

# DIRECTOR'S REPORTS

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# SAFMC



# South Atlantic Fishery Management Council

## News Release

FOR IMMEDIATE RELEASE  
March 5, 2021

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### **Council Chooses Preferred Management Measures for Dolphin and Wahoo Fisheries**

*Proposed measures would reduce recreational vessel limits for Dolphin and bag limits for Wahoo*

During its meeting this week, members of the South Atlantic Fishery Management Council chose preferred management alternatives affecting Dolphin and Wahoo harvested in federal waters along the entire Atlantic coast. The proposed measures, as outlined in Amendment 10 to the Dolphin Wahoo Fishery Management Plan, would reduce the current recreational vessel limit for Dolphin from 60 fish to 48 fish per vessel while maintaining the 10 fish per person/day bag limit and reduce the daily bag limit for Wahoo from 2 fish to 1 fish per person/day. Reductions in harvest are intended to help prevent seasonal closures that could be imposed should catch levels be exceeded.

Regional differences in the Dolphin and Wahoo fisheries became the focus of discussion as members of the Council reviewed concerns expressed during public hearings held in late January. Fishermen in South Florida and the Keys, including charter captains, have expressed concerns about catching fewer Dolphin and encountering smaller fish over the past few years and have requested the Council take action to reduce harvest. Further north, charter captains and other fishermen have raised objections to the proposed reductions, noting the importance of maintaining higher vessel limits for trips that require much farther runs offshore.

“We’ve heard from constituents and advisory panel members and believe their observations. Looking at the various management scenarios for both Dolphin and Wahoo, the Council compromised to reduce catches while addressing concerns of fishermen dependent on these valuable recreational fisheries,” explained Council Chair Mel Bell. “There are many variables affecting these migratory fisheries, including international harvest, environmental conditions, and other factors. We don’t have a clear sense of what the problem is and we’re being more preventative than curative at this point,” said Bell.

Amendment 10 also includes updates to annual catch limits, modifications to sector allocations, and changes to accountability measures designed to ensure the catch levels are not exceeded for both Dolphin and Wahoo. Proposed management measures would also allow properly permitted commercial fishing vessels with trap, pot or buoy gear onboard to retain up to 500 pounds (gutted weight) of Dolphin and remove the Operator Card requirement for for-hire and commercial fishermen in the Atlantic Dolphin Wahoo fishery. After considering recommendations from its advisory panels and public comment, the Council removed an action that would have allowed filleting Dolphin at sea on for-hire vessels in federal waters north of the NC/VA border. The Council is scheduled to approve Dolphin Wahoo Amendment 10 for review by the Secretary of Commerce during its June meeting.

*(Continued)*

## **Other Business:**

### **Red Snapper**

NOAA Fisheries provided an update on the recreational Red Snapper Season for 2021. Due to delays from COVID-19, some landings data from 2020 are not yet available. Those data are expected in May 2021. NOAA Fisheries intends to announce the 2021 season as soon as data are available and evaluated. If a season is allowed, the recreational season for Red Snapper begins on the second Friday in July. The number of fishing days is determined by NOAA Fisheries based on catch estimates from the previous season. The recreational season was open for four days in 2020 and five days in 2019.

A new stock assessment for Red Snapper will be reviewed by the Council's Scientific and Statistical Committee (SSC) during its meeting in late April. The Council will receive an overview of the assessment and the SSC's recommendations during its June meeting. The Council discussed management options for considering the stock assessment results in setting the 2021 catch levels and requested that staff determine if an abbreviated framework can be used to adjust catch levels and if so, prepare such an amendment for Council review at their June 2021 meeting. The Council will also move forward with a plan amendment to modify annual catch limits, allocations, and other management measures necessary as a result of the stock assessment.

### **King Mackerel, Red Porgy, Snowy Grouper and Rock Shrimp Fishery Access Area**

The Council continued work on management measures addressing Atlantic migratory group King Mackerel to address the recent stock assessment update that found the stock is not overfished or undergoing overfishing. The measures, originally included in Framework Amendment 10 and now Amendment 34 to the Coastal Migratory Pelagics Fishery Management Plan, would modify annual catch limits and sector allocations, increase the recreational bag limit and possession limits off the coast of Florida, reduce the minimum size limits for both commercial and recreational sectors, and allow retention of "cut off" King and Spanish Mackerel by recreational fishermen as is allowed for the commercial sector. Public hearings on the amendment will be scheduled following the Council's June meeting.

Proposed management measures for Red Porgy to end overfishing and rebuild the stock continued to be reviewed in Amendment 50 to the Snapper Grouper Fishery Management Plan, with public hearings scheduled this summer. The Council reviewed recent stock assessment results for Snowy Grouper and recommendations from its SSC and will begin developing an amendment to address management measures. The Council also approved Coral Amendment 10 for public hearings to be held prior to the Council's June meeting. The amendment addresses a Shrimp Fishery Access Area for rock shrimp along the northern extension of the Oculina Bank Coral Habitat Area of Particular Concern off the east coast of Florida.

Additional information about this week's meeting, including a meeting [Story Map](#), committee reports, and briefing book materials is available from the Council's website at: <https://safmc.net/safmc-meetings/council-meetings/>. The next meeting of the South Atlantic Fishery Management Council is currently scheduled for June 14-18, 2021 in Ponte Vedra, Florida.

**The South Atlantic Fishery Management Council, one of eight regional councils, conserves and manages fish stocks from three to 200 miles offshore of North Carolina, South Carolina, Georgia and east Florida.**



**South Atlantic Fishery Management Council**  
**SUMMARY MOTIONS**  
**March 1-5, 2021**

This is a summary of the motions approved by the Council. Motions addressing actions and alternatives for FMP amendments are followed by text showing the result of the approved motion. Complete details on motions and other committee recommendations are provided in the Committee Reports available on the SAFMC website.

**Habitat Protection and Ecosystem-Based Management Committee**

**Coral Amendment:**

**MOTION 1: APPROVE CORAL AMENDMENT 10 FOR PUBLIC HEARINGS AS MODIFIED**

APPROVED BY COUNCIL

**MOTION 2: ADOPT THE FOLLOWING TIMING AND TASK(S):**

1. Modify Coral Amendment 10 to address Committee recommendations: clarify that industry came forward before the previous amendment (Coral Amendment 8) was approved; describe and clarify SFAA designation; reword language for no action stating no SFAA exists in the OHAPC at this time and modify wording in the preferred alternative to clarify the allowable activity within the proposed SFAA. Schedule Coral Amendment 10 public hearings during the spring 2021.
2. Continue development of the Habitat Blueprint with the provided guidance.
3. Schedule and facilitate the Habitat and Ecosystem AP April meeting with agenda topics listed above.

APPROVED BY COUNCIL

**Snapper Grouper Committee**

**MOTION 1: INSTRUCT STAFF TO INITIATE A FULL PLAN AMENDMENT FOR SNOWY GROUPE**

APPROVED BY COUNCIL

**MOTION 2: SELECT ALTERNATIVE 2 UNDER ACTION 1 AS PREFERRED**

Action 1. Revise the Greater Amberjack annual catch limit and annual optimum yield.

Alternative 2. Revise the total annual catch limit and annual optimum yield for Greater Amberjack and set equal to the updated acceptable biological catch based on the results of the latest stock assessment (SEDAR 59 2020). The 2026-27 total annual catch limit would remain in place until modified.

Year	Total ACL (lbs ww)
2022-23	4,380,000
2023-2024	3,233,000
2024-2025	2,818,000
2025-2026	2,699,000
2026-2027+	2,669,000

APPROVED BY COUNCIL

**MOTION 3:** APPROVE AMENDMENT 49 FOR SCOPING

APPROVED BY COUNCIL

**MOTION 4:** REQUEST THE SSC PROVIDE SHORT-TERM MANAGEMENT (3 to 5 YEARS) ADVICE FOR RED SNAPPER ASSUMING RECENT HIGH RECRUITMENT

APPROVED BY COUNCIL

**MOTION 5:** REQUEST THAT STAFF DETERMINE WHETHER AN ABBREVIATED FRAMEWORK CAN BE USED TO ADJUST CATCH LEVELS OF RED SNAPPER AND, IF SO, PREPARE SUCH AN AMENDMENT FOR COUNCIL REVIEW IN JUNE 2021

APPROVED BY COUNCIL

**MOTION 6:** DIRECT STAFF TO DO THE FOLLOWING:

- Request a presentation from the SEFSC on pilot longline surveys in the region to be provided to the Committee at the June meeting, if time allows.
- Prepare Amendment 49 (Greater Amberjack) for scoping and conduct scoping hearings before the June meeting.
- Schedule and facilitate a meeting of the Snapper Grouper AP with approved agenda topics in April.
- Schedule wreckfish shareholders meeting after the June 2021 meeting.
- Request that the SSC explore ABC recommendations based on recent high recruitment for Red Snapper.
- Prepare an abbreviated framework to adjust catch levels for Red Snapper for review and approval in June 2021, if appropriate.

- Initiate amendment to address snowy grouper and direct staff to ensure appropriate timeline for development.

APPROVED BY COUNCIL

### **Dolphin Wahoo Committee**

**MOTION 1:** ACCEPT THE IPT'S SUGGESTED EDITS TO THE REVISED GOALS AND OBJECTIVES OF THE DOLPHIN WAHOO FMP. DIRECT STAFF TO INCLUDE THE REVISED GOALS AND OBJECTIVES IN AMENDMENT 10 TO THE DOLPHIN WAHOO FMP.

APPROVED BY COUNCIL

**MOTION 2:** APPROVE THE IPT'S SUGGESTED EDITS TO THE PURPOSE AND NEED STATEMENTS IN AMENDMENT 10.

The *purpose* of Dolphin Wahoo Amendment 10 is to revise the catch levels [acceptable biological catch (ABC) and annual catch limits (ACL)], sector allocations, accountability measures, and management measures for dolphin and wahoo. Management measures address authorized gear, the operator card requirement, and recreational bag/vessel limits in the dolphin and wahoo fisheries, as well as allowing fillets at sea onboard for-hire vessels in the dolphin fishery.

The need for Dolphin Wahoo Amendment 10 is to base conservation and management measures on the best scientific information available and increase net benefits to the Nation, consistent with the Magnuson-Stevens Fishery Conservation and Management Act and its National Standards.

APPROVED BY COUNCIL

**MOTION 3:** REPLACE ALTERNATIVE 2 IN ACTION 5 WITH THE IPT PROPOSED ALTERNATIVE 2.

Action 5. Revise the trigger for the post-season recreational accountability measures for dolphin.

Alternative 2. Implement post season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year mean (*Sub-alternative 2a or 2b*) of landings exceeds the recreational sector annual catch limit. When the recreational sector annual catch limit is changed, use a single year of landings, beginning with the most recent available year of landings, then a two-year average of landings from that single year and the subsequent year, then a three-year average of landings from those

two years and the subsequent year, and thereafter a progressive running three-year average to trigger the recreational accountability measure.

Sub-alternative 2a. Use the arithmetic mean to calculate average landings.

Sub-alternative 2b. Use the geometric mean to calculate average landings.

APPROVED BY COUNCIL

**MOTION 4: ACCEPT THE IPT PROPOSED ALTERNATIVE 5 TO REPLACE THE CURRENT ALTERNATIVE 5 IN ACTION 6.**

Action 6. Revise the post-season recreational accountability measures for dolphin.

Alternative 5. In the following fishing year monitor landings, and if by September 1 of each year landings are projected to meet the sector ACL that fishing year, reduce the bag limit to prevent the annual catch limit from being exceeded (*Sub-alternatives 5a through 5e*). If reductions in the bag limit are projected to be insufficient to constrain harvest to the ACL, then also reduce the vessel limit to prevent the annual catch limit from being exceeded (*Sub-alternatives 5f through 5i*). If reductions in the bag limit and vessel limit are not implemented or are projected to be insufficient to constrain harvest to the ACL, then also reduce the length of the recreational fishing season to prevent the annual catch limit from being exceeded. However, the vessel limit, bag limit and/or recreational fishing season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Bag Limit Sub-Alternatives:

Sub-alternative 5a. Reduce the bag limit by the amount necessary but not below 2 fish per person per day.

Sub-alternative 5b. Reduce the bag limit by the amount necessary but not below 3 fish per person per day.

Sub-alternative 5c. Reduce the bag limit by the amount necessary but not below 4 fish per day.

Sub-alternative 5c. Reduce the bag limit by the amount necessary but not below 4 fish per person per day.

Sub-alternative 5d. Reduce the bag limit by the amount necessary but not below 5 fish per vessel per day.

Sub-alternative 5e. Do not reduce the bag limit.

Vessel Limit Sub-Alternatives:

Sub-alternative 5f. Reduce the vessel limit by the amount necessary but not below 10 fish per vessel per day.

Sub-alternative 5g. Reduce the vessel limit by the amount necessary but not below 20 fish per vessel per day.

Sub-alternative 5h. Reduce the vessel limit by the amount necessary but not below 30 fish per vessel per day.

Sub-alternative 5i. Do not reduce the vessel limit.

APPROVED BY COUNCIL

**MOTION 5: SELECT ALTERNATIVE 2 IN ACTION 6 AS PREFERRED.**

Action 6. Revise the post-season recreational accountability measures for dolphin.

Alternative 2. Reduce the length of the following recreational fishing season by the amount necessary to prevent the annual catch limit from being exceeded in the following year. However, the length of the recreational season will not be reduced if the Regional Administrator determines, using the

APPROVED BY COUNCIL

**MOTION 6: ACCEPT THE IPT'S WORDING FOR ALTERNATIVE 2 IN ACTION 7.**

Action 7. Revise the trigger for the post-season recreational accountability measures for wahoo.

IPT PROPOSED Alternative 2. Implement post season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year mean (Sub-alternative 2a or 2b) of landings exceeds the recreational sector annual catch limit. When the recreational sector annual catch limit is changed, use a single year of landings, beginning with the most recent available year of landings, then a two-year average of landings from that single year and the subsequent year, then a three-year average of landings from those two years and the subsequent year, and thereafter a progressive running three-year average to trigger the recreational accountability measure.  
Sub-alternative 2a. Use the arithmetic mean to calculate average landings.  
Sub-alternative 2b. Use the geometric mean to calculate average landings.

APPROVED BY COUNCIL

**MOTION 7: CHOOSE SUB-ALTERNATIVE 2B UNDER ACTION 7 AS PREFERRED.**

Action 7. Revise the trigger for the post-season recreational accountability measures for wahoo.  
Alternative 2. Implement post season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year mean (Sub-alternative 2a or 2b) of landings exceeds the recreational sector annual catch limit. When the recreational sector annual catch limit is changed, use a single year of landings, beginning with the most recent available year of landings, then a two-year average of landings from that single year and the subsequent year, then a three-year average of landings from those two years and the subsequent year, and thereafter a progressive running three-year average to trigger the recreational accountability measure.

Sub-alternative 2b. Use the geometric mean to calculate average landings.

APPROVED BY COUNCIL

**MOTION 8: ACCEPT THE IPT'S SUGGESTED EDITS IN ACTION 11.**

Action 11. Reduce the recreational vessel limit for dolphin.

Alternative 1 (No Action). The recreational daily bag limit is 10 dolphin per person, not to exceed 60 dolphin per vessel, whichever is less:

Alternative 2. The recreational daily bag limit is 10 dolphin per person, not to exceed:

Sub-alternative 2a. 30 dolphin per vessel, whichever is less.

Sub-alternative 2b. 40 dolphin per vessel, whichever is less.

Sub-alternative 2c. 42 dolphin per vessel, whichever is less:

Sub-alternative 2d. 48 dolphin per vessel, whichever is less.

Sub-alternative 2e. 54 dolphin per vessel, whichever is less.

Alternative 3. In Florida only, the recreational daily bag limit is 10 dolphin per person, not to exceed:

Sub-alternative 3a. 30 dolphin per vessel, whichever is less.

Sub-alternative 3b. 40 dolphin per vessel, whichever is less.

Sub-alternative 3c. 42 dolphin per vessel, whichever is less.

Sub-alternative 3d. 48 dolphin per vessel, whichever is less.

Sub-alternative 3e. 54 dolphin per vessel, whichever is less.

Alternative 4. In South Carolina, Georgia, and Florida only, the recreational daily bag limit is 10 dolphin per person, not to exceed:

Sub-alternative 4a. 30 dolphin per vessel, whichever is less.

Sub-alternative 4b. 40 dolphin per vessel, whichever is less.

Sub-alternative 4c. 42 dolphin per vessel, whichever is less.

Sub-alternative 4d. 48 dolphin per vessel, whichever is less.

Sub-alternative 4e. 54 dolphin per vessel, whichever is less.

APPROVED BY COUNCIL

**MOTION 9: SELECT SUB-ALTERNATIVE 2D AS PREFERRED IN ACTION 11.**

Action 11. Reduce the recreational vessel limit for dolphin

Alternative 2. The recreational daily bag limit is 10 dolphin per person, not to exceed:

Sub-alternative 2d. 48 dolphin per vessel, whichever is less.

APPROVED BY COUNCIL

**MOTION 10: ACCEPT ACTION 12 TO BE INCLUDED IN AMENDMENT 10.**

Action 12. Reduce the recreational bag limit and establish a recreational vessel limit for wahoo  
Alternative 1 (No Action). The recreational daily bag limit is 2 wahoo per person. There is no  
Alternative 2. The recreational daily bag limit is 1 wahoo per person.

Alternative 3. The recreational vessel limit is:

- Sub-alternative 3a. 2 wahoo per vessel.
- Sub-alternative 3b. 3 wahoo per vessel.
- Sub-alternative 3c. 4 wahoo per vessel.
- Sub-alternative 3d. 5 wahoo per vessel.
- Sub-alternative 3e. 6 wahoo per vessel.
- Sub-alternative 3f. 7 wahoo per vessel.

APPROVED BY COUNCIL

**MOTION 11: ACCEPT ALTERNATIVE 2 AS PREFERRED IN ACTION 12.**

Action 12. Reduce the recreational bag limit and establish a recreational vessel limit for wahoo

Alternative 2. The recreational daily bag limit is 1 wahoo per person.

APPROVED BY COUNCIL

**MOTION 12: REMOVE ACTION 13 IN AMENDMENT 10 AND PUT IT IN THE  
CONSIDERED BUT REJECTED SECTION.**

APPROVED BY COUNCIL

**MOTION 13: APPROVE ALL ACTIONS IN DOLPHIN WAHOO AMENDMENT 10, AS  
MODIFIED, FOR REVIEW AT THE JUNE 2021 MEETING.**

APPROVED BY COUNCIL

**DIRECTION TO STAFF:**

- 1) Develop a framework action, or other appropriate action, to consider making the minimum size requirements currently in place for FL, GA, and SC apply throughout the management zone for dolphin.
- 2) Develop a framework or other appropriate action to consider exempting the charter fleet from the dolphin and wahoo vessel limits.

**MOTION 14: APPROVE THE FOLLOWING TIMING AND TASKS:**

- 1) Continue work on Amendment 10 and prepare the amendment for a vote of approval for secretarial review at the June 2021 meeting.

- 2) Prepare information on identified topics regarding the use of pelagic longline gear in the dolphin wahoo fishery, dolphin size limits, and exemptions to the dolphin and wahoo vessel limits onboard for-hire vessels. The council will review this information at the June 2021 meeting.

APPROVED BY COUNCIL

### **Mackerel Cobia Committee**

#### **MOTION 1: APPROVE THE PURPOSE AND NEED STATEMENT**

The *purpose* of this amendment is to revise the annual catch limits for Atlantic migratory group king mackerel; to revise recreational and commercial allocations for Atlantic migratory group king mackerel; and to revise or establish management measures for Atlantic migratory group king and Spanish mackerel.

The need for this amendment is to ensure annual catch limits are based on the best scientific information available and to ensure overfishing does not occur in the Atlantic migratory group king and Spanish mackerel fisheries, while increasing social and economic benefits through sustainable and profitable harvest of Atlantic migratory group king and Spanish mackerel.

APPROVED BY COUNCIL

#### **MOTION 2: APPROVE ACTION 1 AND ALTERNATIVES 1 THROUGH 4 FOR INCLUSION IN CMP AMENDMENT 34.**

Action 1. Revise the total annual catch limit for Atlantic migratory group king mackerel to reflect the updated acceptable biological catch level.

Alternative 1 (No Action). The total annual catch limit for Atlantic migratory group king mackerel is set equal to the current acceptable biological catch level (12,700,000 pounds).

Alternative 2. The total annual catch limit for Atlantic migratory group king mackerel is equal to the updated acceptable biological catch level.

Alternative 3. The total annual catch limit for Atlantic migratory group king mackerel is equal to 95% of the updated acceptable biological catch level.

Alternative 4. The total annual catch limit for Atlantic migratory group king mackerel is equal to 90% of the updated acceptable biological catch level.

APPROVED BY COUNCIL



**MOTION 3: APPROVE ACTION 3 AND ALTERNATIVES 1 THROUGH 4 FOR INCLUSION IN CMP AMENDMENT 34.**

Action 3. Revise recreational annual catch target for Atlantic migratory group king mackerel.

Alternative 1 (No Action). Retain the current recreational annual catch target for Atlantic migratory group king mackerel [ACL[(1-PSE) or 0.5, whichever is greater] based on the previous acceptable biological catch (ACT = 7,400,000 pounds)

Alternative 2. Revise the recreational annual catch target to reflect updated acceptable biological catch level. The recreational annual catch target equals sector ACL[(1-PSE) or 0.5, whichever is greater].

Alternative 3. Revise the recreational annual catch target to reflect updated acceptable biological catch level. The recreational annual catch target equals 90% sector ACL.

Alternative 4. Revise the recreational annual catch target to reflect updated acceptable biological catch level. The recreational annual catch target equals 85% sector ACL.

APPROVED BY COUNCIL

**MOTION 4: APPROVE ACTION 4 AND ALTERNATIVES 1 THROUGH 2 FOR INCLUSION IN CMP AMENDMENT 34.**

Action 4. Increase the recreational bag and possession limit for Atlantic migratory group king mackerel in the exclusive economic zone off Florida.

Alternative 1 (No Action). The daily bag limit for Atlantic migratory group king mackerel in the exclusive economic zone off Florida is two fish per person. Two fish per person is the daily bag limit specified by Florida for its waters.

Alternative 2. Increase the daily bag limit for Atlantic migratory group king mackerel to three fish per person. off Florida.

APPROVED BY COUNCIL

**MOTION 5: APPROVE ACTION 5 AND ALTERNATIVES 1 THROUGH 4 FOR INCLUSION IN CMP AMENDMENT 34.**

Action 5. Reduce the minimum size limit for recreational and commercial harvest of Atlantic migratory group king mackerel.

Alternative 1 (No Action). The minimum size limit for commercial and recreational harvest of Atlantic migratory group king mackerel is 24-inches fork length.

Alternative 2. Reduce the minimum size limit for commercial and recreational harvest of Atlantic king migratory group mackerel to 22-inches fork length.

Alternative 3. Reduce the minimum size limit for commercial and recreational harvest of Atlantic migratory group king mackerel to 20-inches fork length.

Alternative 4. Remove the minimum size limit for commercial and recreational harvest of Atlantic migratory group king mackerel.

APPROVED BY COUNCIL

**MOTION 6:** APPROVE ACTION 6 AND ALTERNATIVES 1 THROUGH 2 FOR INCLUSION IN CMP AMENDMENT 34.

Action 6. Modify the recreational requirement for Coastal Migratory Pelagic species in the Atlantic region to be landed with heads and fins in intact.

Alternative 1 (No Action). Cut-off (damaged) Atlantic migratory group king mackerel or Atlantic migratory group Spanish mackerel caught under the recreational bag limit may not be possessed.

Alternative 2. Cut-off (damaged) fish caught under the recreational bag limit, that comply with the minimum size limits, may be possessed, and offloaded ashore.

Sub-alternative 2a. Atlantic migratory group king mackerel

Sub-alternative 2b. Atlantic migratory group Spanish mackerel

APPROVED BY COUNCIL

**MOTION 7:** SELECT ALTERNATIVE 2, UNDER ACTION 1, AS THE PREFERRED ALTERNATIVE

Action 1 – Modify the Gulf of Mexico (Gulf) Migratory Group Cobia (Gulf Cobia) Overfishing Limit (OFL), Acceptable Biological Catch (ABC), and Annual Catch Limit (ACL).

Gulf Council Preferred Alternative 2: Modify the Gulf cobia stock OFL, ABC, and ACL based on recommendation of the Gulf Scientific and Statistical Committee (SSC) as presented in July 2020, for an increasing yield stream for 2021 to 2023, and then maintain the 2023 levels for subsequent fishing years or until changed by a management action. The stock ACL is set equal to the stock ABC.

	<b>Gulf Cobia Stock</b>		
<b>Year</b>	<b>OFL</b>	<b>ABC</b>	<b>ACL</b>
<b>2021</b>	3,030,000	2,340,000	2,340,000
<b>2022</b>	3,210,000	2,600,000	2,600,000
<b>2023+</b>	3,310,000	2,760,000	2,760,000

Note: Catch limits in pounds whole weight. The recreational portion of the OFL, ABC, and ACL are based on MRIP-FES data.

APPROVED BY COUNCIL

**MOTION 8: CHOOSE ALTERNATIVE 3, UNDER ACTION 2, AS THE SOUTH ATLANTIC COUNCIL'S PREFERRED ALTERNATIVE**

Action 2 – Modify the Gulf Cobia Apportionment Between the Gulf Zone and the Florida East Coast (FLEC) Zone and Update the Zones' ACLs Based on the ACL Selected in Action 1.

Alternative 3: Modify the Gulf cobia stock ACL apportionment to be 63% for the Gulf Zone and 37% for the FLEC Zone, based on the MRIP-FES average landings for Gulf cobia for the years 1998 – 2012, and use this apportionment to update the Zone ACLs based on the Gulf Cobia ACL(s) in Action 1.

APPROVED BY COUNCIL

**MOTION 9: UNDER ACTION 4, CHOOSE ALTERNATIVE 2B AND ALTERNATIVE 3B-SUB-OPTION I AS PREFERRED.**

Action 4 – Modify the Gulf Cobia Possession Limit and/or Establish a Trip Limit

Alternative 2: Reduce the recreational and commercial daily possession limit to 1 fish per person, regardless of the number or duration of trips.

Option 2b: in the FLEC Zone

Alternative 3: Create a recreational and commercial daily trip limit. Fishermen may not exceed the per person daily possession limit.

Option 3b: in the FLEC Zone

Sub-option i: The trip limit for cobia is two fish.

APPROVED BY COUNCIL

**MOTION 10: APPROVE THE GULF COUNCIL PREFERRED FOR THE GULF ZONE UNDER ACTION 4**

Action 4 – Modify the Gulf Cobia Possession Limit and/or Establish a Trip Limit

Gulf Council Preferred Alternative 2: Reduce the recreational and commercial daily possession limit to 1 fish per person, regardless of the number or duration of trips.

Gulf Council Preferred Option 2a: in the Gulf Zone

Gulf Council Preferred Alternative 3: Create a recreational and commercial daily trip limit. Fishermen may not exceed the per person daily possession limit.

Gulf Council Preferred Option 3a: in the Gulf Zone

Gulf Council Preferred Sub-option i: The trip limit for cobia is two fish.

APPROVED BY COUNCIL

**MOTION 11: SELECT ALTERNATIVE 2, UNDER ACTION 5, AS THE SOUTH ATLANTIC COUNCIL'S PREFERRED**

Action 5 – Modify the Gulf Cobia Minimum Size Limit

Alternative 2: Retain the current recreational and commercial minimum size limit of 36 inches FL in the Gulf Zone and increase the recreational and commercial minimum size limit to 36 inches FL in the FLEC Zone.

APPROVED BY COUNCIL

**MOTION 12: ADOPT THE FOLLOWING TIMING AND TASKS:**

1. Continue work on CMP Amendment 34 and prepare a draft for discussion and selection of preferred alternatives at the June 2021 meeting.
2. Work with Gulf Council staff to present information on CMP Amendment 32 to the Gulf Council and Gulf Mackerel Cobia Advisory Panel.
3. Work with Gulf Council staff to continue development CMP Amendment 32 for additional review at the June 2021 meeting.
4. White Paper Action – work with ASMFC staff on ad hoc AP structure
5. Convene a meeting of the Mackerel Cobia Advisory Panel to discuss topics listed above

APPROVED BY COUNCIL

### **SEDAR COMMITTEE**

**MOTION 1: APPROVE THE SEDAR 79 PARTICIPANT LIST TABLE AS MODIFIED**

APPROVED BY COUNCIL

**MOTION 2: APPROVE THE SEDAR 79 TERMS OF REFERENCE**

APPROVED BY COUNCIL

### **EXECUTIVE COMMITTEE**

**MOTION 1: APPROVE THE AP POLICY AS REVISED**

APPROVED BY COUNCIL

**MOTION 2: APPROVE THE SAFMC SEMINAR SERIES**

APPROVED BY COUNCIL

**SUMMARY REPORT  
DOLPHIN WAHOO COMMITTEE  
SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL  
Webinar  
March 3-4, 2021**

The Committee approved amended minutes from the December 2020 meeting and the agenda.

**Status of Amendments under Formal Review**

The Committee was updated on the status of Dolphin Wahoo Amendment 12 that adds bullet mackerel and frigate mackerel to the Dolphin Wahoo Fishery Management Plan and designates them as Ecosystem Component species. This amendment was submitted to the NMFS Southeast Regional Office on December 3, 2020 and is undergoing rule making.

**Review of the updated Dolphin Wahoo Fishery Management Plan Goals and Objectives**

The Fisheries Allocation Review Policy (NMFS Policy Directive 01-119) issued in July 2016 encourages the use of adaptive management in respect to allocation revisions, which includes “periodic re-evaluation and updating of the management goals and objectives to ensure they are relevant to current conditions and needs.” As part of the Council’s process for creating an Allocation Review Trigger Policy, the goals and objectives of FMPs that include sector allocations will be reviewed and updated as appropriate.

The Dolphin Wahoo Committee reviewed the updated FMP goals and objectives and made the following motion:

**Preamble:** The original and ongoing intent of the Fishery Management Plan for the Dolphin Wahoo Fishery of the Atlantic is to sustainably manage the stocks of dolphin and wahoo for the long-term benefit of all participants. Owing to the substantial importance of the fisheries for dolphin and wahoo, particularly to the recreational sector, this fishery management plan seeks to manage these fisheries using a precautionary approach that maintains access, minimizes competition, preserves the social and economic importance of the fisheries, as well as promotes research and incorporation of ecosystem considerations where practicable.

<b>Goal 1 (Precautionary Approach):</b> Management of the dolphin and wahoo fisheries is precautionary, risk-averse, and maintains historic catch levels while preventing overfishing.	
<i>Objective 1</i>	Maintain catch levels that do not exceed catch level recommendations for dolphin or wahoo and do not directly change the balance of landings in comparison to the historic fishery to the extent that conflict is created between the recreational and commercial sectors.
<i>Objective 2</i>	Minimize bycatch of dolphin and wahoo in non-directed fisheries.
<b>Goal 2 (Access):</b> The recreational and commercial sectors retain access to the dolphin and wahoo resource.	

<i>Objective 1</i>	For the recreational sector, adopt management measures that ensure consistent and predictable access to dolphin and wahoo when they are regionally available as well as maintain abundant stock levels that lead to high encounter rates and elevated trip satisfaction.
<i>Objective 2</i>	For the commercial sector, adopt management measures that ensure consistent and predictable access to dolphin and wahoo when they are regionally available.
<i>Objective 3</i>	Address concerns as practicable over localized reduction in fish abundance and the resulting perceived decline in local availability of dolphin and wahoo.
<b>Goal 3 (Minimize Competition Between User Groups):</b> Competition between user groups is minimized.	
<i>Objective 1</i>	Ensure effort and catch levels of dolphin and wahoo by distinct user groups does not notably expand beyond their traditional share of the fishery.
<i>Objective 2</i>	Exercise caution in allowing development of new fisheries or expansion of existing fisheries that may increase competition between user groups.
<b>Goal 4 (Economic and Social Importance):</b> Management of the dolphin and wahoo fisheries recognizes and preserves their economic and social importance to both the recreational and commercial sectors.	
<i>Objective 1</i>	Manage the dolphin and wahoo resources to achieve optimum yield on a continuing basis in order to maximize the economic and social net benefits of the fishery.
<i>Objective 2</i>	Minimize market disruption. In the short-term, commercial markets (mainly local) may be disrupted if large quantities of dolphin are landed from intense commercial harvest or unregulated catch.
<i>Objective 3</i>	Encourage research that improves knowledge about the social and economic elements of the dolphin and wahoo fishery.
<i>Objective 4</i>	Improve awareness and understanding of how social and economic issues are linked to dolphin and wahoo fishery management measures.
<b>Goal 5 (Ecosystem Based Management and Research Priorities):</b> Management of the dolphin and wahoo fisheries recognizes the importance of biological information and incorporating ecosystem considerations.	
<i>Objective 1</i>	Support improved and expanded monitoring and reporting programs for the dolphin and wahoo fishery. Promote collection of quality data to support management plans and programs considered by the Council.
<i>Objective 2</i>	Support measures that incorporate ecosystem considerations for the management of dolphin and wahoo where practicable.
<i>Objective 3</i>	Promote research aimed at developing ecosystem based management of dolphin and wahoo.
<i>Objective 4</i>	Promote research that enhances collection of biological and habitat data on dolphin and wahoo stocks and fisheries.

**MOTION 1:** ACCEPT THE IPT'S SUGGESTED EDITS TO THE REVISED GOALS AND OBJECTIVES OF THE DOLPHIN WAHOO FMP. DIRECT STAFF TO INCLUDE THE REVISED GOALS AND OBJECTIVES IN AMENDMENT 10 TO THE DOLPHIN WAHOO FMP.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**Revise Dolphin and Wahoo Management Measures: Amendment 10**

Amendment 10 includes actions that accommodate updated catch level recommendations and recreational data from the Marine Recreational Information Program and revise the annual catch limits and sector allocations for dolphin and wahoo accordingly. The amendment also contains actions that implement various other management changes in the fishery including revising recreational accountability measures; accommodating possession of dolphin and wahoo on vessels with trap, pot, or buoy gear onboard; removing the operator card requirement, reducing the recreational vessel limit for dolphin, reducing the recreational bag limit or implementing a recreational vessel limit for wahoo, and allowing filleting of dolphin at sea onboard for-hire vessels in the waters north of the Virginia/North Carolina border. Public Hearings for this amendment were held via webinar on January 26-28, 2021.

The Committee reviewed public hearing comments, discussed the amendment, and provided the following guidance as well as made the following motions:

**MOTION 2:** APPROVE THE IPT'S SUGGESTED EDITS TO THE PURPOSE AND NEED STATEMENTS IN AMENDMENT 10.

The *purpose* of Dolphin Wahoo Amendment 10 is to revise the catch levels [acceptable biological catch (ABC) and annual catch limits (ACL)], sector allocations, accountability measures, and management measures for dolphin and wahoo. Management measures address authorized gear, ~~and~~ the operator card requirement, ~~and recreational bag/vessel limits~~ in the dolphin and wahoo fisheries, as well as ~~recreational vessel limits and~~ allowing fillets at sea onboard for-hire vessels in the dolphin fishery.

The *need* for Dolphin Wahoo Amendment 10 is to base conservation and management measures on the best scientific information available and increase net benefits to the Nation, consistent with the Magnuson-Stevens Fishery Conservation and Management Act and its National Standards.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 3:** REPLACE ALTERNATIVE 2 IN ACTION 5 WITH THE IPT PROPOSED ALTERNATIVE 2.

**Action 5. Revise the trigger for the post-season recreational accountability measures for dolphin**

~~**Alternative 2.** Implement post-season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year geometric mean of landings~~

exceed the recreational sector annual catch limit. If in any year the recreational sector annual catch limit is changed, the moving multi-year geometric mean of landings will start over.

**IPT PROPOSED Alternative 2.** Implement post season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year mean (*Sub-alternative 2a or 2b*) of landings exceeds the recreational sector annual catch limit. When the recreational sector annual catch limit is changed, use a single year of landings, beginning with the most recent available year of landings, then a two-year average of landings from that single year and the subsequent year, then a three-year average of landings from those two years and the subsequent year, and thereafter a progressive running three-year average to trigger the recreational accountability measure.

**Sub-alternative 2a.** Use the arithmetic mean to calculate average landings.<sup>1</sup>

**Sub-alternative 2b.** Use the geometric mean to calculate average landings.<sup>2</sup>

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 4:** ACCEPT THE IPT PROPOSED ALTERNATIVE 5 TO REPLACE THE CURRENT ALTERNATIVE 5 IN ACTION 6.

**Action 6. Revise the post-season recreational accountability measures for dolphin**

~~**Preferred Alternative 5.** In the following fishing year monitor landings and if landings are projected to meet the sector ACL, reduce the bag limit and/or the vessel limit (*Sub-alternatives 5a and/or 5b*) first and if needed reduce the length of the recreational fishing season by the amount necessary to prevent the annual catch limit from being exceeded. However, the vessel limit, bag limit, and/or recreational fishing season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.~~

~~**Sub-alternative 5a.** Reduce the bag limit by the amount necessary but not below X fish per person per day (*Council to fill in the number*).~~

~~**Sub-alternative 5b.** Reduce the vessel limit by the amount necessary but not below X fish per vessel per day (*Council to fill in the number*).~~

**IPT PROPOSED Alternative 5.** In the following fishing year monitor landings, and if by September 1 of each year landings are projected to meet the sector ACL that fishing year, reduce the bag limit to prevent the annual catch limit from being exceeded (*Sub-alternatives 5a through 5e*). If reductions in the bag limit are projected to be insufficient to constrain harvest to the ACL, then also reduce the vessel limit to prevent the annual catch limit from being exceeded (*Sub-alternatives 5f through 5i*). If reductions in the bag limit and vessel limit are not implemented or are projected to be insufficient to constrain harvest to the ACL, then also reduce the length of the recreational fishing season to prevent the annual catch limit from being exceeded.<sup>3</sup> However, the vessel limit, bag limit, and/or recreational fishing season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

**Bag Limit Sub-Alternatives:**

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<sup>1</sup> The arithmetic mean is calculated by adding the values of a set of numbers and then dividing the sum by the number of values in the set.

<sup>2</sup> The geometric mean is calculated by multiplying the values of a set of numbers and then taking the n<sup>th</sup> root of the product, where n is equal to the number of values in the set.

<sup>3</sup> The intent of this alternative is that NMFS would implement the reduction in bag limit, vessel limit, and/or season length through a single in-season action, but implementation via separate regulations would not be precluded.



**Sub-alternative 5a.** Reduce the bag limit by the amount necessary but not below 2 fish per person per day.

**Sub-alternative 5b.** Reduce the bag limit by the amount necessary but not below 3 fish per person per day.

**Sub-alternative 5c.** Reduce the bag limit by the amount necessary but not below 4 fish per person per day.

**Sub-alternative 5d.** Reduce the bag limit by the amount necessary but not below 5 fish per vessel per day.

**Sub-alternative 5e.** Do not reduce the bag limit.

Vessel Limit Sub-Alternatives:

**Sub-alternative 5f.** Reduce the vessel limit by the amount necessary but not below 10 fish per vessel per day.

**Sub-alternative 5g.** Reduce the vessel limit by the amount necessary but not below 20 fish per vessel per day.

**Sub-alternative 5h.** Reduce the vessel limit by the amount necessary but not below 30 fish per vessel per day.

**Sub-alternative 5i.** Do not reduce the vessel limit.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 5:** SELECT ALTERNATIVE 2 IN ACTION 6 AS PREFERRED.

**Action 6. Revise the post-season recreational accountability measures for dolphin**

**Alternative 2.** Reduce the length of the following recreational fishing season by the amount necessary to prevent the annual catch limit from being exceeded in the following year. However, the length of the recreational season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 6:** ACCEPT THE IPT'S WORDING FOR ALTERNATIVE 2 IN ACTION 7.

**Action 7. Revise the trigger for the post-season recreational accountability measures for wahoo**

~~**Preferred Alternative 2.** Implement post season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year geometric mean of landings exceed the recreational sector annual catch limit. If in any year the recreational sector annual catch limit is changed, the moving multi-year geometric mean of landings will start over.~~

**IPT PROPOSED Alternative 2.** Implement post season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year mean (*Sub-alternative 2a or 2b*) of landings exceeds the recreational sector annual catch limit. When the recreational sector annual catch limit is changed, use a single year of landings, beginning with the most recent available year of landings, then a two-year average of landings from that single year and the subsequent year, then a three-year average of landings from those two years and the subsequent year, and thereafter a progressive running three-year average to trigger the recreational accountability measure.

**Sub-alternative 2a.** Use the arithmetic mean to calculate average landings.<sup>4</sup>

**Sub-alternative 2b.** Use the geometric mean to calculate average landings.<sup>5</sup>

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 7: CHOOSE SUB-ALTERNATIVE 2B UNDER ACTION 7 AS PREFERRED.**

**Action 7. Revise the trigger for the post-season recreational accountability measures for wahoo**

**IPT PROPOSED Alternative 2.** Implement post season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year mean (*Sub-alternative 2a or 2b*) of landings exceeds the recreational sector annual catch limit. When the recreational sector annual catch limit is changed, use a single year of landings, beginning with the most recent available year of landings, then a two-year average of landings from that single year and the subsequent year, then a three-year average of landings from those two years and the subsequent year, and thereafter a progressive running three-year average to trigger the recreational accountability measure.

**Sub-alternative 2b.** Use the geometric mean to calculate average landings.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 8: ACCEPT THE IPT'S SUGGESTED EDITS IN ACTION 11.**

**Action 11. Reduce the recreational vessel limit for dolphin**

Note: **Alternative 1 (No Action), Alternative 2 and Alternative 3** (including their respective sub-alternatives) do not apply to headboats. The current limit of 10 dolphin per paying passenger onboard a headboat will not change under this action and its alternatives.

