations to the Board on the technical merit and enforcement considerations of state proposals. The Board approved Georgia's proposal, which includes a bag limit of 15 fish, a minimum size of 12 inches, and a seasonal closure which begins March 1 and ends on April 30, 2020 (Table 1). The Board approved New Jersey's proposed options 1, 2, and a modified 3rd option presented in Table 1 below. Concerns regarding bluefish's overfished status precluded the Board from accepting all options included in New Jersey's proposal. Following the Board's decision, New Jersey's Marine Fisheries Council will select one of the three board approved options for implementation no later than April 1, 2020.

The Board also elected Joseph Cimino, New Jersey's Administrative Commissioner, as the Bluefish Board Vice-Chair.

2020 Recreational Bluefish Fishery Regulations for Georgia and New Jersey

Option	Size Limit	Bag Limit	Mode	Season
Georgia				
	12" min	15	All modes	Closure March 1 – April 30
New Jersey				
1	-	3	Private/shore	Open All Season
	-	5	For-hire	
2	-	3	All modes	Open All Season
3	-	6	All modes	Closure September 1 – October 31

For more information, please contact Dustin Colson Leaning, Fishery Management Plan Coordinator, at dleaning@asmfc.org or 703.842.0740.

Motions

Main Motion

Move to prohibit the use of conservation equivalency for recreational bluefish management for 2020 with the exception of states that are accountable for less than 1% of the total coastwide harvest.
Motion made by Ms. Meserve and seconded by Ms. Patterson. Motion substituted.

Motion to Substitute

Move to substitute to allow conservation equivalency for states that are accountable for less than 1% of the total coastwide harvest and to approve New Jersey's options 1, 2, and a modified 3 with a 6 fish bag limit.
Motion made by Mr. Nowalsky and seconded by Mr. Gary. Motion passes (11 in favor, 5 opposed).

Main Motion as Substituted

Move to allow conservation equivalency for states that are accountable for less than 1% of the total coastwide harvest and to approve New Jersey's options 1, 2, and a modified 3 with a 6 fish bag limit.
Motion passes by unanimous consent. (Roll call: In favor – ME, NH, MA, RI, CT, NY, NJ, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS)

Move to elect Joe Cimino as Vice Chair of the Bluefish Board
Motion made by Mr. Allen and seconded by Mr. Luisi. Motion passes by unanimous consent.

ATLANTIC MENHADEN MANAGEMENT BOARD (FEBRUARY 5, 2020)

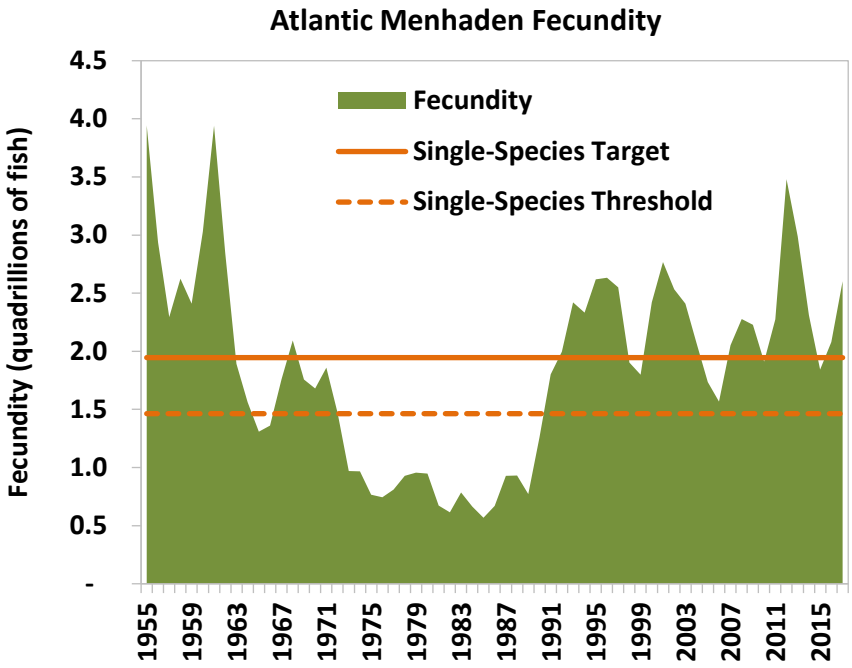
Press Release

ASMFC Atlantic Menhaden Board Prepares to Move Forward with Menhaden Ecological Reference Points

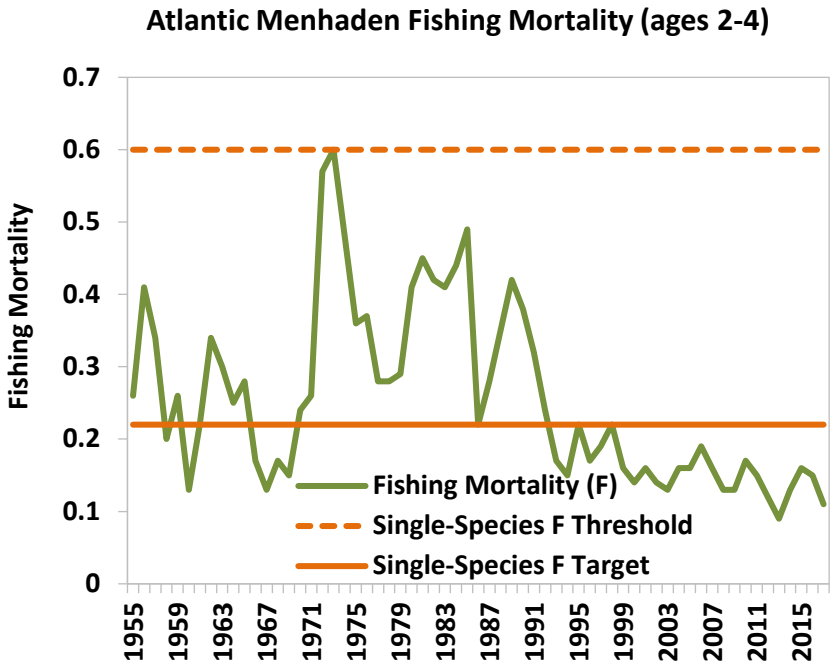
Arlington, VA – The Commission's Atlantic Menhaden Management Board accepted the results of the Single-Species and Ecological Reference Points (ERPs) Assessments and Peer Review Reports for management use. The single-species assessment indicates the stock is not overfished nor experiencing overfishing relative to the single-species reference points established in Amendment 3. However, the ERP assessment indicates that the fishing mortality reference points for menhaden should be lower to account for menhaden's role as a forage fish. In order to consider moving forward with the use of ERPs for management, the Board tasked the ERP Workgroup with producing several scenarios to explore how different fishing mortality assumptions for the other predator and prey species in the ERP model (i.e., bluefish, weakfish, spiny dogfish, and Atlantic herring) might affect the menhaden ERP fishing mortality target and threshold. The Board will review these analyses and take up the issue of formally adopting ERPs in May at the Commission's Spring Meeting.

"On behalf of the Menhaden Board, I commend the ERP Workgroup and the dozens of state, federal, academic, and ASMFC scientists for their countless hours of dedication to this formidable task," stated Board Chair Nichola Meserve. "The Board has long recognized the importance of Atlantic menhaden as a

forage fish for a variety of predators as reflected in its setting of conservative harvest limits for menhaden and its emphasis on the development of ERPs as one of its highest priorities for managing the species. The ERP assessment is an impressive body of work and a huge step towards fully realized ecosystem-based fishery management. Although there is still much more work to be done, the ERP assessment provides managers with a critical tool in setting harvest targets for menhaden in an ecosystem-context."



Under the traditional single-species reference points, Atlantic menhaden are neither overfished nor experiencing overfishing. Population fecundity, a measure of reproductive capacity (i.e., number of mature eggs in the population), has been above the single-species threshold since 1991 and above the single-species target in 20 of the 27 years since then, including 2017. Fishing mortality (*F)* has remained below the single-species overfishing threshold (0.6) since the mid-1970s, and below the single-species overfishing target (0.22) since the mid-1990s. Fishing mortality was estimated to be 0.11 in 2017. Although the ERP assessment indicates that the *F* reference points should be lower than the single-species reference points, it also showed that the conservative total allowable catch set for the 2018 to 2020 fishing seasons is consistent with the ERP *F* target in the example management scenario presented to the Board.



The ERP assessment, which was endorsed by an independent panel of fisheries scientists in November, uses the Northwest Atlantic Coastal Shelf Model of Intermediate Complexity for Ecosystems (NWACS-MICE) to develop Atlantic menhaden ERPs. The model was chosen from a suite of potential options because it was the only model that could explore both the impacts of predators on menhaden biomass and the effects of menhaden harvest on predator populations, and be updated in a timeframe that is informative for management. NWACS-MICE is an intermediate complexity ecosystem model that focuses

on four key predator species (striped bass, bluefish, weakfish, and spiny dogfish) and three key prey species (Atlantic menhaden, Atlantic herring, and bay anchovy). These species were chosen because diet data indicate they are top predators of Atlantic menhaden or are key alternate prey species for those predators, and datasets were available to describe their population dynamics.

The ERP assessment recommends a combination of the single-species model (Beaufort Assessment Model) and the NWACS-MICE model as a tool to evaluate trade-offs between menhaden harvest and predator biomass in a quantitative and transparent way. An important conclusion from the ERP assessment is that the final ERP definitions and values, including the appropriate harvest level for menhaden, depend on the management objectives for the ecosystem (i.e., management objectives for both Atlantic menhaden and its predators). The Board will continue to discuss management objectives and use of ERPs at the Commission's Spring Meeting in May.

Copies of the Assessment and Peer Review Reports can be found on the Commission's website on the Atlantic menhaden webpage, http://www.asmfc.org/species/atlantic-menhaden, under stock status. A more detailed overview of the stock assessments is available at http://www.asmfc.org/uploads/file/5e3c4663AtlanticMenhadenAssessmentsOverview_Feb2020.pdf. The overview aims to aid media and interested stakeholders in better understanding the assessment results. For more information, please contact Max Appelman, Fishery Management Plan Coordinator, at mappelman@asmfc.org or 703.842.0740.

PR20-04

Motions

Move to accept the Atlantic menhaden single species, ecological reference points, and peer review reports for management use.

Motion made by Mr. Woodward and seconded by Dr. Rhodes. Motion approved by unanimous consent.

Main Motion

Move to adopt:

1. **An Atlantic Menhaden ecological reference point F target equal to the maximum F on Atlantic menhaden that maintains Atlantic striped bass at its biomass target when striped bass is fished at its F target and all other ERP species as defined in the NWACS-MICE model are fished at their status quo F rates.**
2. **An Atlantic Menhaden ecological reference point F threshold equal to the maximum F on Atlantic menhaden that maintains Atlantic striped bass at its biomass threshold when striped bass is fished at its F target and other ERP species as defined in the NWACS-MICE model are fished at their status quo F rates.**

Motion made by Dr. Colden and seconded by Ms. Patterson. Motion postponed.

Motion to Postpone

Move to postpone until after completion of the following task: task the Ecological Reference Points Workgroup with the following analysis to better understand the parameters and outputs of the example ERP. The Work Group is asked to present this analysis at the May ASMFC meeting.

1. **Using the existing example ERP framework, modify the assumptions on the other species such that they are fished at their F-target as opposed to F2017. Reproduce figures 144-148.**
2. **Using the existing example ERP framework, modify the assumptions on the other species such that they are fished at their F-threshold, as opposed to F2017. Reproduce figures 144-148.**

3. **Using the existing example ERP framework, modify the assumptions on the other species such that bluefish and herring are fished at their F-target while spiny dogfish and weakfish are fished at their F-2017. Reproduce figures 144-148.**

Motion made by Ms. Ware and seconded by Mr. Clark. Motion carries unanimously

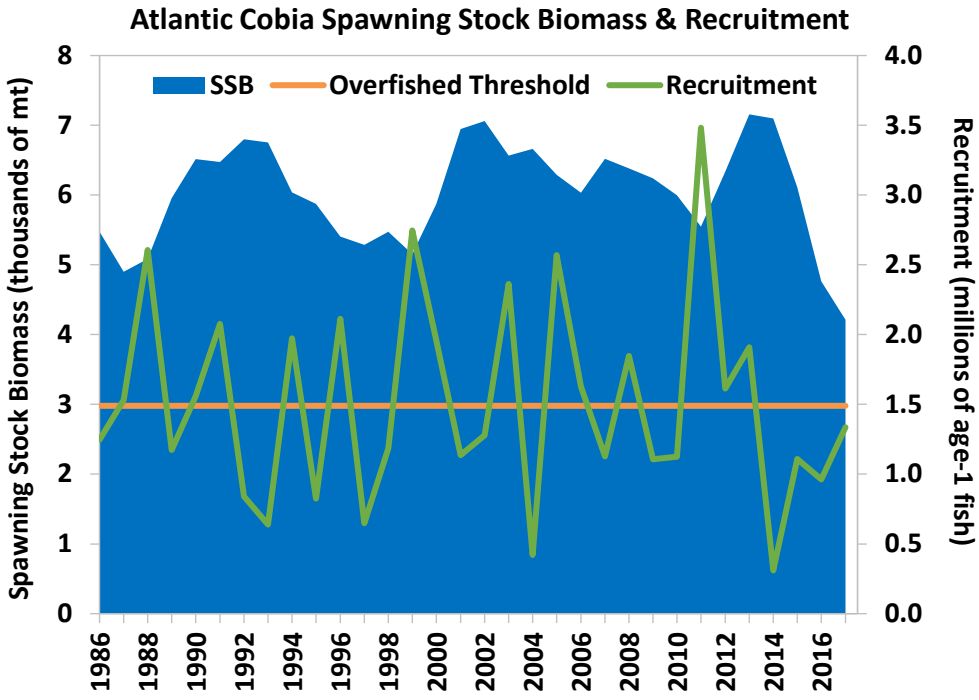
SOUTH ATLANTIC STATE/FEDERAL FISHERIES MANAGEMENT BOARD (FEBRUARY 5, 2020)

Press Releases

Atlantic Cobia Benchmark Stock Assessment Finds Resource Not Overfished Nor Experiencing Overfishing

South Atlantic Board Sets Harvest Specifications & Initiates Addendum

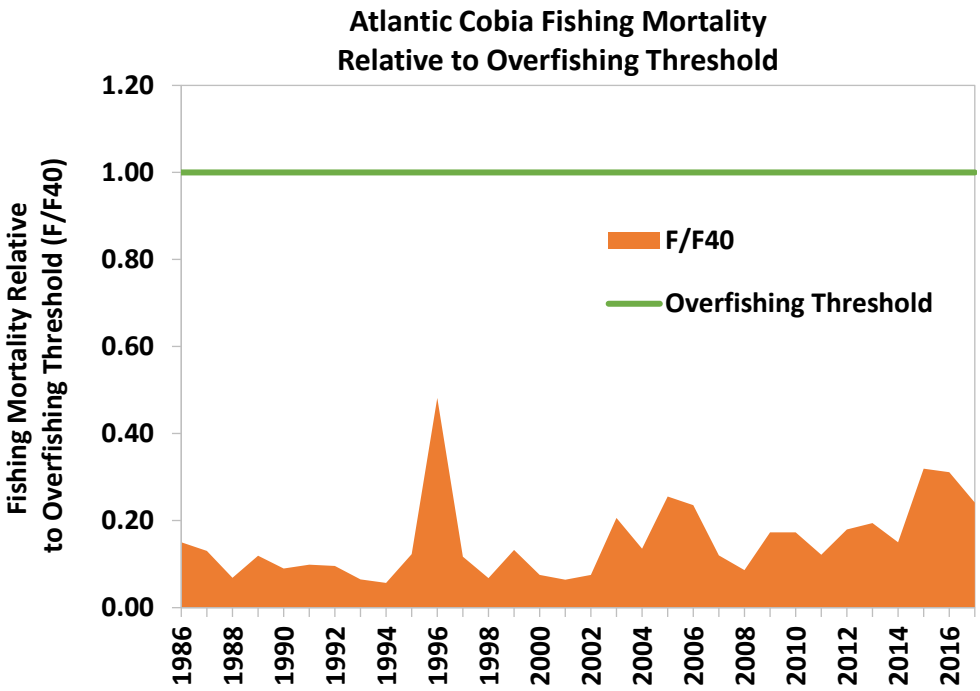
Arlington, VA – The Commission's South Atlantic State/Federal Fisheries Management Board accepted the Atlantic Cobia Benchmark Stock Assessment and Peer Review Report, including new reference points, for management use. The assessment, which was conducted through the Southeast Data, Assessment, and Review (SEDAR) process, evaluated the Atlantic stock of cobia, which extends from the Georgia/Florida border north. Assessment results indicate the stock is not overfished and overfishing is not occurring.