**Alternative 1 (No Action).** The recreational daily bag limit is 10 dolphin per person, not to exceed 60 dolphin per vessel, whichever is less, ~~except on board a headboat where the limit is 10 dolphin per paying passenger.~~

**Alternative 2.** The recreational daily bag limit is 10 dolphin per person, not to exceed:

**Sub-alternative 2a.** 30 dolphin per vessel, whichever is less, ~~except on board a headboat where the limit is 10 dolphin per paying passenger.~~

**Sub-alternative 2b.** 40 dolphin per vessel, whichever is less, ~~except on board a headboat where the limit is 10 dolphin per paying passenger.~~

**Sub-alternative 2c.** 42 dolphin per vessel, whichever is less, ~~except on board a headboat where the limit is 10 dolphin per paying passenger.~~

**Sub-alternative 2d.** 48 dolphin per vessel, whichever is less, ~~except on board a headboat where the limit is 10 dolphin per paying passenger.~~

**Sub-alternative 2e.** 54 dolphin per vessel, whichever is less, ~~except on board a headboat where the limit is 10 dolphin per paying passenger.~~

**Alternative 3.** In Florida only, the recreational daily bag limit is 10 dolphin per person, not to exceed:

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<sup>4</sup> The arithmetic mean is calculated by adding the values of a set of numbers and then dividing the sum by the number of values in the set.

<sup>5</sup> The geometric mean is calculated by multiplying the values of a set of numbers and then taking the n<sup>th</sup> root of the product, where n is equal to the number of values in the set.

**Sub-alternative 3a.** 30 dolphin per vessel, whichever is less, except on board a headboat where the limit is 10 dolphin per paying passenger.

**Sub-alternative 3b.** 40 dolphin per vessel, whichever is less, except on board a headboat where the limit is 10 dolphin per paying passenger.

**Sub-alternative 3c.** 42 dolphin per vessel, whichever is less, except on board a headboat where the limit is 10 dolphin per paying passenger.

**Sub-alternative 3d.** 48 dolphin per vessel, whichever is less, except on board a headboat where the limit is 10 dolphin per paying passenger.

**Sub-alternative 3e.** 54 dolphin per vessel, whichever is less, except on board a headboat where the limit is 10 dolphin per paying passenger.

**Alternative 4.** In South Carolina, Georgia, and Florida only, the recreational daily bag limit is 10 dolphin per person, not to exceed:

**Sub-alternative 4a.** 30 dolphin per vessel, whichever is less.

**Sub-alternative 4b.** 40 dolphin per vessel, whichever is less.

**Sub-alternative 4c.** 42 dolphin per vessel, whichever is less.

**Sub-alternative 4d.** 48 dolphin per vessel, whichever is less.

**Sub-alternative 4e.** 54 dolphin per vessel, whichever is less.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 9:** SELECT SUB-ALTERNATIVE 2D AS PREFERRED IN ACTION 11.

**Action 11. Reduce the recreational vessel limit for dolphin**

**Alternative 2.** The recreational daily bag limit is 10 dolphin per person, not to exceed:

**Sub-alternative 2d.** 48 dolphin per vessel, whichever is less.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 10:** ACCEPT ACTION 12 TO BE INCLUDED IN AMENDMENT 10.

**Action 12. Reduce the recreational bag limit and establish a recreational vessel limit for wahoo**

**Alternative 1 (No Action).** The recreational daily bag limit is 2 wahoo per person. There is no recreational vessel limit for wahoo.

**Alternative 2.** The recreational daily bag limit is 1 wahoo per person.

**Alternative 3.** The recreational vessel limit is:

**Sub-alternative 3a.** 2 wahoo per vessel.

**Sub-alternative 3b.** 3 wahoo per vessel.

**Sub-alternative 3c.** 4 wahoo per vessel.

**Sub-alternative 3d.** 5 wahoo per vessel.

**Sub-alternative 3e.** 6 wahoo per vessel.

**Sub-alternative 3f.** 7 wahoo per vessel.

**Sub-alternative 3g.** 8 wahoo per vessel.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 11:** ACCEPT ALTERNATIVE 2 AS PREFERRED IN ACTION 12.

**Action 12. Reduce the recreational bag limit and establish a recreational vessel limit for wahoo**

**Alternative 2.** The recreational daily bag limit is 1 wahoo per person.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 12:** REMOVE ACTION 13 IN AMENDMENT 10 AND PUT IT IN THE CONSIDERED BUT REJECTED SECTION.

**Action 13. Allow filleting of dolphin at sea on board charter or headboat vessels in the Atlantic Exclusive Economic Zone north of the Virginia/North Carolina border.**

**Preferred Alternative 1 (No Action).** Dolphin possessed in the Atlantic Exclusive Economic Zone must be maintained with head and fins intact, with specific exceptions for fish lawfully harvested in the Bahamas. Such fish harvested from the Atlantic Exclusive Economic Zone may be eviscerated, gilled, and scaled, but must otherwise be maintained in a whole condition.

**Alternative 2.** Exempt dolphin from regulations requiring head and fins be intact on board properly permitted charter and headboat vessels in the Atlantic Exclusive Economic Zone north of the Virginia/North Carolina border where dolphin may be filleted under the following requirement(s):

**Sub-alternative 2a.** Skin must remain intact on the entire fillet of any dolphin carcass.

**Sub-alternative 2b.** Two fillets of dolphin, regardless of the length of each fillet, is the equivalent to one dolphin.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 13:** APPROVE ALL ACTIONS IN DOLPHIN WAHOO AMENDMENT 10, AS MODIFIED, FOR REVIEW AT THE JUNE 2021 MEETING.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**DIRECTION TO STAFF:**

- 1) DEVELOP A FRAMEWORK ACTION OR OTHER APPROPRIATE ACTION TO CONSIDER MAKING THE MINIMUM SIZE REQUIREMENTS CURRENTLY IN PLACE FOR FL, GA, AND SC APPLY THROUGHOUT THE MANAGEMENT ZONE FOR DOLPHIN.
- 2) DEVELOP A FRAMEWORK OR OTHER APPROPRIATE ACTION TO CONSIDER EXEMPTING THE CHARTER FLEET FROM THE DOLPHIN AND WAHOO VESSEL LIMITS.

**Timing for the next Dolphin Wahoo Advisory Panel meeting**

The Committee discussed the timing of potential upcoming amendments to the Dolphin Wahoo FMP and were in generally agreement to tentatively schedule the next Dolphin Wahoo AP meeting in the Spring of 2022.

**Other Business**

There were no items discussed under other business.

**Timing and Tasks**

**MOTION 14:** APPROVE THE FOLLOWING TIMING AND TASKS:

- 1) CONTINUE WORK ON AMENDMENT 10 AND PREPARE THE AMENDMENT FOR A VOTE OF APPROVAL FOR SECRETARIAL REVIEW AT THE JUNE 2021 MEETING.
- 2) PREPARE INFORMATION ON IDENTIFIED TOPICS REGARDING THE USE OF PELAGIC LONGLINE GEAR IN THE DOLPHIN WAHOO FISHERY, DOLPHIN SIZE LIMITS, AND EXEMPTIONS TO THE DOLPHIN AND WAHOO VESSEL LIMITS ONBOARD FOR-HIRE VESSELS. THE COUNCIL WILL REVIEW THIS INFORMATION AT THE JUNE 2021 MEETING.

APPROVED BY COUNCIL

**FINAL**  
**SUMMARY REPORT**  
**EXECUTIVE COMMITTEE**  
**SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**  
**MARCH 4, 2021**

**(MEETING HELD VIA WEBINAR)**

The South Atlantic Council's Executive Committee met via webinar on March 4, 2021. The Committee approved the meeting agenda and December 2020 minutes.

**Advisory Panel Policy**

The Committee reviewed and approved a revised draft of the Advisory Panel policy that addressed guidance provided in December 2020.

**SAFMC Seminar Series Proposal**

The Committee reviewed a proposal for a SAFMC Seminar Series intended to increase the timeliness and transparency of the Council considering research findings. The committee suggested several changes, including: discussing "next steps" following a seminar separately from the seminar; distributing a "call for topics" after the initial list of topics is addressed; clarifying that some questions will be considered "beyond the scope" of the seminar approach; and providing context when a topic is forwarded to the SSC for BSIA consideration. The Committee requested that boilerplate FRN language be provided to Monica Smit-Brunello for review. The Committee approved the proposal and discussed the initial topics.

**Workplan Review**

The Committee was provided an updated workplan that addressed direction and progress from this meeting. Priorities for June 2021 will be completing Dolphin Wahoo 10 for final approval and addressing the Red Snapper assessment findings. If necessary to achieve these goals, work may be delayed on the Greater Amberjack and ABC Control Rule Amendments. Final approval for Coral Amendment 10 and the ABC Control Rule amendment was delayed 1 meeting. There was also discussion on considering the commercial electronic logbook action sooner and the potential impact on developing Dolphin framework actions on scheduling of the proposed Dolphin longline amendment. The Committee directed staff to prepare, for consideration in June, proposals for completing the Dolphin Wahoo framework actions.

**MOTIONS**

**MOTION 1: APPROVE THE AP POLICY AS REVISED**

Approved by Committee

Approved by Council.

**MOTION 2: APPROVE THE SAFMC SEMINAR SERIES**

Approved by Committee

Approved by Council.

**FINAL**  
**SUMMARY REPORT**  
**HABITAT PROTECTION AND ECOSYSTEM BASED MANAGEMENT COMMITTEE**  
**SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**  
**Via Webinar**  
**March 1, 2021**

The Committee approved a revised agenda and minutes from the December 2020 meeting.

**Coral Amendment 10**

Staff provided an overview of the Coral Amendment 10 Decision Document on possible establishment of a Shrimp Fishery Access Area (SFAA) along the eastern boundary of the northern extension of the *Oculina* Bank CHAPC to address a previous request from the rock shrimp fishery to provide access to historic fishing grounds. The IPT was given license to edit and revise the public hearing document based on recommendations provided by the Committee. The Committee approved the following motion and provided the following guidance:

**MOTION 1: APPROVE CORAL AMENDMENT 10 FOR PUBLIC HEARINGS AS MODIFIED APPROVED BY COMMITTEE**

Reword purpose to clarify the intent of the action is to allow rock shrimp fishing along the edge of the OHAPC.

The Committee reaffirmed selection of **Preferred Alternative 2:**

**Preferred Alternative 2.** Establish a rock shrimp fishery access area along the eastern edge of the northern extension of the *Oculina* Coral Habitat Area of Particular Concern. Allow a shrimp vessel with a valid commercial permit for rock shrimp to bottom trawl within the established area bounded by the following coordinates. No person may use a bottom longline, dredge, pot, or trap. If aboard a fishing vessel, no person may anchor, use an anchor and chain, or use a grapple and chain.

Point	Latitude	Longitude
1	29° 17.533' N	80° 10 ' 22" W
2	29° 10.983' N	80° 8 ' 39" W
3	29° 3.583' N	80° 7 ' 29" W
4	28° 54.417' N	80° 5 ' 23" W
5	28° 48.6' N	80° 4 ' 22" W
6	28° 30' N	80° 1 ' 1" W
7	28° 30' N	80° 0 ' 46" W
8	28° 46.017' N	80° 3 ' 29" W
9	28° 48.617' N	80° 3 ' 57" W
10	28° 53.3' N	80° 4 ' 49" W
11	29° 11.333' N	80° 8 ' 37" W
12	29° 17.567' N	80° 10 ' 7" W

### **FEP II Roadmap Update**

Staff provided an overview of outcomes and highlights of the FEP II Roadmap Update developed by staff through Panel member deliberations and input. The Roadmap identified components of policies that could be turned into actions to be accomplished in 2 years. The Committee provided the following comments and guidance:

- As a vast resource, determine how can the FEP Roadmap be better used or operationalized.
- While policy statements were used in the past year as the basis for Council comments in the region there is a need to clarify how other policies get translated into actionable items.
- Policy statements are useful in supporting Council coordination with partners and other items such as providing material for the CCC document pertaining to MSA reauthorization.
- FEP roadmap is a good document housing all policies and region-wide policy statements and serves a good resource for states.
- The feedback loop connecting the FEP Roadmap to actionable items is going to be the Blueprint.

### **Habitat and Ecosystem Program Blueprint**

Staff provided an overview of development of a Habitat and Ecosystem Blueprint and establishment of a Habitat and Ecosystem Blueprint Workgroup to discuss scope of and process to develop an overarching document.

The Committee provided the following guidance/comments:

- Composition of Habitat and Ecosystem Advisory Panel and possible modification.
- Broader goal is how to better integrate information that we have into the conversation for all of the Council's actions.
- Role and pathways for the SSC and APs to engage along this process while avoiding creating a mega-working group
- Vision to bring the Council's habitat program more into the conversations and be more focused on deliverables informing management decisions.
- Insight into how policies can be integrated across all the work the Council does.
- Highlight important Council policies e.g., affecting forage fish, climate change and prioritization of needs to document how other fisheries are affected
- Split habitat from ecosystem and climate activities. Committee members stated addressing all those overarching topics under the Blueprint would become unwieldy. Additionally, new Executive Orders pertaining to climate issues warrant addressing separately.

### **Habitat Protection and Ecosystem Based Management Advisory Panel**

Staff reviewed a draft list of agenda items noted below to be covered during the spring Habitat and Ecosystem AP webinar. Committee modified and endorsed the list shown below.

### **List of Agenda Items for Spring Habitat Protection and Ecosystem Based Management AP** (April 14-16, 2021)

- Briefing on Committee Action



- Status of Amendment Development
- NOAA Fisheries South Atlantic Climate Vulnerability Assessment
- Executive Order on Climate
- NOAA Fisheries South Atlantic Ecosystem Status Report
- FEP II Roadmap Activities
- Development of a SAFMC Habitat Blueprint
- Beach Dredge and Fill Policy Statement Revision
- ESA BiOp for beach, sand placement and dredging
- Habitat and Ecosystem Webpages/FEP II Dashboard
- Habitat and Ecosystem Web Services and Hub Development
- BOEM 2021 Activities
- Status Report on Kitty Hawk Wind and SC Call Areas
- Enhancing Collaboration with FSCs CCC Habitat WG
- SECAS and Regional Conservation Blueprint Update

The Committee discussed a recent Executive Order on Climate Change and 30-day comment period that was announced on March 1. Most Councils are interested in receiving a presentation from NMFS before CCC meets the 3rd week of May. The Council, has scheduled a meeting on March 29 to receive NMFS's presentation and provide comments. The EO was also added to the list of agenda items for the Habitat and Ecosystem AP meeting to obtain additional comment.

### **Timing and Task(s)**

#### **MOTION 2: ADOPT THE FOLLOWING TIMING AND TASK(S):**

1. Modify Coral Amendment 10 to address Committee recommendations: clarify that industry came forward before the previous amendment (Coral Amendment 8) was approved; describe and clarify SFAA designation; reword language for no action stating no SFAA exists in the OHAPC at this time and modify wording in the preferred alternative to clarify the allowable activity within the proposed SFAA.
2. Schedule Coral Amendment 10 public hearings during the spring 2021.
3. Continue development of the Habitat Blueprint with the provided guidance (see above).
4. Schedule and facilitate the Habitat and Ecosystem AP April meeting with agenda topics listed above.

**FINAL**  
**SUMMARY REPORT**  
**MACKEREL COBIA COMMITTEE**  
**SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**  
**Webinar**  
**March 2, 2021**

The Committee approved minutes from the December 2020 meeting and the agenda.

**Coastal Migratory Pelagics Amendment 34 - Updates to king mackerel management based on SEDAR 38 Update 2020**

At the June 2020 meeting the Council directed staff to begin work on an options paper that would include consideration of sector allocations and catch level adjustments based on SSC recommendations and the recent stock assessment update. Scoping for the amendment was held during the public comment period associated with this Council meeting. The Committee reviewed a draft options paper and considered potential topics to include in the amendment. Staff noted that because this amendment was considering revisions to sector allocations and the requirement to land fish with heads and fins intact it would need to be a full plan amendment. As such, these management actions will now be contained in Coastal Migratory Pelagics (CMP) Amendment 34 and will be a joint amendment with the Gulf of Mexico Fishery Management Council (Gulf Council). The Committee provided the following comments on the range of actions and alternatives:

- Consider a smaller range of buffers between the Atlantic king mackerel ABC and ACL (10% and 5%).
- Landings data from 1979-1983 is no longer supported and should not be used to set allocations.
- The Committee clarified that they would like to consider an allocation alternative that would hold the commercial sector poundage during the 2026/2027+ season equal to the commercial sector poundage in the 2020/2021 season.
- The CFR needs to be examined to determine if cut/damaged fish caught under the recreational bag limit can be possessed and landed if they comply with minimum size limits. NOAA GC will clarify at Full Council.

NOAA GC Clarification: language regarding cut up fish does not apply to recreational sector.

The following motions were approved:

**MOTION 1: APPROVE THE PURPOSE AND NEED STATEMENT**

The *purpose* of this amendment is to revise the annual catch limits for Atlantic migratory group king mackerel; to revise recreational and commercial allocations for Atlantic migratory group king mackerel; and to revise or establish management measures for Atlantic migratory group king and Spanish mackerel.

The *need* for this amendment is to ensure annual catch limits are based on the best scientific information available and to ensure overfishing does not occur in the Atlantic migratory group

king and Spanish mackerel fisheries, while increasing social and economic benefits through sustainable and profitable harvest of Atlantic migratory group king and Spanish mackerel.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 2:** APPROVE ACTION 1 AND ALTERNATIVES 1 THROUGH 4 FOR INCLUSION IN CMP AMENDMENT 34.

**Action 1. Revise the total annual catch limit for Atlantic migratory group king mackerel to reflect the updated acceptable biological catch level.**

**Alternative 1 (No Action).** The total annual catch limit for Atlantic migratory group king mackerel is set equal to the current acceptable biological catch level (12,700,000 pounds).

**Alternative 2.** The total annual catch limit for Atlantic migratory group king mackerel is equal to the updated acceptable biological catch level.

**Alternative 3.** The total annual catch limit for Atlantic migratory group king mackerel is equal to 95% of the updated acceptable biological catch level.

**Alternative 4.** The total annual catch limit for Atlantic migratory group king mackerel is equal to 90% of the updated acceptable biological catch level.

APPROVED BY COUNCIL

**MOTION 3:** APPROVE ACTION 3 AND ALTERNATIVES 1 THROUGH 4 FOR INCLUSION IN CMP AMENDMENT 34.

**Action 3. Revise recreational annual catch target for Atlantic migratory group king mackerel.**

**Alternative 1 (No Action).** Retain the current recreational annual catch target for Atlantic migratory group king mackerel [ $ACL[(1-PSE) \text{ or } 0.5]$ , whichever is greater] based on the previous acceptable biological catch (ACT = 7,400,000 pounds)

**Alternative 2.** Revise the recreational annual catch target to reflect updated acceptable biological catch level. The recreational annual catch target equals sector  $ACL[(1-PSE) \text{ or } 0.5]$ , whichever is greater].

**Alternative 3.** Revise the recreational annual catch target to reflect updated acceptable biological catch level. The recreational annual catch target equals 90% sector ACL.

**Alternative 4.** Revise the recreational annual catch target to reflect updated acceptable biological catch level. The recreational annual catch target equals 85% sector ACL.

APPROVED BY COUNCIL

**MOTION 4:** APPROVE ACTION 4 AND ALTERNATIVES 1 THROUGH 2 FOR INCLUSION IN CMP AMENDMENT 34.

**Action 4. Increase the recreational bag and possession limit for Atlantic migratory group king mackerel in the exclusive economic zone off Florida.**

**Alternative 1 (No Action).** The daily bag limit for Atlantic migratory group king mackerel in the exclusive economic zone off Florida is two fish per person. Two fish per person is the daily bag limit specified by Florida for its waters.

**Alternative 2.** Increase the daily bag limit for Atlantic migratory group king mackerel to three fish per person. off Florida.

APPROVED BY COUNCIL

**MOTION 5:** APPROVE ACTION 5 AND ALTERNATIVES 1 THROUGH 4 FOR INCLUSION IN CMP AMENDMENT 34.

**Action 5. Reduce the minimum size limit for recreational and commercial harvest of Atlantic migratory group king mackerel.**

**Alternative 1 (No Action).** The minimum size limit for commercial and recreational harvest of Atlantic migratory group king mackerel is 24-inches fork length.

**Alternative 2.** Reduce the minimum size limit for commercial and recreational harvest of Atlantic king migratory group mackerel to 22-inches fork length.

**Alternative 3.** Reduce the minimum size limit for commercial and recreational harvest of Atlantic migratory group king mackerel to 20-inches fork length.

**Alternative 4.** Remove the minimum size limit for commercial and recreational harvest of Atlantic migratory group king mackerel.

APPROVED BY COUNCIL

**MOTION 6:** APPROVE ACTION 6 AND ALTERNATIVES 1 THROUGH 2 FOR INCLUSION IN CMP AMENDMENT 34.

**Action 6. Modify the recreational requirement for Coastal Migratory Pelagic species in the Atlantic region to be landed with heads and fins in intact.**

**Alternative 1 (No Action).** Cut-off (damaged) Atlantic migratory group king mackerel or Atlantic migratory group Spanish mackerel caught under the recreational bag limit may not be possessed.

**Alternative 2.** Cut-off (damaged) fish caught under the recreational bag limit, that comply with the minimum size limits, may be possessed, and offloaded ashore.

**Sub-alternative 2a.** Atlantic migratory group king mackerel

**Sub-alternative 2b.** Atlantic migratory group Spanish mackerel

APPROVED BY COUNCIL

The following direction to staff was provided:

DIRECTION TO STAFF TO MODIFY ALTERNATIVE 3 (ACTION 2- ALLOCATIONS) TO CONSIDER MULTIPLE TIME PERIODS (LONG TERM, SHORT TERM, BOTH) CONSIDERING WHEN TAC/ACL MAY HAVE BEEN RESTRICTIVE IN THE PAST.

**Coastal Migratory Pelagics Amendment 32 - Updates to Gulf cobia management based on SEDAR 28 Update 2020 and the CMP Framework Procedure**

An update to SEDAR 28 assessment for Gulf cobia was completed in July 2020. The results that Gulf cobia is undergoing overfishing, which puts the stock at risk of becoming overfished without management action. The Gulf SSC reviewed the results of the updated SEDAR 28 and provided recommendations for new ABCs for Gulf cobia. Council staff presented draft management measures to end overfishing of Gulf cobia and update the CMP framework procedures to clarify language about the responsibilities of the South Atlantic and Gulf Councils. Discussion had during the Gulf Council’s January 2021 meeting were also covered.

- Consider separating the action dealing with possession and vessel limits (Action 4) into two separate actions for clarity.
- Create a table and provide examples of actions that can be taken by each Council under the proposed revisions to the framework procedure (Action 6).

The following motions were approved:

**MOTION 7: SELECT ALTERNATIVE 2, UNDER ACTION 1, AS THE PREFERRED ALTERNATIVE**

**Action 1 – Modify the Gulf of Mexico (Gulf) Migratory Group Cobia (Gulf Cobia) Overfishing Limit (OFL), Acceptable Biological Catch (ABC), and Annual Catch Limit (ACL).**

**Gulf Council Preferred Alternative 2:** Modify the Gulf cobia stock OFL, ABC, and ACL based on recommendation of the Gulf Scientific and Statistical Committee (SSC) as presented in July 2020, for an increasing yield stream for 2021 to 2023, and then maintain the 2023 levels for subsequent fishing years or until changed by a management action. The stock ACL is set equal to the stock ABC.

	Gulf Cobia Stock		
Year	OFL	ABC	ACL
2021	3,030,000	2,340,000	2,340,000
2022	3,210,000	2,600,000	2,600,000
2023+	3,310,000	2,760,000	2,760,000

Note: Catch limits in pounds whole weight. The recreational portion of the OFL, ABC, and ACL are based on MRIP-FES data.

APPROVED BY COMMITTEE  
APPROVED BY COUNCIL

**MOTION 8:** CHOOSE ALTERNATIVE 3, UNDER ACTION 2, AS THE SOUTH ATLANTIC COUNCIL'S PREFERRED ALTERNATIVE

**Action 2 – Modify the Gulf Cobia Apportionment Between the Gulf Zone and the Florida East Coast (FLEC) Zone and Update the Zones' ACLs Based on the ACL Selected in Action 1.**

**Alternative 3:** Modify the Gulf cobia stock ACL apportionment to be 63% for the Gulf Zone and 37% for the FLEC Zone, based on the MRIP-FES average landings for Gulf cobia for the years 1998 – 2012, and use this apportionment to update the Zone ACLs based on the Gulf Cobia ACL(s) in Action 1.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 9:** UNDER ACTION 4, CHOOSE ALTERNATIVE 2B AND ALTERNATIVE 3B-SUB-OPTION I AS PREFERRED.

**Action 4 – Modify the Gulf Cobia Possession Limit and/or Establish a Trip Limit**

**Alternative 2:** Reduce the recreational and commercial daily possession limit to 1 fish per person, regardless of the number or duration of trips.

**Option 2b:** in the FLEC Zone

**Alternative 3:** Create a recreational and commercial daily trip limit. Fishermen may not exceed the per person daily possession limit.

**Option 3b:** in the FLEC Zone

**Sub-option i:** The trip limit for cobia is two fish.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 10:** APPROVE THE GULF COUNCIL PREFERRED FOR THE GULF ZONE UNDER ACTION 4

**Action 4 – Modify the Gulf Cobia Possession Limit and/or Establish a Trip Limit**

**Gulf Council Preferred Alternative 2:** Reduce the recreational and commercial daily possession limit to 1 fish per person, regardless of the number or duration of trips.

**Gulf Council Preferred Option 2a:** in the Gulf Zone

**Gulf Council Preferred Alternative 3:** Create a recreational and commercial daily trip limit. Fishermen may not exceed the per person daily possession limit.

**Gulf Council Preferred Option 3a:** in the Gulf Zone

**Gulf Council Preferred Sub-option i:** The trip limit for cobia is two fish.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 11:** SELECT ALTERNATIVE 2, UNDER ACTION 5, AS THE SOUTH ATLANTIC COUNCIL'S PREFERRED

**Action 5 – Modify the Gulf Cobia Minimum Size Limit**

**Alternative 2:** Retain the current recreational and commercial minimum size limit of 36 inches FL in the Gulf Zone and increase the recreational and commercial minimum size limit to 36 inches FL in the FLEC Zone.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

The following direction to staff was provided:

DIRECTION TO STAFF TO DEVELOP AN ALTERNATIVE TO ADDRESS FLEC ZONE SECTOR ALLOCATIONS (UPDATES CURRENT % BASED ON FES, OTHER TIME PERIODS, IPT TO DISCUSS)

### **Mackerel Cobia Advisory Panel Structure White Paper**

During its September 2020 meeting the Council reviewed appointments to the Mackerel Cobia AP and decided to further discuss the structure of the advisory panel. In December, the Council directed staff to put together a white paper detailing how the Advisory Panel structure can be modified to better work with different regions and management organizations, such as other regional councils and the Atlantic States Marine Fisheries Commission. Staff presented a white paper with options to work with the Mid-Atlantic, Gulf, and New England Councils and the ASMFC.

- Do not support adding a member from the New England region because we do not manage CMP species in that region.
- Concern about adding a Gulf representative because the fisheries are so diverse that it would be hard to find one person to represent the entire CMP fishery.
  - Ensure that Gulf Council and South Atlantic Council APs have had a chance to discuss an issue in advance of either chair going to the other Council's AP meeting.
  - Joint AP meetings could be considered on a case-by-case basis.
- There is currently no need to add an additional representative for the Mid-Atlantic region, working with ASMFC should help.
- Support for **Option 3**: Joint-MC AP and ASMFC Spanish Mackerel AP meetings could be held to discuss Spanish mackerel issues as needed. Members of the MC AP that do not participate in the Spanish mackerel fishery would not be required to attend.
  - The Gulf Council could send representatives to these meetings as well.
  - Working with ASMFC would help improve representation throughout the Mid-Atlantic region and possibly the New England states (ASMFC is still working on populating APs under their new board structure).
  - Should be flexible enough to adjust to changing fisheries.

### **Mackerel Cobia Advisory Panel Agenda Items**

The next Mackerel Cobia Advisory Panel will be held on April 6, 2021 via webinar. To optimize the level of input the Council desires from its advisory panels, the Committee was asked to provide guidance on items to include on the next Mackerel Cobia Advisory Panel agenda. The Committee has asked the AP to discuss:

- CMP Amendment 34 (Atlantic king mackerel)
- CMP Amendment 32 (Gulf cobia)
- Updated FPRs
- Impacts of COVID on mackerel fisheries
- Feedback on discussion at Council meeting regarding AP structure

## **Other Business**

The commercial trip limit system for Atlantic Spanish mackerel in the Southern Zone (NC/SC line south to the Miami-Dade/Monroe line in Florida) uses an adjusted quota system with several step downs (3,500-pounds at the beginning of the season, dropping to 1,500-pounds when 75% of the adjusted quota has been met, 500-pounds when 100% of the adjusted quota has been met, closure once the full quota has been met). Rick DeVictor, SERO, explained to the Committee that due to late reporting and associated issues with projections from the Science Center there was a need to close the fishery to commercial harvest immediately, skipping usual the trip limit step downs. The Committee noted the intent to take a comprehensive look at the Spanish mackerel fishery once results from the upcoming stock assessment for Spanish mackerel are available and that this issue could be addressed at that time.

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Note: Council staff drafts the timing and task motion based on Committee action. If points require clarification, they will be added to the draft motion. The Committee should review this wording carefully to be sure it accurately reflects their intent prior to making the motion.

## **Timing and Task(s)**

### **MOTION 12: ADOPT THE FOLLOWING TIMING AND TASKS:**

1. Continue work on CMP Amendment 34 and prepare a draft for discussion and selection of preferred alternatives at the June 2021 meeting.
2. Work with Gulf Council staff to present information on CMP Amendment 32 to the Gulf Council and Gulf Mackerel Cobia Advisory Panel.
3. Work with Gulf Council staff to continue development CMP Amendment 32 for additional review at the June 2021 meeting.
4. White Paper Action – work with ASMFC staff on ad hoc AP structure.
5. Convene a meeting of the Mackerel Cobia Advisory Panel to discuss topics listed above.

**APPROVED BY COUNCIL**



**FINAL**  
**SUMMARY REPORT**  
**SEDAR COMMITTEE**  
**SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**  
**March 4, 2021**

The Committee approved minutes from the September 2020 meeting and agenda.

**SEDAR 79 (MUTTON SNAPPER) APPOINTMENTS**

The Committee met during closed session to make appoints to SEDAR 79 (Mutton Snapper) Benchmark Assessment (see Table 1 below).

**APPROVAL OF TERMS OF REFERENCE FOR SEDAR 79**

The Committee was provided and approved the terms of reference for SEDAR 79.

**SEDAR UPDATES**

The Committee was provided an update on ongoing assessments and the schedules for SEDAR 79 (Mutton Snapper) and 76 (South Atlantic Black Sea Bass). Both assessments are scheduled to be delivered to the Council in June 2023.

**Other Business:**

No other business was brought before the committee.

The Committee approved the following motions:

**MOTION 1:** APPROVE THE SEDAR 79 PARTICIPANT LIST TABLE AS MODIFIED  
APPROVED BY COMMITTEE  
APPROVED BY COUNCIL

**MOTION 2:** APPROVE THE SEDAR 79 TERMS OF REFERENCE  
APPROVED BY COMMITTEE  
APPROVED BY COUNCIL

**Timing and Tasks:**

No timing and tasks motions were made during the meeting.

**Table 1. SEDAR 79 MUTTON SNAPPER PANEL PARTICIPANTS AND OBSERVERS**  
**P = Panelist, O=Observer, D = Data Provider**

<b>Name</b>	<b>Affiliation</b>	<b>DW</b>	<b>AW</b>	<b>RW</b>
<b>Technical Appointees (non-SSC)</b>				
Mike Rinaldi	ACCSP	<b>P</b>		
Alejandro Acosta	FWC	<b>P</b>	<b>P</b>	
Chris Bradshaw	FWC	<b>P</b>	<b>P</b>	
Jessica Carrol	FWC	<b>P</b>	<b>P</b>	
Jeffery Renchen	FWC	<b>P</b>	<b>P</b>	
Alan Bianchi	NCDMF	<b>D</b>		
Amy Dukes	SCDNR	<b>D</b>		
Eric Hiltz	SCDNR	<b>D</b>		
<b>SSC</b>				
Scott Crosson	SSC	<b>P</b>		
Amy Schueller	SSC			<b>P (C)</b>
Eric Johnson	SSC	<b>P</b>	<b>P</b>	
Alexei Sharov	SSC			<b>P</b>
George Sedberry	SSC	<b>P</b>	<b>P</b>	
Jie Cao	SSC		<b>P</b>	
<b>AP</b>				
David Moss	S/G AP	<b>P</b>	<b>O</b>	<b>O</b>
Richie Gomez	S/G AP	<b>P</b>	(O)	
<b>Other Constituent Candidates</b>				
Greg Mercurio		<b>P</b>	<b>O</b>	<b>O</b>
<b>Observers below are covered by SAFMC</b>				
<b>Council &amp; Staff Observers</b>				
Jessica McCawley, SAFMC	Council	<b>O</b>	<b>O</b>	<b>O</b>
Chester Brewer, SAFMC	Council	<b>O</b>	<b>O</b>	<b>O</b>
Mike Errigo, SAFMC	Staff	<b>O</b>	<b>O</b>	<b>O</b>
Mike Schmidtke, SAFMC	Staff	<b>O</b>	<b>O</b>	<b>O</b>

**FINAL**  
**SUMMARY REPORT**  
**SNAPPER GROUPEL COMMITTEE**  
**SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**  
**March 2-3, 2021**

The Committee approved the minutes from the December 2020 meeting and the agenda for the March 2021 meeting noting two items to be discussed under Other Business.

**Status of Amendments under Formal Review**

SERO staff update the Committee on the status of Regulatory Amendment 34 (SMZs in NC and SC). A final rule for this amendment is awaiting publication.

**Snowy Grouper Stock Assessment**

The update to SEDAR 36 conducted in 2020, using data through 2018, showed the stock remains overfished and is experiencing overfishing. A lower natural mortality at age was likely the primary driver of any differences between SEDAR 36 and the 2020 update. SEFSC staff delivered a presentation on the assessment's results to the Committee and the SSC Chair delivered the SSC's recommendations. The SSC accepted the base run of the assessment model as Best Available Information Available and suitable for management and presented OFL and ABC recommendations ([SSC Report](#)). In addition, Council staff provided an overview of available Snowy Grouper landings and other pertinent data using an [online application](#). The Committee made the following motion:

**MOTION 1: INSTRUCT STAFF TO INITIATE A FULL PLAN AMENDMENT FOR  
SNOWY GROUPEL  
APPROVED BY COMMITTEE  
APPROVED BY COUNCIL**

Note: The IPT will develop a suite of possible actions for the Council's consideration at a subsequent meeting in 2021 and Council staff will obtain input from the Snapper Grouper AP regarding potential modifications to management measures.

**Wreckfish ITQ Modernization (Amendment 48)**

Council staff reviewed modifications to actions and alternatives and IPT and relevant LE AP recommendations. Scoping for this amendment was held during the Public Comment session on March 3. No scoping comments were received.

Staff explained there will likely be additional actions needed as a significant overhaul of the regulations will be required to move from a paper-based reporting system to an electronic reporting system. Hence, the timeline of development will need adjustment. Final approval of this amendment is now tentatively expected in June 2022. The Committee provide the following guidance:

- Remove *de minimis* allocation alternative from Action 1.

- Explore allocations that would match expected recreational landings, it might be possible to allocate between 1-2% to the recreational sector.
  - Consider number of fish associated with allocated poundage.
- Separate actions to consider a fishing year change and modification of the spawning season closure and obtain feedback from shareholders on the spawning season closure.
- It was reiterated that a Snapper Grouper Unlimited permit (SG1) should be the one required to obtain a wreckfish permit.
- Move action to modify the fishing year to follow implementation of the electronic system since fishing year is tied to those modifications.
- Continue to develop actions and alternatives related to a VMS requirement. Include consideration of current requirements in the Gulf of Mexico IFQ fisheries.
- Hold a shareholders meeting after the June 2021 Council meeting.

### **Greater Amberjack (Amendment 49)**

Staff presented available data on Greater Amberjack landings and other relevant information on the online application (link above). Subsequently, staff provided an overview of the decision document with modifications since the December 2020 meeting and IPT recommendations. Staff indicated that revised projections had been recently received from the SEFSC and presented revised total annual catch limit (ACL) alternatives based on those projections. It was clarified that the poundages under other actions in the amendment currently do not reflect those revisions. The Committee also discussed revising the recreational Annual Catch Target (ACT) for this species (Action 3) and supported the IPT’s to consider more general removal of recreational ACTs from the Snapper Grouper FMP, as these levels are not currently being used in management. The Committee made the following motions and provided the guidance below:

- Include language under Action 2 that notes an alternative that maintained the current commercial ACL poundage and only varied the recreational ACL according to any increase in the total ACL was previously considered and removed, due to the long-term allocations (2026-2027+) being very similar (within 1%) to allocation percentages from Alternative 2, which applies the current allocation formula to landings that include recreational catch estimates calibrated to the Marine Recreational Information Program Fishing Effort Survey (FES).
- For Action 3, remove Alternative 2 and revise the language to consider removing recreational ACTs for all species managed under the Snapper Grouper FMP.

### **MOTION 2: SELECT ALTERNATIVE 2 UNDER ACTION 1 AS PREFERRED**

#### **Action 1. Revise the Greater Amberjack annual catch limit and annual optimum yield**

**Alternative 2.** Revise the total annual catch limit and annual optimum yield for Greater Amberjack and set equal to the updated acceptable biological catch based on the results of the latest stock assessment (SEDAR 59 2020). The 2026-27 total annual catch limit would remain in place until modified.

Year	Total ACL (lbs ww)
2022-23	4,380,000
2023-2024	3,233,000
2024-2025	2,818,000
2025-2026	2,699,000
2026-2027+	2,669,000

**NOTE:** Proposed annual catch limits are based on recreational data calibrated to the Marine Recreational Information Program Fishing Effort Survey (FES). Future recreational catches under these limits would be monitored by the FES.

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

**MOTION 3: APPROVE AMENDMENT 49 FOR SCOPING**

APPROVED BY COMMITTEE

APPROVED BY COUNCIL

### **Red Porgy (Amendment 50)**

During the December meeting, the Council reviewed preliminary analyses and recommendations from the Snapper Grouper AP, requested specific analyses for review at this meeting, and approved the amendment for scoping. Scoping hearings were held on February 3 and 4, 2021 via webinar. Staff reviewed scoping comments, actions and alternatives with available analyses, and IPT recommendations. The Committee reviewed, modified, and approved actions and the range of alternatives under each action. The Committee provided the following guidance to the IPT:

- Request the IPT discuss possibly adding an alternative for catch level that reflects rebuilding at T<sub>min</sub> (ACL = 0). Add discussion to the amendment to explain the apparent disconnect between the projected catch levels under rebuilding projections and the recommended ABC (similar situation noted for snowy grouper) and the role of recruitment.
- Incorporate reference to “annual” OY to Action 2 and its alternatives. It was noted the language for a similar action in Amendment 49 (Greater Amberjack) includes this language and the Committee suggested being consistent.
- Remove Action 4 (revision of the recreational ACT) for Red Porgy (since an action was included in Amendment 49 to consider removing the recreational ACT for all species for which it has been specified under the Snapper Grouper FMP).
- Modify alternatives for a recreational vessel (Action 6) limit to include 6, 12, and 18 fish per vessel.
- Include an alternative that explores options for different vessel limits for headboats for analysis and discussion.
- Remove action to consider modification to commercial accountability measures.
- Direct the IPT to develop an alternative to modify recreational accountability measures to incorporate multi-year (3 years or longer) running averages.
- Direct IPT to explore use of geometric mean vs arithmetic mean for triggering recreational accountability measures

### **Updates**

#### **Red Snapper and Greater Amberjack Research Projects:**

In 2020, the NMFS Sea Grant Consortium received funding to administer programs to solicit research on Red Snapper (South Atlantic) and Greater Amberjack (South Atlantic and Gulf). The goal is to support research that would generate absolute estimates of abundance, with accompanying measures of uncertainty, for these stocks. The intent is for this information to be used as an “anchor point” for future stock assessments. These are sister projects to the much larger “Great Red Snapper Count” that was conducted in the Gulf of Mexico. Council staffs serve on the Steering Committees for each project and provided updates on progress to date for each project.

### **South Atlantic Preliminary Recreational Landings and 2021 Red Snapper Season**

SERO staff presented preliminary 2020 recreational landings for Red Snapper and other information that will be used to determine the duration of the 2021 recreational season. The Committee discussed several issues related to Red Snapper:

- The SSC is scheduled to review the assessment at their April meeting (scheduled for April 27-29 and May 3, 2021) and provide their recommendations to the Council in June.
- The Red Snapper assessment will be presented to the Council at the June meeting.
- Adjusting catch levels, if allowed, could be done via an abbreviated framework. However, adjusting sector allocations would have to be done through a plan amendment (which takes much longer to develop).
- An approach where the Red Snapper ACL is adjusted through a framework amendment and allocations are addressed through a separate amendment was offered (the Gulf Council is pursuing such an approach). *Clarification – Gulf Council’s action to change red snapper ACLs is related to an interim analysis and does not consider changes in allocation because the assessment does not incorporate MRIP FES data.*
- NOAA GC will be providing further advice to the Council regarding the approach above.

**MOTION 4:** REQUEST THE SSC PROVIDE SHORT-TERM MANAGEMENT (3 to 5 YEARS) ADVICE FOR RED SNAPPER ASSUMING RECENT HIGH RECRUITMENT APPROVED BY COUNCIL

**MOTION 5:** REQUEST THAT STAFF DETERMINE WHETHER AN ABBREVIATED FRAMEWORK CAN BE USED TO ADJUST CATCH LEVELS OF RED SNAPPER AND, IF SO, PREPARE SUCH AN AMENDMENT FOR COUNCIL REVIEW IN JUNE 2021 APPROVED BY COUNCIL

### **Agenda topics for Spring 2021 Snapper Grouper AP Meeting**

The Snapper Grouper AP is scheduled to convene via webinar on April 21-23, 2021. The Committee reviewed the list of topics below and approved it for staff to develop the AP’s agenda.