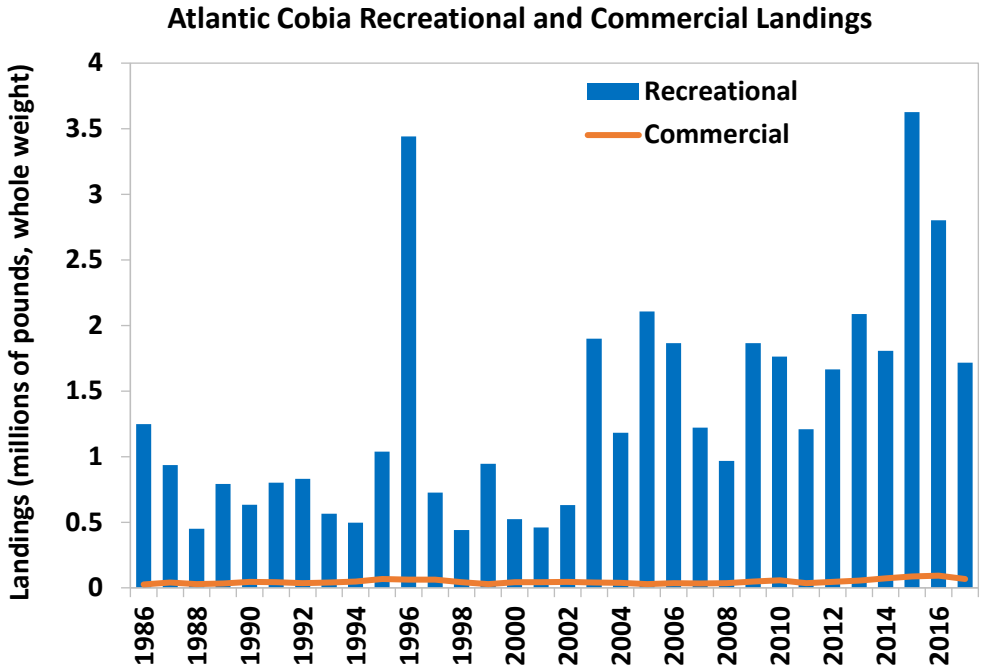
Spawning stock biomass (SSB) has been above the overfished threshold throughout the timeframe (1986-2017), indicating the coastwide stock is not overfished. SSB has shown several large increases following years of high recruitment, the most recent following the 2011 recruitment peak, with the largest SSB in the time series occurring in 2013. These peaks in SSB have been followed by declines when recruitment moves back towards its average. While SSB has undergone a steep decline since the 2013 peak, SSB remains above the overfished threshold.

This assessment used re-calibrated recreational catch data from the Marine Recreational Information Program (MRIP). Landings of Atlantic cobia have generally increased since the 1980s, primarily driven by the recreational fishery, which accounts for about 96% of the total landings. Fishing mortality showed some increase in the most recent years, but did not approach the overfishing threshold, indicating the coastwide stock has not undergone overfishing during the assessment timeframe.

Several projections of the population under different harvest scenarios were conducted, describing predicted trends in biomass and the probability of the stock becoming overfished through 2024. The TC recommended harvest quota levels to the Board based on projections that maintained a low probability of the stock becoming overfished and did not result in consistent declines in SSB. Based on the assessment results and harvest projections, the Board approved an annual total harvest quota of 80,112 fish for the 2020-2022 fishing seasons. The Board maintained current recreational measures for 2020 while the states consider potential regulatory changes for future years.



The Board also discussed recreational/commercial allocation as established by Amendment 1 to the Interstate Fishery Management Plan (FMP) for Atlantic Migratory Group Cobia, which currently allocates 92% of the total quota to the recreational fishery and 8% to the commercial fishery. These percentages were originally based on historical harvest from each sector within a period of reference years, prior to the re-calibration of MRIP estimates. With the re-calibration of the recreational data, the percentages of harvest in the reference period changed, resulting in the current commercial allocation percentage being higher than its percentage of total harvest during the reference period. In response to this, the Board initiated an addendum to reevaluate allocation. The Board also noted potential regulatory inconsistencies among *de minimis* states and determined the *de minimis* measures should be reconsidered through the addendum.



The SEDAR 58 Report is available at http://www.asmfc.org/uploads/file/5e3d99a3SEDAR58_AtlCobiaAssessment_PeerReviewReport.pdf . An overview will be available on the Commission's website, www.asmfc.org, on the Cobia page under Stock Assessment Reports. For more information, please contact Dr. Mike Schmidtke, FMP Coordinator, at mschmidtke@asmfc.org.

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PR20-06

ASMFC South Atlantic Board Approves Atlantic Croaker and Spot Addenda

Arlington, VA – The Commission's South Atlantic State/Federal Fisheries Management Board approved Addendum III to Amendment 1 to the Interstate Fishery Management Plan (FMP) for Atlantic Croaker and Addendum III to the Omnibus Amendment to the Interstate FMPs for Spanish Mackerel, Spot, and Spotted Seatrout. These Addenda adjust management of Atlantic croaker and spot through their respective Traffic Light Approaches (TLA).

Through the annual analysis of the TLA, which assigns a color (red, yellow, or green) to characterize relative levels of indicators that reflect the condition of the fish population (abundance characteristic) or fishery (harvest characteristic). If the amount of red, indicating low abundance or low harvest, in both characteristics exceeds threshold levels (30% and 60%) for too many years, management action is triggered. In 2018, the Atlantic Croaker Technical Committee and Spot Plan Review Team recommended updates to their respective TLAs that would incorporate additional fishery-independent indices, age information, use of regional characteristics, and changes to the management-triggering mechanism.

These Addenda change the management-triggering mechanisms to enact coastwide management if the amounts of red for both the harvest and abundance characteristics within a region (Mid-Atlantic and South Atlantic) exceed threshold levels for 3 of the 4 most recent years for Atlantic croaker and 2 of the 3 most recent years for spot. The Addenda also define commercial and recreational management responses to triggers at each threshold level (see table below). Finally, the Addenda define the processes for evaluating the fisheries while triggered measures are in place and determining when triggered measures may be removed.

Management Triggers & Reponses for Atlantic Croaker & Spot

Species	Recreational		Commercial	
	30% Threshold	60% Threshold	30% Threshold	60% Threshold
Atlantic Croaker	Bag Limit: up to 50 fish for non-*de minimis* states	Bag Limit: up to 40 fish for all states	Measures to achieve 1% harvest reduction from previous 10-year average for non-*de minimis* states with no regulations	Measures to achieve 5% harvest reduction from previous 10-year average for all states
Spot	Bag Limit: up to 50 fish for non-*de minimis* states	Bag Limit: up to 40 fish for all states	Measures to achieve 1% harvest reduction from previous 10-year average for non-*de minimis* states with no regulations	Measures to achieve 10% harvest reduction from previous 10-year average for all states

Note: Regulations will not go into effect unless management is triggered by the TLA Analysis.

Both Addenda were approved for immediate implementation by the states of New Jersey through Florida. The next TLA analyses will be presented to the Board at the Commission's 2020 Summer Meeting.

The Addenda will be available on the Commission's website, www.asmfc.org (on the Atlantic Croaker and Spot webpages) by mid-February. For more information, please contact Dr. Mike Schmidtke, FMP Coordinator, at mschmidtke@asmfc.org or 703.842.0740.

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PR20-05

Meeting Summary

The South Atlantic State/Federal Fisheries Management Board met to review and consider acceptance of the Atlantic Cobia Benchmark Stock Assessment and Peer Review (see above press release), take final action on Draft Addenda for Atlantic Croaker and Spot (see above press release), consider initiating changes to the Spanish Mackerel Fishery Management Plan (FMP) and discuss a roadmap for the next red drum stock assessment.

The Board discussed initiating management action to align state and federal management of Spanish mackerel. A federal commercial closure in 2019 prompted state, Commission, and South Atlantic Fishery Management Council (SAFMC) staff to compare Spanish mackerel management through the Commission's Omnibus Amendment to the Interstate Fishery Management Plans (FMP) for Spanish Mackerel, Spot, and Spotted Seatrout (Omnibus Amendment) with that of the SAFMC's FMP for Coastal Migratory Pelagics of the Gulf of Mexico and Atlantic Region (CMP FMP). Differences between these plans exist in terms of recreational season definition, allowable gears, commercial management zones, recreational accountability measures, and commercial trip limits. The Board was presented with a summary of the differences between the FMPs. The Board noted the next stock assessment is scheduled for completion in 2022. This assessment will incorporate re-calibrated recreational catch estimates from the Marine Recreational Information Program (MRIP), which will likely impact harvest quotas and other management measures. The Board decided action on the current differences between the FMPs can be postponed until after the stock assessment.

The Board also reviewed a proposal from the Red Drum Stock Assessment Subcommittee (SAS) concerning the next red drum stock assessment. Previous assessments have had difficulty modeling red drum due to limited data on fish larger than the current slot limit, which can disproportionately contribute reproductively to the stock. It was recommended population simulation models be developed that would simulate the full red drum population, then test a variety of assessment modeling techniques to determine which would be most useful with a peer review in 2022. The SAS noted this project will require a substantial work and modeling expertise and would change the timeline for delivery of the next red drum assessment. The Southeast Data, Assessment, and Review of red drum, currently scheduled for 2022, would be postponed until 2024. The Board agreed with the SAS's proposal, tasked the SAS with conducting the simulation project, and recommended that the Interstate Fishery Management Program Policy Board adjust the stock assessment schedule accordingly.

For more information, please contact Dr. Michael Schmidtke, Fishery Management Plan Coordinator, at mschmidtke@asmfc.org or 703.842.0740.

Motions

Atlantic Cobia

Move to accept the SEDAR 58 Atlantic Cobia Benchmark Stock Assessment and Peer Review Reports and the recommended F40-based biological reference points for management use.
Motion made by Dr. Rhodes and seconded by Ms. Fegley. Motion carries unanimously.

Main Motion
Move to recommend a 2.4 million pound annual quota for cobia for 2020-2022 with status quo recreational measures in 2020.
Motion made by Mr. Batsavage and seconded by Mr. Bell. Motion tabled.

Motion to Table
Move to table motion until after red drum items.
Motion made by Mr. Nowalsky and seconded by Dr. Rhodes.

Main Motion as Modified
Move to recommend an 80,112 fish annual quota for cobia for 2020-2022 with status quo recreational measures in 2020.
Motion made by Mr. Batsavage and seconded by Mr. Bell. Motion carries unanimously. (Roll call: In favor – NJ, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS)

Move to initiate an addendum to reevaluate the recreational and commercial allocations for cobia and reconsider *de minimis* measures.
Motion made by Mr. Woodward and seconded by Mr. Cimino. Motion passes unanimously.

Atlantic Croaker Addendum III

Move to approve Option B, under Issue 1, for Atlantic Croaker Addendum III.
Motion made by Ms. Fegley and seconded by Mr. Gary. Motion passes by unanimous consent.

Move to approve Option B, under Issue 2, for Atlantic Croaker Addendum III.
Motion made by Mr. Batsavage and seconded by Mr. Estes. Motion passes by unanimous consent.

Move to approve Option B, sub-option B1, under Issue 3, for Atlantic Croaker Addendum III.
Motion made by Ms. Fegley and seconded Mr. Estes. Motion passes by unanimous consent.

Move to approve Option B, under Issue 4, for Atlantic Croaker Addendum III.
Motion made by Mr. Miller and seconded by Dr. Rhodes. Motion passes by unanimous consent.

Spot Addendum III

Move to approve Option B, under Issue 1, for Spot Addendum III.
Motion made by Mr. Clark and seconded by Mr. Batsavage. Motion passes by unanimous consent.

Move to approve Option B, under Issue 2, for Spot Addendum III.
Motion made by Ms. Fegley and seconded by Mr. Clark. Motion passes by unanimous consent.

Move to approve Option B, sub-option B2, under Issue 3, for Spot Addendum III.
Motion made by Mr. Batsavage and seconded by Mr. Bell. Motion passes by unanimous consent.

Move to approve Option B, under Issue 4, for Spot Addendum III.
Motion made by Mr. Miller and seconded by Dr. Rhodes. Motion passes approved unanimously.

Move to approve Addendum III to the Omnibus Amendment to the Interstate Fishery Management Plans for Spanish Mackerel, Spot, and Spotted Seatrout, and Addendum III to Amendment 1 to the croaker Fishery Management Plan as modified today with an immediate implementation date.
Motion made by Mr. Bell and seconded by Ms. Bolen. Motion passes unanimously. Roll call: In favor – NJ, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS)

Move to elect Lynn Fegley as Vice Chair of the South Atlantic Board.
Motion made by Mr. Clark and seconded by Mr. Haymans. Motion passes by unanimous consent.

EXECUTIVE COMMITTEE (FEBRUARY 6, 2020)

Meeting Summary
The Executive Committee met and discussed several issues including: 1) allocation of remaining plus-up funds; 2) Public input process; 3) Management Board changes to accommodate shifts in species distributions; 4) Use of Modes split in Recreational Fisheries Management and 5) future Commission Annual Meetings. The following action items resulted from the Committee's discussions:

- **Allocation of remaining plus-up funds** – Staff presented options for allocating the remaining plus-up funds and the Committee had a good discussion on potential projects. An interactive spreadsheet will be developed and utilized by the Executive Committee to rank the nine projects presented for funding. Allocation of the plus-up funds will be reconsidered at the Spring Executive Committee meeting.

- **Public input process** – Staff presented the details of Advisory Panel (AP) participation by species panels, and it was determined that there is generally poor attendance and participation across most APs. After some discussion it was recognized that the old way of getting public input is becoming less effective, due in large part to the use of social media and technology, and the Commission needs to update its public input process. The Management & Science Committee (MSC) has been tasked with recommending better ways to engage stakeholders and capture public input. This will be on the agenda for the Spring Executive Committee meeting.

- Management Board changes to accommodate shifts in species distributions – In light of species distribution shifts due to Climate Change, the question of when is a state obligated to participate in a species management board has been asked. A healthy discussion ensued, with a number of thought-provoking ideas offered. The Chair will task the MSC with recommending better ways to engage stakeholders and capture public input. This will be on the agenda for the Summer Executive Committee meeting.

- Modes split in Recreational Fisheries Management – Concern has been raised about the fairness of allowing differential access to for-hire and private angler fisheries. The recent bluefish decision to allow a larger possession limit for individuals on for-hire trips compared to private boat and shore anglers was used as an example of differential access. The Commission is charged with the responsibility of managing public resources and fairness is an important part of that charge. A work group was established to develop a policy on this issue and will report out to the Executive Committee at the Spring Meeting.

- Future Annual Meetings – The Commission's next four Annual Meetings will be held in New Jersey (2020), North Carolina (2021), Maryland (2022) and Delaware (2023).

The Committee also discussed the membership of the Commission's Legislative Committee; coordination of the whelk fishery along the Atlantic coast; Pennsylvania's membership on the Atlantic Menhaden Board and MRIP invoice from the states.