- Fishery overviews for Greater Amberjack, Yellowtail Snapper, and Snowy Grouper – recommendations on potential management measures
- Mutton Snapper FPR
- Amendment 49 (Greater Amberjack) – overview of proposed actions/alternatives and available analyses
- Amendment 50 (Red Porgy) – overview of proposed actions/alternatives and available analyses
- Amendment 48 (Wreckfish ITQ Modernization) – brief update and schedule shareholders meeting separately (include in T&T). Request input on recreational catch of wreckfish.
- SEDAR updates (Red Snapper, golden Tilefish, Gag, others)
- CitSci – the new ACCSP CitSci app (SciFish) combining Release and CatchULater. Demo of the app and short update on the general program
- Discussion on possible approaches to reduce recreational discards
- Feedback on Council’s research recommendations
- Request feedback on vermilion snapper trip limit

## **Other Business**

The Committee discussed the two items below:

### **Golden Tilefish –**

Projections indicate that the longline fishery for golden Tilefish may be reopened for an additional 11 days (this estimate subject to change). Fishermen indicated their preference for the fishery to be reopened in the days leading up to Easter (April 4), such as on or around March 20. NMFS staff stated that this can be done, and staff will prepare to announce the reopening as requested in late March.

### **Vermilion Snapper –**

An emergency rule went into place in 2020 to increase the commercial trip limit for Vermilion Snapper to 1,500 pounds to help mitigate impacts of the pandemic on the commercial industry in the region. The emergency rule will expire on March 31, 2021. A Committee member requested discussion on whether the emergency rule could be extended. NOAA GC explained the emergency measures could not be extended without proper public notice and comment and without the Council actively working on an amendment to address the emergency. Neither of these criteria have been met. Additionally, the Council modified the commercial trip limit for Vermilion Snapper recently (in 2020)

The Committee made the motion below but did not vote on it.

**MOTION: INCREASE THE VERMILION SNAPPER TRIP LIMIT TO 1,500 LBS**

**MOTION WITHDRAWN**

The Council discussed looking for added flexibility to make adjustments to management measures as the need arises. The Council requested input from the Snapper Grouper AP on this topic.

### **Timing and Tasks:**

**MOTION 6: DIRECT STAFF TO DO THE FOLLOWING:**

- Request a presentation from the SEFSC on pilot longline surveys in the region to be provided to the Committee at the June meeting, if time allows.
- Prepare Amendment 49 (Greater Amberjack) for scoping and conduct scoping hearings before the June meeting.
- Schedule and facilitate a meeting of the Snapper Grouper AP with approved agenda topics in April.
- Schedule wreckfish shareholders meeting after the June 2021 meeting.
- Request that the SSC explore ABC recommendations based on recent high recruitment for Red Snapper
- Prepare an abbreviated framework to adjust catch levels for Red Snapper for review and approval in June 2021, if appropriate
- Initiate amendment to address snowy grouper and direct staff to ensure appropriate timeline for development

**APPROVED BY COUNCIL**



**SOUTHERN  
FLOUNDER FISHERY  
MANAGEMENT PLAN**





ROY COOPER  
*Governor*

DIONNE DELLI-GATTI  
*Secretary*

JOHN G. BATHERSON  
*Acting Director*

May 5, 2021

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Michael S. Loeffler and Anne L. Markwith Southern Flounder Fishery Management Plan co-leads

**SUBJECT:** Landings Update for Amendment 2 to the N.C. Southern Flounder Fishery Management Plan

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### Issue

The 2020 southern flounder fishery removals have been updated following the release of the recreational harvest data in April 2021. Below is an overview of the total removals of southern flounder since implementation of Amendment 2 and anticipated seasonal adjustments to reduce the likelihood of continued overages during the 2021 seasons.

### Action Needed

No action needed at this time.

### Overview

Southern flounder is a commercially and recreationally important fishery. The southern flounder found in North Carolina waters are part of a larger regional stock ranging from North Carolina to Florida. A multi-state stock assessment was conducted and found the southern flounder stock to be overfished and found overfishing was occurring. During their Aug. 2019 business meeting, the MFC took action to quickly address the stock status with the adoption of Amendment 2 and instructed the DMF to immediately begin development of Amendment 3 to include more precise management measures. Amendment 2 implemented commercial and recreational flounder seasons projected to achieve the 62% harvest reductions in 2019, and 72% harvest reductions in 2020. The original timeline for Amendment 3 estimated final adoption in August 2021.

The harvest reductions recommended by DMF and adopted by the MFC in Amendment 2 were more conservative than the statutorily required minimums of a 31% reduction to end overfishing in 2 years and a 52% reduction to rebuild the spawning stock biomass (SSB) in 10 years. Following the release of the 2020 recreational landings data in April 2021, it is now clear that while the statutorily required minimum reductions have been met to end overfishing and begin rebuilding the southern flounder stock, the reductions approved by the MFC have not been met. Please note, the stock assessment indicated successful rebuilding would be dependent on action by all states managing the southern flounder regional stock. In addition, the success of the seasonal approach to management has met with disparate success in the fishery sectors. Please note, the pounds of fish available for harvest by each sector is described as total allowable removals which includes the observed landings and the estimated dead discard values.

The commercial sector seasons were projected to result in total allowable removals of 531,629 pounds in 2019 and 391,726 pounds in 2020. The actual total removals were 804,117 pounds in 2019 and 482,832 pounds in 2020. While total removals were reduced from the 2017 removals by 42.5% and 65.5% in 2019 and 2020, respectively, removal overages occurred in both years. The commercial removal overages were 272, 488 pounds in 2019 and 91,106 pounds in 2020 (Table 1). As expected, the overages were greatly reduced in 2020, the first full year of seasonal management implementation.

The recreational sector seasons were projected to result in total allowable removals of 207,382 pounds in 2019 and 152,808 pounds in 2020. The actual total removals were 461,588 pounds in 2019 and 456,636 pounds in 2020. While actual removals were reduced from the 2017 removals by 15.4% and 16.3% in 2019 and 2020, respectively, removal overages occurred in both years. The recreational removal overages were 254, 206 pounds in 2019 and 303,828 pounds in 2020 (Table 1). While the removal overages in 2019 were anticipated, the significant overages in 2020 were not (Table 1).

**Table 1.** Allowable and actual total removals in pounds for the N.C. southern flounder fishery by sector and overall for 2019 and 2020. Removal overages are calculated by subtracting the allowable removals from the actual pounds of southern flounder removed. Percent reductions are the reductions in removals compared to the removals in 2017. The pounds of escapement provided in parentheses describe the pounds of flounder that escaped being harvested by the fishery.

	Total Removals (pounds)		Removal Overage (pounds)	Percent Reduction from 2017 (Pounds of Escapement)
	Allowable	Actual		
<b>Commercial</b>				
2019	531,629	804,117	272,488	42.5 (595,195)
*2020	391,726	482,832	91,106	65.5 (916,480)
<b>Recreational</b>				
2019	207,382	461,588	254,206	15.4 (84,152)
*2020	152,808	456,636	303,828	16.3 (89,104)
<b>Overall</b>				
2019	739,011	1,265,705	526,694	34.9 (679,347)
*2020	544,534	939,468	394,934	51.7 (1,005,584)

\* 2020 data are preliminary at this time.

While the reductions achieved in 2019 and 2020 have met the minimum statutory requirements for the North Carolina portion of the southern flounder stock to end overfishing and begin rebuilding the stock, they have not met the reductions recommended by the division and approved by the MFC in August 2019. While the allowable removal overages were expected in 2019, the continuing overages in both sectors in 2020, and specifically the magnitude of the

overages observed in the recreational fishery in both years, indicate the current seasons are not achieving the 72% reductions. Based on the overages observed and because of the changes in the timeline for adoption of Amendment 3, further seasonal adjustment is necessary. In accordance with the seasonal flexibility provided to the DMF Director in the Aug. 2019 MFC motion approving the adoption of Amendment 2 to the Southern Flounder FMP the 2021 flounder seasons for both sectors are being evaluated and the division will implement adjusted seasons based on the 2019 and 2020 seasonal performance. The seasons will be adjusted to further reduce total removals in the southern flounder fishery to bring the actual removals more in line with the 72% reductions adopted under Amendment 2. Management will continue under Amendment 2 until Amendment 3 is implemented.



ROY COOPER  
*Governor*

DIONNE DELLI-GATTI  
*Secretary*

KATHY B. RAWLS  
*Director*

May 5, 2021

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Michael S. Loeffler and Anne L. Markwith Southern Flounder Fishery Management Plan co-leads

**SUBJECT:** Amendment 3 to the N.C. Southern Flounder Fishery Management Plan

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### Issue

Development of Amendment 3 to the N.C. Southern Flounder Fishery Management Plan (FMP) is continuing. Following the March MFC special meeting, the draft FMP is currently being revised to incorporate the MFC decision to amend the sector allocations to 70% commercial and 30% recreational in 2021 and 2022, 60% commercial and 40% recreational in 2023, and 50% commercial and 50% recreational in 2024. Updates are provided for the adjusted Amendment 3 timeline, impacts to the plan based on the amended allocation decision and a brief summary of additional management suggestions from the MFC.

### Action Needed

No action needed at this time.

### Overview

Southern flounder is a commercially and recreationally important fishery. The southern flounder found in North Carolina waters are part of a larger regional stock ranging from North Carolina to Florida. A multi-state stock assessment was conducted and found the southern flounder stock to be overfished and found overfishing was occurring. To implement management measures to address the stock status, the MFC moved quickly to adopt Amendment 2 to the Southern Flounder FMP. Amendment 2 implemented commercial and recreational flounder seasons that were projected to achieve the necessary harvest reductions. In addition, adoption of Amendment 2 authorized the continued development of Amendment 3 and more robust, long-term management strategies. As a reminder, management of the southern flounder stock will remain under Amendment 2 until the approval of Amendment 3.

Following the action by the commission in February establishing a 70% commercial and 30% recreational sector allocation, draft Amendment 3 was completed and ready for review. Based on that timeline Amendment 3 was scheduled for final approval by the MFC during the August 2021 business meeting. However, with the vote by the MFC at the March special meeting amending the allocation decision, staff are now revising draft Amendment 3 and anticipate presenting the completed draft during the November 2021 business meeting for review by the commission. At that time the commission may vote to send draft Amendment 3 out for public comment and AC review. This timeline adjustment is necessary for staff to evaluate how the different allocations will affect the management measures contained in the Sustainable Harvest, Increased Recreational Access, and Adaptive Management issue papers.

The changes to the sector allocations may alter the recommendations provided by the division and may alter options in their entirety. The new draft will include management options for the MFC to consider

based on the new sector allocations. Additionally, a southern flounder advisory committee workshop may need to be scheduled for input prior to the MFC's November 2021 business meeting.

At the March 2021 special meeting the MFC also provided a list of management suggestions for the division to consider for inclusion in the plan. Below the division has provided information gathered so far on some of these management suggestions. Additional updates will be provided during the August 2021 business meeting following further consideration of the issues.

- **Additional options for inlet corridors**

The current draft Inlet Corridors Issue paper is being updated with additional options for consideration by the MFC.

- **Recreational reporting app to track landings in real time**

The division is collaborating on a citizen science app that is trying to capture real-time data on the recreational fishery. Development of this citizen science app is in the very early stages of development and it will be several years before implementation and data collection begins.

- **Phase out large mesh gill nets**

The MFC has the authority to phase out the use of large mesh gill nets to harvest southern flounder through the Southern Flounder FMP. Exceptions may be allowed for commercial large mesh gill net fisheries that target American shad, hickory shad and catfish species if these fisheries are only allowed to operate during times of the year and locations where bycatch of southern flounder is unlikely. To phase out large mesh gill nets in all NC fisheries, action would be needed outside of the Southern Flounder FMP process.

- **Addressing unreported SCFL landings**

The current NCTTP forms have been updated to collect this information but no law currently exists to require this be completed.

- **Observer program for the pound net fishery**

Development of an observer program for the southern flounder pound net fishery is a research recommendation by the division and is currently included in draft Amendment 3.

- **Addressing shrimp trawl bycatch of southern flounder**

Shrimp trawl bycatch estimates are at the south Atlantic level and not as individual state estimates. The division does not have a monitoring program in place to obtain annual estimates of shrimp trawl bycatch for southern flounder.

The current projections assume the prior levels of shrimp trawl bycatch will continue throughout the rebuilding timeline. The current stock assessment and associate projections do not provide necessary reductions in F for each individual sector. Shrimp trawl bycatch management is addressed directly in the Shrimp Fishery Management Plan, which the MFC will review in May.

- **Considering slot limits that would decrease the minimum size to 12 or 13 inches**

Implementing a slot limit to include any length below the current minimum size of 15 inches while managing the stock to a significantly reduced harvest level for rebuilding purposes will increase uncertainty around the management measures implemented. In addition, access to the fishery may be reduced because of the subsequent changes in the in the weight of harvested and dead discard removals. A portion of the larger fish currently harvested will shift to dead discards. Because these fish weigh more, each dead discard will contribute more weight to the overall removals than the current dead discards. In addition, the increased harvest of smaller fish may be substantial, potentially increasing the likelihood of harvest overages. This change would require an issue paper to fully evaluate the impacts on management.

A vertical decorative border on the left side of the page, consisting of a repeating pattern of stylized fish silhouettes in a dark blue color. The fish are arranged in a column, facing right, with their tails pointing downwards.

# ASMFC

**ASMFC SPRING SUMMARY WILL BE  
ADDED AS SUPPLEMENTAL MATERIAL  
PRIOR TO THE MAY MEETING**



# MAFMC





## April 2021 Council Meeting Summary

The following summary highlights actions taken and issues considered at the Mid-Atlantic Fishery Management Council's meeting April 6-8, 2021. This meeting was conducted by webinar due to the ongoing COVID-19 pandemic. Presentations, briefing materials, and motions are available at <http://www.mafmc.org/briefing/april-2021>.

During this meeting, the Council:

- Postponed final action on the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment until the joint Council/Board meeting in December 2021 (joint with the ASMFC Summer Flounder, Scup, and Black Sea Bass Management Board)
- Adopted status quo specifications for the Mid-Atlantic blueline tilefish fishery for 2022-2024
- Reviewed a preliminary range of alternatives for the Tilefish Multi-Year Specifications Framework
- Provided comments on E.O 14008 on Tackling the Climate Crisis at Home and Abroad
- Received an update regarding several ongoing activities in support of advancing the Council's EAFM guidance document
- Reviewed the 2021 Mid-Atlantic State of the Ecosystem Report and EAFM Risk Assessment
- Received an update on the East Coast Climate Change Scenario Planning Initiative
- Received a presentation on Climate Change Science Efforts Underway at the Northeast Fisheries Science Center

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

The Council met jointly with the Atlantic States Marine Fisheries Commission's (Commission) Summer Flounder, Scup, and Black Sea Bass Board (Board) to consider final action on the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment. This action considers possible changes to the commercial and recreational allocations of summer flounder, scup, and black sea bass. The amendment also considers options that would allow a portion of the allowable landings to be transferred between the commercial and recreational sectors each year, in either direction, based on the needs of each sector.

During the meeting, the Council and Board reviewed a summary of the 334 public comments submitted during five virtual public hearings and a written comment period earlier this year. In general, comments from the commercial sector favored maintaining status quo allocations, while comments from the recreational sector tended to support the alternatives that would increase allocations to the recreational sector. A more detailed summary of the public comments is available [here](#).

After several hours of discussion, the Council and Board voted to postpone final action until December. This is intended to allow for further development of the Recreational Reform Initiative—an approach that has been recommended by stakeholders from both sectors, as well as representatives from the NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO). The [Recreational Reform Initiative](#) focuses on management changes to more appropriately account for uncertainty and variability in the Marine Recreational Information Program data and provide stability in the recreational bag, size, and season limits. Proponents of postponing final action have argued that a better sense of potential management changes through the Recreational Reform Initiative may inform the allocation decisions that the Council and Board are considering through this action.

This decision is not expected to affect the timing of any allocation changes, as GARFO has advised that implementation of the amendment would be very unlikely to occur until January 1, 2023, regardless of whether

approval occurred at this meeting or in December. In the months ahead, staff may incorporate a small number of new alternatives proposed by Council and Board members that fall within the range of alternatives already analyzed within the amendment. The Council and Board are expected to discuss the need for any additional alternatives at their joint meeting in August. Additional information and updates are available on the amendment [action page](#).

### Blueline Tilefish 2022-2024 Specifications

After reviewing recommendations from its Scientific and Statistical Committee, Tilefish Monitoring Committee, and Tilefish Advisory Panel, the Council adopted status quo specifications for the Mid-Atlantic blueline tilefish fishery for the 2022-2024 fishing years. These specifications are summarized in the table below.

Summary of Blueline Tilefish 2022-2024 Specifications	
<b>Acceptable Biological Catch</b>	100,520 pounds
<b>Recreational Total Allowable Landings</b>	71,912 pounds
<b>Recreational Trip Limits</b>	Private Boat: 3 fish USCG uninspected for-hire vessel: 5 fish USCG inspected for-hire vessel: 7 fish
<b>Commercial Total Allowable Landings</b>	26,869 pounds
<b>Commercial Trip Limits</b>	500 pounds (until 70% of quota is met, then reduced to 300 pounds)

The Council discussed several significant sources of uncertainty for this data poor stock. In particular, the SSC has voiced concerns about the data limited assessment approach for blueline tilefish as well as the methods used to estimate private/rental recreational catch. It was also noted that there is uncertainty about whether the spatial expansion of the fishery represents increased effort by harvesters or a shift northward in the range of the population as result of climate change.

Finally, the Council also discussed the status of private permitting and reporting for blueline and golden tilefish. In August 2020, NOAA Fisheries implemented a [final rule](#) requiring recreational vessels to obtain a private recreational tilefish permit and submit vessel trip reports for all trips where tilefish were targeted or retained. Because the recreational season runs from May 1 - October 31, the Council was only able to review 3 months of data. The Council anticipates a presentation from the regional office that will include a status update of private permitting and reporting at the October 2021 meeting. Learn more about tilefish permitting and reporting requirements [here](#).

### Tilefish Multi-Year Specifications Framework

The first of two meetings was held to consider the Tilefish Multi-Year Specifications Framework to the Tilefish Fishery Management Plan. This framework was initiated to address minor process-related modifications to the golden tilefish management system and set specifications for 2023-2024. The Council reviewed a preliminary range of alternatives and selected preferred alternatives for the process related issues. The golden tilefish management track assessment update, which is scheduled to be completed in June, will be used to develop specifications for 2023-2024. Staff will continue development of the framework for further consideration at the August 2021 Council meeting.

### Listening Session on President Biden's Executive Order on Tackling the Climate Crisis at Home and Abroad

Mr. Paul Doremus, Acting Administrator of the NOAA Fisheries, hosted a listening session on Section 216(c) of E.O 14008 on Tackling the Climate Crisis at Home and Abroad. This section of the EO requires the Secretary of

Commerce to collect input from the Councils on how to make fisheries and protected resources more resilient to climate change. The Council and members of the public offered comments and recommendations related to science and monitoring needs, governance concerns, fish habitat, aquaculture, offshore wind, and other topics. Council staff will summarize these comments for submission to NOAA Fisheries. A recording of the discussion is available [here](#).

### Ecosystem Approach to Fisheries Management (EAFM) Updates

The Council received an update regarding several ongoing activities in support of advancing the Council's EAFM guidance document. First, staff reviewed progress made on the management strategy evaluation (MSE) that will evaluate the biological and economic performance and trade-offs of management alternatives to minimize discards in the recreational summer flounder fishery. Since the Council's last update on this project in October 2020, staff conducted considerable outreach to solicit input from a broad sector of stakeholders regarding the future management of summer flounder and ideas on how to reduce recreational discards. Initial results from a scoping survey were presented to the Council and will be used in future focused stakeholder workshops. This input will help the Council identify management objectives and strategies to be evaluated in the MSE. Over the next 8-10 months the project will focus on additional stakeholder workshops, biological and economic model development, and additional feedback and direction from management. It is anticipated that final results will be available for Council consideration in the spring of 2022.

Staff also provided an update on a collaborative research project between the Council and a research team from Rutgers University. The project will test new methods and models to predict short-term (over the next 1-10 years) climate-induced movements of diverse species that better align with management timescales. Summer flounder, spiny dogfish, *Illex* squid, and gray triggerfish have been selected as the focal species due to their diverse life histories, data availability, and interest in past and future distribution shifts. This project will test the utility of dynamic range models and their ability to forecast changes in species distributions. Observation models are currently being fitted to survey data and life history information and should be complete for all four focal species by the end of summer 2021. An update on model development and preliminary results will be presented to the Council's Ecosystem and Ocean Planning Committee and Advisory Panel, tentatively planned for early this fall. It is anticipated the project will be completed in late 2022.

### 2021 Mid-Atlantic State of the Ecosystem Report and EAFM Risk Assessment

Dr. Sarah Gaichas (NEFSC) presented the key results and findings of the 2021 Mid-Atlantic State of the Ecosystem report developed by scientists at the NEFSC, NOAA researchers, academia, and non-profit organizations. The report is provided to the Council each April and gives an overview of ecosystem-level indicators that evaluate the status and trends of ecological, environmental, economic, and social components of the Mid-Atlantic ecosystem. Addressing previous Council feedback and helping improve the utility to management, the 2021 report includes information detailing the linkages between ecosystem indicators and environmental variables and the potential risks they pose to meeting management goals and objectives. The 2021 report highlights how climate change, particularly ocean warming, is affecting the Mid-Atlantic ecosystem and its fisheries. In addition, the report provides new information on the potential management, biological, economic, and science risks associated with offshore wind development.

Dr. Gaichas also provided an update of the 2021 EAFM risk assessment, part of the Council's EAFM structured decision framework to incorporate ecosystem considerations into the management process. Risk assessment helps identify and prioritize ecosystem interactions and risks to help the Council decide where to focus limited resources to address priority ecosystem considerations. The report is an adaptive document and updated annually with new science, analysis, and information, including many of the indicators included in the 2021 State of the Ecosystem report. The updated risk assessment allows the Council to re-evaluate risk on an annual basis, track changes in risk across managed species and sectors, and identify possible management and science priorities.

## East Coast Climate Change Scenario Planning Initiative

The Council received an update on the East Coast Climate Change Scenario Planning Initiative, which was initiated by the Northeast Region Coordinating Council (NRCC) in 2020. The NRCC, which consists of leadership from the Mid-Atlantic Fishery Management Council, New England Fishery Management Council, Atlantic States Marine Fisheries Commission, Greater Atlantic Regional Fisheries Office, and Northeast Fisheries Science Center, will serve as the primary decision-making body for this initiative, with the addition of South Atlantic Council representatives. The NRCC has appointed a Core Team of staff from each participating organization to serve as the technical team for this initiative, in conjunction with a contracted facilitator to be secured in the near future. The Council reviewed a tentative plan and timeline for this process, which will be reviewed by the NRCC at their May meeting. Pending NRCC approval, a public scoping process is expected to occur this summer. Additional information can be found at the [webpage for this initiative](#).

## Climate Change Science Efforts Underway at the Northeast Fisheries Science Center

The Council received a presentation from Dr. Vincent Saba (NEFSC Ecosystem Dynamics and Assessment Branch) on climate science underway at the Northeast Fisheries Science Center. Dr. Saba provided an overview of observed change in the U.S. Northeast Shelf, discussed progress toward implementing the National Climate Science Strategy and Northeast Regional Action Plan (NERAP), and identified a number of steps that can be taken to help achieve climate ready fisheries. The presentation and discussion can be viewed [here](#).

## Other Business

### ***Northeast Trawl Advisory Panel***

Staff provided an update on the ongoing revisions to the Northeast Trawl Advisory Panel (NTAP) charter, which the Council will review at a future meeting. The Council also reviewed the proposed use of available research funds in 2021 for a project titled “Quantifying the impacts of a restrictor rope on the composition, rate, and size-distribution of catch derived from a bottom trawl survey”. Since this document was only available as supplemental material in the briefing book, the Council decided to offer comments to staff the following week. Ultimately, no comments were received, and the document was approved by the MAFMC. The NEFMC approved the same document on April 14<sup>th</sup> leading to joint Council approval.

### ***Research Steering Committee Report – RSA Workshops***

The Council reviewed a summary of the Research Steering Committee's meeting on March 18 to discuss redevelopment of the RSA program and potential workshop options. The RSC recommended holding three workshop webinars during the summer and early fall focusing on research, funding, and enforcement, followed by an in-person 1-day workshop in the fall to report all findings and recommendations to the participants. The results of the entire workshop will be presented to the Council in December with a recommendation on whether/how to re-develop the RSA program.

## Next Meeting

The next Council meeting will be conducted by conducted by webinar **June 8-10, 2021**.

A complete list of upcoming meetings can be found at <https://www.mafmc.org/council-events>.

## Mid-Atlantic Fishery Management Council

April 6-8, 2021  
Webinar Meeting

### MOTIONS

#### Tuesday, April 6, 2021

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

In order to prioritize work on the Recreational Reform Initiative, I move to postpone final action on this amendment until the December 2021 joint Council/Commission meeting, with an understanding of a January 2023 implementation date.

Council: DiLernia/deFur 16/2/1

Board: Borden/Gilmore Motion passes with no objection and 2 abstentions (USFWS and NMFS)

#### Wednesday, April 7, 2021

##### **Blueline Tilefish 2022-2024 Specifications**

Move that the blueline tilefish ABC = 100,520 pounds for the 2022-2024 fishing years with status quo management measures. This results in status quo ACLs of 73,380 pounds and 27,140 pounds for the recreational and commercial sectors, respectively.

Council: Hemilright/Hughes

Motion carries by consent with no abstentions.

##### **Golden Tilefish Framework**

In section 5.1, move alternative 5.1.2 (alternative 2): specifications to be set for maximum number of years needed to be consistent with the Northeast Regional Coordinating Council (NRCC) approved stock assessment schedule as the preferred alternative.

Council: Farnham/DiLernia

Motion carries by consent with no abstentions

In section 5.2, move alternative 5.2.2 (alternative 2): the golden tilefish fishing year is the 12-month period beginning with January 1, annually, as the preferred alternative.

Council: Farnham/DiLernia

Motion carries by consent with no abstentions



# HMS



ROY COOPER  
*Governor*

DIONNE DELLI-GATTI  
*Secretary*

KATHY B. RAWLS  
*Director*

May 5, 2021

**MEMORANDUM**

**TO:** N.C. Marine Fisheries Commission

**FROM:** Steve Poland, Executive Assistant for Councils & Highly Migratory Species  
Lead

**SUBJECT:** Highly Migratory Species Update

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**Issue**

Highly Migratory Species activity update.

**Action Needed**

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

**Overview**

Bluefin Tuna

NOAA Fisheries closed the General Category Atlantic Bluefin Tuna fishery on February 27<sup>th</sup>, 2021 after projecting the January through March sub-period quota of 75-metric tonnes would be reached on this date. The Southern area trophy fishery (measuring 73-inches or greater) was closed on March 1<sup>st</sup>, 2021 through December 31<sup>st</sup>, 2021. NOAA Fisheries projected that the 1.8 metric tonne quota for the trophy fishery had been exceeded, necessitating the closure for the remainder of the fishing year.

Upcoming events

The next meeting of the HMS Advisory Panel will be held [via webinar](#) May 25<sup>th</sup> – 28<sup>th</sup>, 2021. The AP will discuss many topics including bluefin tuna restricted fishing days, update on Bluefin tuna management measures action (Amendment 13), Endangered Species Act listing of shortfin mako, and conclude with a full day roundtable discussion on HMS recreational management.



# PROTECTED RESOURCES UPDATE





ROY COOPER  
*Governor*

DIONNE DELLI-GATTI  
*Secretary*

KATHY B. RAWLS  
*Director*

May 5, 2021

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Barbie Byrd, Biologist Supervisor  
Protected Resources Program, Fisheries Management Section

**SUBJECT:** Protected Resources Program Update

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### Issue

Summary information is provided from the division's Protected Resources Program for the most recent annual reports for Atlantic Sturgeon and Sea Turtle Incidental Take Permits (ITPs). The reports were submitted in February to the National Marine Fisheries Service (NMFS) as required for the 2020 ITP Year (Sept. 1, 2019 - Aug. 31, 2020).

### Action Needed

For informational purposes only; **no action is needed at this time.**

### Overview

During the 2020 ITP year, take levels of Atlantic Sturgeon and sea turtles in anchored estuarine gill nets did not reach or exceed allowable thresholds for any combination of species and management unit. Observers documented seven Atlantic Sturgeon and 25 green sea turtles in large-mesh gill nets and zero Atlantic Sturgeon and two green sea turtles in small-mesh gill nets. All seven observed Atlantic Sturgeon interactions were alive in large-mesh gill nets set in Management Unit A (Fall=2, Winter=1, Spring=4). Of the 27 observed sea turtle interactions, 26 occurred during fall (25 in large mesh, 1 in small mesh) and one occurred during winter (small mesh). All but six of the 27 sea turtles were released alive; 23 of 27 turtles were observed in Management Unit B.

Due to protective measures to help prevent the spread of COVID-19, the Protected Resources Program received a waiver from the NMFS on March 24, 2020 granting an exemption for maintaining observer coverage until further notice. Observers and Marine Patrol officers continued to conduct alternative platform observations in an attempt to meet required observer coverage levels while limiting potential COVID-19 exposure between fishermen and observers.

The Observer Program continues to have difficulty scheduling observed trips with fishermen. Out of 970 phone calls and in-person contacts across all seasons, observers spoke with a fisherman 30% of the time, but were only successful in scheduling a trip 2% of the time. Additionally, observers and Marine Patrol officers made 1,730 (98 and 1,632, respectively) unsuccessful attempts to find and observe a trip using alternative platform across all seasons.

The final documents can be found at the following links:

[2020 Annual Sea Turtle ITP Report 2020](#)  
[Annual Atlantic Sturgeon ITP Report](#)



Annual Sea Turtle Interaction Monitoring of the Anchored Gill-Net Fisheries  
in North Carolina for Incidental Take Permit Year 2020  
(1 September 2019–31 August 2020)

Annual Completion Report for Activities under Endangered Species Act  
Section 10 Incidental Take Permit No. 16230

Barbie L. Byrd, Meghan P. Gahm, John K. McConnaughey, Scott A. Smith

North Carolina Department of Environmental Quality  
North Carolina Division of Marine Fisheries  
Protected Resources Program  
3441 Arendell Street  
Morehead City, NC 28557

February 2021

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## 1 INTRODUCTION

The North Carolina Division of Marine Fisheries (NCDMF) has actively addressed the incidental take of sea turtles in commercial estuarine gill nets since 2000. Between 2000 and 2011, the NCDMF had a series of Incidental Take Permits (ITP) from the National Marine Fisheries Service (NMFS) under Section 10(a)(1)(B) of the Endangered Species Act (ESA) of 1973 (Public Law 93-205) to “minimize, monitor, and mitigate” sea turtle interactions in anchored gill nets primarily in Pamlico Sound (Boyd 2012; Gearhart 2001, 2002, 2003; Murphey 2011; Price 2004, 2005, 2006, 2007, 2008, 2009, 2010). Five species of sea turtles can occur in North Carolina: green sea turtle (*Chelonia mydas*), Kemp’s ridley sea turtle (*Lepidochelys kempii*), loggerhead sea turtle (*Caretta caretta*), hawksbill sea turtle (*Eretmochelys imbricata*), and leatherback sea turtle (*Dermochelys coriacea*). Anchored gill nets are passive sets deployed with an anchor, stake, or boat at one or both ends of the net string; they do not include run-around, strike, drop, or drift gill nets. For this report, the term “gill net” refers to anchored gill net unless stated otherwise.

Evidence of incidental takes of sea turtles outside of Pamlico Sound was documented in June 2009 by NMFS observations of gill-net fisheries operating in Core Sound and nearby waterbodies (Byrd et al. 2016). These takes resulted in a series of temporary measures to address sea turtle interactions until the NCDMF obtained an ITP for gill-net fisheries state-wide (see McConnaughey et al. 2019). On 11 September 2013, the NCDMF received the Sea Turtle ITP (No. 16230), which expires on 31 August 2023 (McConnaughey et al. 2019; NMFS 2013). In addition to establishing authorized levels of incidental takes, the ITP included a Conservation Plan that consisted of measures the NMFS determined would monitor, minimize, and mitigate incidental takes of sea turtles in otherwise lawful gill-net fisheries operating in North Carolina estuarine waters. The Conservation Plan included a continuation of restrictions implemented previously as temporary measures for large-mesh ( $\geq 4$  inch stretched mesh) gill nets. Specifically, these restrictions prohibited gill nets in the deep waters of Pamlico Sound; limited soak times to an hour before sunset to an hour after sunrise in portions of the state; limited days of fishing depending on location; restricted net height to no more than 15 meshes; restricted total net yardage to a maximum of 2,000 yards per vessel; and required net configuration for a string of nets (each net is called a ‘shot’) be constructed of shots no longer than 100 yards with a 25-yard break between shots. The only exception to these restrictions was that fishermen in Management Unit D2 (Figure 1) were restricted to a maximum of 1,000 yards per fishing operation (M-31-2014; <http://portal.ncdenr.org/web/mf/proclamation-m-31-2014>). In addition to establishing regulations on how fisheries could be prosecuted, the Conservation Plan included a state-wide estuarine gill-net observer program of estuarine gill nets that would allow for interactions to be counted and extrapolated when applicable across the fishery within a given season and area. Observer data also are used by the NCDMF in an adaptive management approach to mitigate incidental takes by implementing temporary management options using the NCDMF director’s Proclamation authority (General Statute 143B-289.52).

In May 2020, the NCDMF contacted the NMFS to request clarification of tagging protocols for sea turtles. Although the ITP requires that incidental sea turtles be tagged, the NMFS Southeast Fisheries Science Center (SEFSC, Beaufort, NC) staff communicated to the NCDMF that there had been recent changes to their tagging protocols. These changes affected the type of training that available SEFSC provided and resulted in having observers without the training necessary to fulfill the tagging requirement per the ITP. On 1 September 2020, the NMFS provided a notification letter to the NCDMF modifying ITP permit 16230 to remove the requirement for

observers to apply flipper and Passive Integrated Transponders (PIT) tags to incidentally captured sea turtles (Appendix A). This modification applies to the remainder of the current permit.

In July 2014, the NCDMF also received an ITP (No. 18102) to address incidental takes of Atlantic Sturgeon (*Acipenser oxyrinchus*) in gill-net fisheries operating in estuarine waters across the state (NMFS 2014). Although the ITPs and their Conservation Plans addressed different taxa, the fisheries included therein were the same. Both ITPs were reliant on observer coverage to document incidental takes and to estimate total incidental take where possible. Data from observed trips are used for both ITPs. Notably, however, the ITPs defined large mesh differently; the sea turtle ITP defined large-mesh gill nets as  $\geq 4$  inch stretched mesh and the Atlantic Sturgeon ITP defined them as  $\geq 5$  inch stretched mesh.

Significant regulatory changes were enacted during fall 2019 for the Southern Flounder (*Paralichthys lethostigma*) fisheries. These regulations were included in Amendment 2 of the Southern Flounder Fishery Management Plan (FMP) adopted by the North Carolina Marine Fisheries Commission on 23 August 2019 (NCDMF 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 to 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 beginning in 2020.

To reduce harvest in the anchored large-mesh gill-net fishery, the state was divided into three flounder management areas, Northern, Central, and Southern. These flounder management areas generally aligned with the ITP management units except for the Core Sound portion of B, which was split into a different flounder management area than the rest of B (Figure 1). Each area had specific dates when fishing was allowed: the Northern area was open 15 September–13 October 2019, the Central area was open 1–26 October 2019, and the Southern area was open 1 October–15 November 2019. Yardage restrictions for large-mesh gill nets per the ITPs were further reduced by 25% in the Amendment 2 Flounder FMP (NCDMF 2019). Amendment 2 also reduced large-mesh gill net soak times to overnight soaks state-wide. 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 incidental take thresholds be approached or exceeded. After November 15, limited allowances for anchored large-mesh gill nets were made during winter and spring for the invasive Blue Catfish (*Ictalurus furcatus*) and American Shad (*Alosa sapidissima*) fisheries. For more information, see the Results section.

Another significant event that occurred during the 2020 ITP Year was the COVID-19 pandemic, which led to a state of emergency declaration by NC's Governor. On 20 March 2020, the NMFS waived the requirement for boats fishing in federally managed fisheries to carry observers or at sea monitors due to concerns about the transmission of COVID-19. The NMFS extended this waiver to the NCDMF Observer Program on 23 March 2020; the waiver was in place throughout the remainder of the 2020 ITP Year.

Per the ITP requirements, the Observer Program provides weekly, seasonal, and annual reports to the NMFS for a given ITP year. As required, weekly progress reports were provided for any week in which a sea turtle interaction occurred. Seasonal reports for the 2019 ITP Year also were provided for fall (September–November 2019; McConnaughey 2020a), spring (March–May 2020; McConnaughey 2020b), and summer (June–August 2020; McConnaughey 2020c). The

Conservation Plan does not require observer coverage or seasonal reports for winter because sea turtles are less likely to be present in North Carolina during this time. This annual report outlines observer activity, fishing activity, and total or estimated takes of sea turtles for the 2020 ITP Year, 1 September 2019–31 August 2020. Data for fishing activity, measured in number of trips, are finalized for fall 2019. After the preliminary data for spring and summer 2020 are finalized in May 2021, observer coverage and authorized estimated sea turtle takes will be recalculated and finalized estimates will be provided to the NMFS in the form of an addendum.

## **2 METHODS**

### **2.1 Observer Activity**

Observer activity was distributed across six management units outlined in the Conservation Plan (A, B, C, D1, D2, and E; Figure 1). Per the sea turtle ITP, Management Unit B was unique in that large-mesh gill nets operating in Pamlico Sound were confined to specific subunits (Shallow Water Gill-Net Restricted Area, SGNRA 1, SNGRA2, SNGRA3, SGNRA4, and Mainland Gill-Net Restricted Area, MGNRA), effectively closing the fishery in the deep waters of Pamlico Sound and in corridors near Ocracoke, Hatteras, and Oregon inlets (Daniel 2013; Figure 1). Within the management units, observer activity was also distributed across three seasons that cross calendar years: fall, spring, and summer. Per the Conservation Plan, the number of projected observer trips was based on the required 7–10% observer coverage of the total large-mesh ( $\geq 4$  inches stretched mesh) gill-net fishing trips, and 1–2% coverage of the total small-mesh ( $< 4$  inch stretched mesh) gill-net fishing trips per season and management unit. Projected observer trips were stratified across seasons and management units proportional to the NCDMF Trip Ticket Program (TTP) data for large-mesh and small-mesh gill-net trips from the previous five years. The exception was for management units and seasons where anchored large-mesh gill nets were prohibited whereby the projected fishing and observer trips were set to zero: Management Unit D2 for the entire 2020 ITP Year; Management Units B, D1, and E during spring and all management units during summer. It is important to note that for the TTP, data are reported as the large-mesh category for gill nets using  $\geq 5$  inch webbing, not  $\geq 4$  inch. It is uncommon, however, for gill nets to have a mesh size between these two sizes; therefore, we assumed effort by mesh categories in the TTP dataset would not be greatly affected by the difference in definitions of mesh size.

At the beginning of the 2020 spring season (20 March 2020), the NCDMF temporarily halted observer effort because of the COVID-19 pandemic. Marine Patrol officers were still on the water and continued to include alternative platform trips (i.e., using a state-owned vessel to observe at a distance; see description below) as a part of their weekly duties when fishing effort could be found. In June 2020, the NCDMF outlined protocols for observer staff to resume limited field sampling while preventing the spread of COVID-19. These protocols included among other things, the use of alternative platform observations only and no overnight travel. Observers resumed effort under these guidelines on 6 June 2020. Because all observers were based out of the Morehead City office, coverage of areas too far for a day trip (e.g., Cape Fear River, Albemarle Sound) was dependent on Marine Patrol officers.

During fall, winter, and the first few weeks of spring, each observer attempted to obtain three to four trips per working week when fishing activity was occurring. This approach was used again when observers resumed activities in early June (beginning of summer). Observers were assigned a management unit to work weekly, and the number of observers assigned to a management unit

depended on the season and projected fishing effort. Additionally, Marine Patrol officers attempted to obtain alternative platform trips as part of their regular duties. Reports from observers, fishermen, and other NCDMF staff (e.g., fish house samplers) were used to determine if effort was fluctuating between management units. Trends from the previous years' TTP data and current area closures were also assessed to determine if fishing effort was shifting from one management unit to another.

Obtaining observer trips was facilitated by the requirement that fishermen participating in estuarine anchored gill-net fisheries were required to obtain an Estuarine Gill-Net Permit (EGNP; M-24-2014; <http://portal.ncdenr.org/web/mf/proclamation-m-24-2014>). The most recent list of permit holders was stratified by management unit and then by geographic area within units. Contact information for these fishermen was given to observers assigned to specific management units so they could attempt to schedule an onboard trip. Other outreach efforts, such as visiting fish houses, were limited during the 2020 ITP Year. The Observer Program website (<http://portal.ncdenr.org/web/mf/observers-program>) was available, but fishermen were not necessarily directed to it during the 2020 ITP Year.

The Observer Program employed two methods to obtain trips for documenting protected species interactions. The preferred method has always been onboard observations where observers ride onboard fishermen's vessels. The other method was alternative platform" observations whereby two observers used a state-owned vessel to monitor commercial fishers hauling their gill nets. In addition to traditional observers, Marine Patrol officers also obtained alternative platform trips, following similar data collection protocols. Alternative platform trips were used for areas where fishing effort increased quickly, when a fisherman's vessel was too small to safely accommodate an onboard observer, and when observers are unable to set-up onboard trips due to fisherman avoidance or non-compliance, and when observations resumed in June during the ongoing COVID-19 pandemic. Coordination of onboard, alternative platform, and Marine Patrol alternative platform trips occurred regularly to maximize efficiency, avoid multiple observations of a single trip, and to achieve the maximum amount of observer coverage possible for each management unit. Changes in fishing effort and sea turtle abundance (i.e., observed and reported interactions) were monitored on a daily, weekly, and monthly basis to ensure proper observer coverage was being maintained.