For more information, please contact Laura Leach, Director of Finance & Administration, at lleach@asmfc.org or 703.842.0740.

Motions
No motions made.

INTERSTATE FISHERIES MANAGEMENT PROGRAM POLICY BOARD (FEBRUARY 6, 2020)

Meeting Summary
The ISFMP Policy Board met to consider a number of issues, including an update from the Executive Committee; review of the 2020 Commissioner survey results; process implications for the Ecological Reference Points (ERPs) Assessment; update on the progress of the shad and lobster benchmark stock assessments; and review of the definitions for stock status categories.

The Commission Chair Pat Keliher presented the Executive Committee Report (see Executive Committee meeting summary earlier in this document) to the Policy Board.

Deke Tompkins presented the results of the 2019 Commissioner survey, highlighting that there were no significant changes from the previous year regarding Commissioner satisfaction on the progress and actions of the Commission. Areas highlighted for improvement included cooperation between Commissioners, the Commission's ability to manage rebuilt stocks, and progress to end overfishing.

Dr. Katie Drew provided a summary of the ERPs assessment presented at the Atlantic Menhaden Board meeting earlier in the week (see press release). There is no one answer for how to manage under ERPs. The ERP Assessment provides tools to evaluate trade-offs of different management objectives for various predator and prey populations and fisheries. The Policy Board discussed how management decisions could be made for ERPs and how those decisions could impact decisions of other management boards and vice versa. For example, if ERPs were adopted as presented but the Atlantic Striped Bass Board changed its single-species reference points, the ERP values would then change. A decision by one species board could impact the actions of another board, which raised the question of what body should

make ERP decisions or decisions impacting ERPs. In its discussions, the Policy Board discussed the need to minimize the complexity of decision-making as the Commission moves towards ecosystem-based fisheries management. The Policy Board recognized the Commission may need to develop a framework within the ISFMP for ecosystem management and will continue the discussion in May.

Jeff Kipp provided an update on two ongoing benchmark stock assessments. The American lobster stock assessment will be peer-reviewed in the summer of 2020. A reference point workshop was held in October 2019 and the last modeling workshop will be in February 2020. The American shad stock assessment will be peer-reviewed in the spring of 2020. The last modeling workshop was in November of 2019. The Policy Board discussed a change in the timing of the next red drum benchmark stock assessment as recommended by the South Atlantic State/Federal Fisheries Management Board. The Policy Board approved a two-stage assessment process, which includes two years of work devoted to simulation analysis with a peer review in 2022 and a subsequent two years of work devoted to a traditional benchmark stock assessment with a peer review in 2024.

In August 2019, the Policy Board reviewed the annual performance of the stocks, which provides the Board a review of the stock status, technical committee advice, and management board actions for Commission species. Based on its review, it suggested that the current stock categories were not broad enough for all of the Commission species. At its meeting this week, the Policy Board approved adding overfished and overfishing to the stock categories.

For more information, please contact Toni Kerns, ISFMP Director, at tkerns@asmfc.org or 703.842.0740.

Motions
No motions made.

BUSINESS SESSION (FEBRUARY 6, 2020)

Meeting Summary
The Business Session (also known as the full Commission) met to receive an update on the Commonwealth of Virginia's efforts to come back into compliance with the Atlantic Menhaden FMP. The Business Session thanked the Secretary of Commerce for his support and concurrence with the Commission's non-compliance finding. The Virginia General Assembly is working toward approving legislation to bring the state back into compliance with the FMP. A bill has passed the House of Delegates and a similar bill will be considered by the Senate in the coming weeks. Upon written notification from Virginia that they are fully in compliance, the Commission Chair will submit a letter to the Secretary of Commerce to remove the potential moratorium.

For more information, please contact Robert Beal, Executive Director, at rbeal@asmfc.org or 703.842.0740.

Motions
No motions made.

MID-ATLANTIC
FISHERY MANAGEMENT COUNCIL

PRESS RELEASE

FOR IMMEDIATE RELEASE
December 17, 2019

PRESS CONTACT: Mary Sabo
(302) 518-1143

Council and Commission Recommend Recreational Bluefish Management Measures for 2020

ANNAPOLIS, MD – Last week, the Mid-Atlantic Fishery Management Council (Council) recommended and the Atlantic States Marine Fisheries Commission (Commission) approved new recreational fishing regulations for the 2020 Atlantic bluefish fishery from Florida to Maine. These measures, which include a 3-fish bag limit for private anglers and shore-based fishermen and a 5-fish bag limit for for-hire fishermen, represent a substantial reduction compared to the federal 15-fish bag limit that has been in place since 2000. The Commission's actions are final and apply to state waters (0-3 miles from shore), while the Council will forward its recommendation for federal waters (3 – 200 miles from shore) to the NOAA Fisheries Greater Atlantic Regional Fisheries Administrator for final approval.

The most recent operational assessment of the Atlantic bluefish stock concluded that the stock is overfished but not experiencing overfishing. During their joint meeting in October, the Council and Commission adopted a recreational harvest limit (RHL) of 9.48 million pounds for 2020 and 2021, which is an 18% decrease compared to the 2019 RHL. Using the current regulations, the recreational sector is projected to land 13.27 million pounds, which will exceed the RHL by 28.56%. Therefore, the Council and Commission met last week to approve new recreational management measures to constrain harvest to the reduced RHL.

The Council and Commission considered several combinations of bag limits and minimum size limits, including options to set a single set of regulations for all fishing modes or different regulations for shore/private modes and the for-hire mode. Although the Council's Bluefish Monitoring Committee recommended a coastwide 3-fish bag limit, the majority of comments from the public and Bluefish Advisory Panel (AP) members expressed opposition to this option, noting that it would have severe economic consequences for the for-hire sector, which was only responsible for 3.6% of coastwide landings from 2016 to 2018. Additionally, AP members and the public emphasized that these proposed reductions come at a challenging time for for-hire stakeholders as they are also facing new restrictions on striped bass, black sea bass, summer flounder, and scup.

After an extensive discussion and thorough consideration of public comments, the Council recommended and Commission approved a 3-fish bag limit for private and shore modes and a 5-fish bag limit for the for-hire mode. No restrictions were made to minimum fish size or seasons.

"For many years, bluefish has been one of our most abundant recreational fisheries," said Council Chairman and ASMFC Board member Mike Luisi. "The Council and Commission are fully committed to the effective conservation and management of this stock, but we also recognize that a sudden change in regulations could have severe socioeconomic consequences for some stakeholders. After evaluating a wide range of options and considering numerous comments from the public, we feel that this approach is the most fair and effective way to achieve the necessary reduction in harvest next year."

The Council and Commission are continuing to work on development of a rebuilding plan as part of the Bluefish Allocation and Rebuilding Amendment. Additional information and updates on this action are available at http://www.mafmc.org/actions/bluefish-allocation-amendment

December 2019 Council Meeting Report

The following summary highlights actions taken and issues considered at the Mid-Atlantic Fishery Management Council's meeting December 9-12, 2019 in Annapolis, MD. Presentations, briefing materials, and webinar recordings are available at: http://www.mafmc.org/briefing/december-2019.

During this meeting, the Council:

- Approved the use of regional conservation equivalency for the recreational summer flounder fishery in 2020*
- Approved *status quo* recreational scup and black sea bass management measures in state and federal waters in 2020*
- Approved recreational bluefish measures for 2020 consisting of a 3-fish bag limit for the shore and private mode and a 5-fish bag limit for the for-hire modes*
- Approved a scoping document for the joint Summer Flounder, Scup, and Black Sea Bass Commercial/ Recreational Allocation Amendment*
- Agreed to develop the Black Sea Bass Commercial Allocation Addendum/Amendment as a joint action with the ASMFC*
- Approved a supplemental scoping document for the Bluefish Allocation and Rebuilding Amendment*
- Approved the Commercial eVTR Omnibus Framework with a 48-hour reporting deadline
- Selected a preferred alternative and approved the Omnibus Risk Policy Framework
- Selected preferred alternatives and approved the Surfclam and Ocean Quahog Excessive Shares Amendment
- Approved the 2020-2024 Strategic Plan
- Approved the Comprehensive Five Year (2020-2024) Research Priorities document
- Finalized the EAFM summer flounder conceptual model and agreed to move forward with development of a summer flounder recreational discards management strategy evaluation
- Identified four areas of expertise needed on the Scientific and Statistical Committee
- Reviewed and approved a list of actions and deliverables for the 2020 Implementation Plan
- Received an update on habitat activities

** Items denoted with an asterisk (*) were undertaken during joint meetings with the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Management Board and Bluefish Management Board.*

Summer Flounder, Scup, Black Sea Bass, and Bluefish 2020 Recreational Management Measures

The Council met jointly with the Atlantic States Marine Fisheries Commission's (ASMFC) Summer Flounder, Scup, and Black Sea Bass Management Board (Board) and Bluefish Management Board to develop recreational management measures for summer flounder, scup, black sea bass, and bluefish for 2020.

Summer Flounder

The Council and Board approved the continued use of regional conservation equivalency for the recreational summer flounder fishery in 2020 to achieve, but not exceed, the 2020 summer flounder recreational harvest limit (RHL) of 7.69 million pounds. Conservation equivalency allows individual states or multi-state regions to develop customized measures that, in combination, will achieve the coastwide RHL. Regional measures under conservation equivalency in 2020 will be the same measures as in 2019, with the possibility of minor adjustments to season start and end dates in some states.

The Council and Board also maintained the *status quo* non-preferred coastwide measures that are written into the federal regulations but waived in favor of state regulations once conservation equivalency is approved by the National Marine Fisheries Service (NMFS). These measures include a 4-fish possession limit, a 19-inch total length minimum size, and an open season of May 15 – September 15. The Council and Board also made no changes to the current precautionary default measures (i.e., a 2-fish possession limit, a 20-inch total length minimum size, and an open season of July 1 – August 31) which would be implemented in any state or region that does not adopt measures consistent with the conservation equivalency guidelines.

The Council and Board considered the staff recommendation to implement a coastwide slot limit in the summer flounder recreational fishery (allowing harvest of summer flounder only between 17-20 inches total length), but consistent with the Monitoring Committee recommendations, did not recommend this strategy for 2020. The Monitoring Committee has identified additional analyses that should be done to more thoroughly evaluate the potential impacts of slot limits for summer flounder and whether they are appropriate to use in future years.

Scup and Black Sea Bass

The Council and Board agreed to maintain *status quo* recreational management measures for scup in state and federal waters in 2020. In federal waters, this includes a 9-inch total length minimum fish size, a 50 fish possession limit, and an open season of January 1 - December 31.

They also agreed to maintain *status quo* recreational management measures for black sea bass in state and federal waters in 2020. In federal waters, this includes a 12.5-inch total length minimum fish size, a 15 fish possession limit, and open seasons of February 1-28 and May 15 - December 31. The Board agreed that states should not modify their management measures for 2020, with the exception of states participating in the optional February recreational fishery. Virginia is the only state which indicated an interest in participating in 2020; therefore, Virginia may need to adjust their measures later in the year to account for February 2020 harvest.

For both black sea bass and scup, the Council and Board discussed the possibility that maintaining *status quo* management measures in state and federal waters may result in overages of the recreational harvest limits. However, they agreed that these measures are unlikely to harm the stocks given that biomass is much higher than the target level for both species. They agreed that it is hard to justify a restriction in harvest to prevent exceeding the 2020 recreational harvest limits when biomass and availability to anglers are so high and the need for a restriction is not driven by a conservation need, but rather by changes to the recreational harvest estimates and the commercial/recreational allocation percentages in the Fishery Management Plan. The Council and Board emphasized that this is a short-term approach to address a unique situation and allow for more time to consider how management should adapt to the revised recreational harvest estimates from the Marine Recreational Information Program.

Bluefish

The Council and Bluefish Board approved coastwide recreational bluefish measures consisting of a 3-fish bag limit for the shore and private mode and a 5-fish bag limit for the for-hire modes (party/charter). No restrictions on season or minimum size were made. Additional details are available here: http://www.mafmc.org/newsfeed/2019/bluefish-2020-recreational-measures.

Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment

The Council and Board approved, with minor revisions, a scoping document for a joint amendment to reconsider the allocations between the commercial and recreational sectors for summer flounder, scup, and black sea bass. Scoping hearings will be scheduled for early 2020, and a revised scoping document will be posted once available at: http://www.mafmc.org/actions/sfsbsb-allocation-amendment.

Black Sea Bass Commercial Allocation Addendum/Amendment

In October 2019, the Board initiated a Board-only addendum to consider modifications to the state shares of the black sea bass commercial quota. During the December 2019 joint meeting, the Council agreed that this should be a joint action to allow the Council to have a voting role in any potential changes to these allocations and to

consider including them in the Council's fishery management plan. The Council voted to move forward with a Council amendment to complement the Board's addendum.

Bluefish Allocation and Rebuilding Amendment

The Council and ASMFC are developing an amendment that will address several issues in the bluefish fishery. The Council and Board held an initial round of scoping hearings in June and July 2018. However, because the issue of rebuilding was added to the amendment during the October 2019 meeting, the Council will need to provide additional hearings and opportunities for public comment. During this meeting, the Council and Bluefish Board reviewed a supplemental scoping document and approved the document for public scoping hearings with minor suggestions. Scoping hearing are anticipated to be held in January and February with exact locations and dates to be determined. Additional information and updates on this action will be posted at http://www.mafmc.org/actions/bluefish-allocation-amendment.

Seized Commercial Catch and the Quota Monitoring/Accountability Process

The Council and Board discussed issues related to monitoring and reporting of illegal commercial catch. Toni Kerns (ASMFC) provided an overview of how the states are handling seized commercial catch within their own reporting and monitoring systems, and Mike Ruccio (NOAA Fisheries Greater Atlantic Regional Fisheries Office) presented several options that could be pursued to address inconsistencies between the states.

Commercial eVTR Omnibus Framework

The Council discussed the alternatives and analyses for an omnibus framework action that considers requiring federally permitted commercial vessels to submit vessel trip reports (VTRs) to NMFS electronically. This action does not change existing data being collected, and operators would have a choice of which NMFS-approved eVTR application to use. This action affects all vessels with federal commercial permits for species managed by the Mid-Atlantic and New England Fishery Management Councils once joint action is taken. The NEFMC is scheduled to take final action at their January 2020 council meeting. After considering Advisory Panel and Fishery Management Action Team recommendations, the Council took final action, selecting alternative 1c to require VTRs be submitted electronically within 48 hours of trip completion. NMFS indicated that they would likely have an extended implementation deadline of up to a year after the final rule and the Council will coordinate several workshops throughout the Northeast Region in 2020. More information is available at http://www.mafmc.org/actions/commercial-evtr-framework.

Omnibus Risk Policy Framework

The Council held the second framework meeting and took final action on the Omnibus Risk Policy Framework. The Council's risk policy, originally implemented in 2011, specifies the Council's acceptable level of risk (i.e., the probability of overfishing, P*) and works in conjunction with the Scientific and Statistical Committee's (SSC) application of the ABC control rule to account for scientific uncertainty when setting an Acceptable Biological Catch (ABC) for a specific stock. During this meeting, the Council reviewed the results of a biological management strategy evaluation (MSE) conducted by Dr. John Wiedenmann (Rutgers University) and an economic MSE conducted by Dr. Doug Lipton (NOAA Fisheries) and Cyrus Teng (University of Maryland) that evaluated eight different risk policy alternatives, including the Council's current risk policy. The results indicated that several alternatives would allow for increased yield and economic benefit when compared to the current risk policy and would still minimize the risk of overfishing or a stock becoming overfished.

The Council approved a new risk policy that was a hybrid approach to two of the alternatives considered (Alternatives 2 and 8). The new risk policy seeks to prevent stocks from being overfished by reducing the probability of overfishing as stock size falls below the target biomass while also allowing for increased risk under higher stock biomass conditions, particularly at very high levels such as those currently found with scup and black sea bass. The Council also approved removing the typical/atypical species distinction currently included in the risk policy. It is anticipated that the new risk policy will be implemented in 2020 and could be applied to 2021 catch and harvest specifications.

Surfclam and Ocean Quahog Excessive Share Amendment

After reviewing public comments, the Council selected preferred alternatives and approved the Atlantic Surfclam and Ocean Quahog Excessive Shares Amendment for submission to the Secretary of Commerce. The amendment was developed to address the "excessive shares" provisions of the National Standard 4 guidelines of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), which require that no individual, corporation, or other entity acquires an excessive share of the SCOQ Individual Transferable Quota (ITQ) privileges. The amendment also considered modifications to the FMP goals and objectives and revisions to the multi-year specification setting process. The Council selected the following preferred alternatives:

- **Goals and Objectives.** The Council adopted the goals and objectives recommended by the Fishery Management Action Team. They were crafted around goal areas that focused on sustainability, a simple and efficient management regime, managing for stability, management that is flexible and adaptive to changes, and the promotion of science and research. The adopted goals and objectives better reflect the Council's long-term intent for these fisheries
- **Excessive Shares Cap: Sub-Alternative 4.4.** The Council's preferred alternative would implement a two-part cap, with quota share ownership cap at 35% for surfclams and 40% for quahogs, and annual allocation cap based on the possession of cage tags at 65% for surfclams and 70% for ocean quahogs. The Council selected the family affiliate level and the cumulative 100% model for tracking of ownership.
- **Excessive Shares Review: Alternative 2**. This alternative would require the periodic review of the excessive share measures at least every 10 years or as needed. The review could be done in conjunction with the Catch Share Program Review.
- **Framework Adjustment Process: Alternative 1**. This alternative would not change the list of management measures that can be addressed through the framework adjustment process.
- **Multi-Year Management Measures: Alternative 2.** The Council's preferred alternative would allow specifications to be set for maximum number of years consistent with the Northeast Regional Coordinating Council approved stock assessment schedule.

2020-2024 Strategic Plan

The Council reviewed public comments and approved a final 2020-2024 Strategic Plan with several minor modifications. A final version of the plan will be posted in the coming weeks at http://www.mafmc.org/strategic-plan. In addition, the Council reviewed a proposed evaluation plan which outlines a process for conducting annual, mid-plan, and comprehensive reviews of progress toward addressing the Council's strategic goals and objectives.

2020-2024 Research Priorities

The Council reviewed and approved the Comprehensive Five Year (2020-2024) Research Priorities document. This document outlines broad priority themes and species-specific research priorities and was developed with input from the Council's Research Steering Committee, SSC, Advisory Panels, Monitoring Committees, and the Northeast Fisheries Science Center (NEFSC). The document includes a review of the existing priorities document and was also re-organized and prioritized to develop a more useful, tactical, and strategic document to effectively advance scientific and management information that is aligned with Council and NEFSC resources and priorities.

EAFM Summer Flounder Conceptual Model

The Council reviewed and finalized the Ecosystem Approach to Fisheries Management (EAFM) summer flounder conceptual model. Conceptual model development is the second step in the EAFM structured decision framework and is meant to ensure that key relationships throughout the system are accounted for and help answer high priority management questions. A workgroup of summer flounder science and management experts, in consultation with the Council's Ecosystem and Ocean Planning Committee, developed a conceptual model and visualization tool that identified key high-risk factors and important ecosystem elements. Management questions relevant to summer flounder and the associated fisheries that could be answered using the model and the available data were then developed and considered by the Council. Based on application and information in the conceptual model, the Council agreed to conduct a management strategy evaluation (MSE) that will identify and

evaluate the biological and management implications of alternative strategies to minimize recreational summer flounder discards. The recreational discards MSE, the third step in the EAFM decision framework, will begin in 2020 and will involve extensive science, management, and stakeholder engagement.

SSC Membership White Paper

Earlier in 2019, the Council reappointed 16 existing members of the Scientific and Statistical Committee (SSC) to another 3-year term, leaving four vacancies on the SSC. At that time, the Council agreed to delay adding new members to the SSC in order to develop a white paper that would evaluate SSC membership, the future needs of the Council, and the expertise necessary to address those needs. The Council reviewed the white paper evaluation and recommended the following areas of need and membership expertise: one additional member with quantitative stock assessment expertise, one additional fisheries biologist/ecologist and one economist/social scientist that each have experience and expertise in ecosystem related issues, and one economist/social scientist to help support the different Council priorities and actions that will have socioeconomic implications. The Council will solicit nominations for new SSC membership in early 2020.

2020 Implementation Plan

Each year, the Council develops an annual implementation plan which identifies the activities and actions the Council expects to work on during the upcoming year. Implementation plans are designed for use as a planning tool by the Council and staff and as a way to update the public on progress toward achieving the goals and objectives of the strategic plan. During the meeting the Council reviewed and approved a list of actions and deliverables for the upcoming year. This list will be used by staff to develop a complete 2020 Implementation Plan for Council consideration at the February 2020 meeting.

Habitat Update

Council staff provided an update on the Northeast Regional Habitat Assessment (NRHA), which is a collaborative effort to describe and characterize estuarine, coastal, and offshore fish habitat distribution, abundance, and quality in the Northeast using a partnership driven approach. The project is being led by a Steering Committee composed of leadership from the major habitat conservation, restoration, and science organizations in the region. Additional information related to NRHA is available at http://www.mafmc.org/nrha. Staff also provided a brief update on the Council Coordination Committee Habitat Workgroup. The group met earlier this year for an Essential Fish Habitat Consultation and Regional Innovations Workshop. The purpose of the workshop was to advance our collective work toward effective essential fish habitat (EFH) consultations on non-fishing activities. Keith Hanson (GARFO Habitat Conservation Division) provided an update on projects of interest in the region, including several offshore wind activities, oil and gas survey activities, and coastal storm risk management studies.

Oscar E. Sette Award

Dr. John Boreman was recognized as the 2019 recipient of the Oscar E. Sette Award. The award is presented each year by the Marine Fisheries Section of the American Fisheries Society to an individual who has demonstrated sustained excellence in marine fishery biology through research, teaching, administration, or a combination of the three. Dr. Boreman has a distinguished career as a federal fisheries scientist with both NOAA and the U.S. Fish and Wildlife Service. He served as Director of the NOAA Fisheries Office of Science and Technology, the Science and Research Director of the NMFS Northeast Fisheries Science Center (NEFSC), the Director of the NEFSC Cooperative Marine Education and Research Program and adjunct professor of fisheries at the University of Massachusetts. At the end of this year, Dr. Boreman will step down as chair of the Council's SSC after serving in the role for 11 years.

Other Business

2020 Council Meetings

The schedule of 2020 Council Meetings is available at http://www.mafmc.org/meetings. Please note that the June 2020 Council meeting dates have been changed to **June 16-18, 2020**.

Next Council Meeting

February 11-13, 2020
The Sanderling Resort
1461 Duck Road, Duck, NC 27949
(855)-412-7866

http://www.mafmc.org/council-events/february-2020-council-meeting

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

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Jessica McCawley, Chair | Mel Bell, Vice Chair
Gregg T. Waugh, Executive Director

DECEMBER 2-6, 2019 COUNCIL MEETING REPORT
WILMINGTON, NORTH CAROLINA

The following summary highlights the major issues discussed and actions taken at the South Atlantic Fishery Management Council's December 2019 meeting in Wilmington, North Carolina. Briefing materials, presentations, and public comments are available on the Council's website at:
http://safmc.net/safmc-meetings/council-meetings/

Final Committee Reports contain more details of what was accomplished for each committee and are located on the December 2019 briefing book page. In addition, the Summary of Motions on the Council's website includes all motions from the meeting. Read further details and see images and other links at the December 2019 Council Meeting Round-up Story Map:
https://www.arcgis.com/apps/MapJournal/index.html?appid=683b6570b2444ac8949710a512a31325

Issue:	Action Taken:	Schedule:
Mackerel Emergency Action	In June 2019, the Council approved a request for NMFS to raise the commercial king mackerel trip limit south of the Flagler/Volusia County line, Florida from 50-fish to 75-fish for the 2019-2020 season via emergency rule. The value of unharvested quota over the last four fishing seasons averaged $3,880,961 per season.	The Council's letter requesting emergency action was sent to NMFS on June 21, 2019 with a request to implement this prior to Season 2 of the 2019-2020 season (October 1st). NMFS implemented the emergency action effective October 1st.
Spanish Mackerel Control date	In June 2019, the Council approved a motion requesting that a control date be established for the open access commercial Spanish mackerel permit as of March 7, 2019, the date at which the Council first dis used limited-access for the commercial Spanish mackerel fishery.	The request for a control date in the commercial Spanish mackerel fishery was sent to NMFS on June 21, 2019. NMFS published an advanced notice of proposed rulemaking on October 15, 2019. The public comment period concluded on November 14, 2019. NMFS is drafting responses to the comments.

Issue:	Action Taken:	Schedule:
CMP Framework Amendment 8 – increase the king mackerel commercial trip limit in the southern zone.	The Council approved the following preferred alternative for formal review: **Preferred:** 100 fish October 1st to the end of February.	Staff and the IPT will prepare CMP Framework Amendment 8 **for formal Secretarial review**. The Council's intent is to have these permanent regulations in place prior to the start of the second season of the 2020/21 fishing year (October 1st).
CMP Framework Amendment 9 – Spanish mackerel commercial trip limit in the northern zone.	The Council reviewed the Advisory Panel's recommendations and approved alternative trip limits for the Northern Zone of 1,500, 2,000, 2,500, or 3,500 pounds whole or gutted weight (no action). The Council selected 2,000 pounds as preferred and approved the amendment for public hearings.	Staff and the IPT will prepare CMP Framework Amendment 9 for public hearings to be held prior to the March 2-6, 2020 Council meeting.
Issue:	**Action Taken:**	**Schedule:**
ABC's for Unassessed Snapper Grouper Stocks	The Council reviewed the SSC recommendations and directed staff to begin an information paper to evaluate the continued need for conservation and management of species recommended by the SSC for Ecosystem Component designation and evaluate additional species for management (barrel fish and African pompano). The Council also recommended that gray snapper, almaco jack, knobbed porgy, and jolthead porgy be considered for assessment through the SEDAR process.	The Council will review this information paper at the March 2-6, 2020 Council meeting. The SEDAR Steering Committee will review this request at their May 2020 meeting.
Snapper Grouper Abbreviated Framework Amendment 3 (South Atlantic Blueline Tilefish ACL)	The Council approved the following preferred alternative for formal review: • Increase the total ACL from 174,798 to 233,968 lbs ww • Increase the commercial ACL from 87,521 to 117,148 lbs ww • Increase the recreational ACL from 87,277 to 116,820 lbs ww • Increase the recreational ACT from 54,653 to 70,886 lbs ww	Staff and the IPT will prepare SG Abbreviated Framework Amendment 3 **for formal Secretarial review**. The Council's intent is to send for review prior to the March 2020 Council meeting.

Issue:	Action Taken:	Schedule:
Snapper Grouper Regulatory Amendment 31 (Modifications to Recreational Accountability Measures)	The Council revised the purpose and paused future work on Regulatory Amendment 31 until December 2020 when more will be known about how MRIP revisions will affect ACL and allocation revisions.	The Council will discuss SG Regulatory Amendment 31 at the December 2020 Council meeting.
Snapper Grouper Regulatory Amendment 33 (Red Snapper Season Modifications)	The Council revised the purpose and need for the amendment, decided not to change the start date of the commercial red snapper season, kept the preferred alternative to remove the minimum #days (3) for a season, and approved the amendment for formal review.	Staff and the IPT will prepare SG Regulatory Amendment 33 **for formal Secretarial review**. The Council's intent is to send for review prior to the March 2020 Council meeting.
Issue:	**Action Taken:**	**Schedule:**
Snapper Grouper Snapper Grouper Regulatory Amendment 29 (Best Fishing Practices & Powerheads)	The Council approved the amendment at the September meeting and the document is being finalized before sending for formal Secretarial review. At the December meeting, they reviewed a summary of current and past outreach efforts on best fishing practices in the South Atlantic and their results. Council staff also presented plans for future outreach efforts.	Council staff are planning an outreach program to coincide with the anticipated approval and implementation of the amendment in 2020.
System Management Plan Workgroup	The System Management Plan Workgroup met in October 8-9, 2019 to go over the Spawning Special Management webpage and begin an outline for evaluation of the Oculina Experimental Closed Area. Council staff briefed the Committee on the meeting and the evaluation plan.	Council staff will continue working with the System Management Plan Workgroup to complete the plan during 2020.
Landing Snapper Grouper Species in whole condition	The Committee discussed the regulation that requires that all snapper grouper species be landed with heads and fins intact. Staff provided background on the rationale for this regulation and recent inquiries from fishermen regarding whether certain species can be cut up to be used as bait.	The Law Enforcement Advisory Panel discussed the issue at their May 2019 meeting and stated there were no enforcement concerns. This was reiterated at the Committee meeting by the USCG representative who stated there had been very few cases where fishermen were found to be in violation of this regulation. The Committee did not express intent to modify the current regulation.

Issue:	Action Taken:	Schedule:
Shrimp Amendment 11 (Transit Provisions)	The Council reviewed scoping comments, modified the need statement, modified alternative 2 as shown below, and approved the amendment for public hearings: Alternative 2. A vessel may transit with non-stop progression through the South Atlantic cold-weather closed area with fishing gear appropriately stowed with trawl doors and nets out of the water. The bag straps must be removed from the nets.	Staff and the IPT will prepare Shrimp Amendment 11 **for public hearings**. Public hearings and review by the Shrimp/Deepwater Shrimp, and Law Enforcement Advisory Panels will be held prior to the March 2020 Council meeting.
Issue:	**Action Taken:**	**Schedule:**
SEDAR	The Council: • Approved appointments to the Gag operational assessment (SEDAR 71) and modified appointments to the Tilefish assessment (SEDAR 66). • Approved the schedule and the terms of reference for the Gag operational assessment (SEDAR 71). • Approved the scopes of work for the red snapper, blueline tilefish, and vermilion snapper assessments. The red snapper operational assessment will begin in early 2021.	The Council will monitor progress of the assessments.
Issue:	**Action Taken:**	**Schedule:**
Advisory Panel Selection	The Council: • Approved appointments to the Dolphin Wahoo, Habitat Protection and Ecosystem-Based Management, Information and Education and Mackerel Cobia Advisory Panels. • Discussed concerns expressed by some Advisory Panel members about reimbursements for travel expenditures. The Council recognizes the importance of the AP members to the management process and the need to fairly cover expenses for travel for their voluntary participation.	Staff will advertise open seats on the AP's as appropriate for consideration at the June 2020 Council meeting. Staff will draft edits to the Council Handbook that allow leeway for travel reimbursements as recommended for consideration at the March 2020 Council meeting.