Observers were trained to identify, measure, evaluate condition of, and resuscitate sea turtles by experienced NCDMF and NMFS SEFSC (Beaufort, NC) staff. Data collected on observed sea turtles included: date, time, location (latitude and longitude, when possible), condition (e.g., no apparent harm, injury including a description of the nature of the injury, or mortality), species, sex (if determinable), curved carapace length (CCL, mm), and curved carapace width (CCW, mm). Photographs of the turtles and environmental parameters (e.g., salinity, water temperature) were also collected when feasible. Dead and live, debilitated sea turtles were retained by the observer when possible and delivered to the North Carolina Wildlife Resource Commission (NCWRC) sea turtle biologist for necropsy or examination and treatment.

Observers also collected data on location, gear parameters, fish catch and bycatch (including regulatory discards) for each haul depending on the observed trip type (onboard or alternative platform). For onboard observations, the catch was sampled for each trip whereby the observer recorded species, quantities, weights, lengths, disposition (alive or dead), and whether the catch was kept or discarded. Limited data such as date and waterbodies surveyed were also collected for unsuccessful alternative platform attempts (hereafter termed "No Contact" trips) by observers

and Marine Patrol. All data were coded onto NCDMF data sheets and uploaded to the NCDMF Biological Database for analysis. Observers were debriefed within 24 hours of each trip to obtain data on catch, set locations, gear parameters, and sea turtle interactions to provide running totals and estimates of sea turtle bycatch in near real time.

Ongoing estimates of observer coverage were calculated by comparing the number of observed trips by large-mesh ( $\geq 4$  inch) and small-mesh ( $< 4$  inch) category to the average number of trips from the previous five years' TTP data for (large-mesh =  $\geq 5$  inch, small-mesh =  $< 5$  inch) by season and management unit. Reduced season dates in each management unit were accounted for by calculating the proportion of actual to possible fishing days. This estimated fishing effort was compared to the number of observer trips completed throughout the ITP year. The average, normalized effort was used when estimating fishing trips to account for the fluctuation of fishing effort throughout the years due to closures and other regulations put in place throughout the time series. No Contact trips were not included in calculations of observer coverage.

At the end of the ITP year, observer coverage was calculated similar to above, but using the actual number of reported trips in the TTP database for the ITP year by season and management unit. The TTP data for 2019 (fall) were finalized, but the data for 2020 (spring and summer) were preliminary. As a result, observer coverage calculated for spring and summer were considered estimates.

## 2.2 Changes in Fishing Effort

The number of reported fishing trips by mesh size category were compiled by season for the 2020 ITP Year and compared to the last two ITP Years (2018 ITP Year and 2019 ITP Year). This assessment was a general comparison to examine trends in fishing effort.

## 2.3 Incidental Takes

The ITP outlines authorized levels of incidental takes expressed as either estimated total takes based on observer data or counts of observed takes (Tables 1–5). Both types (estimated and counted) were necessary because there were insufficient data available for modeling predicted estimated takes in the ITP application for some combinations of species, management unit, and gear type (Daniel 2013). As a result, authorized levels of annual estimated interactions were only available for green and Kemp's ridley sea turtles in Management Units B, D1, and E in the large-mesh gill-net fishery, and for Kemp's ridley sea turtles in D2 in the large-mesh gill-net fishery. Authorized levels for all other combinations were based on counts of actual observed (i.e., not estimated) takes. Therefore, comparisons of interactions during the 2020 ITP Year to authorized interactions were based either on annual counts of observed sea turtle takes or annual estimates of sea turtle takes. Also, during summer 2015 a minor modification to the ITP was enacted through the NMFS combining authorized takes for Management Units A ( $n = 4$ ) and C ( $n = 4$ ) for a total authorized take limit of eight sea turtles from large-mesh or small-mesh gill nets and any species or disposition (Boyd 2016). Estimates of incidental take as outlined above were calculated using the stratified ratio method where the bycatch rate calculated from observer data (sea turtles caught per observed trip) was multiplied by the total reported fishing trips.

$$\text{Estimated interactions} = \left( \frac{\# \text{ of sea turtle interactions observed}}{n \text{ gill-net trips observed}} \right) * \text{total gill-net trips reported}$$

Throughout each season, this calculation was employed for each incidental take to determine the estimated number of interactions by date of capture, management unit, species, and disposition.

For the real-time estimates, the average number of TTP reported trips for the previous five years was used. Estimated numbers of interactions and running totals of observed interactions were accumulated by interaction date to determine if interactions were approaching authorized take thresholds. The ongoing comparisons allowed for the implementation of management measures to prevent interactions from exceeding authorized levels. The estimated and/or total observed interactions were provided in weekly (when required), monthly, and seasonal reports.

At the end of the ITP year, the estimated number of interactions was recalculated using actual number of trips, albeit preliminary for 2020, reported in the TTP rather than an average from the previous five years. Nonparametric confidence intervals (95%) were calculated using standard bootstrapping techniques (Efron and Tibshirani 1993) using the ‘boot’ package in R (Davison and Hinkley 1997; Canty and Ripley 2015; R Core Team 2019). Bootstrap replicates were generated by sampling observer trips with replacement 5,000 times within strata (mesh/season/management unit).

## **2.4 Compliance**

The Observer Program used various methods to contact fishermen to schedule trips. The most common method was by phone, due to fishermen leaving from private launches and overall efficiency. For each contact made to obtain a trip (phone call or in-person), observers documented the contact in a log maintained by the Observer Program. For each contact, observers assigned a category of the response and noted any additional information (e.g., fisherman stated he did not fish until October; Table 6). Observers also documented calls returned from fishermen, including the response category and notes. Data in the contact log was summarized by month and response category to determine what percentage of phone calls resulted in observer trips.

As part of their regular duties, Marine Patrol officers checked both gill nets for compliance. This effort, combined with the time spent conducting observations and searching for gill nets (No Contact trips), was logged as total “gill-net hours” by officers. Occasionally, citations and/or Notice of Violations (NOVs) were issued to fishermen when gear or fishing practices were out of compliance. A citation is an enforcement action taken by a Marine Patrol officer for person(s) found to be in violation of General Statutes, Rules, or Proclamations under the authority of the Marine Fisheries Commission and is considered a proceeding for District Court. A NOV is the Division’s administrative process to suspend a permit and is initiated by an Officer or Division employee when a permit holder is found to be in violation of general or specific permit conditions. A citation and a NOV may both be initiated by the same permit condition violation; however, they are two separate actions. For this report, NOVs or citations under the codes “EGNP” and “NETG” were compiled, as they are applicable to the estuarine gill-net permits and violations.

## **3 RESULTS**

### **3.1 Observer Activity**

Overall observer coverage during the three seasons covered for 2020 ITP Year was 7.8% of the large-mesh gill-net fishery and 1.7% of the small-mesh gill-net fishery (Tables 7 and 8; Figure 2). This level of coverage was based on 249 large-mesh gill-net trips (62 onboard and 187 alternative platform) and 103 small-mesh gill-net trips (5 onboard and 98 alternative platform) during fall, spring, and summer. Only one out of 354 (<0.3%) observed trips recorded a mesh size  $\geq 4$  and  $< 5$  inch; the mesh size was exactly 4 inches. The COVID-19 pandemic and associated waiver from

the NMFS impacted observer coverage during spring and summer. Additionally, there were 1,345 No Contact trips (Table 9).

During the 352 observed trips, observers documented 25 sea turtles (24 green turtles and one unidentified) in large-mesh and two sea turtles (both green) in small-mesh gill nets (Table 10; Figures 2-14). One of the green sea turtles was documented during winter in a small-mesh gill net set in Management Unit B (Figure 8). The turtle fell out of the net and swam off as the fisherman was pulling in the net. No self-reported interactions were reported.

A series of proclamations was issued throughout the ITP year for management needs unrelated to protected species interactions (Table 11). A significant change in regulations for the Southern Flounder fishery during fall 2019 was noted above. After these regulations closed anchored large-mesh gill nets, portions of Management Unit A were re-opened to anchored large-mesh gill nets during late fall, winter, and spring (23 November–25 March) for harvesting Blue Catfish and American Shad, and portions of Management Unit C were re-opened to anchored large-mesh gill nets during winter and spring (February 15–April 15) for harvesting American Shad. Separately, Management Unit D1 was closed to anchored large-mesh gill nets for the entire 2020 ITP Year and closed to anchored small-mesh gill nets effective 20 April.

### **3.1.1 Fall 2019**

During fall 2019 (September–November), the Observer Program achieved 10.0% state-wide coverage of large-mesh gill-net trips, and exceeded 7% in all management units except B (5.4%) and D2 (5.5%; Table 7; Figures 3–7). Based on the estimated ( $n = 373$ ) large-mesh fishing trips for Management Unit B, the observer program would have attained 8% coverage (Table 7). However, the actual number of reported trips was greater than estimated by 180 trips. As such, the observer program needed 12 additional trips that were not obtained (nine in Management Unit B and three in D2). For small-mesh gill nets, the Observer Program achieved 2.5% state-wide coverage and exceeded 1% coverage in all management units (Table 8; Figures 3–7). There were 324 No Contact trips including 35 in Management Unit B and 52 in D2 (Table 9).

There were 25 observed sea turtle interactions in large-mesh gill nets and one observed in small-mesh gill nets during fall (Table 10; Figures 3–7). The interactions comprised 25 green sea turtles ( $n = 19$  alive;  $n = 6$  dead) and one identified sea turtles ( $n = 1$  alive;  $n = 0$  dead). The identified sea turtle fell out of the net and swam away before the observer was able to positively identify the species. The majority of interactions occurred in Management Unit B (22 out of 26) with three in D2 and one in E. No fisherman self-reported sea turtle interactions were reported.

### **3.1.2 Spring 2020**

During spring 2020 (March–May), the Observer Program achieved an estimated 4.1% state-wide coverage of large-mesh gill nets (Table 7; Figures 9–11). Only Management Units A and C were open to large-mesh gill nets, and 41 observed trips occurred in A before observations were halted in response to the COVID-19 pandemic. There were 34 fishing trips reported across the three closed units. For small-mesh gill nets, the Observer Program achieved an estimated 1.1% state-wide coverage, and exceeded 1% in Management Units C, D1, and E (Table 8; Figures 9–11). The shortage represents an additional six trips that were not obtained (four in Management Unit A, one in B, and one in D2). There were 448 No Contact trips including 90 in Management Unit A, 40 in B, and 96 in D2 (Table 9).



No sea turtle interactions were observed during spring (Table 10; Figures 9–11). Additionally, no fisherman self-reported sea turtle interactions were reported.

### **3.1.3 Summer 2020**

During summer 2020 (June–August), the Observer Program did not observe any large-mesh gill-net trips as the gear was prohibited state-wide (Table 7; Figures 12–14). The entire state was closed to large-mesh gill nets. Nevertheless, 90 large-mesh fishing trips were reported. For small-mesh gill nets, the Observer Program achieved an estimated 1.4% state-wide coverage and exceeded 1% in all management units except Management Unit B (0.9%) (Table 8; Figures 12–14). The shortage represents one additional trip that was not obtained in Management Unit B. There were 573 No Contact trips including 77 in Management Unit B (Table 9).

No sea turtle interactions were observed during summer (Table 10; Figures 12–14). Additionally, no fisherman self-reported sea turtle interactions were reported.

### **3.2 Changes in Fishing Effort**

Overall large-mesh gill-net effort during the 2020 ITP Year (seasons fall, spring, and summer) was 67% lower than during the 2019 ITP Year and 71% lower than during the 2018 ITP Year (Figure 7). The decrease in large-mesh trips occurred during fall, spring, and summer in all management units. Overall small-mesh gill-net effort during the 2020 ITP Year was 30% higher than during the 2019 ITP Year and 8% higher than during the 2018 ITP Year (Figure 8). When comparing the 2020 and 2019 ITP Years, the increase in small-mesh gill-net trips was attributed primarily to fall when small-mesh gill-net trips nearly doubled from the previous ITP Year (1,262 trips during the 2019 ITP Year and 2,294 during the 2020 ITP Year). The greater number of small-mesh trips during fall occurred in all management units, but was particularly sharp in Management Unit B (97% increase) and D2 (255% increase).

### **3.3 Incidental Takes**

Across the seasons covered by the sea turtle ITP, there were 26 observed sea turtle interactions (25 green and one unidentified sea turtle), all during fall (Table 10; Figures 2–14). An additional green sea turtle was documented during winter (see above). The observed takes occurred primarily in large-mesh gill nets (all but two sea turtles). The majority of observed takes were recovered alive (21 of 27). Measured green sea turtles ( $n = 19$  of 26) ranged from 206 to 332 mm CCL (mean = 287.1, SD = 28.0) and 202 to 288 mm CCW (mean = 244.0, SD = 24.3; Figure 17). The single unidentified sea turtle could not be measured. Observed interactions occurred primarily in Management Unit B (85%), followed by Management Unit D2 (11%), Management Unit E (4%) (Figures 4, 6–7).

Observed take levels during the 2020 ITP Year did not reach the thresholds of allowed takes for any species or management unit (Tables 1–5). Of the thresholds expressed as counts of observed takes (not estimated), green sea turtle takes during the 2020 ITP Year reached only 17% of the threshold (Table 5). Of the separate thresholds expressed as estimated totals of observed takes, green sea turtle takes during the 2019 ITP Year reached 40% of the live threshold and 37% of the dead threshold.

### **3.4 Compliance**

Estuarine Gill-Net Permits were issued to 2,629 fishermen during the 2020 ITP year; however, only 598 of them reported trips using anchored estuarine gill-net gear. Using the full list of EGNPs, 659 phone calls or in-person contacts were made with 5.6% (n = 37) representing occasions where a fishermen returned a phone call. Nevertheless, only 2.9% (n = 19) of the 659 contacts resulting in a booked trip (Figure 18). The greatest number of calls occurred during fall, and the least number of calls occurred in spring when observations temporarily stopped due to the COVID-19 pandemic.

During the 2020 ITP Year, Marine Patrol officers spent 1,584 hours investigating the proper and legal use of gill nets in estuarine waters, conducting and entering observations, and searching for gill nets to be observed (No Contact; Table 12). During these hours, they issued 27 citations (Tables 12–13). In addition to citations, officers issued eight Notice of Violations (NOVs) for fishermen found to be out of compliance with the EGNP (Table 14).

### **3.5 Marine Mammals**

There was no observed marine mammal interaction during the 2020 ITP Year.

## **4 DISCUSSION**

Incidental takes of sea turtles during the 2020 ITP Year, all green sea turtles, were below authorized levels. All 26 observed sea turtle interactions during the months covered by the sea turtle ITP were during the fall. The interactions were primarily in Management Unit B with only four interactions in other management units. Incidental takes continue to be primarily alive and in large-mesh gill nets. No new proclamations had to be imposed during the 2020 ITP Year to maintain take levels below thresholds. However, new regulations from Amendment 2 imposed on the state-wide Southern Flounder fishery greatly reduced large-mesh gill-net effort during fall and prevented the previous low levels of effort in this fishery during spring and summer. Limited allowance for anchored large-mesh gill nets occurred only during winter and spring for portions of Management Unit A and C, and for an additional seven days during late fall in portions of Management Unit A.

Compared to the previous 2019 ITP Year (n = 22; Byrd et al. 2020), the overall count of incidental takes was slightly higher during the 2020 ITP Year. The most notable differences were the large decrease in observed interactions during summer 2020 (n = 0) compared to summer 2019 (n = 14), and the increase in observed interactions during fall 2019 (n = 26) compared to fall 2018 (n = 4). The decrease in incidental takes in summer was likely due to the regulations associated with the Southern Flounder FMP Amendment 2, restricting the use of large-mesh gill nets during summer. Possible factors affecting the increase in takes during fall 2019 over fall 2018 were not identified. Increased takes were not coincident with increased large-mesh fishing effort. In fact, effort was greatly decreased in fall 2019 compared to fall 2018 because of the Southern Flounder regulations. Further investigation is needed to determine what factors may have affected the observed count of takes during fall 2019 compared to the previous year.

Overall minimum coverage levels were met or exceeded for large-mesh and small-mesh gill-net trips when combined across the ITP year and management units. Although coverage exceeded the overall 7% minimum of large-mesh gill-net trips for fall, minimum coverage levels were not reached for Management Unit B (5.4%) and D2 (5.5%). The shortage of 12 observed trips during

fall is despite the 35 No Contact trips (attempts to find trips) in Management Unit B and 52 No Contact trips in Management Unit D2. In contrast, coverage of small-mesh gill-net trips during fall exceeded the 1% minimum in all management units and exceeded 2% in three of six management units. Observers were active for only several weeks during spring prior the temporary halt of observer-led trips in March because of the COVID-19 pandemic. Marine Patrol officers contributed greatly to this continued coverage during spring when observers did not go in the field, and in summer when observers returned to the field at reduced capacity due to the NCDMF requirement of having two observers per alternative platform observation. Nevertheless, coverage of large-mesh gill-net trips during spring in open management units (A and C) did not meet the minimum 7%. Observer coverage of small-mesh gill-net trips met or exceeded the 1% minimum in three of six management units during spring and five of six management units during summer. It is surprising that there were reported fishing trips using anchored large-mesh gill nets during management units and seasons when this gear was prohibited. These reported trip data are being examined; it is likely that the dealers recorded fishing trips that used run-around/strike gill nets incorrectly as anchored gill nets during these months.

Obtaining observed trips continues to be a challenge for the NC Observer Program, not unlike other observer programs (e.g., Lyssikatos and Garrison 2018). The EGNP is a useful tool to improve fishermen compliance by including specific permit conditions requiring fishermen to allow observers aboard their vessels to monitor catches and by providing contact information of permit holders. Phone calls made using the contact information contribute to observers scheduling trips, but the low success rate of scheduling a trip (3%) is low. This assessment of success rate and the assignment of call lists are being re-evaluated for the 2021 ITP Year given that only 23% of EGNP holders during the 2020 ITP Year reported trips with anchored gill-net gear. For the contacts that were made during the 2020 ITP Year, a sharp decrease in phone calls was made during the 2020 ITP Year (n = 659) compared to the previous year (n = 4,305), due in large part to effects of COVID-19 on observer activity.

Although onboard observations are the preferred method, alternative platform observations played a critical role to achieving the minimum percent coverage especially after the COVID-19 pandemic. In fact, 81.0% of observed trips during the 2020 ITP Year were alternative platform observations. Alternative platform observations have several advantages. Primarily, they do not rely on previous contact with fishermen to obtain an observable trip. Alternative platform observations also allow Marine Patrol to conduct observations as part of their daily patrols; their observed trips contribute a substantial portion of the total alternative platform observations. Even for fishermen who would willingly take an observer, many vessels used by gillnetters in estuarine waters are too small to easily accommodate an observer, making alternative platform observations ideal for capturing trips with this size class of vessel (Kolkmeier et al. 2007); however, the alternative platform method has several drawbacks. First, it requires two observers, halving observer effort and program efficiency. Also, observers cannot collect the same breadth of biological data for kept catch and discards (e.g., length and weight of individual fish) compared to onboard observer trips. Another drawback is that observers can spend a significant amount of time searching for fishing activity, sometimes unsuccessfully, when fishing activity is less concentrated. Obtaining alternative platform observations also can be a challenge as some fishermen avoid being observed by retrieving their gear before sunrise or changing fishing locations if observers have been seen in an area. Although refusal of an observed trip by a fisherman can result in a suspension of their EGNP, non-compliance typically does not include such a direct refusal. As such, non-compliance continues to be a hurdle for ensuring the observer coverage requirements for both ITPs

are met. Outreach activities are an ongoing necessity to improve fishermen compliance. These activities will resume when risks associated with COVID-19 are abated.

Significant staffing changes occurred during the 2020 ITP Year. The program supervisor left in September 2019 and the position was not filled until January 2020. The observer coordinator left in June 2019 and the position was not filled until March 2020. Additionally, a data analyst position was created in July 2019. These filled positions should increase efficiencies in the program. Changes in observer staffing also occurred during the 2020 ITP Year. Two long-term temporary observers left or significantly reduced their hours before March. Those positions were not refilled when observations resumed in June given the uncertainty of the effects of COVID-19 on the safety of continued, but limited, observation efforts.

The NCDMF observer program uses a combination of real-time monitoring of sea turtle takes and an adaptive management approach to successfully control the number of interactions in the estuarine anchored gill-net fisheries. Specific actions to limit sea turtle takes were not necessary during the 2020 ITP Year; however, Management Unit D1 was kept closed to large-mesh gill nets based on historical sea turtle densities and take levels. The new management measures for Southern Flounder significantly reduced large-mesh gill-net effort throughout the year, especially during fall 2019 when effort was historically high. These management measures, along with challenges faced from the COVID-19 pandemic and its' associated field restrictions, presented additional and unique challenges in predicting fishing effort and obtaining coverage during the 2020 ITP Year. These ongoing changes require the Observer Program to incorporate new approaches to project observer coverage for the fishery in subsequent ITP years as the fishery is undergoing regulatory changes that impact fishermen strategy and effort.

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## 6 TABLES

**Table 1.** For large-mesh ( $\geq 4$  inch) gill nets, annual estimated authorized and actual takes of sea turtles by species and Management Units B, D1, D2, and E for the 2020 ITP Year. Estimated actual takes were calculated from observer data; 95% confidence intervals are provided in parentheses. <sup>1</sup> Insufficient observer data existed to model an estimated annual take level for the permit application; therefore, for Management Unit D2, an annual observed take number was identified for green turtles (see Table 2).

Species	B				D1				D2			
	Estimated Takes				Estimated Takes				Estimated Takes			
	Authorized		Actual		Authorized		Actual		Authorized		Actual	
	Alive	Dead	Alive	Dead	Alive	Dead	Alive	Dead	Alive	Dead	Alive	Dead
Green	225	112	127.7 (62.1, 237.8)	61.3 (20.5, 129.5)	9	5	0	0	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>
Kemp's ridley	53	26	0	0	15	7	0	0	6	3	0	0
Total	278	138	127.7	61.3	24	12	0	0	6	3	0	0

Species	E				Total			
	Estimated Takes				Estimated Takes			
	Authorized		Actual		Authorized		Actual	
	Alive	Dead	Alive	Dead	Alive	Dead	Alive	Dead
Green	96	48	5.7 (0, 17.2)	0	330	165	133.4	61.3
Kemp's ridley	24	13	0	0	98	49	0	0
Total	120	61	5.7	0	428	214	133.4	61.3



**Table 2.** For large-mesh ( $\geq 4$  inch) gill nets, annual authorized and actual observed (not estimated) takes of sea turtles by species and Management Units B, D1, D2, and E for the 2020 ITP Year. <sup>1</sup> Authorized levels of Kemp’s ridley sea turtles in Management Units B, D1, D2, and E and green sea turtles in Management Units B, D1, and E are expressed as estimated takes for the fishery because sufficient observer data existed to model estimated annual take levels in the ITP application (See Table 1).

Species	B		D1		D2		E		Total	
	Observed (live/dead)		Observed (live/dead)		Observed (live/dead)		Observed (live/dead)		Observed (live/dead)	
	Authorized	Actual	Authorized	Actual	Authorized	Actual	Authorized	Actual	Authorized	Actual
Green	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	6	2	n/a <sup>1</sup>	n/a <sup>1</sup>	6	2
Kemp's ridley	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>
Hawksbill	1	0	1	0	1	0	1	0	4	0
Leatherback	1	0	1	0	1	0	1	0	4	0
Loggerhead	3	0	3	0	3	0	3	0	12	0
Total	5	0	5	0	11	2	5	0	26	2

**Table 3.** For large-mesh ( $\geq 4$  inch) and small-mesh ( $< 4$  inch) gill nets combined, annual authorized and actual observed (not estimated) takes of sea turtles by Management Unit A and C for the 2020 ITP Year. Authorized levels per management unit are 4 sea turtles of any species.

Species	A		C		Total	
	Authorized (live/dead)	Actual (live/dead)	Authorized (live/dead)	Actual (live/dead)	Authorized (live/dead)	Actual (live/dead)
Green		0		0		0
Kemp's ridley		0		0		0
Hawksbill	4 (any species)	0	4 (any species)	0	8 (any species)	0
Leatherback		0		0		0
Loggerhead		0		0		0

**Table 4.** For small-mesh (<4 inch) gill nets, annual authorized and actual observed (not estimated) takes of sea turtles by species and Management Unit B, D1, D2, and E for the 2020 ITP Year.

Species	B		D1		D2		E		Total	
	Observed (live/dead)		Observed (live/dead)		Observed (live/dead)		Observed (live/dead)		Observed (live/dead)	
	Authorized	Actual	Authorized	Actual	Authorized	Actual	Authorized	Actual	Authorized	Actual
Green	3	1	3	0	3	0	3	0	12	1
Hawksbill	1	0	1	0	1	0	1	0	4	0
Kemp's ridley	3	0	3	0	3	0	3	0	12	0
Leatherback	1	0	1	0	1	0	1	0	4	0
Loggerhead	3	0	3	0	3	0	3	0	12	0
Total	11	1	11	0	11	0	11	0	44	1

**Table 5.** Total annual authorized and actual takes (observed and estimated) of sea turtles by species and for estimated takes by condition for the 2020 ITP Year. The incidental take of an unidentified sea turtle in a large-mesh gill net is not represented in the actual observed counts or estimated totals. <sup>1</sup> Insufficient observer data exist to model an estimated annual take level; therefore, takes are expressed as observed.

Species	Observed (live/dead)		Estimated			
	Authorized	Actual	Authorized		Actual	
	Live/Dead	Live/Dead	Alive	Dead	Alive	Dead
Green	18	3	330	165	133.4	61.3
Hawksbill	8	0	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>
Kemp's ridley	12	0	98	49	0	0
Leatherback	8	0	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>
Loggerhead	24	0	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>
Any Species	8	0	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>
Total	78	3	428	214	133.4	61.3

**Table 6.** Categories and descriptions of fisherman responses for the Observer Program's contact logs.

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 refused
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 7.** For large-mesh gill nets, observer coverage calculated from observer data ( $\geq 4$  inch) and reported trips from the Trip Ticket Program ( $\geq 5$  inch) by season and management unit for the 2020 ITP Year. Observer coverage was calculated using estimated fishing trips based on the Trip Ticket Program data for the previous five years and using actual reported trips from the program for the 2020 ITP Year. Estimated trips = “closed” when/where anchored large-mesh gill nets were prohibited, and any reported trips are *italicized*. Trip Ticket Program data are considered finalized for 2019 and preliminary for 2020.

Season	Management Unit	Large Mesh				
		Estimated Fishing Trips	Reported Fishing Trips	Observed Trips	Coverage - Estimated Fishing Trips	Coverage - Reported Fishing Trips
Fall 2019	A	759	636	81	10.7	12.7
	B	373	553	30	8.1	5.4
	C	297	190	29	9.8	15.3
	D1	<i>closed</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	D2	195	217	12	6.2	5.5
	E	342	493	56	16.4	11.4
	Overall	1,966	2,089	208	10.6	10.0
Spring 2020	A	743	959	41	5.5	4.3
	B	<i>closed</i>	<i>31</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	C	197	4	0	0.0	0.0
	D1	<i>closed</i>	<i>0</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	D2	<i>closed</i>	<i>0</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	E	<i>closed</i>	<i>3</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	Overall	2,474	997	41	1.7	4.2
Summer 2020	A	<i>closed</i>	<i>65</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	B	<i>closed</i>	<i>18</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	C	<i>closed</i>	<i>1</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	D1	<i>closed</i>	<i>0</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	D2	<i>closed</i>	<i>0</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	E	<i>closed</i>	<i>6</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
	Overall	<i>closed</i>	<i>90</i>	<i>closed</i>	<i>closed</i>	<i>closed</i>
Annual		2,906	3,176	249	8.6	7.8

**Table 8.** For small-mesh gill nets, observer coverage calculated from observer trips (<4 inch) and reported trips from the Trip Ticket Program (<5 inch) by season and management unit for the 2020 ITP Year. Observer coverage was calculated using estimated fishing trips based on the Trip Ticket Program data for the previous five years and using actual reported trips from the program for the 2020 ITP Year. Trip Ticket Program data are considered finalized for 2019 and preliminary for 2020. On April 4 2020, Management Unit D1 was closed to small-mesh gill nets.

Season	Management Unit	Small Mesh				
		Estimated Fishing Trips	Reported Fishing Trips	Observed Trips	Coverage - Estimated Fishing Trips	Coverage - Reported Fishing Trips
Fall 2019	A	252	383	5	2.0	1.3
	B	729	1,140	12	1.6	1.1
	C	140	124	3	2.1	2.4
	D1	40	64	1	2.5	1.6
	D2	188	238	13	6.9	5.5
	E	447	345	23	5.1	6.7
	Overall	1,796	2,294	57	3.2	2.5
Spring 2020	A	743	612	2	0.3	0.3
	B	1,347	1,274	12	0.9	0.9
	C	197	315	4	2.0	1.3
	D1	32	14	0	0.0	0.0
	D2	29	39	0	0.0	0.0
	E	126	111	7	5.6	6.3
	Overall	2,474	2,365	25	1.1	1.1
Summer 2020	A	164	212	3	1.8	1.4
	B	836	959	9	1.1	0.9
	C	117	58	4	3.4	6.9
	D1	closed	closed	closed	closed	closed
	D2	45	11	1	2.2	9.1
	E	203	226	4	2.0	1.8
	Overall	1,363	1,466	21	1.5	1.4
Annual		5,633	6,125	103	1.8	1.7

**Table 9.** Number of "No Contact" trips by season and management unit completed by Marine Patrol and observers during the 2020 ITP Year. No Contact refers to unsuccessful attempts to find and observe anchored gill-net effort.

Season	Management Unit	Marine Patrol No Contact Trips	Observer No Contact Trips	Total No Contact Trips
Fall 2019	A	66	5	71
	B	28	8	35
	C	21	3	24
	D1	9	1	10
	D2	47	5	52
	E	130	1	131
	Overall	301	23	324
Spring 2020	A	89	1	90
	B	40	0	40
	C	34	2	36
	D1	14	0	14
	D2	96	0	96
	E	173	0	173
	Overall	445	3	448
Summer 2020	A	104	0	104
	B	51	26	77
	C	32	12	44
	D1	15	2	17.5
	D2	132	6	138
	E	191	2	193
	Overall	525	48	573
Annual		1,271	74	1,345

**Table 10.** Summary of observed sea turtle interactions in large-mesh ( $\geq 4$  inch,  $n = 25$ ) and small-mesh ( $< 4$  inch,  $n = 2$ ) gill nets during the 2020 ITP Year. One of the interactions was recorded during winter observations to monitor for Atlantic sturgeon interactions. PIT = Passive Integrated Transponders.

Date	Season	Management Unit	Mesh Size	Latitude (N)	Longitude (W)	Species	Disposition	Applied Tags		Curved Carapace (mm)	
								PIT	Inconel	Length	Width
10/3/2019	Fall	B	Large	35.30813	75.58702	Unknown	Alive	n/a	n/a	n/a	n/a
10/4/2019	Fall	B	Large	35.29235	76.49730	Green	Alive	n/a	n/a	272	255
10/4/2019	Fall	B	Large	35.30377	75.58100	Green	Dead	n/a	n/a	293	243
10/4/2019	Fall	B	Large	35.30486	75.57900	Green	Dead	n/a	n/a	246	212
10/8/2019	Fall	B	Large	35.31400	76.49846	Green	Alive	n/a	n/a	302	232
10/8/2019	Fall	B	Large	35.31400	76.49631	Green	Alive	n/a	n/a	274	229
10/11/2019	Fall	B	Large	34.88595	76.40133	Green	Alive	n/a	n/a	n/a	n/a
10/11/2019	Fall	B	Large	34.88773	76.40265	Green	Alive	n/a	n/a	n/a	n/a
10/11/2019	Fall	B	Large	34.88653	76.40430	Green	Alive	n/a	n/a	n/a	n/a
10/11/2019	Fall	B	Large	34.88643	76.40437	Green	Dead	n/a	n/a	n/a	n/a
10/15/2019	Fall	B	Large	34.86201	76.38114	Green	Alive	n/a	n/a	276	222
10/15/2019	Fall	B	Large	34.86162	76.38148	Green	Alive	n/a	n/a	299	234
10/15/2019	Fall	E	Large	34.67700	77.13400	Green	Alive	n/a	n/a	314	265
10/15/2019	Fall	B	Large	35.19303	75.79633	Green	Dead	n/a	n/a	276	251
10/15/2019	Fall	B	Large	35.18925	75.80685	Green	Dead	n/a	n/a	283	205
10/16/2019	Fall	B	Large	35.32789	75.59853	Green	Alive	n/a	n/a	298	261
10/18/2019	Fall	D2	Large	34.68332	76.99551	Green	Alive	n/a	n/a	332	288
10/29/2019	Fall	B	Large	34.99532	76.28635	Green	Alive	n/a	n/a	295	256
10/29/2019	Fall	B	Large	34.99582	76.28541	Green	Dead	n/a	n/a	295	252
10/31/2019	Fall	B	Small	34.96300	76.27880	Green	Alive	n/a	n/a	275	235
11/1/2019	Fall	D2	Large	34.68233	77.04841	Green	Alive	n/a	n/a	326	280
11/1/2019	Fall	D2	Large	34.68352	77.03974	Green	Alive	n/a	n/a	298	274
11/5/2019	Fall	B	Large	34.99495	76.28717	Green	Alive	n/a	n/a	n/a	n/a
11/5/2019	Fall	B	Large	34.99495	76.28717	Green	Alive	n/a	n/a	295	240
11/12/2019	Fall	B	Large	34.98670	76.24600	Green	Alive	n/a	n/a	206	202
11/12/2019	Fall	B	Large	34.98650	76.24610	Green	Alive	n/a	n/a	n/a	n/a
12/6/2019	Winter	B	Small	35.28000	75.54000	Green	Alive	n/a	n/a	n/a	n/a



**Table 11.** Regulations for management units by date and regulation change for large-mesh ( $\geq 4$  inch) and small-mesh ( $< 4$  inch) gill nets for the 2020 ITP Year. Proclamations during winter months affected fishing effort in subsequent months.

Year	Date(s)	Regulation change
2019	Sep 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	Sep 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 $3 \frac{3}{4}$ 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	Sep 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	Sep 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 $5 \frac{1}{2}$ inches through $6 \frac{1}{2}$ 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	Sep 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)
2019	Sep 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 $5 \frac{1}{2}$ inches through $6 \frac{1}{2}$ inches. It maintained the openings in Management Unit A to the use of gill nets with stretched mesh lengths of $5 \frac{1}{2}$ inches through $6 \frac{1}{2}$ 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)

**Table 11.** (continued) Regulations for management units by date and regulation change for large-mesh ( $\geq 4$  inch) and small-mesh ( $< 4$  inch) gill nets for the 2020 ITP Year. Proclamations during winter months affected fishing effort in subsequent months.

2019	Oct 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	Oct 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	Oct 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	Nov 15	This proclamation supersedes proclamation M-21-2019 dated October 23, 2019. This proclamation closes all Management Units South of Management Unit A to the use of gill nets with a stretched mesh length of 4 inches through 6 ½ inches (except as described in Section III.). This action is being taken in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-22-2019)
2019	Nov 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)
2019	Dec 1	This proclamation superseded Proclamation M-23-2019 dated November 21, 2019. In Management Unit A, it removed attendance requirements and implemented vertical height restrictions for anchored gill nets with a stretched mesh length of 3 inches through 3 ¾ inches. It continued to allow the use of gill nets with a stretched mesh length of 5 ½ inches through 6 ½ inches in portions of Management Unit A. (M-24-2019)
2020	Jan 1	This proclamation superseded Proclamation M-24-2019 dated November 27, 2019. In Management Unit A, it was unlawful to use small mesh gill nets with a stretched mesh length other than 3 ¼ inches, except as described in Section II. C. and D. and Section IV. It continued to allow the use of gill nets with a stretched mesh length of 5 ½ inches through 6 ½ inches in certain portions of Management Unit A. (M-26-2019)
2020	Feb 15	This proclamation superseded Proclamation M-22-2019 dated November 12, 2019. This proclamation opened Management Unit C to the use of gill nets with a stretched mesh length of 4 inches through 6 ½ inches and implemented gear exemptions for the shad fishery in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-2-2020)

**Table 11.** (continued) Regulations for management units by date and regulation change for large-mesh ( $\geq 4$  inch) and small-mesh ( $< 4$  inch) gill nets for the 2020 ITP Year. Proclamations during winter months affected fishing effort in subsequent months.

2020	Mar 2	This proclamation opens a portion of Management Unit A to the use of floating gill nets configured for harvesting American shad by removing vertical height restrictions for all gill nets with stretched mesh lengths of 5 ¼ through 6 ½ inches. (M-3-2020)
2020	Mar 25	This proclamation supersedes Proclamation M-3-2020 dated February 28, 2020. In Management Unit A, it removes gill nets configured for harvesting American shad. It maintains restrictions on the use of fixed, stationary, or unattended gill nets and allows the use of run-around, strike, drop, and trammel gill nets and with a stretched mesh length of 5 ½ inches through 6 ½ inches in portions of Management Unit A. (M-5-2020)
2020	Apr 15	This proclamation maintains closures in all other management units south of Management Unit A and closes 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 II.; coincides with the commercial shad fishery closure) in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-6-2020)
2020	Apr 20	This proclamation implements yardage and time setting restrictions for gill nets with a stretched mesh length less than 4 inches and attendance restrictions for gill nets with a stretched mesh length less than 5 inches in the Internal Coastal Waters of the state, south of Management Unit A. Yardage limit increases will be considered for the May-October Spanish mackerel drift gill net fishery. Those increases will be implemented by proclamation at a later time. This proclamation also closed D1 to anchored nets with a stretched mesh length less than 4 inches. (M-4-2020)
2020	May 1	This proclamation implements attendance requirements for gill nets with a stretched mesh length less than 4 inches in Subunit B.1. (M-9-2020)
2020	May 1	This proclamation implements small mesh gill net attendance requirements. It maintains restrictions on the use of run-around, strike, drop, and trammel gill nets and with a stretched mesh length of 5 ½ inches through 6 ½ inches in portions of Management Unit A. (M-10-2020)
2020	May 8	This proclamation increases yardage limits for the commercial Spanish mackerel drift gill net fishery in Management Unit B. (M-11-2020)

**Table 11.** (continued) Regulations for management units by date and regulation change for large-mesh ( $\geq 4$  inch) and small-mesh ( $< 4$  inch) gill nets for the 2020 ITP Year. Proclamations during winter months affected fishing effort in subsequent months.

2020	Jun 15	<p>This proclamation supersedes Proclamation FF-34-2019, dated September 12, 2019. It establishes commercial flounder season dates for Internal Coastal Waters by Flounder Management Area. It maintains a 15-inch total length minimum size limit. It also maintains 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 makes it unlawful for a commercial fishing operation to possess flounder from the Atlantic Ocean Waters taken by any method other than trawls. This action is being taken to comply with the requirements of Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. The flounder harvest period for the Northern Management Area will open at 12:01 A.M., Tuesday, September 15, 2020 and close at 8:00 P.M., Tuesday, October 6, 2020.</p> <p>The flounder harvest period for the Central Management Area will open at 12:01 A.M., Thursday, October 1, 2020 and close at 8:00 P.M., Monday, October 19, 2020. The flounder harvest period for the Southern Management Area will open at 12:01 A.M., Thursday, October 1, 2020 and close at 8:00 P.M., Monday, November 2, 2020. (FF-25-2020)</p>
2020	Jul 22	<p>This proclamation reduced the yardage limit for gill nets with a stretched mess length less than 4 inches in Management Unit B. Yardage limit decrease in Management Unit B were being implemented to coincide with the 500 lb daily trip limit in the commercial Spanish mackerel fishery. (M-12-2020)</p>

**Table 12.** Number of gill-net hours logged and citations issued by Marine Patrol for anchored gill nets by season during the 2020 ITP Year. Gill-net hours represent time officers checked gill nets for compliance, conducted observations, or searched for trips to observe (No Contact trips). See Table 13 for details on individual citations.

Season	Gill-Net Hours	# Citations
Fall 2019	511	18
Spring 2020	542	6
Summer 2020	531	3
Total	1,584	27

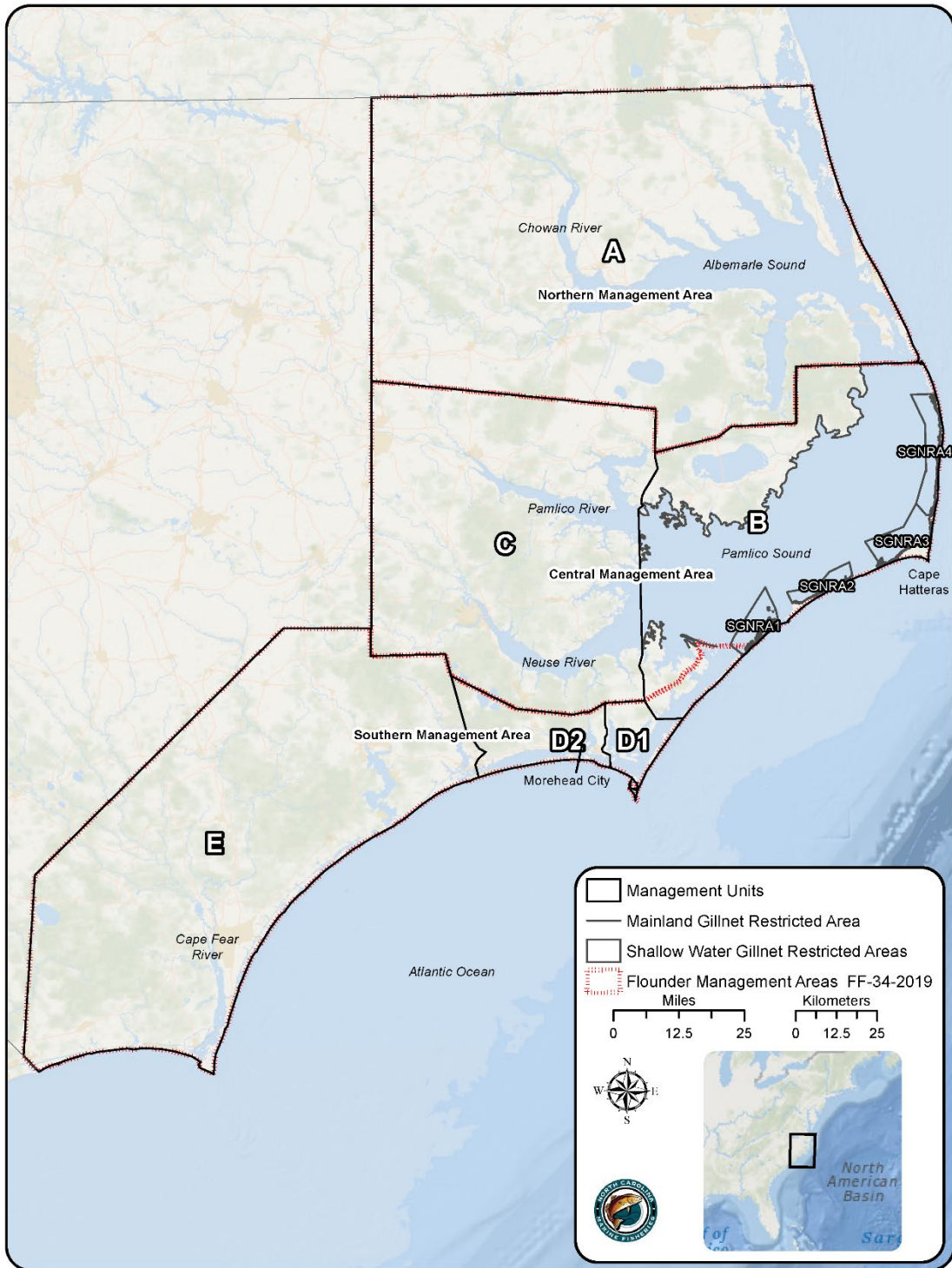
**Table 13.** All EGNP and NETG Citations written by Marine Patrol for anchored gill nets by season and violation code during the 2020 ITP Year. Details for citations with a notice of violation (NOV) are described in Table 14.