Issue:	Action Taken:	Schedule:
Dolphin Wahoo SSC recommendations on ABC levels	The Council discussed and provided the following requests for the SSC to consider at their April 2020 meeting: • Reconsider the time series used for dolphin when setting catch level recommendations for dolphin. • Consider if a different time series that is more reflective of the current fishery for wahoo would be more appropriate in setting catch level recommendations for wahoo. • Would application of the ORCs method be a superior approach to the "third highest landings" approach in setting catch level recommendations for dolphin and wahoo? If so, does the SSC deem this approach best scientific information available (BSAI) and thus this method can be applied rather than the existing approach?	Staff will work with the SSC to be sure they address the request from the Council at their April 2020 SSC meeting.
Goals and Objectives Amendment 10 (Dolphin and Wahoo Management Measures)	The Council reviewed Amendment 10 and provided guidance to staff: • To modify the goals and objective of the FMP. • Determined additional scoping was not necessary given the extensive discussions and public input during past meetings. • Moved Action 8 (Allow adaptive management of sector ACLs for dolphin) to the considered but rejected section. Directed staff to move Alternatives 3 & 4 in Action 8 to the Comprehensive ABC Control Rule amendment. • Removed Alternatives 2 and 3 in Action 9 (Revise the commercial accountability measures for dolphin). Postponed further discussion of Amendment 10 until the June 2020 Council meeting when revised catch level recommendations from the SSC will be available.	The revised goals and objectives will be added to the next plan amendment. The Council will review a revised Amendment 10, with the SSC's new ABC recommendations, at the June 8-12, 2020 meeting in Key West, FL.
Dolphin Wahoo Amendment 12 (Bullet & Frigate Mackerel)	The Council approved modifications to the purpose & need and approved further development of the amendment at the March 2020 Council meeting when the NMFS and NOAA GC will provide recommendations on regulatory measures.	The Council will review a revised Amendment 12 at the March 2-6, 2020 meeting in Jekyll Island, GA.

Issue:	Action Taken:	Schedule:
MyFishCount	BeBe Harrison gave the Council an update on activities: • Staff participated in the American Sportfishing Association Industry Summit, Oct. 7-11, Stevenson, WA. • Staff presented at the Southeastern Association of Fish and Wildlife Agencies Meeting, Oct. 28-31, Hilton Head, SC. • Staff secured booth space at the November 1-2, 2020 National Seminar Series hosted by George Poveromo at the Fort Lauderdale Boat Show. • Staff participated in the North Carolina Boating and Fishing Industry Summit, Nov. 6-7, Greensboro, NC. • Staff participated in the South Carolina Sportfishing Industry Summit, Dec 4, Columbia, SC • Modifications have been made to give a new look and feel to MyFishCount.com. • Upgraded the software for iOS and Android MyFishCount apps. • Developed a MyFishCount message with monthly incentives and featured anglers to keep the public interested and informed.	Council staff are continuing to work on MyFishCount during the 3rd year (2019-2020). Information from the pilot project will be used by the Council when they continue work on the permitting and reporting amendment at a future meeting.
Issue:	**Action Taken:**	**Schedule:**
Citizen Science Program	The Council covered the following: • Julia Byrd, Program Manager, gave an update on the 2019 Programmatic activities, pilot projects in progress, and projects and collaborations under development. Staff have been very busy presenting and participating at meetings and further developing the program. • Data collection for the SAFMC Scamp Release project is underway. The project has been and is still recruiting fishermen to participate in the program. Additionally, staff have been pursuing additional grant funding to help promote and expand the SAFMC Release mobile app. . • The FISHstory project is under development and a demonstration of the FISHstory test project in Zooniverse was conducted. • An additional collaboration is under development with the SEFSC to expand their series of Participatory Modeling	Work will continue on the program, the two pilot projects, and in developing new projects and collaborations. Data from the SAFMC Scamp Release project will be made available for 2020 scamp assessment. Work will continue on the FISHstory project. The tentative schedule is to beta test the project in Zooniverse in Dec 2019 and launch the project in early 2020.

	Workshops from the Gulf of Mexico to the South Atlantic. The South Atlantic workshops would focus on the Dolphin/Wahoo fishery. The tentative plan is for workshops to be held in the Carolinas and FL Keys in 2020 and have initial information available for the Council in late 2020.	Staff will work with the SEFSC and reach out to the states and Dolphin/Wahoo AP members to help determine when and where to hold the workshops.
	• The Council reviewed, modified, and adopted the updated Citizen Science research priorities which incorporated feedback from the Citizen Science Projects Advisory and Operations Committees.	The Council reviewed, made modifications, and approved the updated Citizen Science research priorities.
	• Dr. Jennifer Shirk, Interim Director of the Citizen Science Association, presented preliminary findings from her research on the development of the Council's Citizen Science Program. Her findings found a high return on the Council's investment in the development of the Citizen Science Program. By supporting the Citizen Science Project Design Workshop and one staff person, a volunteer corps of over 45 people was mobilized, devoting the estimated equivalent of over $50k worth of time to develop the SOPPS and the community capacity to implement them, as well as the development of 2+ pilot projects. Recommendations for the continued development and growth of the Council's Program included: o Investing in the continuity of the Program by maintaining and growing staff support o Retaining the Action Teams, which will both require and offset staff time (e.g. mobilize to review/update products) o Seeking and securing funds on hand to anticipate and enable timely project roll-out; and o To conduct an analytical study of success factors and evaluation of both the Program and individual projects.	The Council reiterated their support for the program and thanked Dr. Shirk and Rick Bonney for all their help and support.
	• Rick Bonney gave a presentation on evaluation, highlighting its importance in order to determine whether a project or program is working and to identify ways to improve overall effectiveness. He noted that evaluation can be complicated and requires a careful look at goals, objectives, and indicators of success. He noted that the Council has led the way in the development of its Citizen Science Program by focusing on the Program first approach and that they will need to lead the way in the development of an evaluation plan for this Program.	The Committee supported pursuing evaluation for both the overall Citizen Science Program and individual projects. As a next step for the Program evaluation, they supported staff working with Rick Bonney and the Operations Committee to draft Program objectives and indicators of success based on the Program goals identified in the SOPPS. These draft objectives and indicators of success would then be brought to the Council for their review and consideration.

		Once there are agreed upon Program goals, objectives, and indicators of success, an evaluation plan can begin to be developed. Staff noted that it would be helpful to have someone independent of the Program help conduct an evaluation and additional resources may be required to support the evaluation.
Issue:	**Action Taken:**	**Schedule:**
For-Hire Recreational Reporting	The Amendment was sent for formal review on March 4, 2017 with a request for implementation by January 1, 2018. The amendment was approved on June 12, 2018 and the Final Rule was expected to publish in mid-April 2019 with a 60-day cooling off period.	At the December meeting, the Council was told the **final rule package has been sent from the Region to NMFS HQ and is under review**. No specific timing was available on publication of the final rule.
Full Council Actions: 1. Florida Keys National Marine Sanctuary	Sarah Fangman, FKNMS Superintendent, presented an overview of their proposed actions and alternatives. The Council discussed the input from the public and the Advisory Panels and requested some additional input from staff and NOAA GC for the March 2020 Council meeting.	The Council will develop final recommendations at the March 2-6, 2020 meeting in Jekyll Island, GA.
2. Menhaden	The Council discussed the request for input from NMFS on the finding of non-compliance by the State of Virginia with the ASMFC's Menhaden Plan.	The Council approved sending a letter to NMFS supporting the non-compliance determination of Virginia with the Interstate Fishery Management Plan for Atlantic Menhaden. The letter was sent on December 5, 2019.
3. Council staff will develop a proposal for the South Atlantic/Gulf Council work group to look at flexible management options and bring back to the Committee at the March 2020 Council meeting.	The Council directed staff develop a proposal for the work group looking at flexible management options.	Council staff will coordinate with Gulf Council staff for input at the Gulf's January 2020 meeting and bring back recommendations to the South Atlantic Council's March 2-6, 2020 meeting in Jekyll Island, GA.
4. Next Executive Director	The Council thanked Gregg Waugh for his service to the Council over the past 39 years and for the excellent support provided by all Council staff under his leadership.	John Carmichael assumes duties as the next Executive Director effective December 13, 2019 at 5:01 p.m.

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY
Director

January 24, 2020

MEMORANDUM

TO: N.C. Marine Fisheries Commission

FROM: Randy Gregory, Division of Marine Fisheries, NCDEQ

SUBJECT: Highly Migratory Species Update

Issue
Highly Migratory Species activity update.

Action Needed
For informational purposes only, no action is needed at this time.

Overview
The Highly Migratory Species Advisory Panel will meet in the spring 2020 in Silver Spring, Maryland. The Advisory Panel will discuss scoping for Amendment 12 to comply with Magnuson-Stevens Act National Standard Guidelines and NOAA Fisheries policy directives, Amendment 13 to consider options for modifications to bluefin tuna management, and Amendment 14 for shark quota management.

Tuna
In December 2019, the commercial bluefin tuna General category landed 22.8 metric tons of the 28.9 metric ton December adjusted sub-quota. As of January 22, 2020, preliminary commercial landings for the 2020 General category were 13.7 metric tons of the 49 metric ton January (January – March) adjusted sub-quota. Most of these bluefin tuna have been landed in the Morehead City area. The January sub-quota period will end on March 31, 2020, unless the sub-quota is reached earlier.

On January 17, 2020, NOAA Fisheries published the Final Environmental Impact Statement for a rule that would modify bluefin tuna bycatch management measures in the pelagic longline fishery. NOAA Fisheries is proposing to adjust regulatory measures to manage bluefin tuna bycatch in the pelagic longline fishery for Atlantic highly migratory species, specifically addressing the Northeastern United States Closed Area, the Cape Hatteras Gear Restricted Area, and the Spring Gulf of Mexico Gear Restricted Area as well as the weak hook requirement in the Gulf of Mexico. Of most interest to North Carolina, is the elimination of the Cape Hatteras Gear Restricted Area. Beginning in 2015, the Individual Bluefin Quota Program limited the bluefin tuna incidental catch in the pelagic longline fishery by individual vessel accountability and there is no longer a need for this restricted area.

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY
Director

January 24, 2020

MEMORANDUM

TO: Marine Fisheries Commission

FROM: Barbie Byrd, Protected Resources Biologist Supervisor

SUBJECT: Protected Resources Program Update

Issue
Summary information is provided from the Division's Protected Resources Program, specifically highlighting the Observer Program's coverage of estuarine commercial anchored gill nets during fall 2019 (September - November).

Action Needed
For informational purposes only, no action is needed at this time.

Findings
State-wide observer coverage during fall 2019 met or exceeded the required coverage outlined in the ESA Incidental Take Permits (ITP) for anchored large mesh (10.8%) and small mesh (2.2%) gill net fisheries. The coverage rates were calculated with preliminary trip ticket data from September – November 2019; therefore, the coverage rates could change once the trip ticket data are finalized later this year. The fall seasonal report required by the sea turtle ITP has been completed and submitted to NOAA staff. The final document can be found at the following link:

ITP Fall Seasonal Report (Completed 14 January 2020)

Currently, the Observer Program is focusing their effort on the anchored large mesh gill net catfish and striped bass fisheries in Management Unit A, as well as the state-wide anchored small mesh gill net fisheries.

2019 Fall Seasonal Progress Report
Incidental Take Permit No. 16230
September 1 – November 30, 2019

John McConnaughey
Protected Species Biologist
North Carolina Division of Marine Fisheries

January 14, 2020

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SUMMARY

The 2019 fall season for anchored large and small mesh gill nets in North Carolina is September 1, 2019 through November 30, 2019 for Incidental Take Permit (ITP) Year 2020 (September 1, 2019 – August 31, 2020) as defined in ITP No. 16230.

Significant regulatory changes were enacted during the fall 2019 anchored large mesh gill net fishery for southern flounder (*Paralichthys lethostigma*). These regulations were included in Amendment 2 of the Southern Flounder Fishery Management Plan adopted by the North Carolina Marine Fisheries Commission on August 23, 2019. This action was taken because the most recent southern flounder stock assessment indicated that the stock is overfished and overfishing is occurring. North Carolina state law requires management actions be taken to end overfishing within 2 years and recover the stock from an overfished condition within 10 years. To meet these legal requirements, the Division determined that a 62% reduction in harvest was necessary for 2019 and a 72% reduction would be needed in 2020.

To reduce harvest in the anchored large mesh gill-net fishery, the state was divided into 3 flounder management areas; Northern, Central, and Southern (Figure 4). Each area was scheduled an exact open and close date for fishing effort. The Northern area was open from September 15, 2019 through October 13, 2019, the Central area was open from October 1, 2019 through October 26, 2019, and the Southern area was open from October 1, 2019 through November 15, 2019. Flounder management areas were still subject to conditions put forth by federally issued ITPs for sea turtle and sturgeon incidental takes and could be closed by proclamation should allowable take numbers be approached or exceeded.

Preliminary coverage estimates were calculated differently for this report than they have been in the past as a result of regulation changes to the flounder fishery. In the past, observer coverage was calculated in each management unit by estimating fishing trips using an average of the previous five years' trip ticket data (2014 - 2018) for anchored large mesh gill nets and anchored small mesh gill nets. Averages were calculated using the proportion of actual fishing days to possible fishing days. The average, normalized effort was used to account for fluctuations in fishing effort over the previous five years, due to closures and other regulatory measures. Observed trip numbers for the season were then divided by the estimated number of trips for the season to generate the estimated coverage for each management unit.

Due to the shortened fishing season, using the average of the previous five years' trip ticket data to calculate observer coverage did not accurately represent the effort that was possible in the fishery during fall 2019. As a result, preliminary trip ticket data for large and small mesh gill net trips made during the fall 2019 season were used to calculate observer coverage. Observed trip numbers per season were then divided by the preliminary trip ticket data per season to generate the estimated coverage for each management unit. Although trip ticket data for this time were not finalized, their use allowed for greater confidence in the calculation of estimated observer coverage for the fall 2019 season. A complete list of anchored gill net proclamations implemented during the 2019 fall season can be found in Table 1.

The Observer Program achieved an estimated 10.8% overall anchored large mesh gill net coverage for the 2019 fall season (Table 2). No trips were obtained in Management Unit D1 because the management unit was closed for the entirety of the 2019 fall season (Table 2).

The Observer Program achieved an estimated 2.2% overall anchored small mesh gill net coverage for the 2019 fall season (Table 3).

There were twenty-five observed sea turtle interactions from anchored large mesh gill nets during the 2019 fall season, and one observed sea turtle interactions from anchored small mesh gill nets (Table 4; Figure 6). The species composition consisted of nineteen alive green sea turtles, six dead green sea turtles, and one alive sea turtle where positive species identification was not made (Table 4). There was one fisherman self-reported sea turtle interaction in an anchored large mesh gill net in the 2019 fall season (Table 5). The cumulative estimated and/or observed takes for anchored large mesh gill nets were calculated daily through the 2019 fall season for ITP Year 2020 (Table 6). The cumulative observed takes for anchored small mesh gill nets for the 2019 fall season ITP year 2020 are presented in Table 7.

Marine Patrol performed 277 gill net checks during the 2019 fall season and issued 21 citations (Table 8).

As per the ITP, the division established a permit in September 2014 to register all fishermen participating in the anchored large and small mesh gill net fisheries (Estuarine Gill Net Permit – EGNP). This multifaceted permit allows the division to closely monitor for compliance with the permit system already in place. Permits are renewed on an annual basis, based on the fiscal year for licenses. During the 2019 fall season there were 4 Notice of Violations (NOV) written for violations of the EGNP.

The Observer Program has various ways to contact fishermen to set up trips (i.e., alternative platform trips, calling the fisherman, waiting at boat ramps). Due to limited resources and fishermen leaving from their residence or private ramps, the most efficient and common way to contact fishermen is by phone. One of the many checks the Observer Program has is a contact log which is filled out for every contact that is made when attempting to obtain a trips. Table 10 contains information regarding the number of phone calls made and the responses to those calls. The response category descriptions can be found in Table 9.

TABLES

Table 1. Openings and closings of management units by date and regulation change from the fall 2019 season (September - November) for anchored large and small mesh gill nets for ITP Year 2020.

Year	Date(s)	Regulation change
2019	September 4	This proclamation superseded Proclamation FF-3-2016, dated January 21, 2016 and FF-48-2018, dated November 27, 2018. It closed the commercial flounder fishery to all gears in Internal Coastal Waters and to all gears except trawls in the Atlantic Ocean Waters. The commercial fishery will re-open by proclamation later in 2019. This action was being taken to comply with the requirements of Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (FF-31-2019)
2019	September 4	This proclamation superseded Proclamation M-11-2019 dated April 26, 2019. This proclamation closed all of Management Unit A to the use of gill nets with a stretched mesh length of greater than 3 ¾ inch stretched mesh (except as described in Section IV.) in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-13-2019)
2019	September 4	This proclamation superseded Proclamation M-12-2019 dated June 11, 2019. This proclamation closed all Management Units south of Management Unit A to the use of gill nets with a stretched mesh length of 4 inches and greater (except as described in Section III.) in accordance Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-14-2019)
2019	September 15	This proclamation supersedes Proclamation M-13-2019 dated August 30, 2019. It opens the previously closed Management Unit A to the use of gill nets with stretched mesh lengths of 5 ½ inches through 6 ½ inches in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan and the Sea Turtle ITP. It maintains small mesh gill net attendance requirements in the entirety of Management Unit A. (M-15-2019)
2019	September 15	This proclamation superseded Proclamation FF-31-2019, dated August 28, 2019. It established commercial flounder season dates for Internal Coastal Waters, by Flounder Management Area. It maintained a 15-inch total length minimum size limit. It maintained the regulation making it unlawful to possess flounder taken from anchored large mesh gill nets with a stretched mesh length less than 6 inches. It also made it unlawful for a commercial fishing operation to possess flounder from the Atlantic Ocean Waters taken by any method other than trawls. This action was being taken to comply with the requirements of Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (FF-34-2019)

Cont. Table 1

2019	September 30	This proclamation superseded Proclamation M-15-2019 dated September 12, 2019. It made it unlawful for Recreational Commercial Gear License holders to use gill nets with stretched mesh lengths of 5 ½ inches through 6 ½ inches. It maintained the openings in Management Unit A to the use of gill nets with stretched mesh lengths of 5 ½ inches through 6 ½ inches in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan and the Sea Turtle ITP. It maintained small mesh gill net attendance requirements in the entirety of Management Unit A. (M-17-2019)
2019	October 1	This proclamation superseded Proclamation M-14-2019 dated August 30, 2019. This proclamation opened Management Units B (subunits only), C, D2 and E to the use of gill nets with a stretched mesh length of 4 inches through 6 ½ inches (except as described in Section III.) in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-16-2019)
2019	October 13	This proclamation superseded Proclamation M-17-2019 dated September 27, 2019. It closed all of Management Unit A to the use of gill nets with a stretched mesh length of greater than 3 ¾ inch stretched mesh (except as described in Section IV.) in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. It maintained small mesh gill net attendance in Management Unit A. (M-20-2019)
2019	October 26	This proclamation superseded Proclamation M-16-2019 dated September 27, 2019. This proclamation closed Management Units B (subunits SGNRA 1-4, MGNRA and portions of CGNRA) and Management Unit C to the use of gill nets with a stretched mesh length of 4 inches through 6 ½ inches (except as described in Section III.). It maintained openings in Management Units D2 and E. These actions were being taken in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-21-2019)
2019	November 23	This proclamation superseded Proclamation M-20-2019 dated October 10, 2019. It opened portions of Management Unit A to the use of gill nets with a stretched mesh length of 5 ½ inches through 6 ½ inches in accordance with Amendment 2 to the N. C. Southern Flounder Fishery Management Plan. It maintained attendance on small mesh nets. (M-23-2019)

Table 2. Preliminary seasonal observer coverage, fall 2019 (September - November) by management unit for anchored large mesh gill nets for ITP year 2020.

	Trips		
Management Unit [1]	Preliminary Trips [2]	Observed	Coverage (%)
A	635	80	12.6
B	564	33	5.9
C	146	29	19.9
D1[3]	n/a	n/a	n/a
D2	146	11	7.5
E	345	45	13.0
Total	1,836	198	10.8

[1] Table 1 contains all of the openings and closings for each management unit

[2] Preliminary trips from Trip Ticket data September - November 2019

[3]D1 closed to large mesh for entire 2019 fall season

Table 3. Preliminary seasonal observer coverage, fall 2019 (September - November) by management unit for anchored small mesh gill nets for ITP year 2020.

	Trips		
Management Unit [1]	Preliminary Trips[2]	Observed	Coverage (%)
A	343	3	0.9
B	1,071	11	1.0
C	127	3	2.4
D1	61	1	1.6
D2	228	8	3.5
E	191	19	9.9
Total	2,021	45	2.2

[1] Table 1 contains all of the openings and closings for each management unit

2 Preliminary trips from Trip Ticket data September - November 2019

Table 4. Summary of observed sea turtle interactions in anchored large and small mesh gill nets from the fall 2019 season (September - November) for ITP Year 2020.

						Curved Carapace (mm)	
Date	Management Unit	Latitude	Longitude	Species	Disposition	Length	Width
10/3/2019	B	35.30813	75.58702	Unknown	alive	n/a	n/a
10/4/2019	B	35.29235	76.49730	Green	alive	272	255
10/4/2019	B	35.30377	75.5810	Green	dead	293	243
10/4/2019	B	35.30486	75.5790	Green	dead	246	212
10/8/2019	B	35.31400	76.49846	Green	alive	302	232
10/8/2019	B	35.31400	76.49631	Green	alive	274	229
10/11/2019	B	34.88595	76.40133	Green	alive	n/a	n/a
10/11/2019	B	34.88782	76.40263	Green	alive	n/a	n/a
10/11/2019	B	34.88653	76.4043	Green	alive	n/a	n/a
10/11/2019	B	34.88643	76.40437	Green	dead	n/a	n/a
10/15/2019	B	34.86201	76.38114	Green	alive	276	222
10/15/2019	B	34.86162	76.38148	Green	alive	299	234
10/15/2019	E	34.667	77.134	Green	alive	314	265
10/15/2019	B	35.19303	75.79633	Green	dead	276	251
10/15/2019	B	35.18925	75.80685	Green	dead	283	205
10/16/2019	B	35.32789	75.59853	Green	alive	298	261
10/18/2019	D2	34.68332	76.99551	Green	alive	332	288
10/29/2019	B	34.99532	76.28635	Green	alive	295	256
10/29/2019	B	34.99582	76.28541	Green	dead	295	252
10/31/2019	B	34.96300	76.27880	Green[1]	alive	275	235
11/1/2019	D2	34.68233	77.04841	Green	alive	326	280
11/1/2019	D2	34.68352	77.03974	Green	alive	298	274
11/5/2019	B	34.99495	76.28717	Green	alive	n/a	n/a
11/5/2019	B	34.99495	76.28717	Green	alive	295	240
11/12/2019	B	34.9867	76.2460	Green	alive	206	202
11/12/2019	B	34.9865	76.24610	Green	alive	n/a	n/a

[1]small mesh gill-net interaction

Table 5. Summary of reported sea turtle interactions in anchored large mesh gill nets from the fall 2019 season (September - November) for ITP Year 2020.

						Curved Carapace (mm)	
Date	Management Unit	Latitude	Longitude	Species	Disposition	Length	Width
10/3/2019	E	n/a	n/a	Green	Alive	n/a	n/a

Table 6. Summary of estimated and/or observed cumulative sea turtle interactions through the fall 2019 season (September - November) by management unit for anchored large mesh gill nets for ITP Year 2020.

	Green		Kemp's ridley		Loggerhead		Unknown	
Management Unit	Alive	Dead	Alive	Dead	Alive	Dead	Alive	Dead
A	0	0	0	0	0	0	0	0
B	177.1	83	0.0	0	0	0	1	0
C	0	0	0	0	0	0	0	0
D1	0	0	0	0	0	0	0	0
D2	*3	0	0	0	0	0	0	0
E	4.1	0	0	0	0	0	0	0
Total	184.2	83	0.0	0	0	0	1	0

*Indicates observed takes

Table 7. Summary of estimated and/or observed cumulative sea turtle interactions through the fall 2019 season (September - November) by management unit for anchored small mesh gill nets for ITP Year 2020.

	Green		Kemp's ridley		Loggerhead		Unknown	
Management Unit	Alive	Dead	Alive	Dead	Alive	Dead	Alive	Dead
A	0	0	0	0	0	0	0	0
B	1*	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D1	0	0	0	0	0	0	0	0
D2	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

*Indicates observed takes

Table 8. Citations written by Marine Patrol for anchored large and small mesh gill nets by date and violation code during the fall 2019 season (September - November) for ITP Year 2020.

	Violation	
Date	Code	Description
9/14/2019	NETG45	Set or retrieve large mesh gill nets no sooner than one hour before sunset on Monday through Thursday
9/20/2019	NETG04	Leave gill net in waters when could not be legally fished
9/23/2019	NETG04	Leave gill net in waters when could not be legally fished
9/23/2019	NETG04	Leave gill net in waters when could not be legally fished
9/23/2019	NETG03	Using gill net with improper buoys or identification
9/23/2019	NETG01	Leave gill net in coastal waters unattended
10/1/2019	NETG04	Leave gill net in waters when could not be legally fished
10/3/2019	NETG22	Improperly set gill net
10/8/2019	NETG27	Gill Net set within 50 yards from shore
10/9/2019	NETG03	Using gill net with improper buoys or identification
10/14/2019	NETG03	Using gill net with improper buoys or identification
10/14/2019	NETG02	Using gill net without buoys or identification
10/14/2019	NETG46	Set or retrieve large mesh gill nets later than one hour after sunrise on Tuesday through Friday
10/15/2019	NETG37	Leave small mesh gill nets unattended
10/18/2019	NETG46	Set or retrieve large mesh gill nets later than one hour after sunrise on Tuesday through Friday
10/19/2019	NETG02	Using gill net without buoys or identification
10/23/2019	NETG29	RCGL gear without proper buoys
10/24/2019	NETG02	Using gill net without buoys or identification
10/24/2019	NETG02	Using gill net without buoys or identification
10/28/2019	NETG22	Improperly set gill net
10/31/2019	NETG02	Using gill net without buoys or identification

Table 9. Categories and descriptions of fishermen responses for the Observer Program's contact logs used for analysis.

Categories	Category description
1	Left message with someone else
2	Not fishing general
3	Fishing other gear
4	Not fishing because of weather
5	Not fishing because of boat issues
6	Not fishing because of medical issues
7	Booked trip
8	Hung up, got angry, trip refusal
9	Call back later time/date
10	Saw in person
11	Disconnected
12	Wrong number
13	No answer
14	No answer, left voicemail
15	Not fishing because of natural disaster (e.g., hurricane)

Table 10. Contacts made (n = 436) by the observers trying to set up trips by month categorized by contact type (0-15) and by total number (a), percent for total season (b), and percent for each month (c) for the fall 2019 season (September - November) for ITP Year 2020.

	Categories [1] (# Per Month)															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
September	0	27	8	4	1	0	4	0	14	6	19	2	25	84	1	195
October	6	43	9	4	1	1	13	1	7	4	26	1	36	65	0	217
November	1	6	0	2	0	0	1	0	0	0	4	0	3	7	0	24
Total	7	76	17	10	2	1	18	1	21	10	49	3	64	156	1	436

	Categories [1] (% Per Month)															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
September	0.0	13.8	4.1	2.1	0.5	0.0	2.1	0.0	7.2	3.1	9.7	1.0	12.8	43.1	0.5	100.0
October	2.8	19.8	4.1	1.8	0.5	0.5	6.0	0.5	3.2	1.8	12.0	0.5	16.6	30.0	0.0	100.0
November	4.2	25.0	0.0	8.3	0.0	0.0	4.2	0.0	0.0	0.0	16.7	0.0	12.5	29.2	0.0	100.0
Total	1.6	17.4	3.9	2.3	0.5	0.2	4.1	0.2	4.8	2.3	11.2	0.7	14.7	35.8	0.2	100.0

	Categories [1] (% Total Season)															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
September	0.0	6.2	1.8	0.9	0.2	0.0	0.9	0.0	3.2	1.4	4.4	0.5	5.7	19.3	0.2	44.7
October	1.4	9.9	2.1	0.9	0.2	0.2	3.0	0.2	1.6	0.9	6.0	0.2	8.3	14.9	0.0	49.8
November	0.2	1.4	0.0	0.5	0.0	0.0	0.2	0.0	0.0	0.0	0.9	0.0	0.7	1.6	0.0	5.5
Total	1.6	17.4	3.9	2.3	0.5	0.2	4.1	0.2	4.8	2.3	11.2	0.7	14.7	35.8	0.2	100.0

[1] Contact type categories: 1) Left message with someone else 2) Not fishing general 3) Fishing other gear 4) Not fishing because of weather 5) Not fishing because of boat issues 6) Not fishing because of medical issues 7) Booked trip 8) Hung up, got angry, trip refusal 9) Call back later time/date 10) Saw in person 11) Disconnected 12) Wrong number 13) No answer 14) No answer, left voicemail 15) Not fishing because of natural disaster (e.g., hurricane)

FIGURES

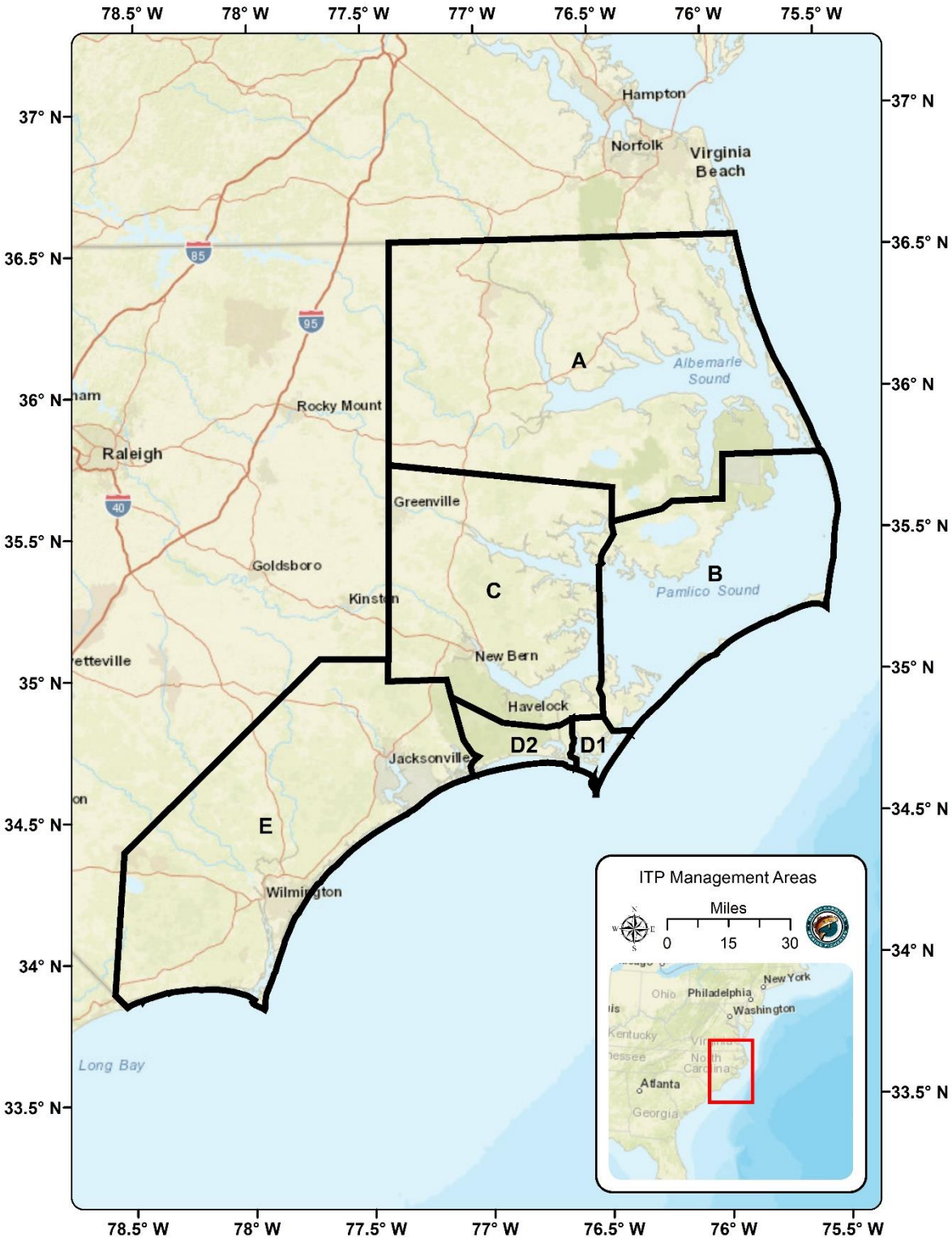

Figure 1. Map of ITP management areas.