Season	Date	Violation Code	Violation Description	NOV Notice Date	
Fall	9/20/2019	NETG04	Leave gill net in waters when could not be legally fished	n/a	
2019	9/20/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a	
	9/23/2019	NETG04	Leave gill net in waters when could not be legally fished	n/a	
	9/23/2019	NETG04	Leave gill net in waters when could not be legally fished	n/a	
	9/23/2019	NETG03	Using gill net with improper buoys or identification	n/a	
	9/23/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a	
	9/26/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a	
	10/14/2019	NETG02	Using gill net without buoys or identification	10/21/2019	
	10/14/2019	NETG46	Set or retrieve large mesh gill nets later than one hour after sunrise on Tuesday through Friday. Proclamation M-8-2010	10/21/2019	
	10/14/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a	
	10/23/2019	NETG29	RCGL gear without proper buoys 3J.0103(c)	n/a	
	10/24/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a	
	10/25/2019	NETG03	Using gill net with improper buoys or identification	n/a	
	10/28/2019	NETG22	Improperly set gill net	n/a	
	10/31/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a	
	11/2/2019	NETG37	Leave small mesh gill nets unattended 3J.0103	n/a	
	11/2/2019	NETG02	Using gill net without buoys or identification	n/a	
11/4/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a		
Spring	3/27/2020	EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)	3/30/2020	
	2020	4/11/2020	NETG30	Leave RCGL gill net unattended 3O.09302	n/a
		5/10/2020	NETG02	Using gill net without buoys or identification	n/a
		5/10/2020	NETG37	Leave small mesh gill nets unattended 3J.0103	n/a
		5/14/2020	NETG03	Using gill net with improper buoys or identification	n/a
5/14/2020	NETG04	Leave gill net in waters when could not be legally fished	n/a		
5/25/2020	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a		
Summer	7/14/2020	NETG04	Leave gill net in waters when could not be legally fished	n/a	
	2020	7/14/2020	NETG02	Using gill net without buoys or identification	n/a

**Table 14.** Notice of Violations issued by season, date, and violation code for the Estuarine Gill Net Permit (EGNP) during the 2020 ITP Year. Details for NOV with an associated citation are described in Table 13.

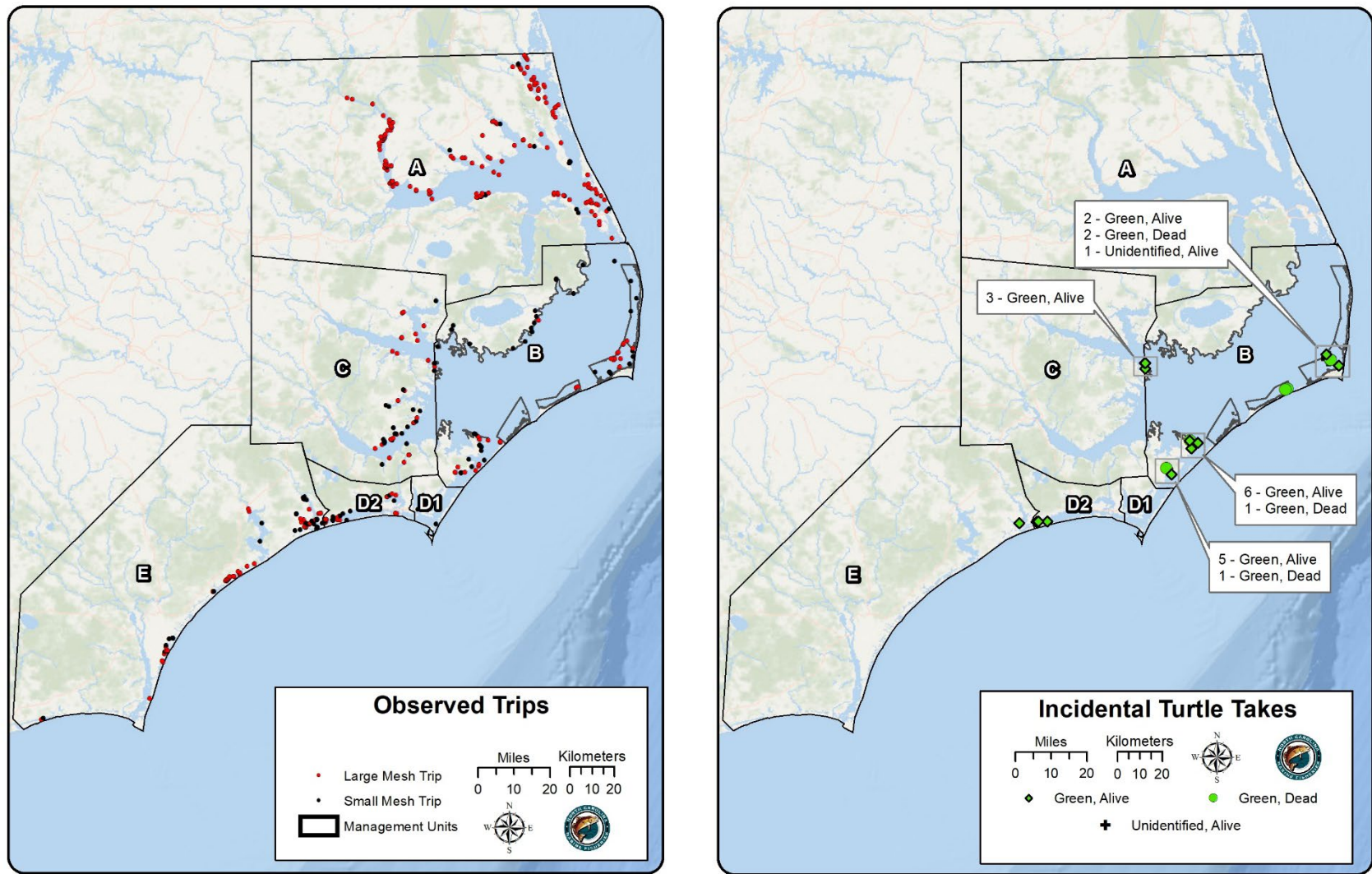
Season	Notice Date	Serve Date	Violation code	Violation description
Fall 2019	9/18/2019	9/19/2019	EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)
	10/21/2019	10/25/2019	EGNP09	Failure to set or retrieve nets in accordance with time restrictions.
	10/21/2019	10/28/2019	EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)
	10/21/2019	10/28/2019	EGNP09	Failure to set or retrieve nets in accordance with time restrictions.
	10/23/2019	10/27/2019	EGNP30	Failure to comply with gill net configurations outlined in proclamation
	10/23/2019	10/27/2019	EGNP10	Set more than the legal length of gill net
	10/23/2019	10/27/2019	EGNP09	Failure to set or retrieve nets in accordance with time restrictions.
Spring 2020	3/30/2020	4/27/2020	EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)

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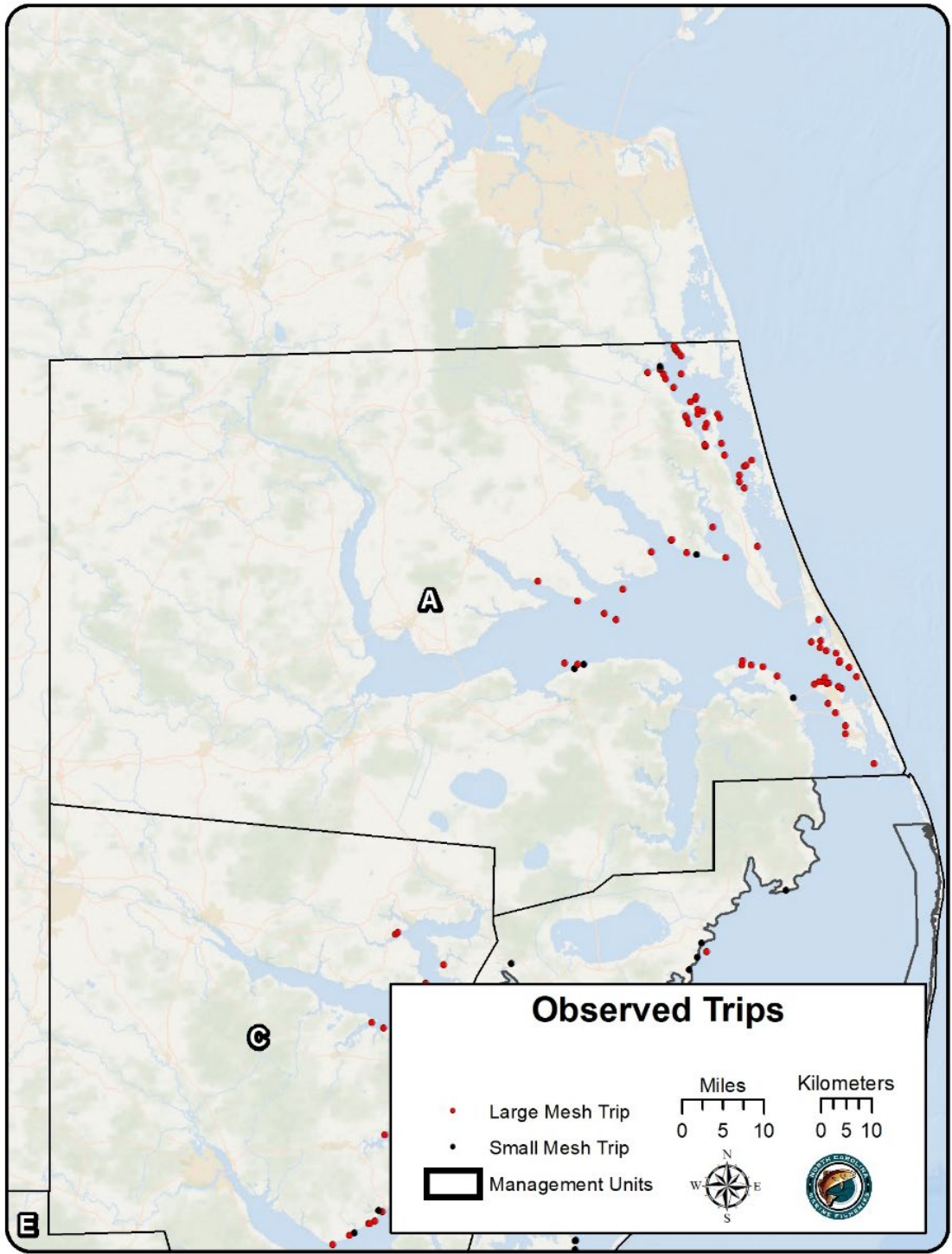


**Figure 1.** Management units (A, B, C, D1, D2, and E) as outlined in the Conservation Plan and used by the Observer Program for the 2020 ITP Year. In the Pamlico Sound Portion of B, large-mesh gill nets were confined to Shallow Water Gillnet Restricted Areas (SGNRA) 1-4 and the Mainland Gillnet Restricted Area (200 yards from shore).

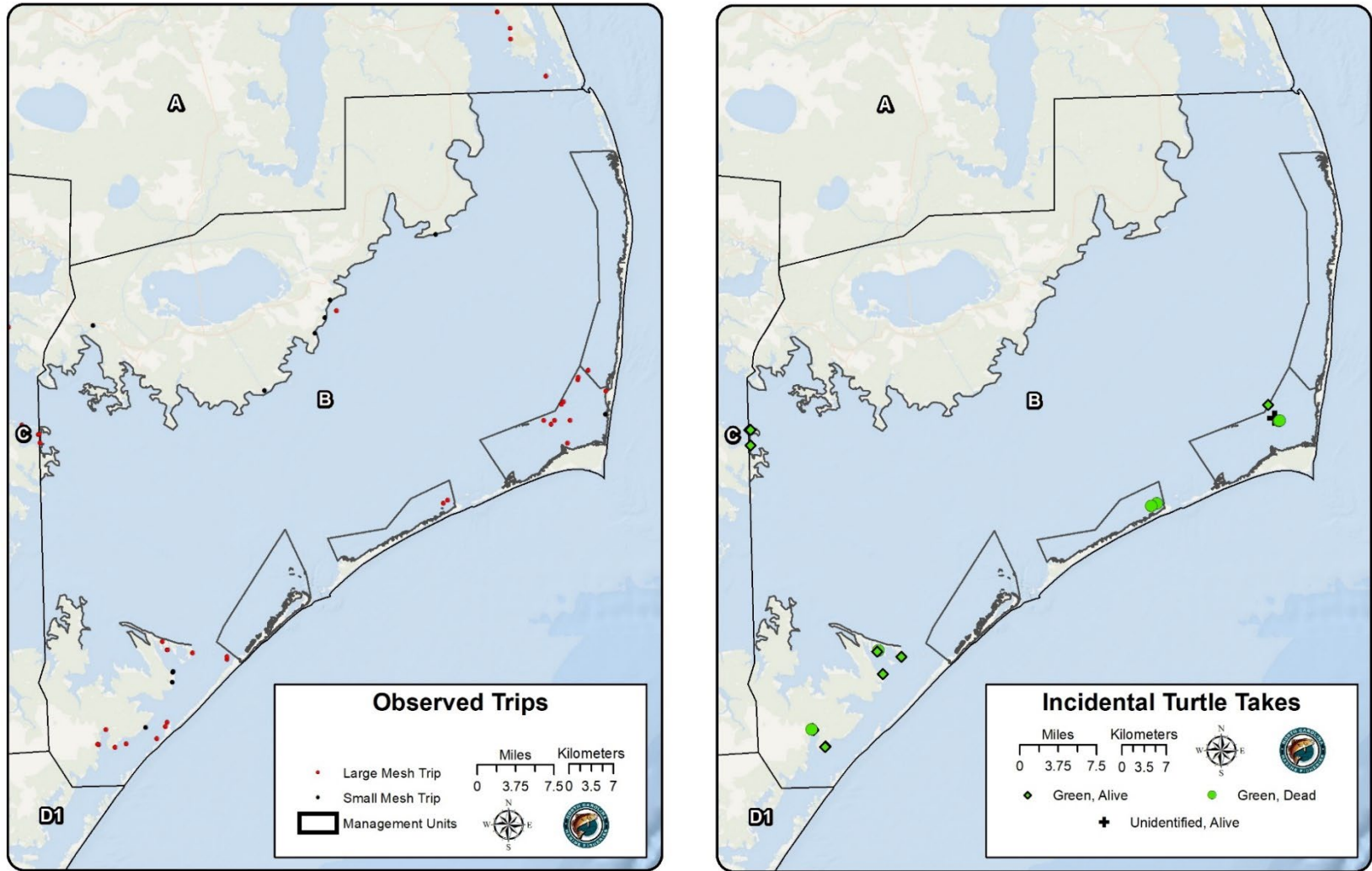




**Figure 2.** For the entire 2020 ITP Year, observed gill-net trips (left) by mesh-size category (249 large mesh =  $\geq 4$  inch; 103 small mesh =  $< 4$  inch) and sea turtle interactions (right) by species and disposition (alive, = 21; dead, n = 6) across management units. One of the interactions was recorded during winter observations to monitor for Atlantic sturgeon interactions.

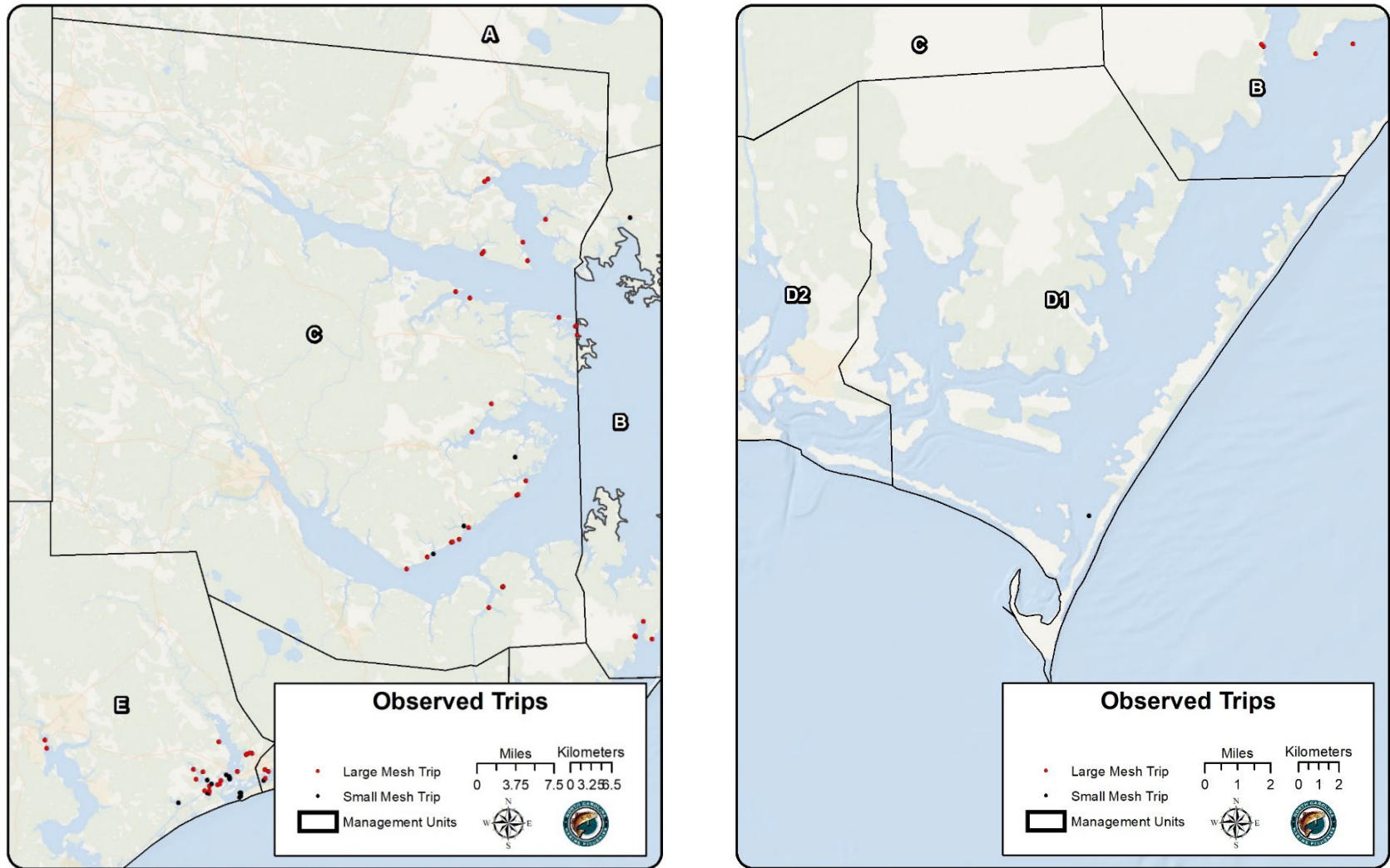


**Figure 3.** For fall 2019, observed gill-net trips by mesh-size category for Management Unit A (81 large mesh =  $\geq 4$  inch; 5 small mesh =  $< 4$  inch). No sea turtle interactions were observed.

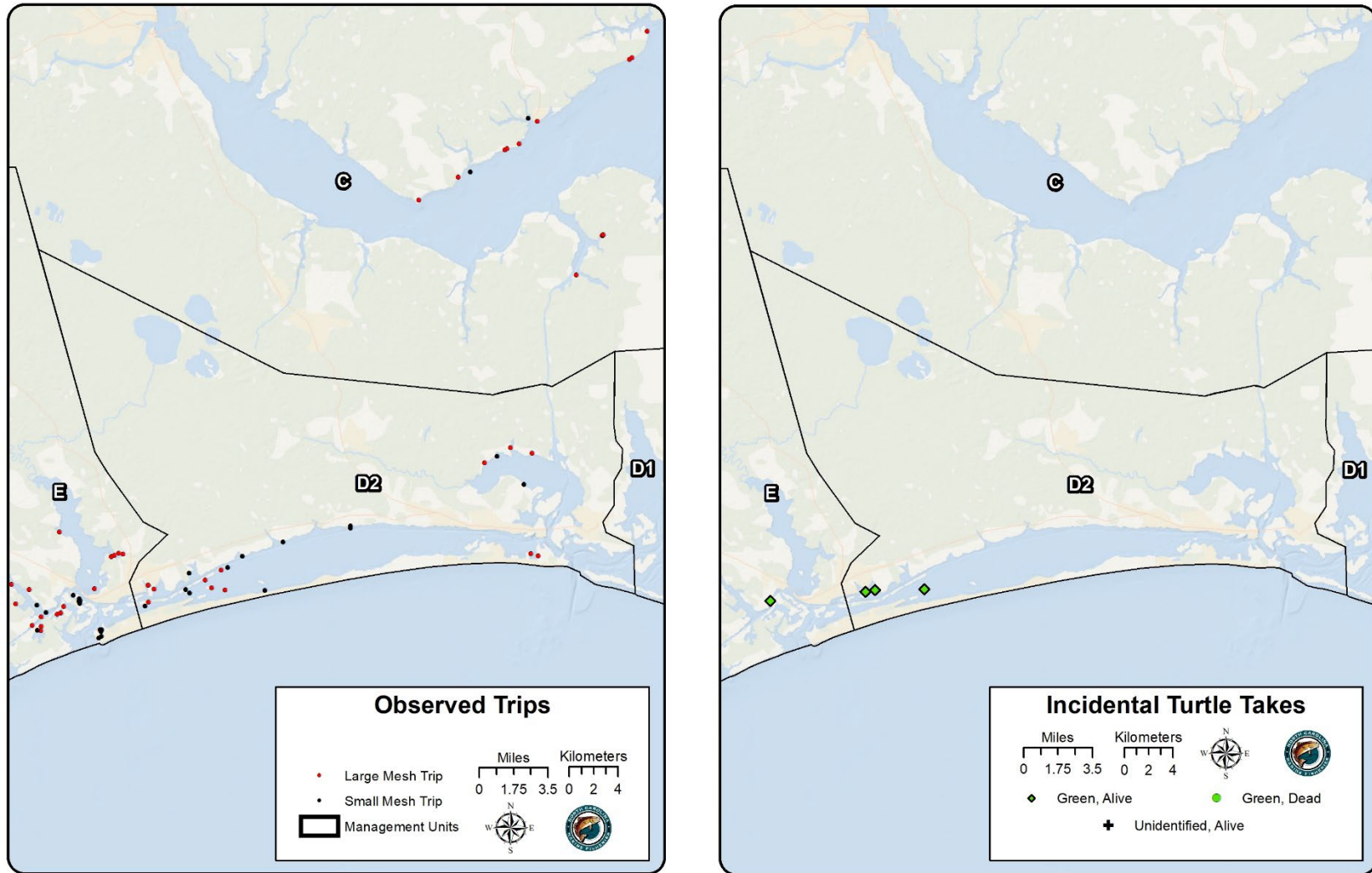


**Figure 4.** For fall 2019, observed gill-net trips (left) by mesh-size category (30 large mesh =  $\geq 4$  inch; 12 small mesh =  $< 4$  inch) and sea turtle interactions (right) by species and disposition (alive,  $n = 16$ ; dead,  $n = 6$ ) for Management Unit B. Trips and turtle location at the border of Management Units B and C occurred in B.

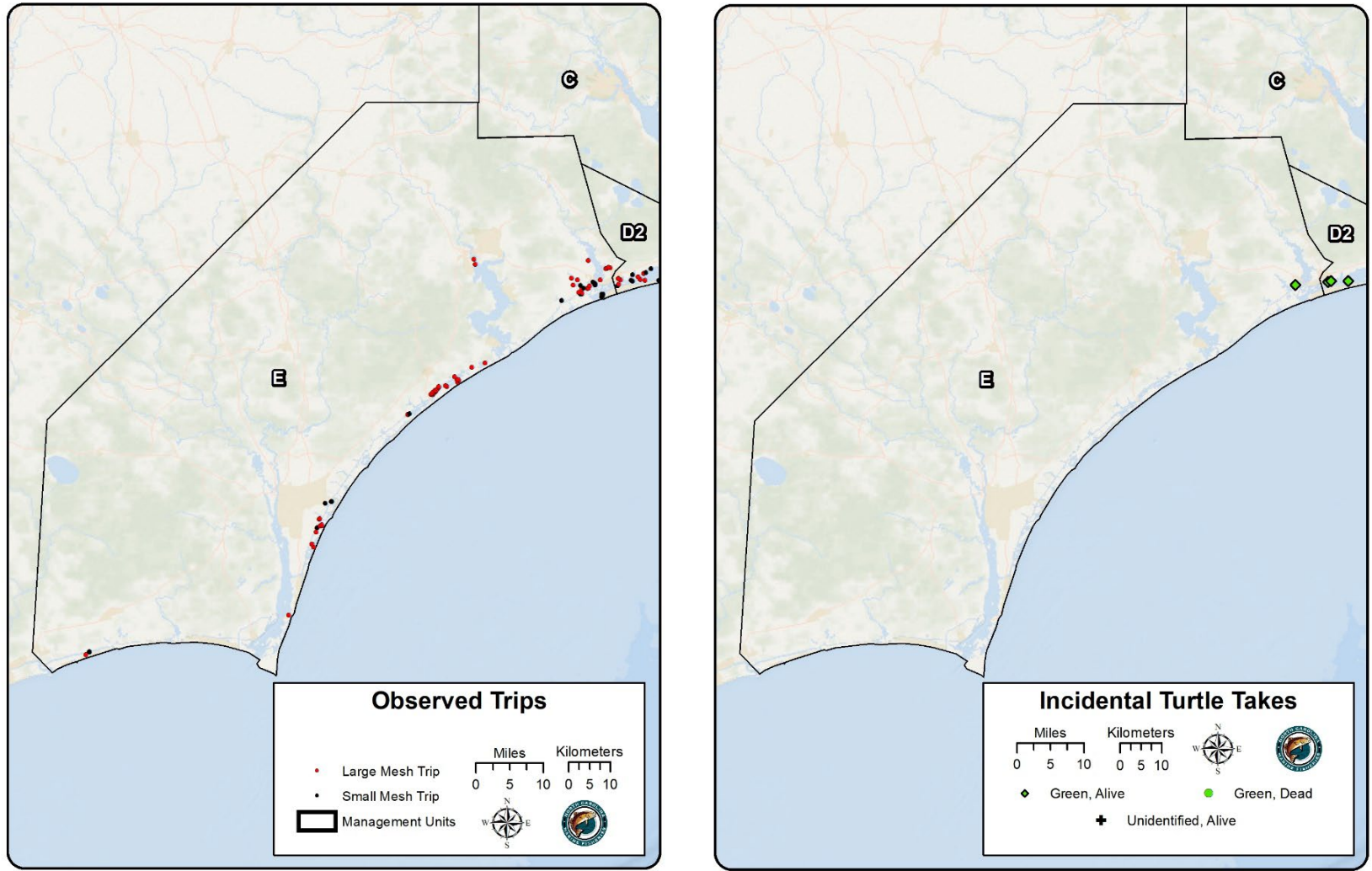




**Figure 5.** For fall 2019, observed gill-net trips by mesh-size category (large mesh =  $\geq 4$  inch; small mesh =  $< 4$  inch) for Management Unit C (left: 29 large mesh; 3 small mesh) and Management Unit D1 (right: 0 large mesh; 1 small mesh). D1 was closed to large-mesh gill nets the entire 2020 ITP Year. No sea turtle interactions were observed in Management Unit C or D1.

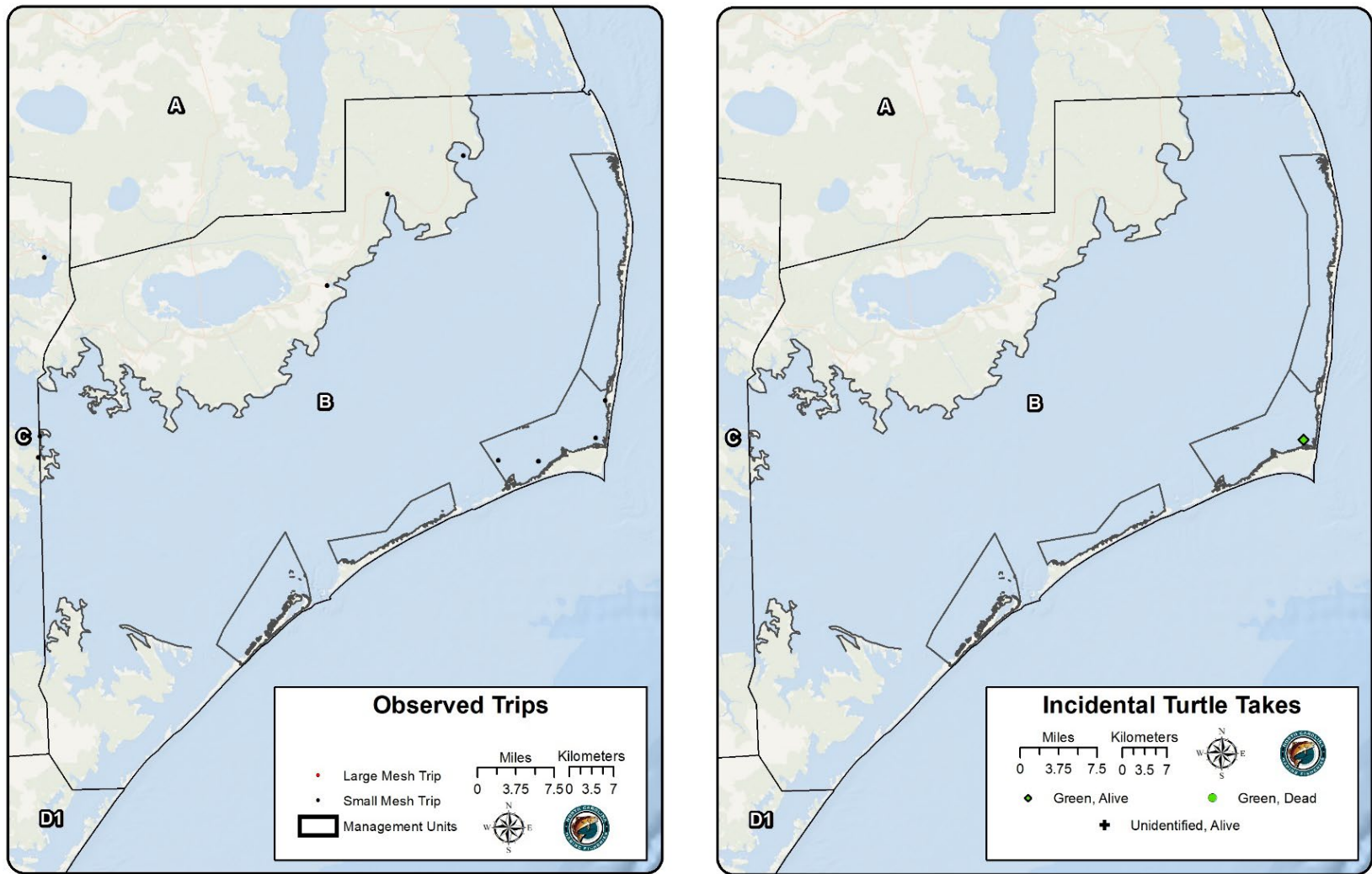


**Figure 6.** For fall 2019, observed gill-net trips (left) by mesh-size category (12 large mesh =  $\geq 4$  inch; 13 small mesh =  $< 4$  inch) and sea turtle interactions (right) by species and disposition (alive,  $n = 3$ ; dead,  $n = 0$ ) for Management Unit D2.

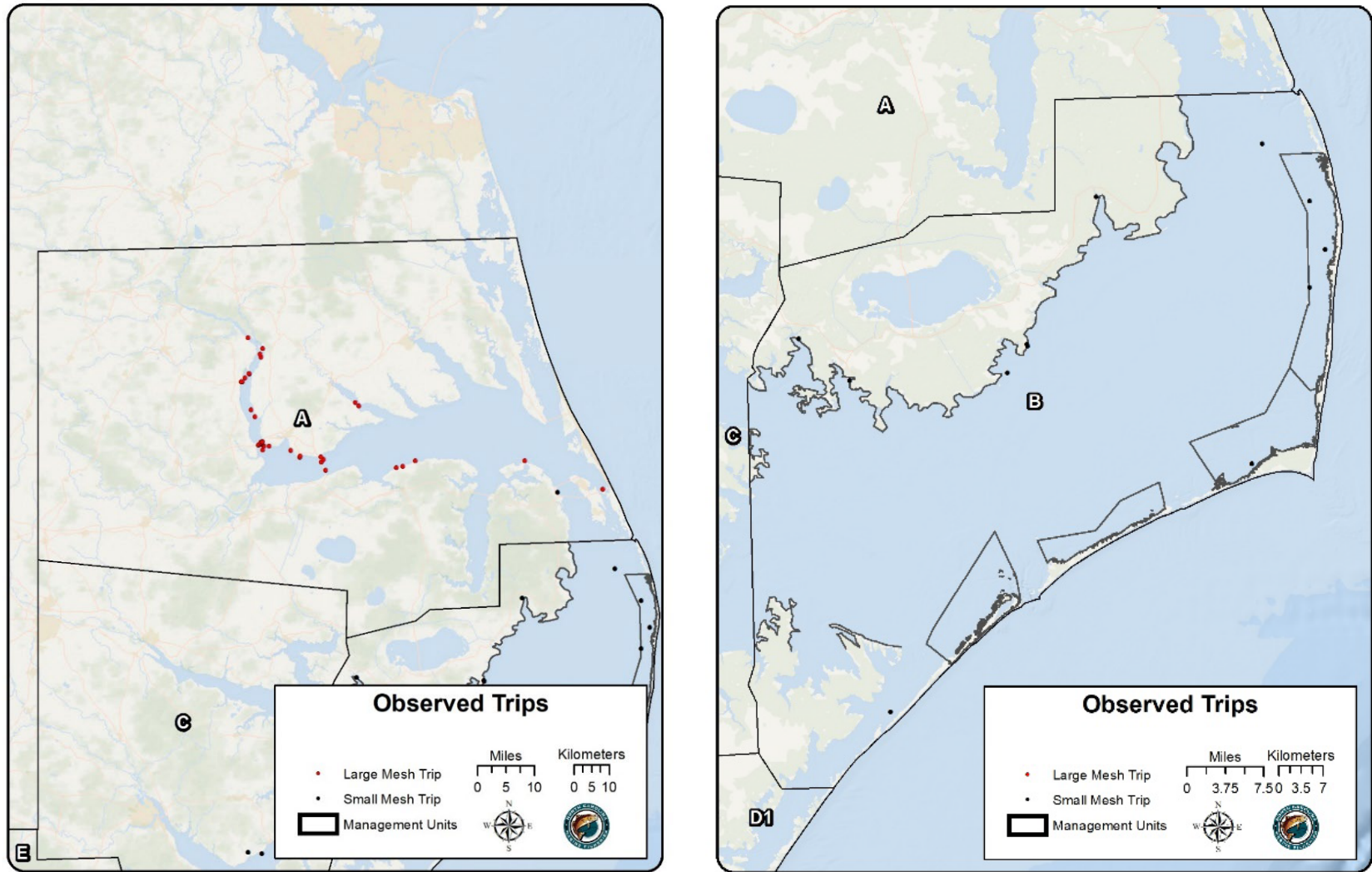


**Figure 7.** For fall 2019, observed gill-net trips (left) by mesh-size category (56 large mesh =  $\geq 4$  inch; 23 small mesh =  $< 4$  inch) and sea turtle interactions (right) by species and disposition (alive,  $n = 1$ ; dead,  $n = 0$ ) for Management Unit E.