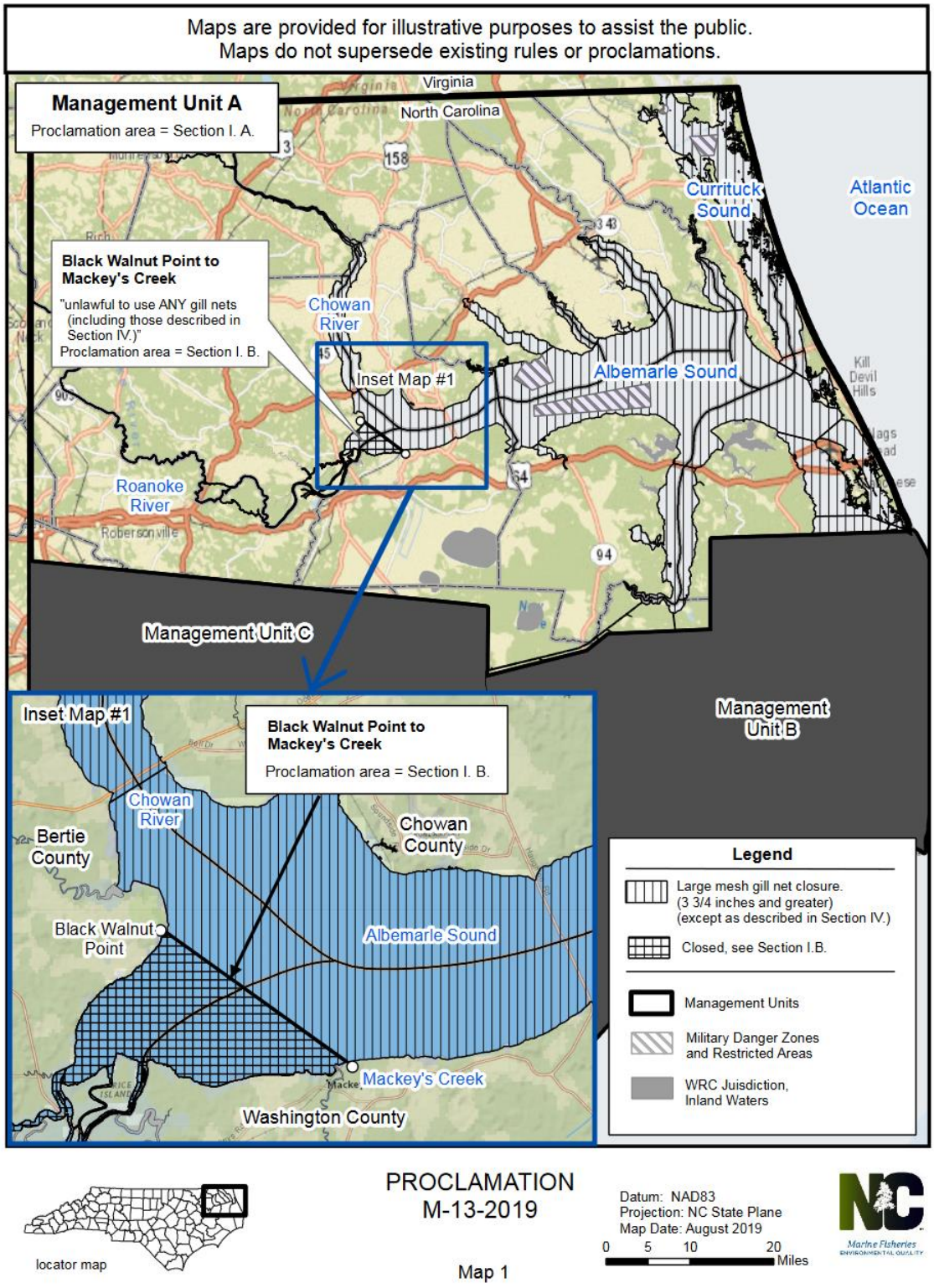

Figure 2. Map for proclamation M-13-2019. See Table 1 for full proclamation description.

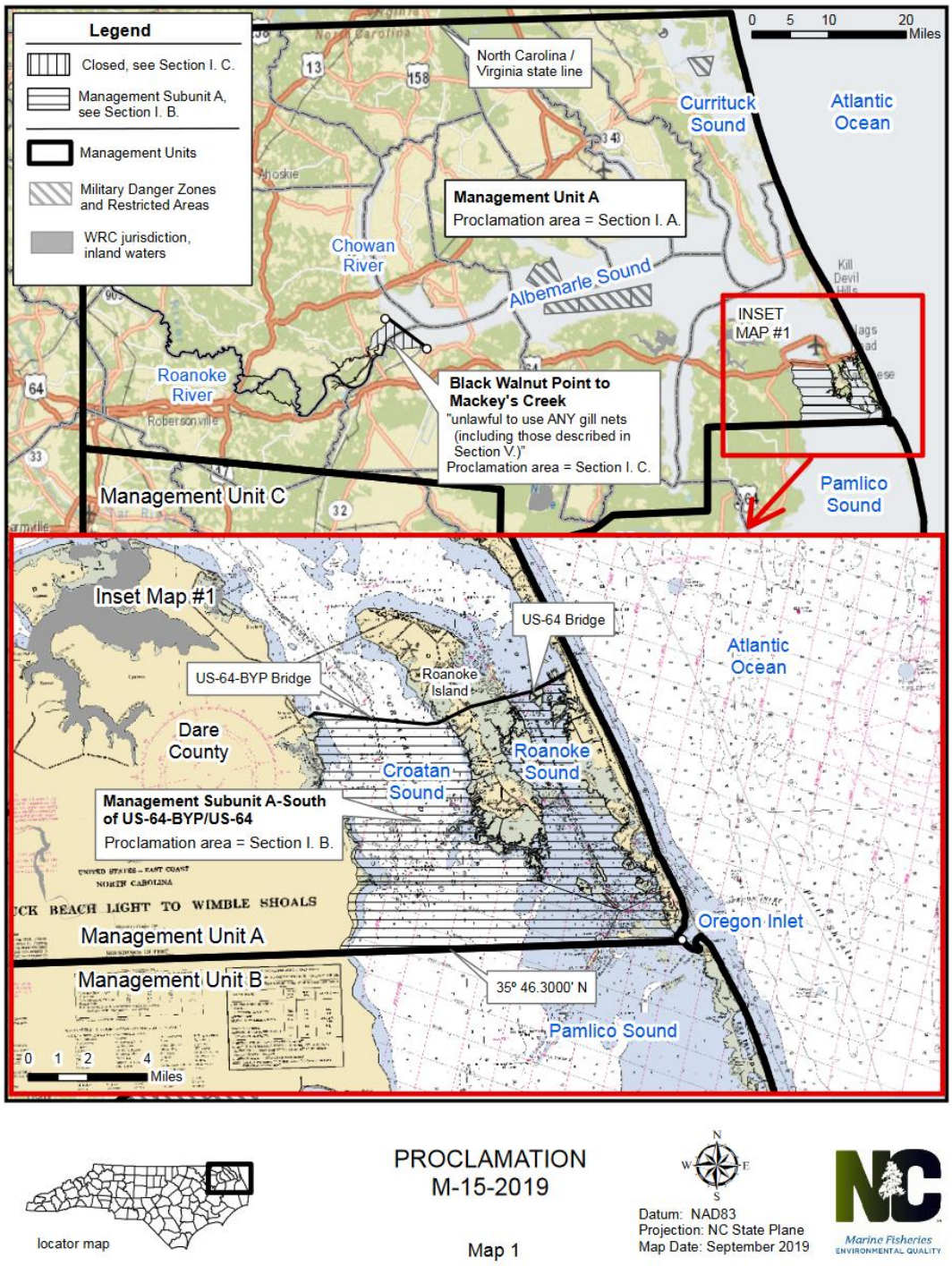

Figure 3. Map for proclamation M-15-2019. See Table 1 for full proclamation description.

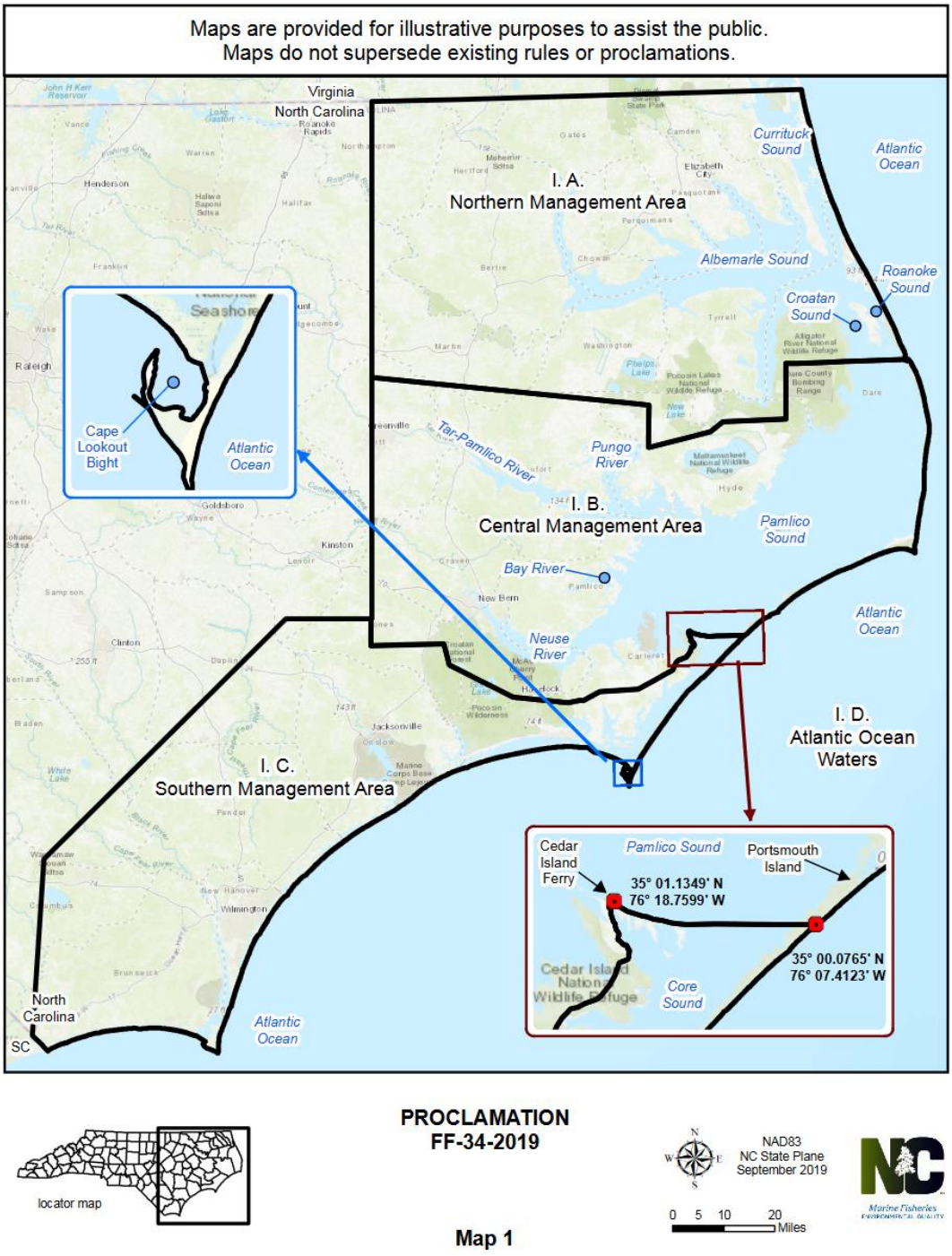

Figure 4. Map for proclamation FF-34-2019. See Table 1 for full proclamation description.

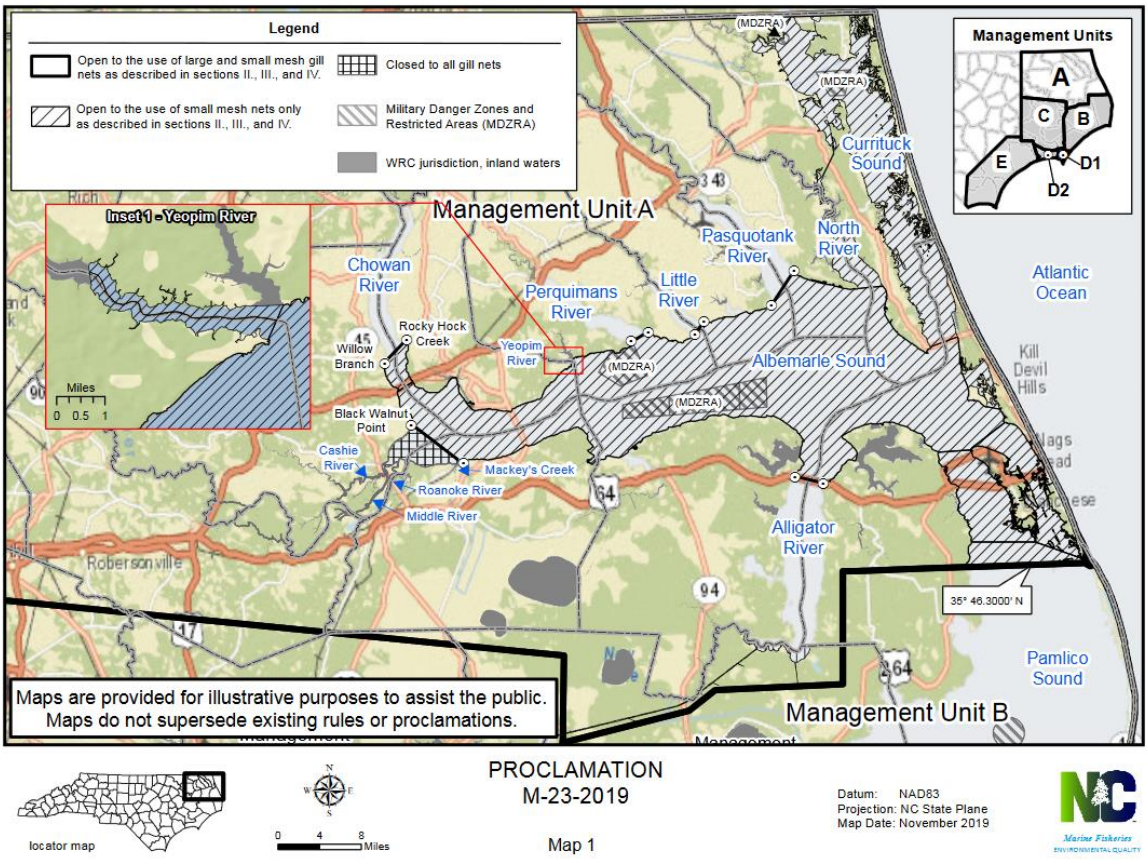

Figure 5. Map for proclamation M-23-2019. See Table 1 for full proclamation description.