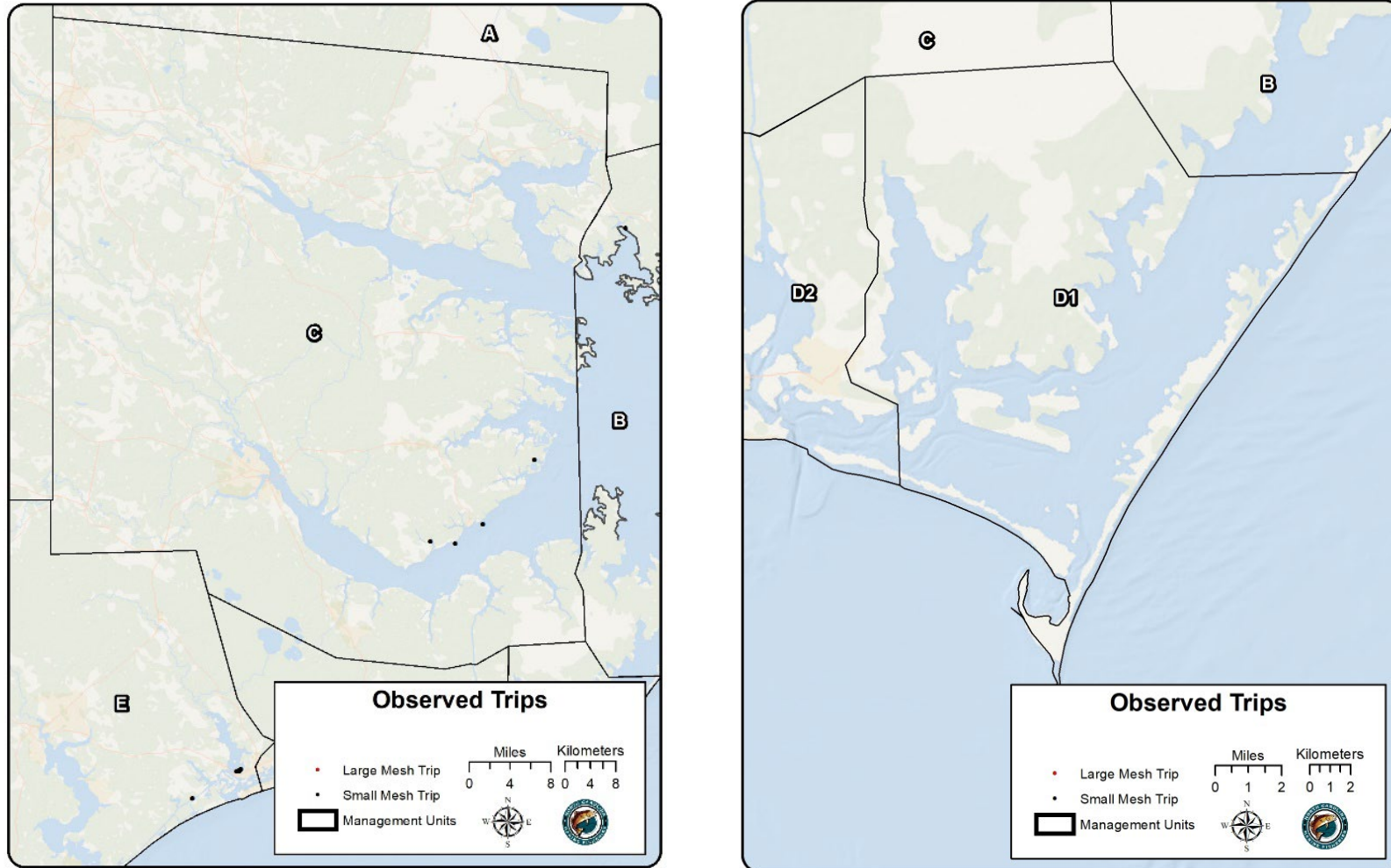


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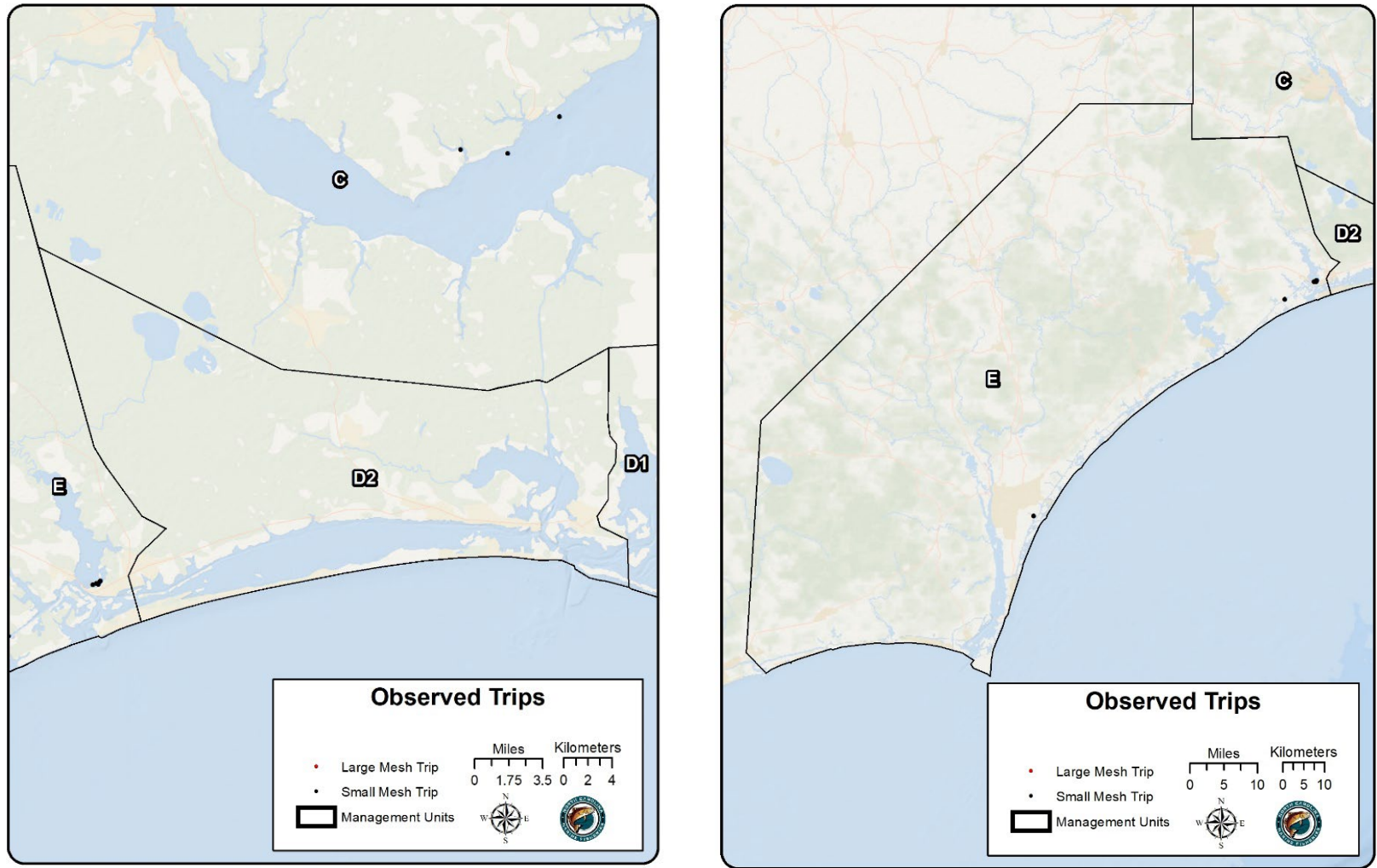


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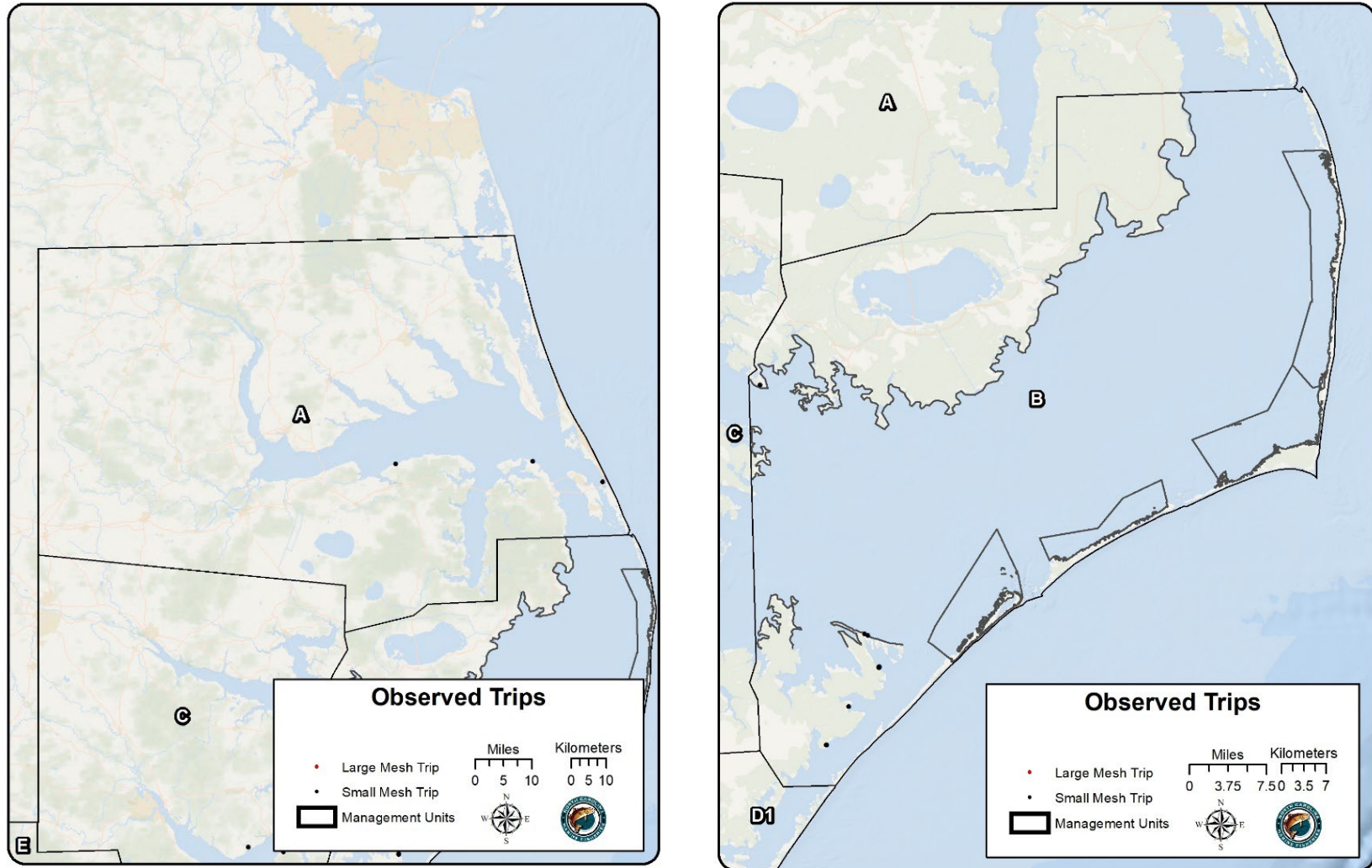




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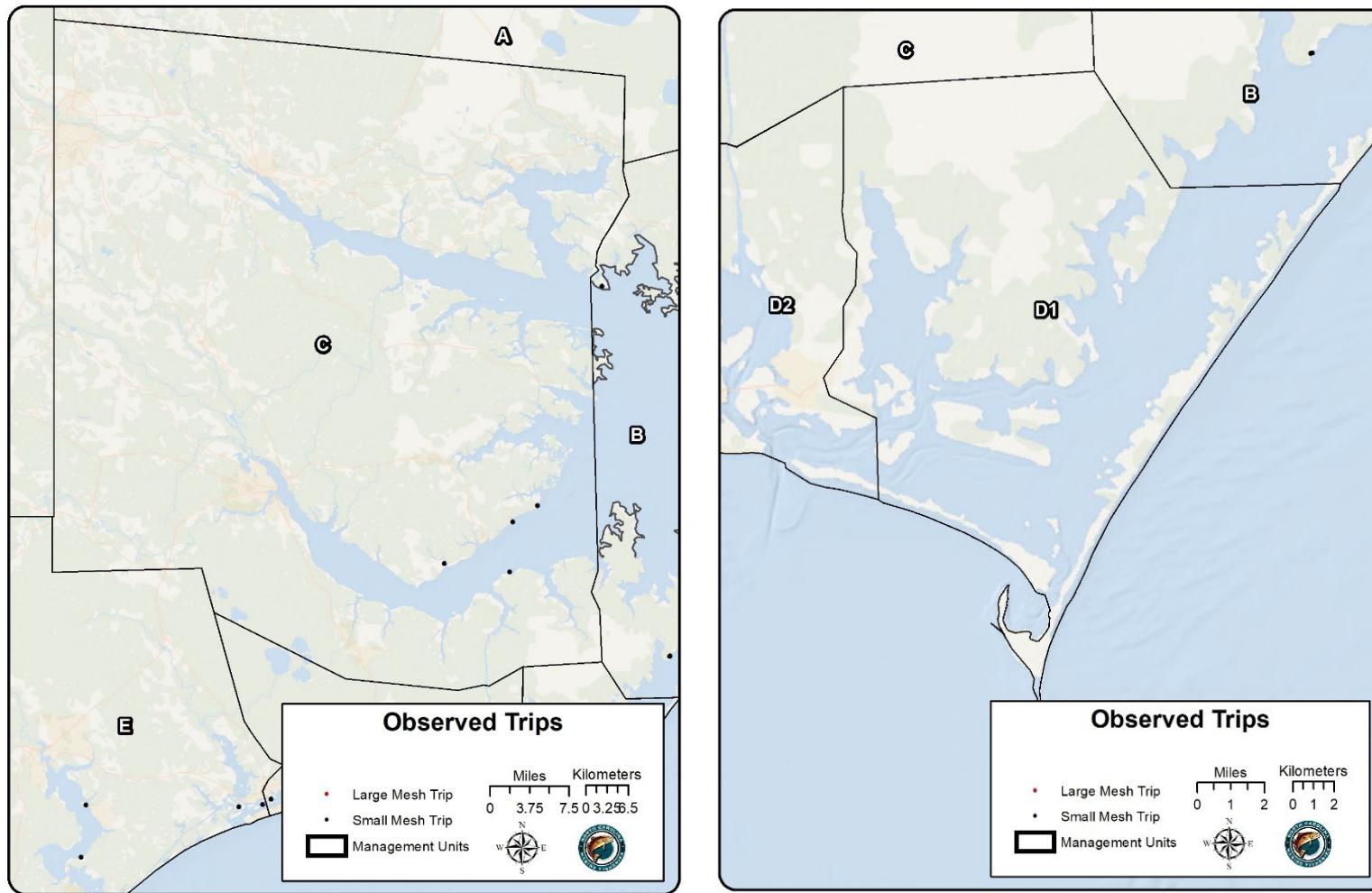


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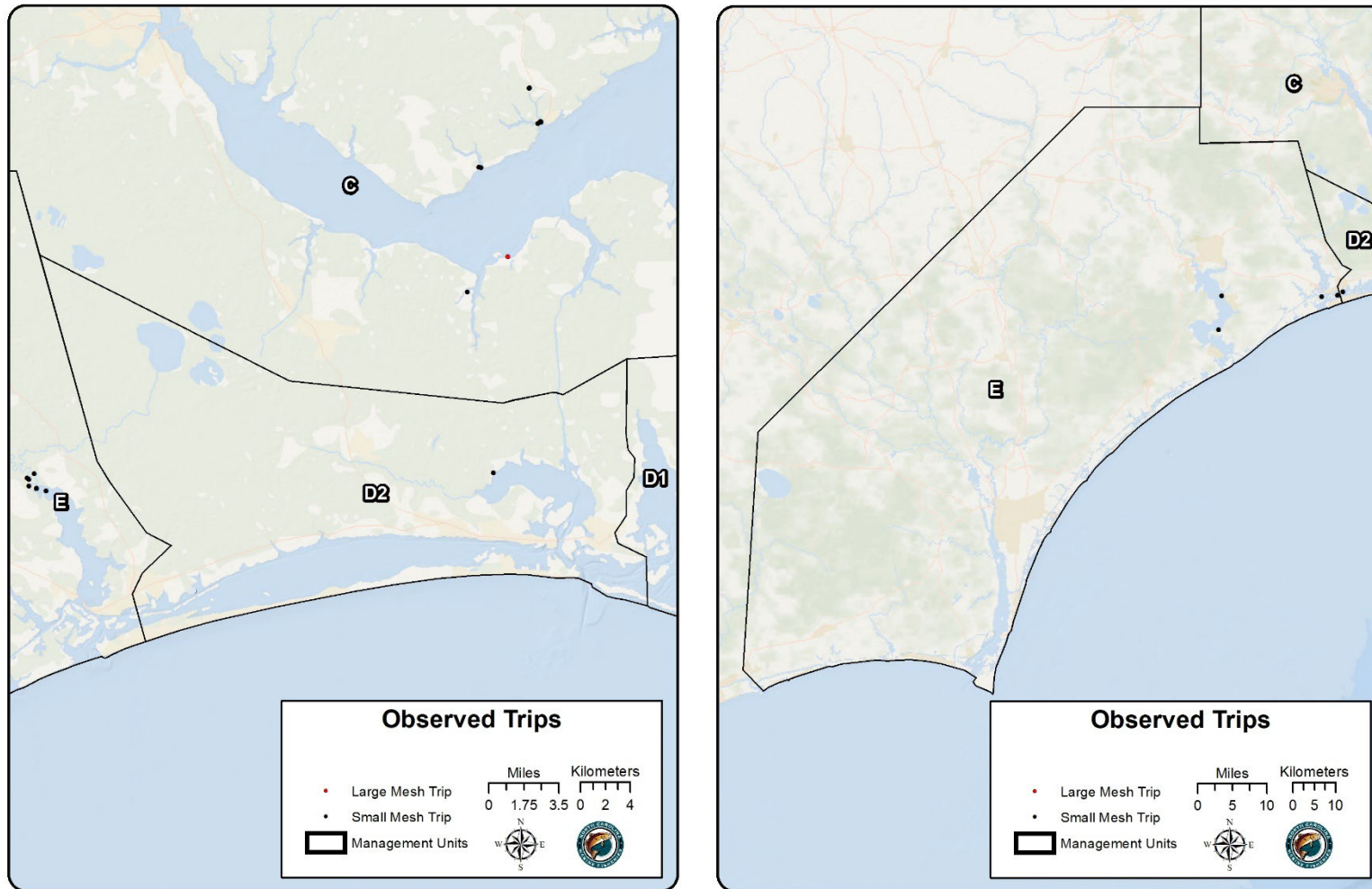


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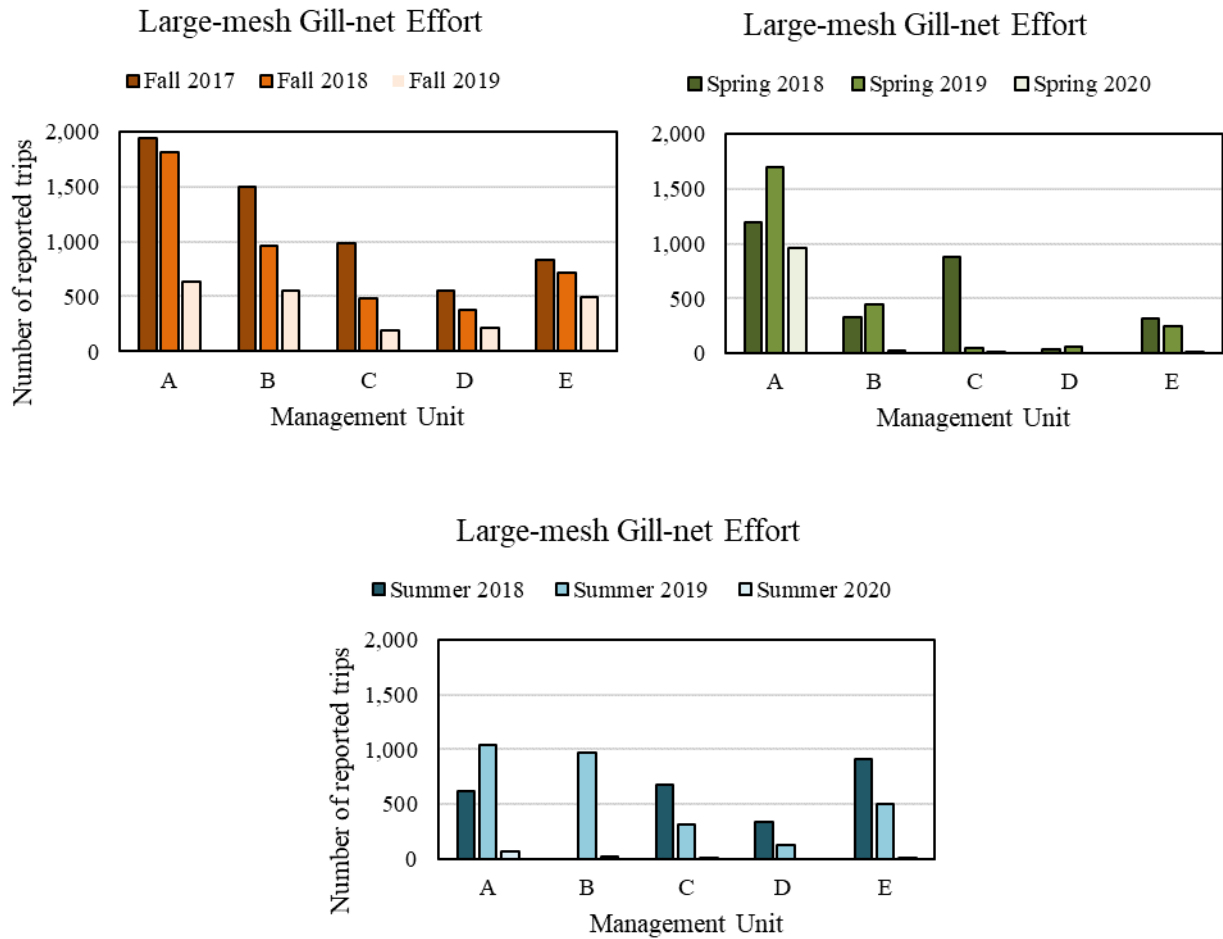




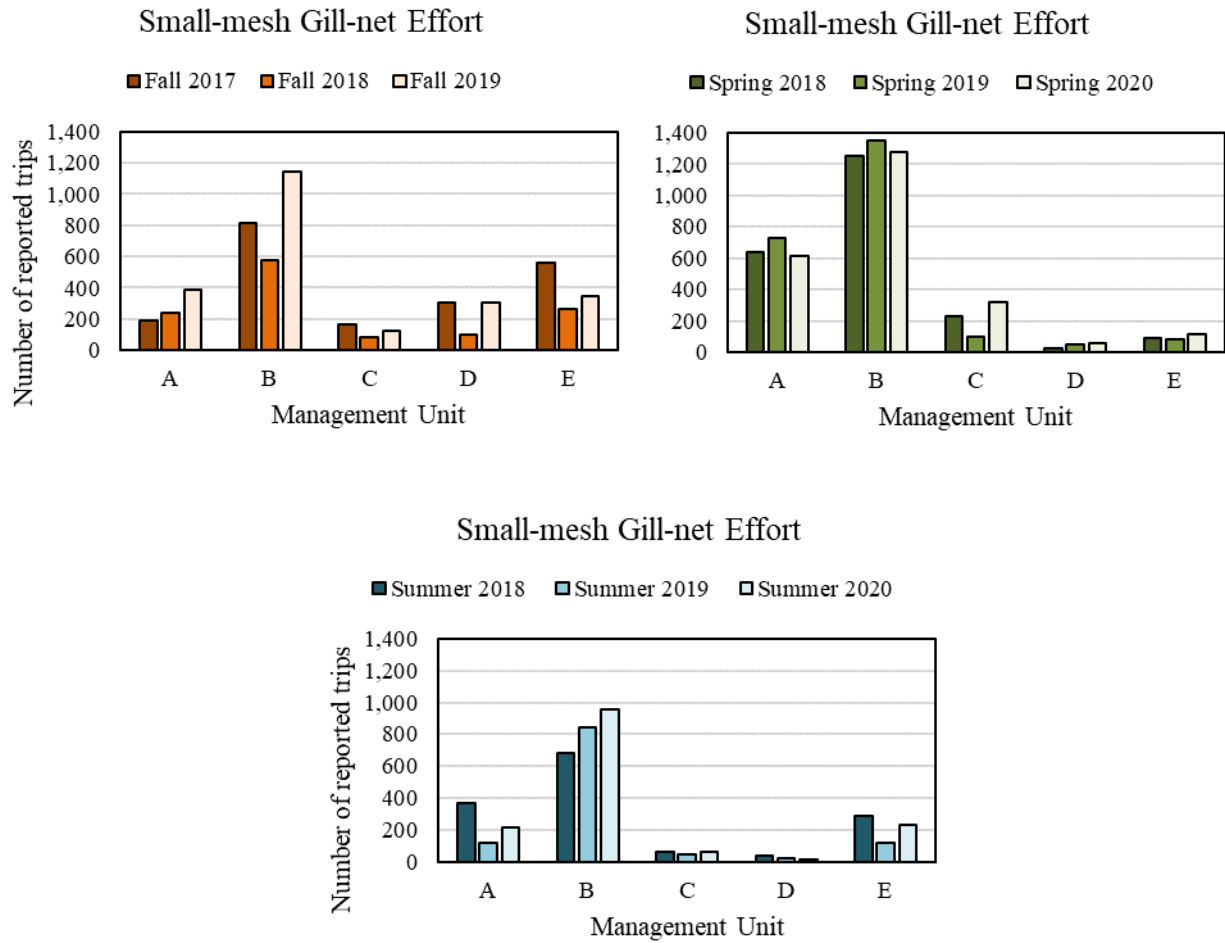
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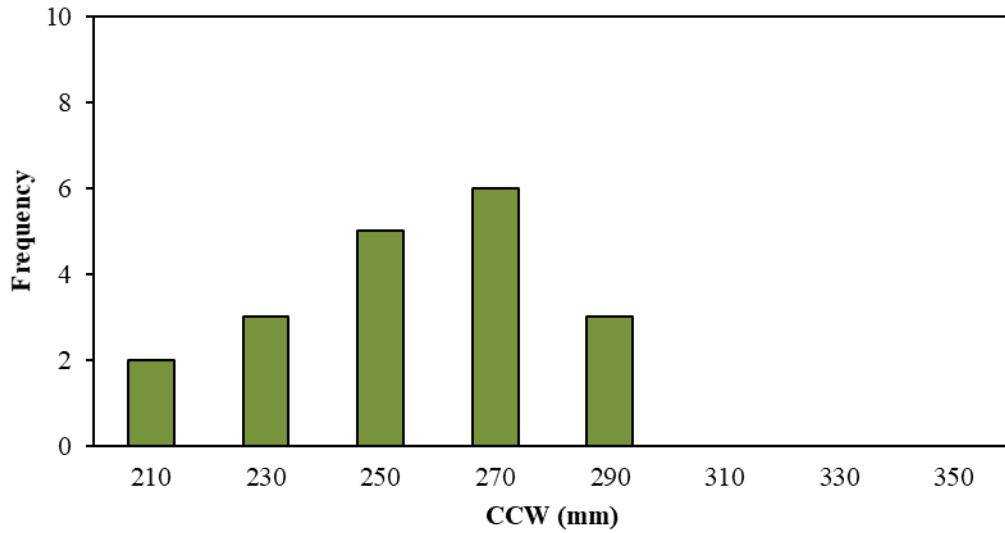
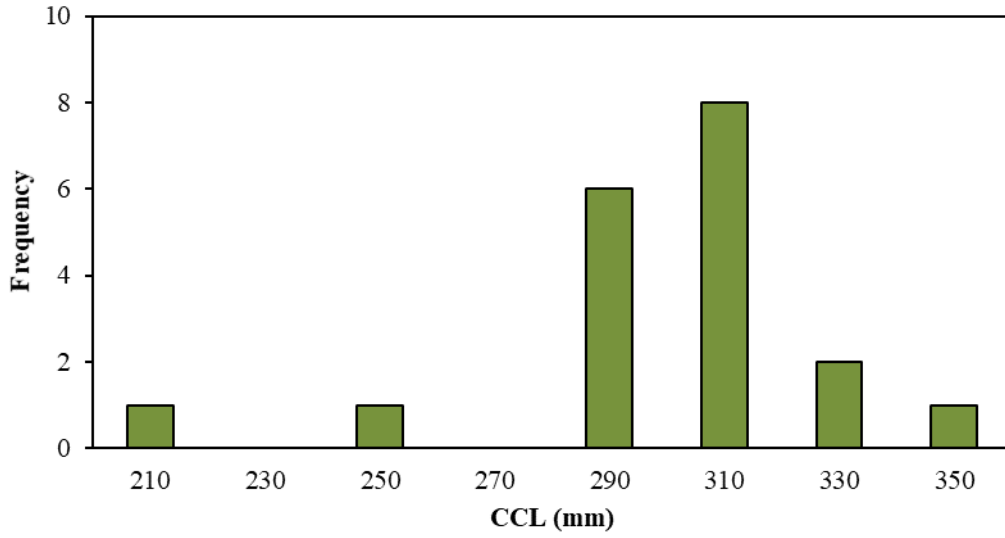
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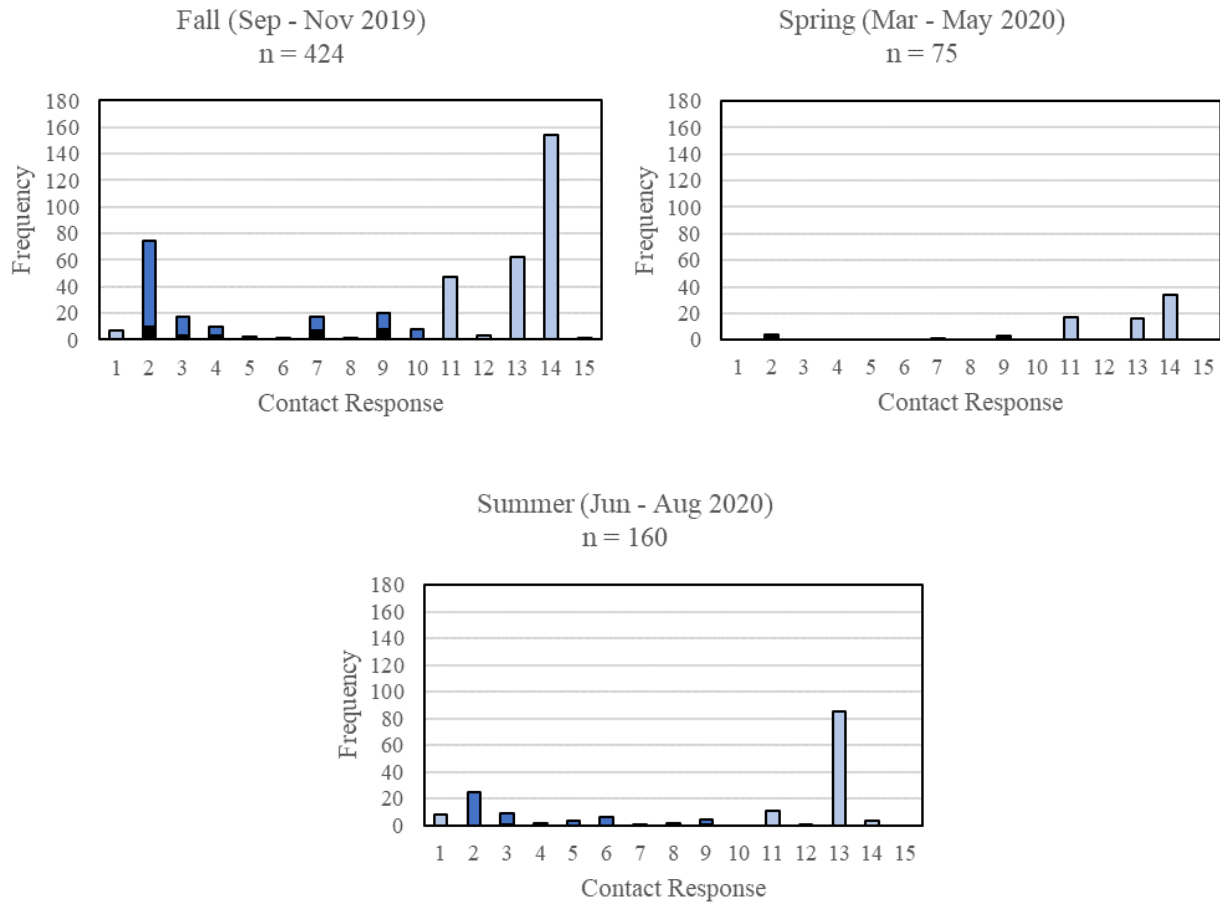


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**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
1315 East-West Highway  
Silver Spring, Maryland 20910

Stephen W. Murphey  
Director, North Carolina Division of Marine Fisheries  
3441 Arendell Street  
P.O. Box 769  
Morehead City, North Carolina 28557

Dear Mr. Murphey:

On May 26, 2020, North Carolina Department of Marine Fisheries (NCDMF) staff contacted NOAA's National Marine Fisheries Service (NOAA Fisheries) Office of Protected Resources requesting clarification of observed sea turtle tagging protocols as required by Permit No. 16230 issued under Section 10 (a)(1)(B) of the Endangered Species Act to incidentally take threatened and endangered sea turtles in gillnet fisheries operating in internal North Carolina (NC) waters. NCDMF staff requested clarification regarding updated flipper and Passive Integrated Transponder (PIT) tagging protocols required in the NOAA Fisheries Southeast Fisheries Science Center (SEFSC) Permit No. 21233-01 for research activities on sea turtles, and the availability of NOAA Fisheries SEFSC personnel to conduct tagging training for NC observers during the COVID-19 pandemic. In response to this request, we have consulted with SEFSC sea turtle staff at the NOAA Beaufort Laboratory, and collaborated with NCDMF staff and the NC Wildlife Resources Commission to conduct an analysis of available sea turtle tagging and recapture data under the current NCDMF incidental take permit.

Tagging of incidentally taken sea turtles is required under the incidental take permit as a mitigation activity to assist in determining the fate of incidentally captured individuals after release. Based on the available data, NCDMF observers (or rehabilitation facilities) have tagged 113 incidentally captured sea turtles (3 loggerhead, 18 Kemp's ridley, and 92 green sea turtles) as part of the current incidental take permit (September, 2013 to October, 2019). Data from the NC Sea Turtle Stranding and Salvage Network Database and the Archie Carr Center for Sea Turtle Research Cooperative Marine Turtle Tagging Program indicate that four of the tagged green sea turtles have been recaptured. Three of these green sea turtles stranded in NC due to cold stunning (one dead, two alive) at least two months after incidental capture, and one green sea turtle stranded in NC dead of undetermined causes approximately one month after incidental capture.

The updated flipper tagging protocols in the SEFSC permit require the use of smaller (1005 series) tags for turtles measuring 20-30 centimeters (cm) in straight carapace length, and standard (681 series) tags for turtles greater than 30 cm in straight carapace length. The updated PIT tagging protocols require researchers with specialized experience, use of a local anesthetic, and use of small needle gauge sizes for applying PIT tags in sea turtles measuring 16-30 cm in straight carapace length. Based on the approximately 200 sea turtles captured under the incidental take permit for which we have carapace measurements, more than 50 percent would require smaller flipper tags, requiring observers to have appropriate training and multiple size



8 Appendix A (continued)

tags available, at a minimum. Given the specialized experience required to apply the smaller tags to smaller turtles, we have determined that it would not be appropriate for observers to flipper or PIT tag these turtles.

Therefore, given the very low recapture rate (3.5 percent), the observer experience and training required to safely tag the size of sea turtles commonly incidentally captured, and the challenges with observers acquiring tagging training during the COVID-19 pandemic, we are modifying the permit to remove the requirement for observers to flipper and PIT tag incidentally captured sea turtles for the remainder of the current incidental take permit (No. 16230, expiring August, 2023). NOAA Fisheries and NCDMF will revisit the tagging requirement when developing any future incidental take permits for gillnet fisheries operating in NC waters as appropriate.

Please sign below to acknowledge that you will comply with this minor permit modification specified in this letter and send a copy of the signed letter to Wendy Piniak on my staff at your earliest convenience.

Please feel free to contact Wendy Piniak ([wendy.piniak@noaa.gov](mailto:wendy.piniak@noaa.gov)) or Kristy Long ([kristy.long@noaa.gov](mailto:kristy.long@noaa.gov)) with any questions about this minor modification.

We look forward to continuing to work with you on sea turtle conservation in North Carolina.

Sincerely,

**WIETING.DONNA**  
**A.S.1365710607**  
Donna S. Wieting  
Director, Office of Protected Resources

Digitally signed by  
WIETING.DONNA.S.1365710607  
Date: 2020.08.24 16:00:30  
-04'00'

I acknowledge the minor modification specified above to Permit No. 16230 issued under Section 10 (a)(1)(B) of the Endangered Species Act to incidentally take threatened and endangered sea turtles in gillnet fisheries operating in inshore waters of North Carolina.

\_\_\_\_\_  
Stephen W. Murphey  
Director  
N.C. Division of Marine Fisheries

\_\_\_\_\_  
Date



Annual Atlantic Sturgeon Interaction Monitoring of Anchored Gill-Net Fisheries  
in North Carolina for Incidental Take Permit Year 2020  
(1 September 2019–31 August 2020)

Annual Completion Report for Activities under Endangered Species Act  
Section 10 Incidental Take Permit No. 18102

Barbie L. Byrd, Meghan P. Gahm, John McConnaughey, and Scott A. Smith

North Carolina Department of Environmental Quality  
North Carolina Division of Marine Fisheries  
Protected Resources Program  
3441 Arendell Street  
Morehead City, NC 28557

February 2021

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## 1 INTRODUCTION

The North Carolina Division of Marine Fisheries (NCDMF) applied for an Incidental Take Permit (ITP) under Section 10(a)(1)(B) of the Endangered Species Act (ESA) of 1973 (Public Law 93-205, ESA) on 5 April 2012 for Atlantic Sturgeon (*Acipenser oxyrinchus*) interactions with anchored gill-net fisheries in North Carolina's estuarine waters. Anchored gill nets are a passive gear deployed with an anchor, stake, or boat at one or both ends of the net string or operation; they do not include run-around, strike, drop, or drift gill nets. The application for the ITP was prompted by notification from the National Marine Fisheries Service (NMFS) in February 2012 indicating the intent to list the Carolina Distinct Population Segment (DPS) of Atlantic Sturgeon as endangered under the ESA. The NCDMF requested an ITP from the NMFS to implement a proposed Conservation Plan that ensured only a reasonable level of authorized Atlantic Sturgeon incidental takes would occur, while allowing North Carolina's estuarine anchored gill-net fisheries to operate. The ITP authorizes such takes that are incidental to normal fishing activity. For this report, the term "gill net" refers to anchored gill nets unless stated otherwise.

The NCDMF received the Atlantic Sturgeon ITP (No. 18102) on 22 July 2014 after a series of revisions based on comments by the NMFS and a final application submitted on 2 January 2014 (Daniel 2014; NMFS 2014; McConnaughey et al. 2019). This ITP defined an ITP Year as 1 September through 31 August of the following year and defined large-mesh gill nets as  $\geq 5$  inch stretched mesh. In addition, the ITP established authorized levels of incidental takes across seven geographic regions (Management Units A1, A2, A3, B, C, D, E; Figure 1). To maintain incidental takes below authorized levels, the ITP included a Conservation Plan that consisted of a variety of measures the NMFS determined would monitor, minimize, and mitigate incidental takes of ESA-listed Atlantic Sturgeon from the Gulf of Maine, New York Bight, Chesapeake, Carolina, and South Atlantic DPSs. These measures included the continuation of restrictions put in place by the NCDMF sea turtle ITP (16230) for gill nets with a mesh size of  $\geq 4$  inch stretched mesh operating in estuarine waters across the state (NMFS 2013). Specifically, these restrictions prohibited gill nets in the deep waters of Pamlico Sound, limited soak times to between an hour before sunset to an hour after sunrise in portions of the state, limited days of fishing depending on location, restricted net height to no more than 15 meshes, restricted total net yardage to a maximum of 2,000 yards per vessel; and required net configurations for a string of nets (each net is called a 'shot') be constructed of shots no longer than 100 yards with a 25-yard break between shots. The only exception to these restrictions was that fishermen were restricted to a maximum of 1,000 yards per fishing operation in the southern portion of the state (M-31-2014) (<http://portal.ncdenr.org/web/mf/proclamation-m-31-2014>). The reason these regulations were in place for gill nets  $\geq 4$  inch stretched mesh was because the sea turtle ITP defined large-mesh gill nets as  $\geq 4$  inch stretched mesh in contrast to the Atlantic Sturgeon ITP, which defined them as  $\geq 5$  inch stretched mesh. In addition to establishing regulations on how fisheries could be prosecuted, the Conservation Plans for both ITPs included a state-wide estuarine gill-net observer program that allows for interactions to be counted and extrapolated when applicable across the fishery within a given season and area. Data from observed trips are used for both ITPs. These data are used by the NCDMF in an adaptive management approach to mitigate incidental takes by implementing temporary management options using the NCDMF director's proclamation authority (General Statute 143B-289.52).

On 13 July 2017, the NCDMF requested a minor modification to the Atlantic Sturgeon ITP allocation of allowed takes in Management Units A and C to be listed as annual rather than

seasonal takes. The NCDMF explained that annual take thresholds would provide greater flexibility in managing the fishery while minimizing the frequency of full seasonal closures. Further, the NCDMF emphasized that they would actively monitor fisheries and take levels daily to limit takes, particularly dead takes. On 19 July 2017, the NMFS sent a letter to the NCDMF agreeing with the request for the minor modification, but encouraging staff to incorporate any further anticipated minor modifications into the application process for an updated ITP (McConnaughey et al. 2019).

Significant regulatory changes were enacted during fall 2019 for the Southern Flounder (*Paralichthys lethostigma*) fisheries. These regulations were included in Amendment 2 of the Southern Flounder Fishery Management Plan (FMP) adopted by the North Carolina Marine Fisheries Commission on 23 August 2019 (NCDMF 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 to 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 beginning in 2020.

To reduce harvest in the anchored large-mesh gill-net fishery, the state was divided into three flounder management areas, Northern, Central, and Southern. These flounder management areas generally aligned with the ITP management units except for the Core Sound portion of B, which was split into a different flounder management area than the rest of B (Figure 1). Each area had specific dates when fishing was allowed: the Northern area was open 15 September–13 October 2019, the Central area was open 1–26 October 2019, and the Southern area was open 1 October–15 November 2019. Yardage restrictions for large-mesh gill nets per the ITPs were further reduced by 25% in the Amendment 2 Flounder FMP (NCDMF 2019). Amendment 2 also reduced soak times of large-mesh gill nets to overnight soaks state-wide. 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 incidental take thresholds be approached or exceeded. After 15 November, limited allowances for anchored large-mesh gill nets were made during winter and spring for the invasive Blue Catfish (*Ictalurus furcatus*) and American Shad (*Alosa sapidissima*) fisheries. For more information, see the Results section.

Another significant event that occurred during the 2020 ITP Year was the COVID-19 pandemic, which led to a state of emergency declaration by NC's Governor. On 20 March 2020, the NMFS waived the requirement for boats fishing in federally managed fisheries to carry observers or at sea monitors due to concerns about the transmission of COVID-19. The NMFS extended this waiver to the NCDMF Observer Program on 23 March 2020; the waiver was in place throughout the remainder of the 2020 ITP Year.

This annual report outlines observer activity, fishing activity, and total or estimated takes of Atlantic Sturgeon for the previous ITP year, 1 September 2019–31 August 2020. The deadline for annual reports was originally 31 January per the ITP; however, in January 2017 the deadline was extended to the last day in February following a request by the NCDMF (McConnaughey et al. 2019). Data for fishing activity, measured in number of trips, are finalized for 2019 (fall and part of winter). After the preliminary data for 2020 are finalized in May 2021, observer coverage and authorized estimated Atlantic Sturgeon takes will be recalculated and finalized estimates will be provided to the NMFS in the form of an addendum.

## 2 METHODS

### 2.1 Observer Activity

Observer activity was distributed across seven management units outlined in the Conservation Plan (A1, A2, A3, B, C, D, and E; Figure 1). Per the sea turtle ITP, Management Unit B was unique in that large-mesh gill nets operating in Pamlico Sound were confined to specific subunits (Shallow Water Gill-Net Restricted Area, SGNRA 1, SNGRA2, SNGRA3, SGNRA4, and Mainland Gill-Net Restricted Area, MGNRA), effectively closing the fishery in the deep waters of Pamlico Sound and in corridors near the Ocracoke, Hatteras, and Oregon inlets (Daniel 2013; Figure 1). Within the management units, observer activity was also distributed across four seasons that crossed calendar years: fall (September–November 2019), winter (December 2019–February 2020), spring (March–May 2020), and summer (June–August 2020). Per the Conservation Plan, the number of projected observer trips was based on the required 7-10% coverage of the total large-mesh ( $\geq 5$  inch stretched mesh) gill-net fishing trips, and 1-2% coverage of the total small-mesh ( $< 5$  inch) gill-net fishing trips state-wide across all seasons. To meet the overall state-wide requirement of observer coverage levels, the Observer Program made every effort to maintain the necessary level of coverage for each season and management unit. This approach was also consistent with observer coverage requirements for the sea turtle ITP. As such, projected observer trips were stratified across seasons and management units proportional to Trip Ticket Program (TTP) data for large-mesh and small-mesh gill-net trips from the previous five years. The exception was for management units and seasons where anchored large-mesh gill nets were prohibited whereby the projected fishing and observer trips were set to zero: Management Units B, D, and E during winter and spring, and all management units during summer.

At the beginning of the 2020 spring season (20 March 2020), the NCDMF temporarily halted observer effort because of the COVID-19 pandemic. Marine Patrol officers were still on the water and continued to include alternative platform trips (i.e., using a state-owned vessel to observe at a distance; see description below) as a part of their weekly duties when fishing effort could be found. In June 2020, the NCDMF outlined protocols for observer staff to resume limited field sampling while preventing the spread of COVID-19. These protocols included among other things, the use of alternative platform observations only and no overnight travel. Observers resumed effort under these guidelines on 6 June 2020. Because all observers were based out of the Morehead City office, coverage of areas too far for a day trip (e.g., Cape Fear River, Albemarle Sound) was dependent on Marine Patrol officers.