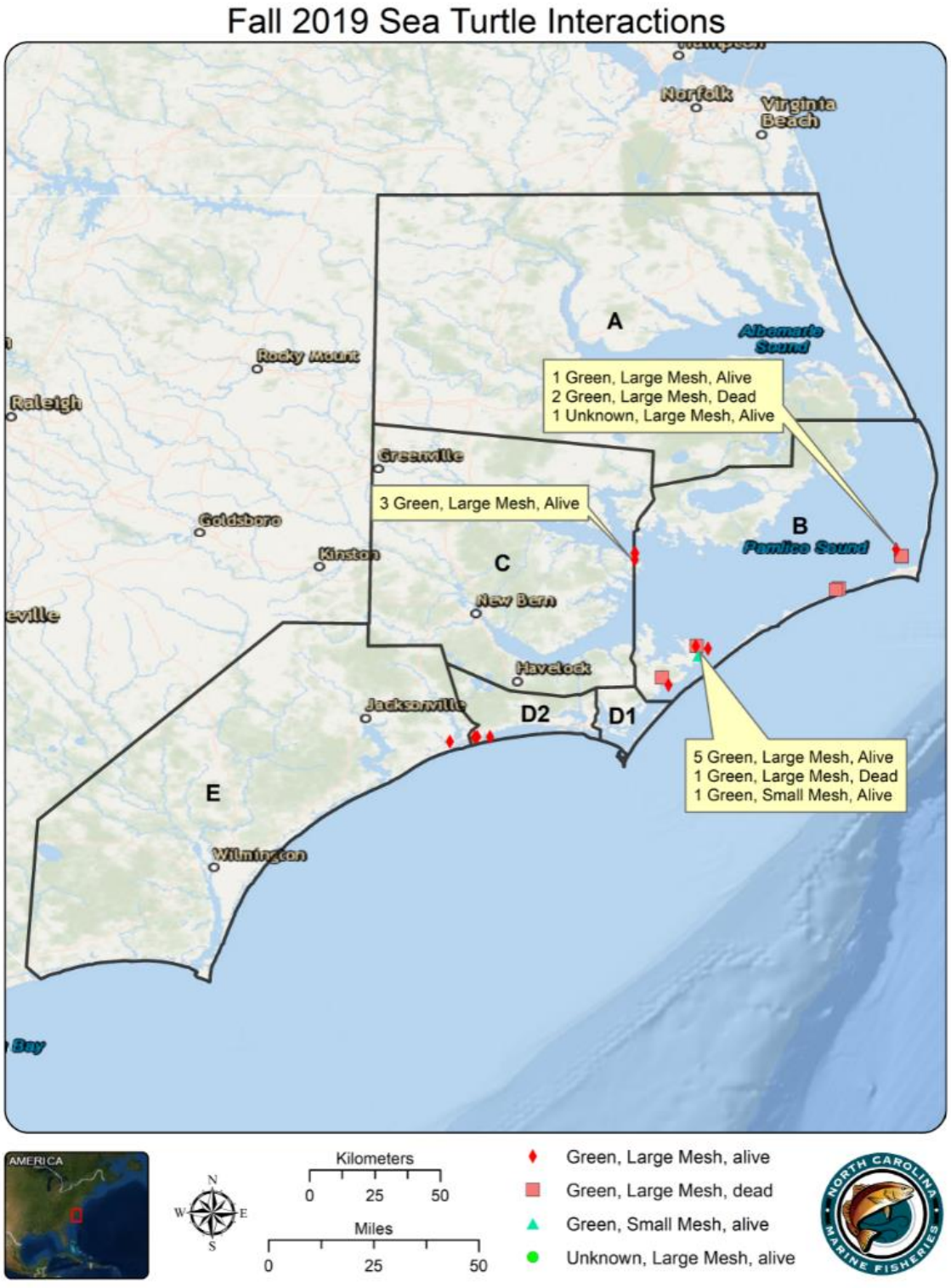

Figure 6. Map of observed sea turtle interactions in all management units (A, B, C, D1, D2, E) in anchored large mesh gill nets (n = 26) by species and disposition (alive/dead) for the 2019 fall season (September - November) for ITP Year 2020 (September 1, 2019 – August 31, 2020).

ROY COOPER
Governor
MICHAEL S. REGAN
Secretary
STEPHEN W. MURPHEY
Director

January 24, 2020

MEMORANDUM

TO: N.C. Marine Fisheries Commission

FROM: Kathy Rawls, Fisheries Management Section Chief

SUBJECT: Temporary Rule Suspension

Issue
In accordance with the North Carolina Division of Marine Fisheries Resource Management Policy Number 2014-2, Temporary Rule Suspension, the North Carolina Marine Fisheries Commission will vote on any new rule suspensions that have occurred since the last meeting of the commission.

Findings
The suspension of North Carolina Marine Fisheries Commission Rule 15A NCAC 03M .0511 Bluefish, occurred since the November 2019 meeting, is subject to commission approval and is noted as an action item on the agenda.

Action Needed
The commission is scheduled to vote on approval of the continued suspension of rule 15A NCAC 03M .0511.

Overview
The following rule suspension occurred since the November 2019 meeting, and in accordance with policy is subject to approval and is noted as an action item on the agenda:

NCMFC RULE 15A NCAC 03M .0511 Bluefish

Suspension of this rule is for an indefinite period of time. Suspension of this rule allows the division to reduce bluefish creel limits in compliance with the requirements of the Mid-Atlantic Fishery Management Council/Atlantic States Marine Fisheries Commission Bluefish Fishery Management Plan to reduce recreational harvest of bluefish. This suspension was implemented in Proclamation FF-1-2020.

Previously Suspended Rules (MFC Approved Suspensions)
In accordance with policy, the division will report current rule suspensions previously approved by the commission as non-action, items. The current rule suspensions previously approved by the commission are as follows:

NCMFC Rule 15A NCAC 03L .0103 (a)(1) Prohibited Nets, Mesh Lengths and Areas

Continued suspension of portions of this rule is for an indefinite period of time. This allows the division to adjust trawl net minimum mesh size requirements in accordance with the May 2018 Revision to Amendment 1 to the North Carolina Shrimp Fishery Management Plan. This suspension was implemented in proclamation SH-3-2019.

NCMFC 15A NCAC 03M .0516 Cobia

Continued suspension of this rule is for an indefinite period of time. This allows the division to manage the commercial and recreational cobia fisheries in accordance with management actions taken by the commission and in accordance with the Atlantic States Marine Fisheries Commission's Interstate Cobia Fishery Management Plan. This suspension was continued in Proclamation FF-52-2019.

NCMFC 15A NCAC 03J .0301 Pots

Continued suspension of portions of this rule is for an indefinite period of time. This allows the division to implement the crab pot escape ring requirements adopted by the commission in the May 2016 Revision to Amendment 2 of the North Carolina Blue Crab Fishery Management Plan. This suspension was implemented in Proclamation M-11-2016.

NCMFC Rule 15A NCAC 03L .0201 Crab Harvest Restrictions & 03L .203 Crab Dredging

Continued suspension of portions of these rules is for an indefinite period of time. This allows the division to implement the blue crab harvest restrictions adopted by the commission in the May 2016 Revision to Amendment 2 of the North Carolina Blue Crab Fishery Management Plan. These suspensions were implemented in Proclamation M-11-2016.

NCMFC Rule 15A NCAC 03J .0501 Definitions and Standards for Pound Nets and Pound Net Sets

Continued suspension of portions of this rule is for an indefinite period of time. This allows the division to increase the minimum mesh size of escape panels for flounder pound nets in accordance with Amendment 2 of the North Carolina Southern Flounder Fishery Management Plan. This suspension was implemented in Proclamation M-34-2015.

NCMFC Rule 15A NCAC 03M .0519 Shad & 03Q .0107 Special Regulations: Joint Waters

Continued suspension of portions of these rules is for an indefinite period of time. This allows the division to change the season and creel limit for American shad under the management framework of the North Carolina American Shad Sustainable Fishery Plan. These suspensions were continued in Proclamation FF-55-2019.

Red Drum Landings 2018-2020

Landings are complete through October 31, 2019.
2018 landings are final. 2019 and 2020 landings are preliminary.

Year	Month	Species	Pounds	2009-2011 Average	2013-2015 Average	
2018	9	Red Drum	11,149	28,991	35,003	
2018	10	Red Drum	42,805	43,644	63,662	
2018	11	Red Drum	10,076	14,318	27,643	
2018	12	Red Drum	2,052	3,428	2,197	
2019	1	Red Drum	2,101	5,885	1,699	
2019	2	Red Drum	1,952	3,448	3,996	
2019	3	Red Drum	1,563	5,699	3,971	
2019	4	Red Drum	5,571	7,848	6,528	
2019	5	Red Drum	11,315	13,730	9,664	
2019	6	Red Drum	6,259	12,681	6,985	
2019	7	Red Drum	5,705	13,777	15,618	
2019	8	Red Drum	5,217	21,252	15,846	

Fishing Year (Sept 1, 2018 - Aug 31, 2019) Landings **105,764**

Year	Month	Species	Pounds	2009-2011 Average	2013-2015 Average	
2019	9	Red Drum	1,508	28,991	35,003	
2019	10	Red Drum	8,090	43,644	63,662	
2019	11	Red Drum	4,843	14,318	27,643	*
2019	12	Red Drum	1,413	3,428	2,197	*
2020	1	Red Drum	75	5,885	1,699	*

Fishing Year (Sept 1, 2019 - Aug 31, 2020) Landings **15,928**

*partial trip ticket landings only
***landings are confidential

Year	Month	Species	Pounds	Dealers	Trips	Average (2007-2009)
2016	1	SOUTHERN FLOUNDER	2,625	33	264	7,713
2016	2	SOUTHERN FLOUNDER	1,643	31	291	4,617
2016	3	SOUTHERN FLOUNDER	9,260	58	915	23,512
2016	4	SOUTHERN FLOUNDER	10,558	72	628	68,389
2016	5	SOUTHERN FLOUNDER	24,522	90	821	122,514
2016	6	SOUTHERN FLOUNDER	44,952	100	1,242	154,090
2016	7	SOUTHERN FLOUNDER	43,574	102	1,132	170,387
2016	8	SOUTHERN FLOUNDER	53,057	106	1,409	201,862
2016	9	SOUTHERN FLOUNDER	246,269	131	3,011	396,301
2016	10	SOUTHERN FLOUNDER	280,689	117	2,181	781,717
2016	11	SOUTHERN FLOUNDER	182,768	102	1,479	392,150
2016	12	SOUTHERN FLOUNDER	14	5	5	37,303
2017	1	SOUTHERN FLOUNDER	1,677	38	122	7,713
2017	2	SOUTHERN FLOUNDER	2,758	55	215	4,617
2017	3	SOUTHERN FLOUNDER	8,254	67	874	23,512
2017	4	SOUTHERN FLOUNDER	9,591	83	787	68,389
2017	5	SOUTHERN FLOUNDER	33,105	105	1,121	122,514
2017	6	SOUTHERN FLOUNDER	74,785	115	1,904	154,090
2017	7	SOUTHERN FLOUNDER	74,879	108	1,755	170,387
2017	8	SOUTHERN FLOUNDER	102,751	116	2,364	201,862
2017	9	SOUTHERN FLOUNDER	235,915	128	2,849	396,301
2017	10	SOUTHERN FLOUNDER	548,740	142	3,971	781,717
2017	11	SOUTHERN FLOUNDER	302,286	123	2,003	392,150
2017	12	SOUTHERN FLOUNDER	166	7	8	37,303
2018	1	SOUTHERN FLOUNDER	610	14	43	7,713
2018	2	SOUTHERN FLOUNDER	1,833	34	154	4,617
2018	3	SOUTHERN FLOUNDER	2,815	43	387	23,512
2018	4	SOUTHERN FLOUNDER	8,142	74	769	68,389
2018	5	SOUTHERN FLOUNDER	18,342	90	951	122,514
2018	6	SOUTHERN FLOUNDER	42,501	105	1,407	154,090
2018	7	SOUTHERN FLOUNDER	57,273	117	1,495	170,387
2018	8	SOUTHERN FLOUNDER	72,495	121	1,916	201,862
2018	9	SOUTHERN FLOUNDER	109,125	114	1,776	396,301
2018	10	SOUTHERN FLOUNDER	363,339	109	3,062	781,717
2018	11	SOUTHERN FLOUNDER	226,832	89	1,352	392,150
2018	12	SOUTHERN FLOUNDER	471	5	5	37,303
2019	1	SOUTHERN FLOUNDER	524	25	74	7,713
2019	2	SOUTHERN FLOUNDER	558	23	69	4,617
2019	3	SOUTHERN FLOUNDER	1,412	44	216	23,512
2019	4	SOUTHERN FLOUNDER	5,966	66	448	68,389
2019	5	SOUTHERN FLOUNDER	36,010	91	1,030	122,514
2019	6	SOUTHERN FLOUNDER	60,304	108	1,431	154,090
2019	7	SOUTHERN FLOUNDER	59,191	108	1,549	170,387
2019	8	SOUTHERN FLOUNDER	95,557	109	1,776	201,862
2019	9	SOUTHERN FLOUNDER	51,734	59	551	396,301
2019	10	SOUTHERN FLOUNDER	320,914	115	2,305	781,717
2019	11	SOUTHERN FLOUNDER	151,715	45	475	392,150

*2019 data are preliminary. Data are complete through October 2019.

***data are confidential

Year	Species	Gear	Pounds	Dealers	Trips
2012	SOUTHERN FLOUNDER	GIGS	149,387	112	3,000
2012	SOUTHERN FLOUNDER	GILLNETS	879,373	168	14,713
2012	SOUTHERN FLOUNDER	OTHER	47,989	105	1,462
2012	SOUTHERN FLOUNDER	POUND NET	569,388	35	1,754
2013	SOUTHERN FLOUNDER	GIGS	118,489	101	2,408
2013	SOUTHERN FLOUNDER	GILLNETS	1,096,060	178	16,968
2013	SOUTHERN FLOUNDER	OTHER	46,953	104	2,093
2013	SOUTHERN FLOUNDER	POUND NET	924,889	41	2,112
2014	SOUTHERN FLOUNDER	GIGS	135,273	109	2,655
2014	SOUTHERN FLOUNDER	GILLNETS	659,719	145	11,779
2014	SOUTHERN FLOUNDER	OTHER	18,303	115	1,886
2014	SOUTHERN FLOUNDER	POUND NET	860,216	39	1,806
2015	SOUTHERN FLOUNDER	GIGS	130,277	92	2,616
2015	SOUTHERN FLOUNDER	GILLNETS	392,406	133	8,466
2015	SOUTHERN FLOUNDER	OTHER	12,422	102	1,002
2015	SOUTHERN FLOUNDER	POUND NET	667,847	40	1,803
2016	SOUTHERN FLOUNDER	GIGS	127,021	92	2,658
2016	SOUTHERN FLOUNDER	GILLNETS	363,699	126	8,463
2016	SOUTHERN FLOUNDER	OTHER	10,953	84	838
2016	SOUTHERN FLOUNDER	POUND NET	398,258	39	1,423
2017	SOUTHERN FLOUNDER	GIGS	136,094	90	2,752
2017	SOUTHERN FLOUNDER	GILLNETS	552,565	128	12,372
2017	SOUTHERN FLOUNDER	OTHER	8,377	90	940
2017	SOUTHERN FLOUNDER	POUND NET	697,870	45	1,912
2018	SOUTHERN FLOUNDER	GIGS	92,302	88	2,089
2018	SOUTHERN FLOUNDER	GILLNETS	364,922	122	9,124
2018	SOUTHERN FLOUNDER	OTHER	6,431	79	561
2018	SOUTHERN FLOUNDER	POUND NET	440,122	37	1,545
2019	SOUTHERN FLOUNDER	GIGS	88,460	78	1,800
2019	SOUTHERN FLOUNDER	GILLNETS	319,320	119	6,755
2019	SOUTHERN FLOUNDER	OTHER	5,621	65	365
2019	SOUTHERN FLOUNDER	POUND NET	370,484	33	1,004

*2019 data are preliminary. Data are complete through October 2019.

***data are confidential