During fall, winter, and the first few weeks of spring, each observer attempted to obtain three to four trips per working week when fishing activity was occurring. This approach was used again when observers resumed activities in early June (beginning of summer). Observers were assigned a management unit to work weekly, and the number of observers assigned to a management unit depended on the season and projected fishing effort. Additionally, Marine Patrol officers attempted to obtain alternative platform trips as part of their regular duties. Reports from observers, fishermen, and other NCDMF staff (e.g., fish house samplers) were used to determine if effort was fluctuating between management units. Trends from the previous years' TTP data and current area closures were also assessed to determine if fishing effort was shifting from one management unit to another.

Obtaining observer trips was facilitated by the requirement that fishermen participating in estuarine anchored gill-net fisheries were required to obtain an Estuarine Gill-Net Permit (EGNP; M-24-2014; <http://portal.ncdenr.org/web/mf/proclamation-m-24-2014>). The most recent list of permit holders was stratified by management unit and then by geographic area within units. Contact information for these fishermen was given to observers assigned to specific management units so they could attempt to schedule an onboard trip. Other outreach efforts, such as visiting fish houses, were limited during the 2020 ITP Year. The Observer Program website (<http://portal.ncdenr.org/web/mf/observers-program>) was available, but fishermen were not necessarily directed to it during the 2020 ITP Year.

The Observer Program employed two methods to obtain trips for documenting protected species interactions. The preferred method has always been onboard observations where observers ride onboard fishermen's vessels. The other method was alternative platform observations, whereby two observers used a state-owned vessel to monitor commercial fishers hauling their gill nets. In addition to traditional observers, Marine Patrol officers also obtained alternative platform trips, following similar data collection protocols. Alternative platform trips were used for areas where fishing effort increased quickly, when a fisherman's vessel was too small to safely accommodate an onboard observer, when observers were unable to set up onboard trips due to fisherman avoidance or non-compliance, and when observations resumed in June during the ongoing COVID-19 pandemic. Coordination of onboard, alternative platform, and Marine Patrol alternative platform trips occurred regularly to achieve the maximum efficiency, to avoid multiple observations of a single trip, and to achieve the maximum amount of observer coverage possible for each management unit. Changes in effort, Atlantic Sturgeon abundance (i.e., observed and reported interactions), and other protected species interactions were monitored on a daily, weekly, and monthly basis to ensure proper observer coverage was being maintained.

Observers were trained by experienced NCDMF staff to identify, measure, evaluate condition of, and tag (with Passive Integrated Transponders, or PIT) Atlantic Sturgeon. Date, time, tag numbers, location (latitude and longitude, when possible), condition (e.g., no apparent harm, injury including a description of the nature of the injury, or mortality), total length (TL mm), and fork length (FL mm) were recorded for each Atlantic Sturgeon observed. Photographs, fin clips (for genetic analyses), and data on environmental parameters (e.g., salinity, water temperature) were also collected when feasible. Observers were instructed to retain any dead Atlantic Sturgeon when possible. Observers also collected data on location, gear parameters, catch, and bycatch for each haul depending on the observed trip type (onboard or alternative platform). For onboard observations, the catch was sampled throughout each trip including species, quantities, weights, lengths, and disposition (alive or dead). Limited data such as date and waterbodies surveyed were also collected for unsuccessful alternative platform attempts (hereafter termed "No Contact" trips) by observers and Marine Patrol. All data were coded onto NCDMF data sheets and uploaded to the NCDMF Biological Database for analysis. Observers were debriefed within 24 hours of each trip to obtain data on catch, set locations, gear parameters, and Atlantic Sturgeon interactions to provide total counts and estimates of bycatch in near real time.

Ongoing estimates of observer coverage were calculated for each season in each management unit by estimating fishing trips using an average of the previous five years' TTP data for large-mesh and small-mesh gill nets, while taking reduced season dates in each management unit into account by calculating the proportion of actual to possible fishing days. This estimated fishing effort was compared to the number of observer trips completed throughout the ITP year. The average,

normalized effort was used when estimating fishing trips to account for the fluctuation of fishing effort throughout the years due to closures and other regulations put in place throughout the time series. No Contact trips were not included in calculations of observer coverage.

At the end of the 2020 ITP year, observer coverage was calculated by comparing the number of observed trips to the number of reported trips in the TTP database for each mesh size category, season, and management unit. The TTP data for 2019 were finalized (fall and part of winter), but the data for 2020 were preliminary (part of winter, spring, and summer). As a result, observer coverage calculated for winter, spring, and summer were considered estimates.

## 2.2 Changes in Fishing Effort

The number of reported fishing trips by mesh size category were compiled by season for the 2020 ITP Year and compared to the last two ITP Years (2018 ITP Year and 2019 ITP Year). This assessment was a general comparison to examine trends in fishing effort, as measured by reported trips).

## 2.3 Incidental Takes

The ITP outlines authorized levels of incidental takes expressed as either estimated total takes based on observer data (Management Unit A) or counts of observed takes (Management Unit B, C, D, E) (Tables 1 and 2). Both types (estimated and counted) were necessary because there were insufficient data available for modeling predicted estimated takes in the ITP application for some combinations of management unit and gear type (Daniel 2014). To compare annual numbers of incidental takes of Atlantic Sturgeon during the 2020 ITP year to authorized levels, actual observed takes were counted for Management Units B, C, D, E and estimated for Management Unit A. The DPS of Atlantic Sturgeon could be determined because genetic results were not available. Incidental take estimates for Management Unit A were calculated using the stratified ratio method where the bycatch rate (Atlantic Sturgeon caught per observed trip) calculated from observer data was multiplied by the total reported fishing trips.

$$\text{Estimated Interactions} = \left( \frac{\text{\# of Atlantic Sturgeon interactions observed}}{\text{gill-net trips observed}} \right) * \text{total gill-net trips}$$

Throughout each season, this calculation was employed for each incidental take to determine the estimated number of interactions in Management Unit A by date of capture and disposition. For the real-time estimates, the average number of TTP reported trips from the previous five years was used. Estimated numbers of interactions were accumulated by interaction date for Management Unit A and running totals of observed interactions were maintained for Management Units B, C, D, and E to determine if interactions were approaching authorized take thresholds. The ongoing comparisons allowed for the implementation of management measures to prevent interactions from exceeding authorized levels. The estimated and/or total observed interactions were provided in weekly (when required) and monthly reports.

At the end of the ITP year, the estimated number of interactions for Management Unit A was recalculated using actual number of trips, albeit preliminary for 2020, reported in the TTP rather than an average from the previous five years. Nonparametric confidence intervals (95%) were calculated using standard bootstrapping techniques (Efron and Tibshirani 1993) using the ‘boot’ package in R (Davison and Hinkley 1997; Canty and Ripley 2015; R Core Team 2019). Bootstrap

replicates were generated by sampling observer trips with replacement 5,000 times within strata (mesh/management unit).

## **2.4 Compliance**

The Observer Program used various methods to contact fishermen to schedule trips. The most common method was by phone, due to fishermen leaving from private launches and overall efficiency. For each contact made to obtain a trip (phone call or in-person), observers documented the contact in a log maintained by the Observer Program. For each contact, observers assigned a category of the response and noted any additional information (e.g., fisherman stated he did not fish until October) (Table 3). Observers also documented calls returned from fishermen, including the response category and notes. Data in the contact log were summarized by month and response category to determine what percentage of phone calls resulted in observer trips.

As part of their regular duties, Marine Patrol officers checked both gill nets for compliance. This effort, combined with the time spent conducting observations and searching for gill nets (No Contact trips), was logged as total “gill-net hours” by officers. Occasionally, citations and/or Notice of Violations (NOVs) were issued to fishermen when gear or fishing practices were out of compliance. A citation is an enforcement action taken by a Marine Patrol officer for person(s) found to be in violation of General Statutes, Rules, or Proclamations under the authority of the Marine Fisheries Commission and is considered a proceeding for District Court. A NOV is the Division’s administrative process to suspend a permit and is initiated by an Officer or Division employee when a permit holder is found to be in violation of general or specific permit conditions. A citation and a NOV may both be initiated by the same permit condition violation; however, they are two separate actions. For this report, NOVs or citations under the codes “EGNP” and “NETG” were compiled, as they are applicable to the estuarine gill-net permits and violations.

## **3 RESULTS**

### **3.1 Observer Activity**

Overall state-wide observer coverage during the 2020 ITP Year was 7.3% of the reported large-mesh gill-net fishery and 1.9% of the small-mesh gill-net fishery (Tables 4 and 5, Figure 2). This level of coverage was based on 297 observed large-mesh gill-net trips (76 onboard and 221 alternative platform) and 149 observed small-mesh gill-net trips (20 onboard and 129 alternative platform). The COVID-19 pandemic and associated waiver from the NMFS impacted observer coverage during spring and summer. Additionally, there were 1,730 No Contact trips (Table 6).

During the 446 total observed trips, observers documented seven Atlantic Sturgeon in large-mesh and none in small-mesh gill nets (Table 7, Figure 2). All interactions occurred in Management Unit A. No self-reported interactions were reported.

A series of proclamations was issued throughout the ITP year for management needs unrelated to protected species interactions (Table 8). A significant change in regulations for the Southern Flounder fishery during fall 2019 was noted above. After these regulations closed anchored large-mesh gill nets, portions of Management Unit A were re-opened to anchored large-mesh gill nets during late fall, winter, and spring (23 November–25 March) for harvesting Blue Catfish and American Shad, and portions of Management Unit C were re-opened to anchored large-mesh gill nets during winter and spring (15 February–15 April) for harvesting American Shad. Separately,

part of Management Unit D was closed to anchored large-mesh gill nets for the entire 2020 ITP Year and closed to anchored small-mesh gill nets effective 20 April 2020.

### **3.1.1 Fall 2019**

During fall 2019 (September–November), the Observer Program achieved 9.9% state-wide coverage of large-mesh gill-net trips, with less than 7% coverage in Management Units B (5.2%) and D (5.1%; Table 4; Figure 3). For small-mesh gill nets, the Observer Program achieved 2.5% state-wide coverage, exceeding 1% observer coverage in all management units (Table 5; Figure 3). There were 324 No Contact trips (Table 6).

Two of the seven (29%) observed Atlantic Sturgeon interactions during the 2020 ITP Year occurred during fall 2019 (Table 7; Figure 3). Both Atlantic Sturgeon were live interactions in large-mesh gill nets set in Management Unit A.

### **3.1.2 Winter 2019-2020**

During winter 2019–2020 (December 2019–February 2020), the Observer Program achieved an estimated 5.7% state-wide coverage of large-mesh gill-net trips, not meeting the minimum 7% coverage overall or in the open Management Units A (6.1%) and C (2.6%; Table 4; Figure 4). This shortage represents an additional 10 trips that were not obtained (eight in management unit A and two in C). Management Units B, D, and E were closed to anchored large-mesh gill nets; however, 35 fishing trips were reported across the three closed units. For small-mesh gill nets, the Observer Program achieved an estimated 3.0% state-wide coverage during winter 2019–2020, exceeding 1.0% in all management units (Table 5; Figure 4). There were 385 No Contact trips (Table 6).

There was one observed Atlantic Sturgeon interaction in a large-mesh gill net and none in small-mesh gill nets during winter 2019–2020. The single interaction was observed alive in Management Unit A (Table 7; Figure 4).

### **3.1.3 Spring 2020**

During spring 2020 (March–May), the Observer Program achieved an estimated 4.1% state-wide coverage of large-mesh gill-net trips, not meeting the minimum 7% coverage overall (Table 4; Figure 5). Only Management Units A and C were open to large-mesh gill nets, and 41 observed trips occurred in A before observations were halted in response to the COVID-19 pandemic. There were 34 fishing trips reported across the three closed units. For small-mesh gill nets, the Observer Program achieved an estimated 1.1% state-wide coverage with the majority of reported and observed trips occurring in Management Unit B (Table 5; Figure 5). There were 448 No Contact trips (Table 6).

Four of seven (57%) observed Atlantic Sturgeon interactions during the 2020 ITP Year occurred during spring 2020. All were live interactions in large-mesh gill nets set in Management Unit A (Table 7; Figure 5). The monthly report for March activities included a single “reported” Atlantic Sturgeon that could be misinterpreted as a self-reported interaction. The sturgeon, in fact, was an interaction in illegal gear that was reported an officer.

### **3.1.4 Summer 2020**

During summer 2020 (June–August), the Observer Program did not observe any large-mesh gill-net trips as the gear was prohibited state-wide (Table 4; Figure 6). Nevertheless, 90 large-mesh fishing trips were reported. For small-mesh gill-net trips, the Observer Program achieved an

estimated 1.4% state-wide coverage, and exceeded 1% in all management units except for B (0.9%; Table 5; Figure 6). There were 573 No Contact trips (Table 6).

There was no observed Atlantic Sturgeon interaction in gill nets during summer 2020 (Table 7; Figure 6).

### **3.2 Changes in Fishing Effort**

Overall large-mesh gill-net effort during the 2020 ITP Year was 62% lower than during the 2019 ITP Year and 66% lower than during the 2018 ITP Year (Figure 7). The decrease in large-mesh trips occurred during fall, spring, and summer in all management units, but not winter. Overall small-mesh gill-net effort during the 2020 ITP Year was 23% higher than during the 2019 ITP Year and 7% higher than during the 2018 ITP Year (Figure 8). When comparing the 2020 and 2019 ITP Years, the increase in small-mesh trips was attributed primarily to fall when small-mesh trips nearly doubled from the previous ITP Year (1,262 trips during the 2019 ITP Year and 2,294 during the 2020 ITP Year). The greater number of small-mesh trips during fall occurred in all management units, but was particularly sharp in Management Unit B (97% increase) and D (199% increase).

### **3.3 Incidental Takes**

All seven observed Atlantic Sturgeon interactions during the 2020 ITP Year were alive in large-mesh gill nets set in Management Unit A (Table 7; Figures 2–6). There were no observed interactions in small-mesh gill nets. Also, there were no self-reported Atlantic Sturgeon interactions. The size range of Atlantic Sturgeon measured by observers was 457–1,829 mm TL ( $n = 7$ , mean = 780.6, SD = 471.5) and 458 – 620 mm FL ( $n = 5$ , mean = 550.0, SD = 69.6; Table 7; Figure 9).

Observed take levels during the 2020 ITP year did not reach the thresholds of allowed takes for any management unit (Tables 1 and 2). The seven observed interactions resulted in an estimated 106.9 total interactions, all in large-mesh gill nets. This number represents 5% of the 2,139 allowable sturgeon takes in large-mesh gill nets.

### **3.4 Compliance**

Estuarine Gill-Net Permits were issued to 2,629 fishermen during the 2020 ITP year; however, only 598 of them reported trips using anchored estuarine gill-net gear. Using the full list of EGNPs, 970 phone calls or in-person contacts were made with 5% ( $n = 53$ ) representing occasions where a fishermen returned a phone call. Nevertheless, only 2% ( $n = 24$ ) of the 970 contacts resulting in a booked trip (Figure 10). The greatest number of calls occurred during fall, and the least number of calls occurred in spring when observations temporarily stopped due to the COVID-19 pandemic.

During the 2020 ITP Year, Marine Patrol officers spent 1,992 hours investigating the proper and legal use of gill nets in estuarine waters, conducting and entering observations, and searching for gill nets to be observed (No Contact; Table 9). During these hours, they issued 31 citations (Tables 9–10). In addition to citations, officers issued nine Notice of Violations (NOVs) for fishermen found to be out of compliance with the EGNP (Table 11).

### **3.5 Marine Mammals**

There was no observed marine mammal take during the 2020 ITP year.



## 4 DISCUSSION

Incidental takes of Atlantic Sturgeon during the 2020 ITP Year were below authorized levels. The combined number of estimated and counts of sturgeon was similar to the 2019 ITP Year, with the greatest difference being fewer interactions observed in fall and more in spring during the 2020 ITP Year. All interactions were alive, thereby limiting negative effects of these interactions on the DPS. Additionally, all interactions occurred in large-mesh gill nets during the 2020 ITP Year. New regulations from Amendment 2 imposed on the state-wide Southern Flounder fishery greatly reduced large-mesh gill-net effort during fall and prevented the previous low levels of effort in this fishery during spring and summer. Limited allowance for anchored large-mesh gill nets occurred only during winter and spring for portions of Management Unit A and C, and for an additional seven days during late fall in portions of Management Unit A.

Prior to the temporary halt of observer-led trips in March because of the COVID-19 pandemic, coverage of large-mesh gill nets exceeded the 7% minimum overall for fall, but not for winter. The shortage of observer trips during winter is despite the 385 No Contact trips reported by Marine Patrol and observers. During the same time, overall coverage of small-mesh gill nets exceeding the 1% minimum for fall and winter. Coverage of small-mesh gill nets during the spring and summer also met or exceeded the minimum 1% despite the limitations resulting from COVID-19. Even when observers returned to the field in June, capacity was halved because alternative platform observations require two observers. Marine Patrol officers contributed greatly to this continued coverage during spring when observers did not go in the field, and in summer when observer capacity was reduced. Nevertheless, coverage of large-mesh gill nets during spring in open management units (A and C) did not meet the minimum 7%. It is surprising that there were reported fishing trips using anchored large-mesh gill nets during management units and seasons when this gear was prohibited. These reported trip data are being examined; it is likely that the dealers recorded fishing trips that used run-around/strike gill nets incorrectly as anchored gill nets during these months.

Obtaining observed trips continues to be a challenge for the NC Observer Program, not unlike other observer programs (e.g., Lyssikatos and Garrison 2018). The EGNP is a useful tool to improve fishermen compliance by including Specific Permit Conditions requiring fishermen to allow observers aboard their vessels to monitor catches and by providing contact information of permit holders. Phone calls made using the contact information contribute to observers scheduling trips, but the success rate of observers even talking to a fisherman is low (<30%). This assessment of success rate and the assignment of call lists are being re-evaluated for the 2021 ITP Year given that only 23% of EGNP holders during the 2020 ITP Year reported trips with anchored gill-net gear. For the contacts that were made during the 2020 ITP Year, a sharp decrease in phone calls was made during the 2020 ITP Year (n = 970) compared to the previous year (n = 5,852), due in large part to effects of COVID-19 on observer activity.

Although onboard observations are the preferred method, alternative platform observations played a critical role to achieving the minimum percent coverage, especially after the COVID-19 pandemic. In fact, 78% of all observed trips during the 2020 ITP Year were alternative platform observations. Alternative platform observations have several advantages. Primarily, they do not rely on previous contact with fishermen to obtain an observable trip. Alternative platform observations also allow Marine Patrol to conduct observations as part of their daily patrols; their

observed trips contribute a substantial portion of the total alternative platform observations. Even for fishermen who would willingly take an observer, many vessels used by gillnetters in estuarine waters are too small to easily accommodate an observer, making alternative platform observations ideal for capturing trips with this size class of vessel (Kolkmeier et al. 2007; however, the alternative platform method has several drawbacks. First, it requires two observers, halving observer effort and program efficiency. Also, observers cannot collect the same breadth of biological data for kept catch and discards (e.g., length and weight of individual fish) compared to onboard observer trips. Another drawback is that observers can spend a significant amount of time searching for fishing activity, sometimes unsuccessfully, when fishing activity is less concentrated. Obtaining alternative platform observations also can be a challenge as some fishermen avoid being observed by retrieving their gear before sunrise or changing fishing locations if observers have been seen in an area. Although refusal of an observed trip by a fisherman can result in a suspension of their EGNP, non-compliance typically does not include such a direct refusal. As such, non-compliance continues to be a hurdle for ensuring the observer coverage requirements for both ITPs are met. Outreach activities are an ongoing necessity to improve fishermen compliance. These activities will resume when risks associated with COVID-19 are abated.

Significant staffing changes occurred during the 2020 ITP Year. The program supervisor left in September 2019 and the position was not filled until January 2020. The observer coordinator left in June 2019 and the position was not filled until March 2020. Additionally, a data analyst position was created in July 2019. These filled positions should increase efficiencies in the program. Changes in observer staffing also occurred during the 2020 ITP Year. Two long-term temporary observers left or significantly reduced their hours before March. Those positions were not refilled when observations resumed in June given the uncertainty of the effects of COVID-19 on the safety of continued, but limited, observation efforts.

The NCDMF observer program uses a combination of real-time monitoring of Atlantic Sturgeon takes and an adaptive management approach to successfully control the number of interactions in estuarine gill-net fisheries. Specific actions to limit Sturgeon take were not necessary during the 2020 ITP Year. The new management measures for Southern Flounder significantly reduced large-mesh gill-net effort throughout the year, especially during fall 2019 when effort was historically high. These management measures, along with challenges faced from the COVID-19 pandemic and its' associated field restrictions, presented additional and unique challenges in predicting fishing effort and obtaining coverage during the 2020 ITP Year. These ongoing changes require the Observer Program to incorporate new approaches to project observer coverage for the fishery in subsequent ITP years as the fishery is undergoing regulatory changes that impact fishermen strategy and effort.

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## 6 TABLES

**Table 1.** For large-mesh ( $\geq 5$  inch) gill nets, a comparison of actual ( $n = 7$ ) annual incidental takes of Atlantic Sturgeon by management unit during the 2020 ITP Year to authorized thresholds expressed as either estimated total takes based on observed takes (Management Unit A) or counts of actual observed takes (Management Units B – E). 95% confidence intervals are provided in brackets. Genetic results were not available to determine Distinct Population Segment (DPS) of observed interactions.

Management Unit	Season	Authorized				Actual	
		Carolina DPS		Other DPS		All DPS	
		Alive	Dead	Alive	Dead	Alive	Dead
A	Annual	1,604	65	535	21	106.9 [40.5, 265.8]	0
B	Annual	24	6	9	0	0	0
C	Annual	11	5	4	0	0	0
D	Annual	8	2	n/a	n/a	0	0
E	Annual	8	2	n/a	n/a	0	0
Total	Annual	1,655	80	548	21	106.9	0

**Table 2.** For small-mesh (<5 inch) gill nets, a comparison of actual (n = 0) annual incidental takes of Atlantic Sturgeon by management unit during the 2020 ITP Year to authorized thresholds expressed as counts (not estimates) of actual observed takes.

Management Unit	Season	Authorized				Actual	
		Carolina DPS		Other DPS		All DPS	
		Alive	Dead	Alive	Dead	Alive	Dead
A	Annual	596	45	114	10	0	0
B	Annual	14	5	3	0	0	0
C	Annual	8	4	n/a	n/a	0	0
D	Annual	8	2	n/a	n/a	0	0
E	Annual	8	2	n/a	n/a	0	0
Total	Annual	634	58	117	10	0	0

**Table 3.** Categories and descriptions of fisherman responses for the Observer Program's contact logs.

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 refused
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 4.** For large-mesh ( $\geq 5$  inch) gill nets, observer coverage (observed trips/fishing trips) calculated by season and management unit for the 2020 ITP Year. Observer coverage was calculated using estimated fishing trips based on the Trip Ticket Program data for the previous five years and using actual reported trips from the program for the 2020 ITP Year. Estimated trips = “*closed*” when/where anchored large-mesh gill nets were prohibited, and any reported trips are *italicized*. Trip Ticket Program data are considered finalized for 2019 and preliminary for 2020.

Season	Management Unit	Large Mesh				
		Estimated Fishing Trips	Reported Fishing Trips	Observed Trips	Coverage - Estimated Fishing Trips	Coverage - Reported Fishing Trips
Fall 2019	A	759	636	81	10.7	12.7
	B	373	553	30	8.0	5.4
	C	297	190	29	9.8	15.3
	D	195	217	11	5.6	5.1
	E	342	493	56	16.4	11.4
	Overall	1,966	2,089	207	10.5	9.9
Winter 2019-2020	A	835	793	48	5.7	6.1
	B	<i>closed</i>	20	<i>closed</i>	<i>closed</i>	<i>closed</i>
	C	46	39	1	2.2	2.6
	D	<i>closed</i>	3	<i>closed</i>	<i>closed</i>	<i>closed</i>
	E	<i>closed</i>	12	<i>closed</i>	<i>closed</i>	<i>closed</i>
	Overall	881	867	49	5.6	5.7
Spring 2020	A	743	959	41	5.5	4.3
	B	<i>closed</i>	31	<i>closed</i>	<i>closed</i>	<i>closed</i>
	C	197	4	0	0.0	0.0
	D	<i>closed</i>	0	<i>closed</i>	<i>closed</i>	<i>closed</i>
	E	<i>closed</i>	3	<i>closed</i>	<i>closed</i>	<i>closed</i>
	Overall	940	997	41	4.4	4.1
Summer 2020	A	<i>closed</i>	65	<i>closed</i>	<i>closed</i>	<i>closed</i>
	B	<i>closed</i>	18	<i>closed</i>	<i>closed</i>	<i>closed</i>
	C	<i>closed</i>	1	<i>closed</i>	<i>closed</i>	<i>closed</i>
	D	<i>closed</i>	0	<i>closed</i>	<i>closed</i>	<i>closed</i>
	E	<i>closed</i>	6	<i>closed</i>	<i>closed</i>	<i>closed</i>
	Overall	<i>closed</i>	90	<i>closed</i>	<i>closed</i>	<i>closed</i>
Annual		3,787	4,043	297	7.8	7.3

**Table 5.** For small-mesh (<5 inch) gill nets, (observed trips/fishing trips) calculated by season and management unit for the 2020 ITP Year. Observer coverage was calculated using estimated fishing trips based on the Trip Ticket Program data for the previous five years and using actual reported trips from the program for the 2020 ITP Year. Trip Ticket Program data are considered finalized for 2019 and preliminary for 2020. On April 4, 2020, a portion of management Unit D was closed to small-mesh gill nets.

Season	Management Unit	Small Mesh				
		Estimated Fishing Trips	Reported Fishing Trips	Observed Trips	Coverage - Estimated Fishing Trips	Coverage - Reported Fishing Trips
Fall 2019	A	252	383	5	2.0	1.3
	B	729	1,140	12	1.6	1.1
	C	140	124	3	2.1	2.4
	D	228	302	15	6.6	5.0
	E	447	345	23	5.1	6.7
	Overall	1,796	2,294	58	3.2	2.5
Winter 2019-2020	A	859	589	9	1.0	1.5
	B	505	544	10	2.0	1.8
	C	255	216	14	5.5	6.5
	D	51	41	2	3.9	4.9
	E	95	129	10	10.6	7.8
	Overall	1,765	1,519	45	2.5	3.0
Spring 2020	A	743	612	2	0.3	0.3
	B	1,347	1,274	12	0.9	0.9
	C	197	315	4	2.0	1.3
	D	61	53	0	0.0	0.0
	E	126	111	7	5.6	6.3
	Overall	2,474	2,365	25	1.0	1.1
Summer 2020	A	164	212	3	1.8	1.4
	B	836	959	9	1.1	0.9
	C	117	58	4	3.4	6.9
	D	45	11	1	4.5	18.2
	E	203	226	4	2.0	1.8
	Overall	1,363	1,466	21	1.5	1.4
Annual		7,398	7,644	149	2.0	1.9



**Table 6.** Number of "No Contact" trips (n = 1,730) by season and management unit completed by Marine Patrol and observers during the 2020 ITP Year. No Contact refers to unsuccessful attempts to find and observe anchored gill-net effort.

Season	Management Unit	Marine Patrol No Contact Trips	Observer No Contact Trips	Total No Contact Trips
Fall 2019	A	66	5	71
	B	28	8	35
	C	21	3	24
	D	56	6	63
	E	130	1	131
	Overall	301	23	324
Winter 2019-2020	A	67	10	77
	B	22	3	25
	C	31	7	38
	D	90	2	92
	E	151	2	153
	Overall	361	24	385
Spring 2020	A	89	1	90
	B	40	0	40
	C	34	2	36
	D	110	0	110
	E	173	0	173
	Overall	445	3	448
Summer 2020	A	104	0	104
	B	51	26	77
	C	32	12	44
	D	147	8	156
	E	191	2	193
	Overall	525	48	573
Annual		1,632	98	1,730

**Table 7.** Summary of observed Atlantic Sturgeon interactions in large-mesh ( $\geq 5$  inch,  $n = 7$ ) gill nets during the 2020 ITP Year. No interactions were observed in small-mesh ( $< 5$  inch) gill nets. PIT = Passive Integrated Transponders

Date	Season	Management Unit	Mesh Size Category	Latitude (N)	Longitude (W)	Disposition	PIT Number	Length (mm)	
								Total	Fork
9/19/2019	Fall	A	large	36.06291	76.15777	alive	982.000364358261	529	458
10/3/2019	Fall	A	large	35.98000	75.86000	alive	n/a	1829	n/a
1/6/2020	Winter	A	large	36.10956	76.71458	alive	982.000364301588	651	560
3/8/2020	Spring	A	large	36.02432	76.59752	alive	n/a	457	n/a
3/10/2020	Spring	A	large	36.20100	76.74590	alive	982.000410598963	582	502
3/12/2020	Spring	A	large	36.01796	76.68732	alive	989.001001951955	701	610
3/13/2020	Spring	A	large	36.04860	76.68840	alive	985.111000930597	715	620

**Table 8.** Regulations for Management Units by date and regulation change for large-mesh ( $\geq 5$  inch) and small-mesh ( $< 5$  inch) gill nets for the 2020 ITP Year.

Year	Date(s)	Regulation change
2019	Sep 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	Sep 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 $3 \frac{3}{4}$ 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	Sep 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	Sep 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 $5 \frac{1}{2}$ inches through $6 \frac{1}{2}$ 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	Sep 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)
2019	Sep 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 $5 \frac{1}{2}$ inches through $6 \frac{1}{2}$ inches. It maintained the openings in Management Unit A to the use of gill nets with stretched mesh lengths of $5 \frac{1}{2}$ inches through $6 \frac{1}{2}$ 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)

**Table 8.** (continued) Regulations for Management Units by date and regulation change for large-mesh ( $\geq 5$  inch) and small-mesh ( $< 5$  inch) gill nets for the 2020 ITP Year.

2019	Oct 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	Oct 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	Oct 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	Nov 15	This proclamation supersedes proclamation M-21-2019 dated October 23, 2019. This proclamation closes all Management Units South of Management Unit A to the use of gill nets with a stretched mesh length of 4 inches through 6 ½ inches (except as described in Section III.). This action is being taken in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-22-2019)
2019	Nov 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)
2019	Dec 1	This proclamation superseded Proclamation M-23-2019 dated November 21, 2019. In Management Unit A, it removed attendance requirements and implemented vertical height restrictions for anchored gill nets with a stretched mesh length of 3 inches through 3 ¾ inches. It continued to allow the use of gill nets with a stretched mesh length of 5 ½ inches through 6 ½ inches in portions of Management Unit A. (M-24-2019)
2020	Jan 1	This proclamation superseded Proclamation M-24-2019 dated November 27, 2019. In Management Unit A, it was unlawful to use small mesh gill nets with a stretched mesh length other than 3 ¼ inches, except as described in Section II. C. and D. and Section IV. It continued to allow the use of gill nets with a stretched mesh length of 5 ½ inches through 6 ½ inches in certain portions of Management Unit A. (M-26-2019)
2020	Feb 15	This proclamation superseded Proclamation M-22-2019 dated November 12, 2019. This proclamation opened Management Unit C to the use of gill nets with a stretched mesh length of 4 inches through 6 ½ inches and implemented gear exemptions for the shad fishery in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-2-2020)

**Table 8.** (continued) Regulations for Management Units by date and regulation change for large-mesh ( $\geq 5$  inch) and small-mesh ( $< 5$  inch) gill nets for the 2020 ITP Year.

2020	Mar 2	This proclamation opens a portion of Management Unit A to the use of floating gill nets configured for harvesting American shad by removing vertical height restrictions for all gill nets with stretched mesh lengths of 5 $\frac{1}{4}$ through 6 $\frac{1}{2}$ inches. (M-3-2020)
2020	Mar 25	This proclamation supersedes Proclamation M-3-2020 dated February 28, 2020. In Management Unit A, it removes gill nets configured for harvesting American shad. It maintains restrictions on the use of fixed, stationary, or unattended gill nets and allows the use of run-around, strike, drop, and trammel gill nets and with a stretched mesh length of 5 $\frac{1}{2}$ inches through 6 $\frac{1}{2}$ inches in portions of Management Unit A. (M-5-2020)
2020	Apr 15	This proclamation maintains closures in all other management units south of Management Unit A and closes Management Unit C to the use of gill nets with a stretched mesh length of 4 inches through 6 $\frac{1}{2}$ inches (except as described in Section II.; coincides with the commercial shad fishery closure) in accordance with Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. (M-6-2020)
2020	Apr 20	This proclamation implements yardage and time setting restrictions for gill nets with a stretched mesh length less than 4 inches and attendance restrictions for gill nets with a stretched mesh length less than 5 inches in the Internal Coastal Waters of the state, south of Management Unit A. Yardage limit increases will be considered for the May-October Spanish mackerel drift gill net fishery. Those increases will be implemented by proclamation at a later time. This proclamation also closed D1 to anchored nets with a stretched mesh length less than 4 inches. (M-4-2020)
2020	May 1	This proclamation implements attendance requirements for gill nets with a stretched mesh length less than 4 inches in Subunit B.1. (M-9-2020)
2020	May 1	This proclamation implements small mesh gill net attendance requirements. It maintains restrictions on the use of run-around, strike, drop, and trammel gill nets and with a stretched mesh length of 5 $\frac{1}{2}$ inches through 6 $\frac{1}{2}$ inches in portions of Management Unit A. (M-10-2020)
2020	May 8	This proclamation increases yardage limits for the commercial Spanish mackerel drift gill net fishery in Management Unit B. (M-11-2020)

**Table 8.** (continued) Regulations for Management Units by date and regulation change for large-mesh ( $\geq 5$  inch) and small-mesh ( $< 5$  inch) gill nets for the 2020 ITP Year.

2020	Jun 15	<p>This proclamation supersedes Proclamation FF-34-2019, dated September 12, 2019. It establishes commercial flounder season dates for Internal Coastal Waters by Flounder Management Area. It maintains a 15-inch total length minimum size limit. It also maintains 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 makes it unlawful for a commercial fishing operation to possess flounder from the Atlantic Ocean Waters taken by any method other than trawls. This action is being taken to comply with the requirements of Amendment 2 to the N.C. Southern Flounder Fishery Management Plan. The flounder harvest period for the Northern Management Area will open at 12:01 A.M., Tuesday, September 15, 2020 and close at 8:00 P.M., Tuesday, October 6, 2020. The flounder harvest period for the Central Management Area will open at 12:01 A.M., Thursday, October 1, 2020 and close at 8:00 P.M., Monday, October 19, 2020. The flounder harvest period for the Southern Management Area will open at 12:01 A.M., Thursday, October 1, 2020 and close at 8:00 P.M., Monday, November 2, 2020. (FF-25-2020)</p>
2020	Jul 22	<p>This proclamation reduced the yardage limit for gill nets with a stretched mess length less than 4 inches in Management Unit B. Yardage limit decrease in Management Unit B were being implemented to coincide with the 500 lb daily trip limit in the commercial Spanish mackerel fishery. (M-12-2020)</p>

**Table 9.** Number of gill-net hours logged and citations issued by Marine Patrol officers by season during the 2020 ITP Year. Gill-net hours represent time officers checked gill nets for compliance, conducted observations, or searched for trips to observe (No Contact trips). See Table 10 for details on individual citations.

Season	Gill-Net Hours	# Citations
Fall 2019	511	18
Winter 2019-2020	408	4
Spring 2020	542	6
Summer 2020	531	3
<b>Total</b>	<b>1,992</b>	<b>31</b>

**Table 10.** Citations written by Marine Patrol for large-mesh ( $\geq 5$  inch) and small-mesh ( $< 5$  inch) gill nets by season and violation code during the 2020 ITP Year. For violations with an associated Notice of Violation (NOV), the notice date is provided. All details for citations with a NOV are described in Table 11.

Season	Date	Violation Code	Violation Description	NOV Notice Date
Fall 2019	9/20/2019	NETG04	Leave gill net in waters when could not be legally fished	n/a
	9/20/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a
	9/23/2019	NETG04	Leave gill net in waters when could not be legally fished	n/a
	9/23/2019	NETG04	Leave gill net in waters when could not be legally fished	n/a
	9/23/2019	NETG03	Using gill net with improper buoys or identification	n/a
	9/23/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a
	9/26/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a
	10/14/2019	NETG02	Using gill net without buoys or identification	10/21/2019
	10/14/2019	NETG46	Set or retrieve large mesh gill nets later than one hour after sunrise on Tuesday through Friday. Proclamation M-8-2010	10/21/2019
	10/14/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a
	10/23/2019	NETG29	RCGL gear without proper buoys 3J.0103(c)	n/a
	10/24/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a
	10/25/2019	NETG03	Using gill net with improper buoys or identification	n/a
	10/28/2019	NETG22	Improperly set gill net	n/a
	10/31/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a
	11/2/2019	NETG37	Leave small mesh gill nets unattended 3J.0103	n/a
	11/2/2019	NETG02	Using gill net without buoys or identification	n/a
	11/4/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a
	Winter 2020	12/6/2019	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit
12/6/2019		NETG16	Use an unattended gill net in a restricted area	n/a
12/20/2019		EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)	1/15/2020
	1/15/2020	NETG02	Using gill net without buoys or identification	n/a



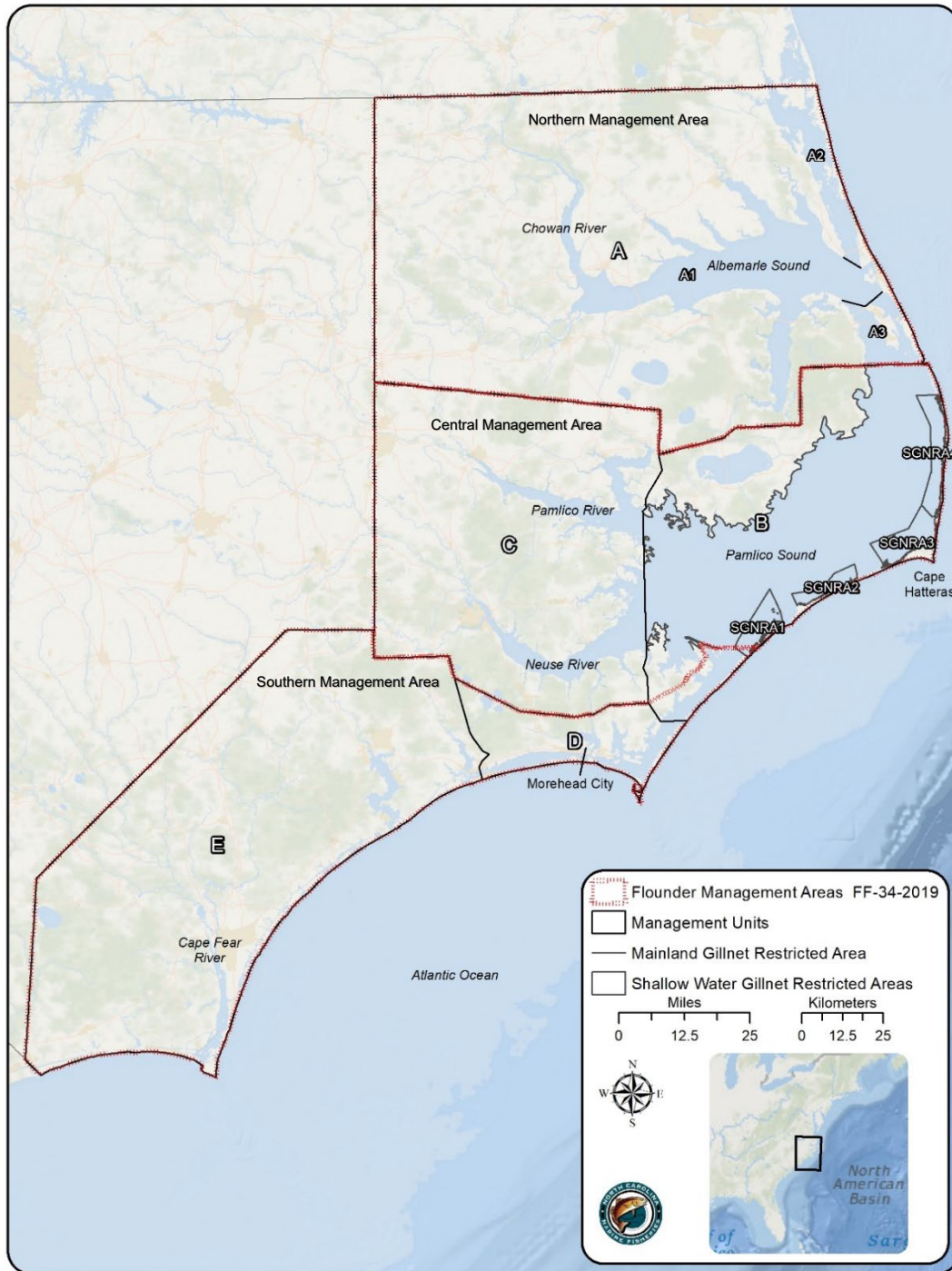
**Table 10.** (continued) Citations written by Marine Patrol for large-mesh ( $\geq 5$  inch) and small-mesh ( $< 5$  inch) gill nets by season and violation code during the 2020 ITP Year. For violations with an associated Notice of Violation (NOV), the notice date is provided. All details for citations with a NOV are described in Table 11.

Season	Date	Violation Code	Violation Description	NOV Notice Date
Spring 2020	3/27/2020	EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)	3/30/2020
	4/11/2020	NETG30	Leave RCGL gill net unattended 3O.09302	n/a
	5/10/2020	NETG02	Using gill net without buoys or identification	n/a
	5/10/2020	NETG37	Leave small mesh gill nets unattended 3J.0103	n/a
	5/14/2020	NETG03	Using gill net with improper buoys or identification	n/a
	5/14/2020	NETG04	Leave gill net in waters when could not be legally fished	n/a
	5/25/2020	EGNP01	Fishing gill net without a valid Estuarine Gill Net Permit	n/a
Summer 2020	7/14/2020	NETG04	Leave gill net in waters when could not be legally fished	n/a
	7/14/2020	NETG02	Using gill net without buoys or identification	n/a

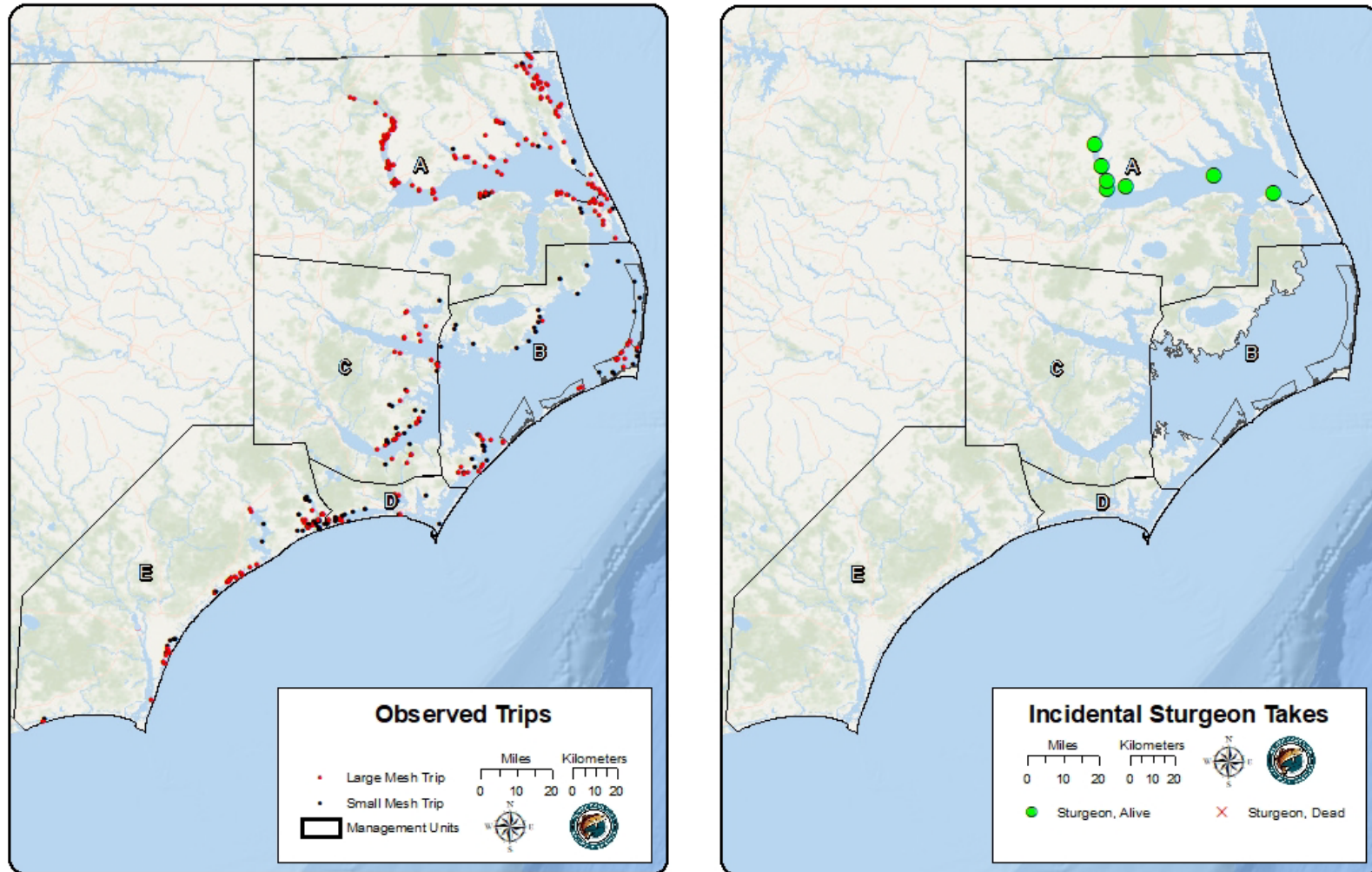
**Table 11.** Notice of Violations (NOVs) issued by season, date, and violation code for the Estuarine Gill-Net Permit for ITP Year 2020. Details for NOV with an associated citation are described in Table 10.

Season	Notice Date	Serve Date	Violation code	Violation description
Fall 2019	9/18/2019	9/19/2019	EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)
	10/21/2019	10/25/2019	EGNP09	Failure to set or retrieve nets in accordance with time restrictions.
	10/21/2019	10/28/2019	EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)
	10/21/2019	10/28/2019	EGNP09	Failure to set or retrieve nets in accordance with time restrictions.
	10/23/2019	10/27/2019	EGNP30	Failure to comply with gill net configurations outlined in proclamation
	10/23/2019	10/27/2019	EGNP10	Set more than the legal length of gill net
	10/23/2019	10/27/2019	EGNP09	Failure to set or retrieve nets in accordance with time restrictions.
Winter 2019-2020	1/15/2020	1/19/2020	EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)
Spring 2020	3/30/2020	4/27/2020	EGNP99	Failure to comply with statutes(s), rules(s), and/or proclamation(s)

7 FIGURES

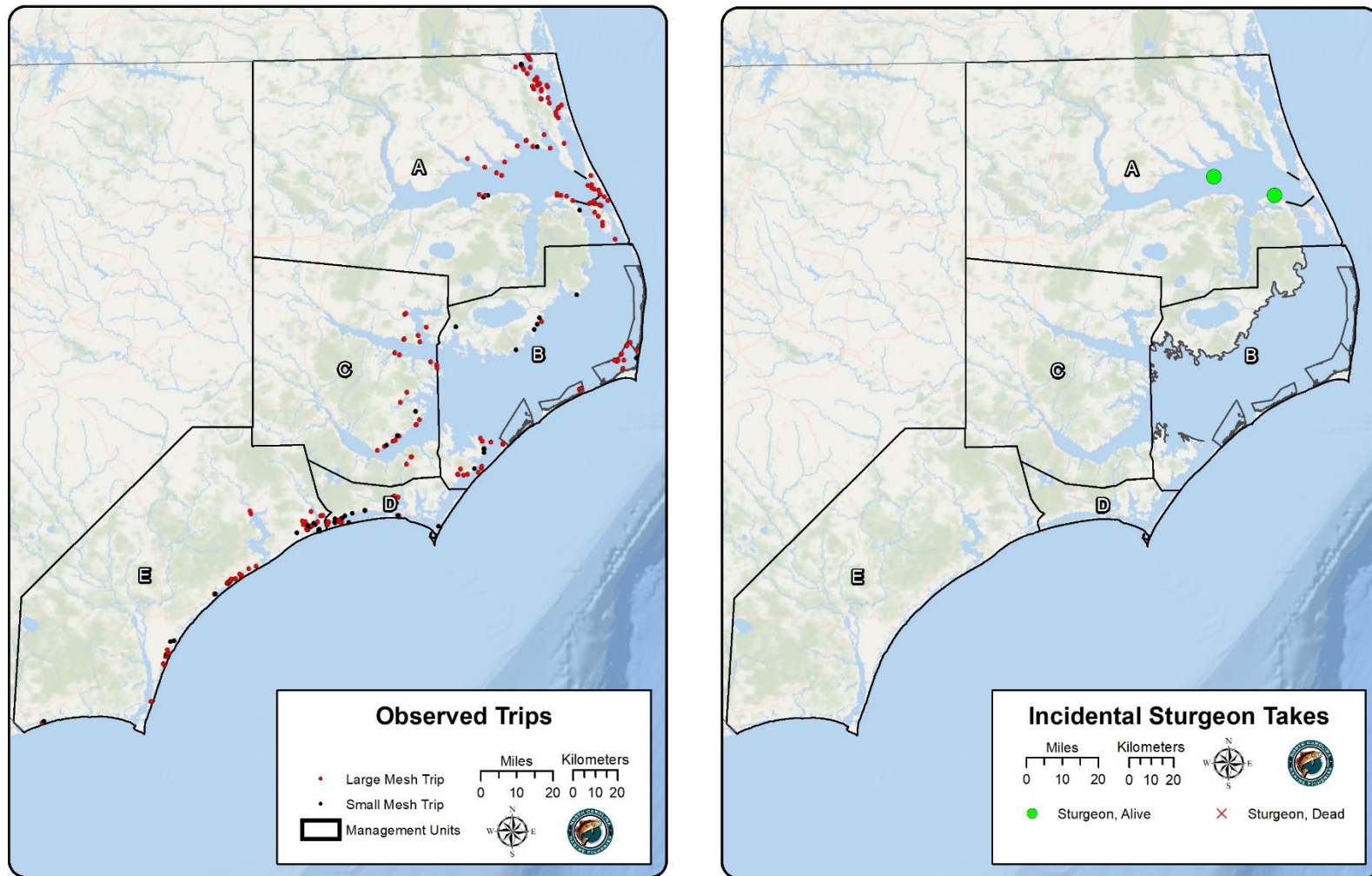


**Figure 1.** Management units (A1, A2, A3, B, C, D, and E) as outlined in the Incidental Take Permit (ITP) Conservation Plan and used by the Observer Program during the 2020 ITP Year. In the Pamlico Sound portion of B, gill nets with a mesh size of  $\geq 4$  inches were confined to Shallow Water Gill-Net Restricted Areas (SGNRA) 1–4 and the Mainland Gill-net Restricted Area (200 yards from shore). The three Southern Flounder Management Areas are shown with red hatched lines: northern, central, and southern.

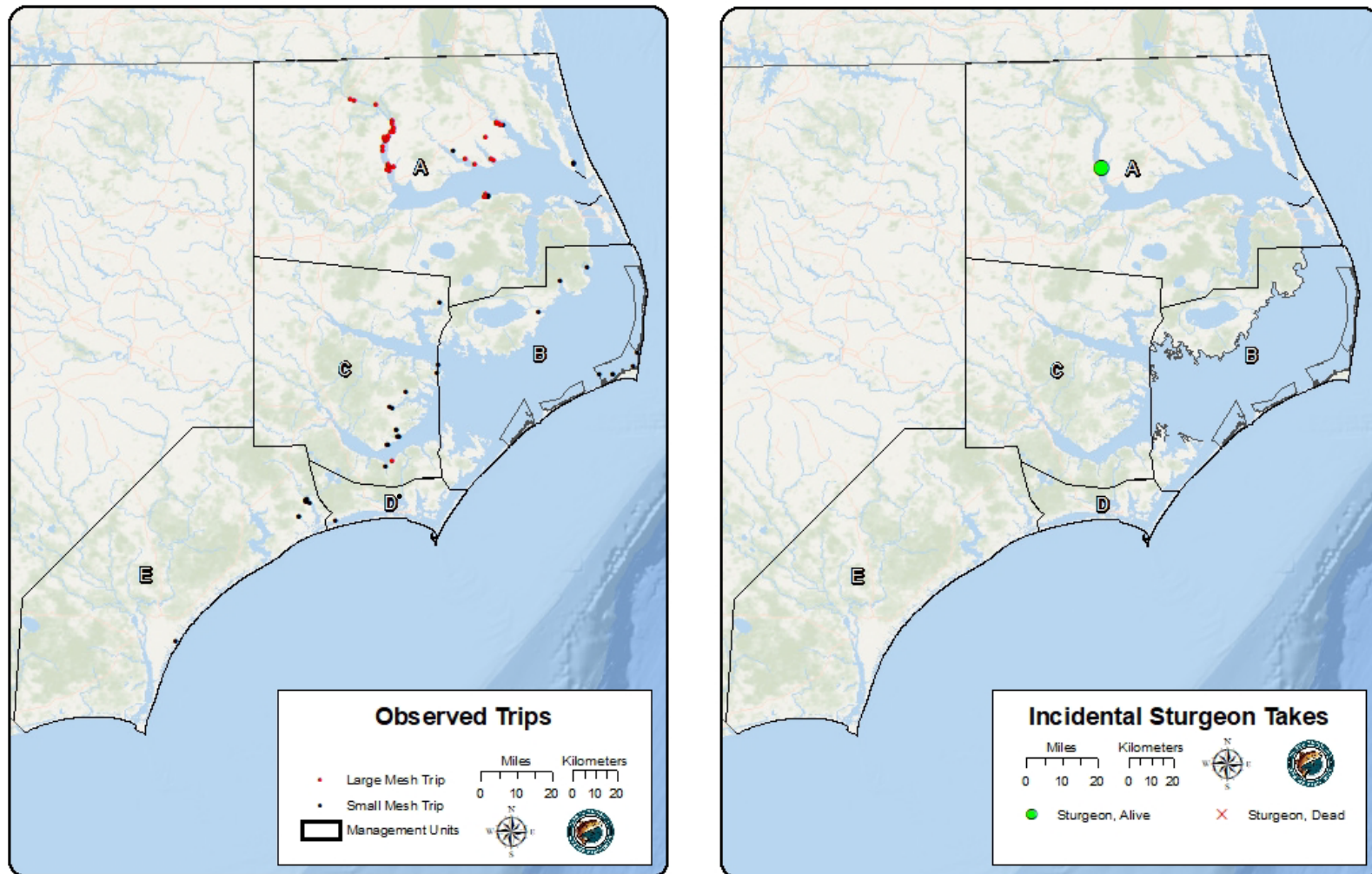


**Figure 2.** For the entire 2020 ITP Year, observed gill-net trips (left) by mesh-size category (297 large-mesh =  $\geq 5$  inch; 149 small-mesh =  $< 5$  inch) and Atlantic Sturgeon interactions (right) by disposition (alive,  $n = 7$ ; dead,  $n = 0$ ) across management units.



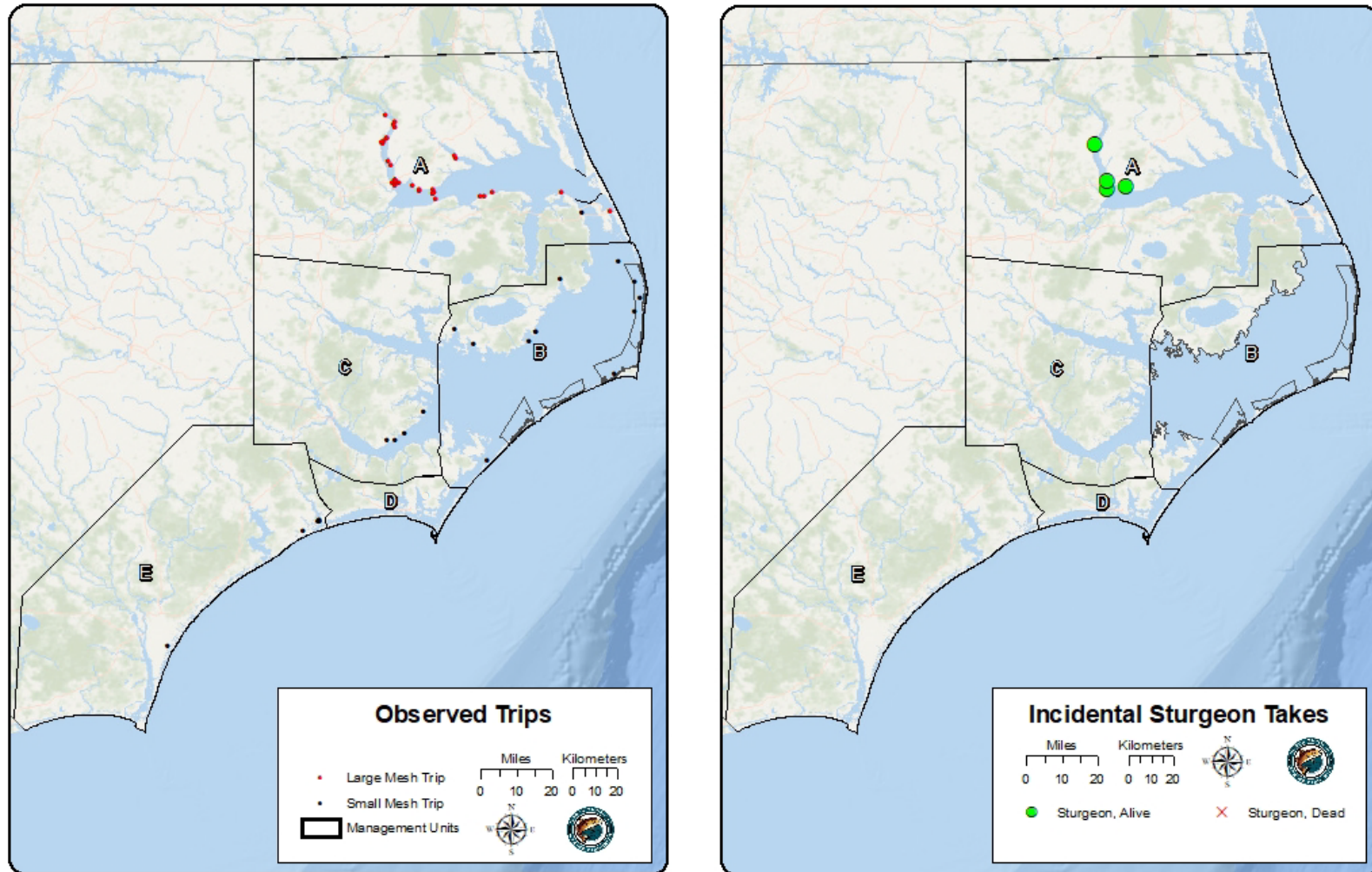


**Figure 3.** For fall 2019, observed gill-net trips (left) by mesh-size category (207 large-mesh =  $\geq 5$  inch; 58 small-mesh =  $< 5$  inch) and Atlantic Sturgeon interactions (right) by disposition (alive,  $n = 2$ ; dead,  $n = 0$ ) across management units.

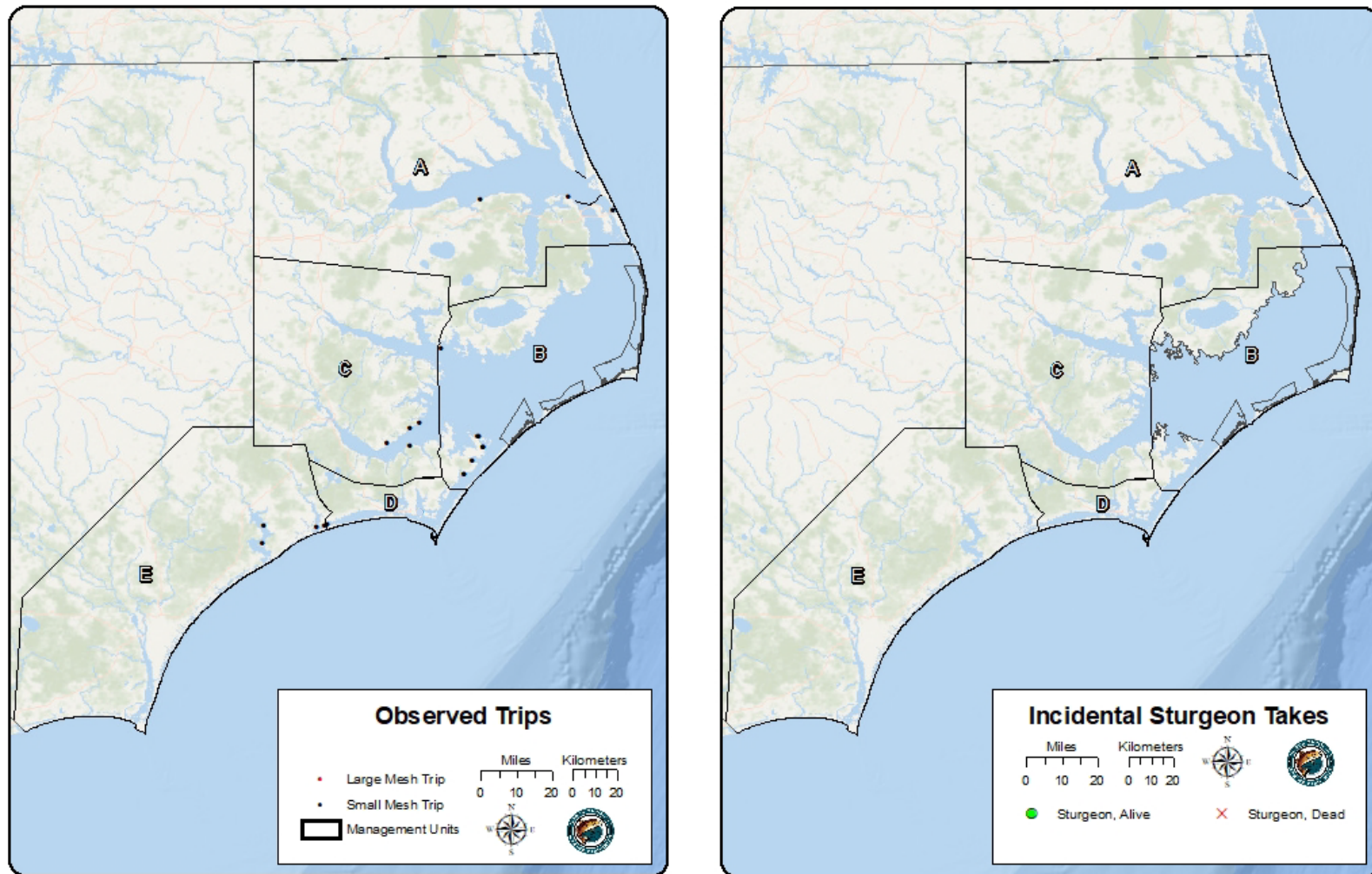


**Figure 4.** For winter 2019–2020, observed gill-net trips (left) by mesh-size category (49 large-mesh =  $\geq 5$  inch; 45 small-mesh =  $< 5$  inch) and Atlantic Sturgeon interactions (right) by disposition (alive,  $n = 1$ ; dead,  $n = 0$ ) across management units.



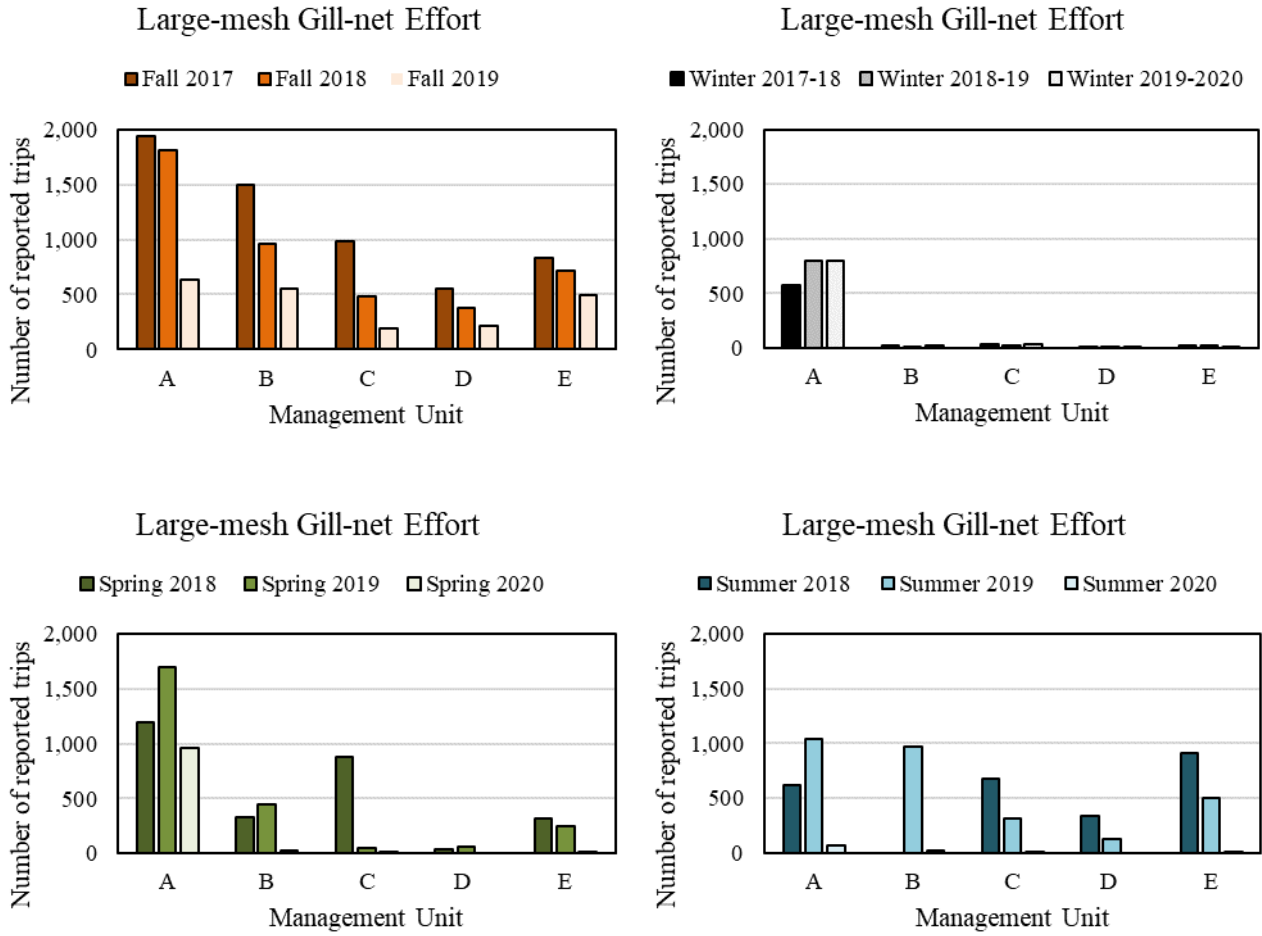


**Figure 5.** For spring 2020, observed gill-net trips (left) by mesh size-category (41 large-mesh =  $\geq 5$  inch; 25 small-mesh =  $< 5$  inch) and Atlantic Sturgeon interactions (right) by disposition (alive,  $n = 4$ ; dead,  $n = 0$ ) across management units.

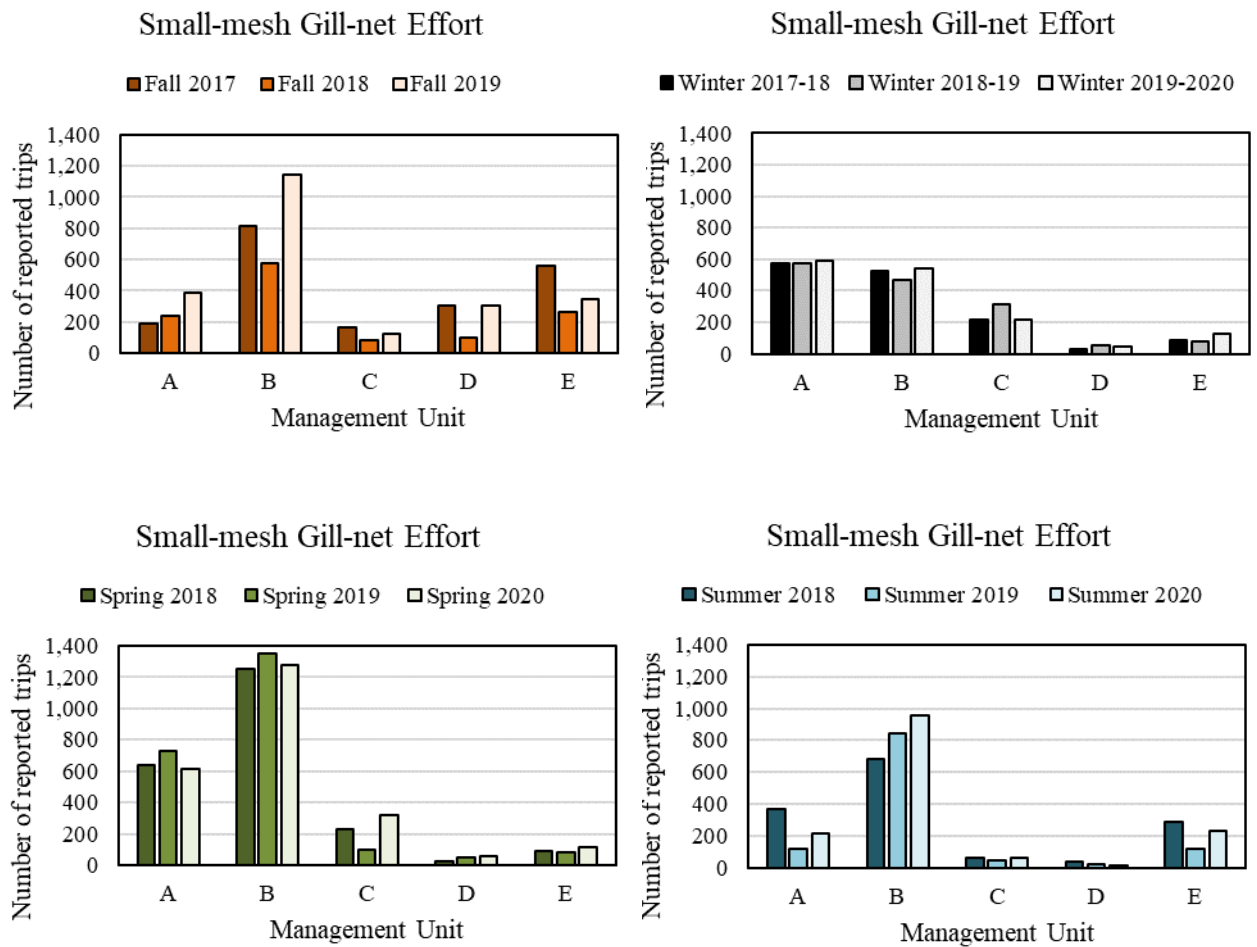


**Figure 6.** For summer 2020 observed gill-net trips (left) by mesh-size category (0 large-mesh =  $\geq 5$  inch; 21 small-mesh =  $< 5$  inch) and Atlantic Sturgeon interactions (right) by disposition (alive,  $n = 0$ ; dead,  $n = 0$ ) across management units.

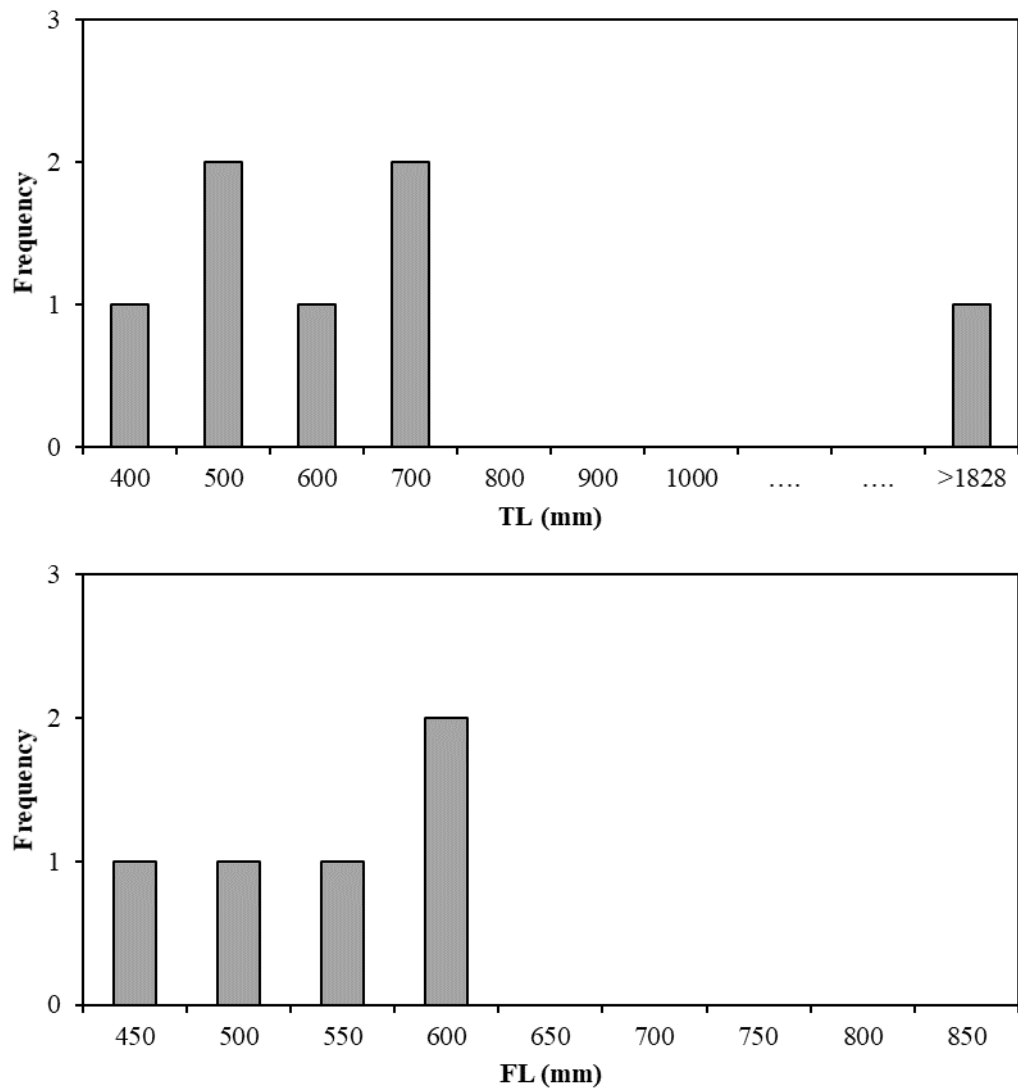




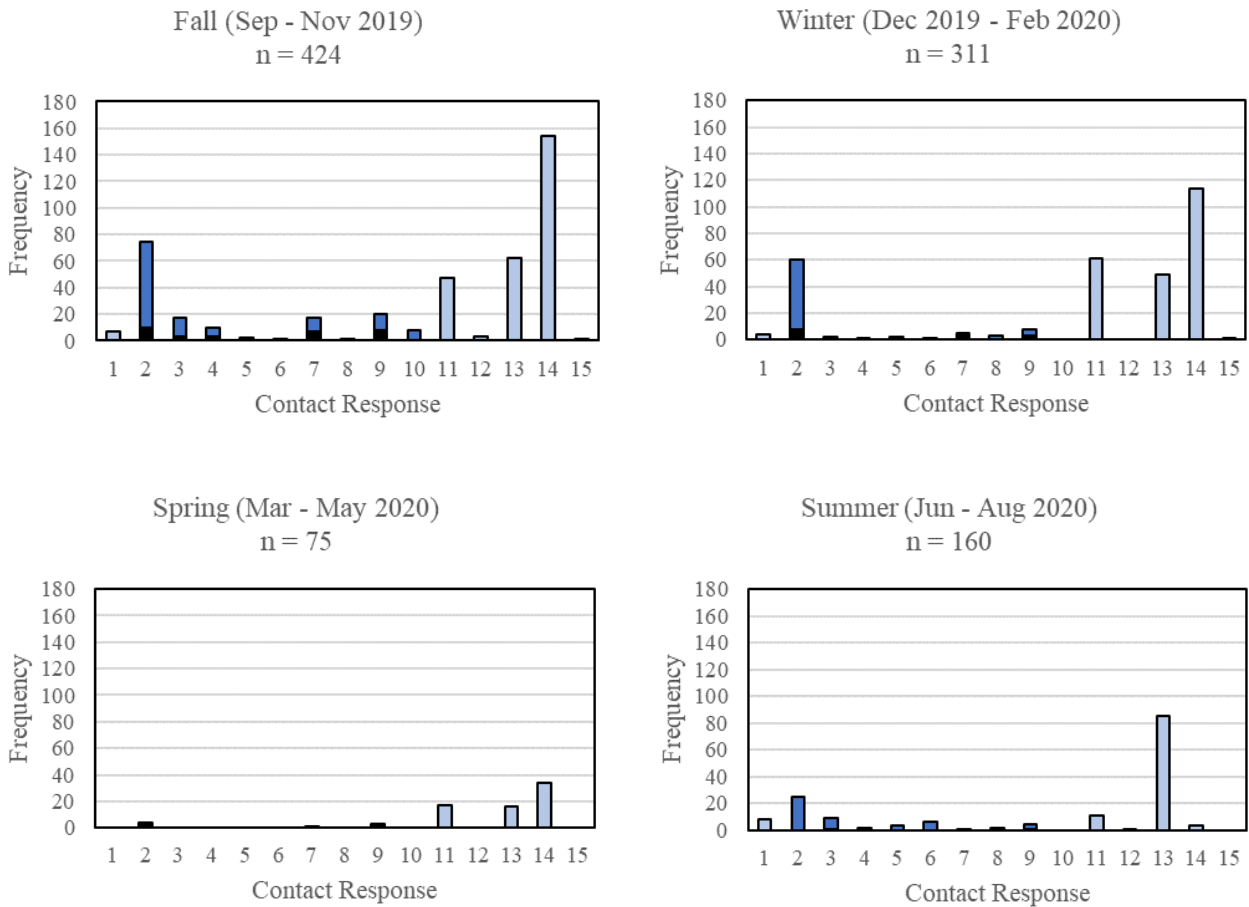
**Figure 7.** Number of fishing trips using large-mesh ( $\geq 5$  inch) gill nets reported to the Trip Ticket Program during the 2018, 2019, and 2020 ITP Years by season and management unit.



**Figure 8.** Number of fishing trips using small-mesh (<5 inch) gill nets reported to the Trip Ticket Program during the 2018, 2019, and 2020 ITP Years by season and management unit



**Figure 9.** For observed and measured incidental takes of Atlantic Sturgeon during the 2020 ITP Year, length-frequency of (top) fork length (FL, mm; n = 5 of 7 observed) and (bottom) total length (TL, mm; n = 7 of 7 observed).



**Figure 10.** For the 2020 ITP Year, contacts attempted (n = 970) by observers to schedule trips categorized by contact type (0-15) and presented as a percentage of the total for fall, winter, spring, and summer. Contact type categories include the following: 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 refused; 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). Contact types are shown as those when the observer talked to a fisherman (dark blue bars), when the observer did not (light blue bars), and when the fisherman returned an observer’s call (black bars).



# **LANDINGS UPDATE FOR RED DRUM & SOUTHERN FLOUNDER**

## Red Drum Landings 2019-2020

Landings are complete through April 20, 2021.

2019 landings are final. 2020 and 2021 landings are preliminary.

Year	Month	Species	Pounds	2009-2011 Average	2013-2015 Average
2019	9	Red Drum	1,508	28,991	35,003
2019	10	Red Drum	8,080	43,644	63,659
2019	11	Red Drum	5,357	14,318	27,646
2019	12	Red Drum	1,763	3,428	2,197
2020	1	Red Drum	1,853	5,885	1,700
2020	2	Red Drum	1,322	3,448	3,996
2020	3	Red Drum	1,040	5,699	3,971
2020	4	Red Drum	2,425	7,848	6,528
2020	5	Red Drum	4,473	13,730	9,661
2020	6	Red Drum	5,890	12,681	6,985
2020	7	Red Drum	6,839	13,777	15,618
2020	8	Red Drum	13,592	21,252	15,846

**FY20 Fishing Year (Sept 1, 2019 - Aug 31, 2020) Landings 54,142**

Year	Month	Species	Pounds	2009-2011 Average	2013-2015 Average
2020	9	Red Drum	32,104	28,991	35,003
2020	10	Red Drum	57,299	43,644	63,659
2020	11	Red Drum	26,704	14,318	27,646
2020	12	Red Drum	12,067	3,428	2,197
2021	1	Red Drum	11,512	5,885	1,700
2021	2	Red Drum	15,548	3,448	3,996
2021	3	Red Drum	2,409	5,699	3,971
2021	4	Red Drum			
2021	5	Red Drum			
2021	6	Red Drum			
2021	7	Red Drum			
2021	8	Red Drum			

**FY21 Fishing Year (Sept 1, 2020 - Aug 31, 2021) Landings 157,643**

\*partial trip ticket landings only

\*\*\*landings are confidential

Year	Month	Species	Pounds	Dealers	Trips	Average (2007-2009)
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	36,666	92	1,038	122,514
2019	6	SOUTHERN FLOUNDER	61,035	109	1,437	154,090
2019	7	SOUTHERN FLOUNDER	59,404	109	1,554	170,387
2019	8	SOUTHERN FLOUNDER	95,588	109	1,778	201,862
2019	9	SOUTHERN FLOUNDER	51,734	59	551	396,301
2019	10	SOUTHERN FLOUNDER	327,291	119	2,333	781,717
2019	11	SOUTHERN FLOUNDER	159,595	58	537	392,150
2020	3	SOUTHERN FLOUNDER	***	***	***	23,512
2020	4	SOUTHERN FLOUNDER	***	***	***	68,389
2020	8	SOUTHERN FLOUNDER	143	3	5	201,862
2020	9	SOUTHERN FLOUNDER	86,644	31	792	396,301
2020	10	SOUTHERN FLOUNDER	340,281	138	2,613	781,717
2020	11	SOUTHERN FLOUNDER	52,642	27	71	392,150
2021	3	SOUTHERN FLOUNDER	***	***	***	23,512

\*2020 and 2021 data are preliminary. 2017-2019 data are complete.

\*\*\*Data are confidential



# **RULE**

## **SUSPENSIONS**





ROY COOPER  
*Governor*

DIONNE DELLI-GATTI  
*Secretary*

KATHY B. RAWLS  
*Director*

May 5, 2021

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission  
**FROM:** Kathy Rawls, DMF Director  
**SUBJECT:** Temporary Rule Suspension

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### 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

No new rule suspensions have occurred since the February 2020 meeting.

### Action Needed

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

### Overview

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 03M .0511 Bluefish

Suspension of this rule is for an indefinite period. 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.

### **NCMFC Rule 15A NCAC 03J .0103 (h) Gill Nets, Seines, Identification, Restrictions**

Suspension of portion of this rule is for an indefinite period. Suspension of this rule allows the division to implement year around small mesh gill net attendance requirements in certain areas of the Tar, Pamlico, and Neuse River systems. This action was taken as part of a department initiative to review existing small mesh gill net rules to limit yardage and address attendance requirements in certain “hot spot” areas of the state. This suspension continues in proclamation M-8-2021.

### **NCMFC Rule 15A NCAC 03R .0110 (4)(5) Crab Spawning Sanctuaries**

Suspension of portions of this rule is for an indefinite period. Suspension of this rule allows the division to revise the boundaries for the Drum Inlet and Barden Inlet crab spawning sanctuaries in accordance with Amendment 3 to the N.C. Blue Crab Fishery Management Plan. This suspension was implemented in proclamation M-7-2020.

### **NCMFC Rules 15A NCAC 03L .0201 (a)(b) Crab Harvest Restrictions, 03L .0203 (a) Crab Dredging and 03J .0301 (a)(1), (g)(h) Pots**

Suspension of portions of these rules is for an indefinite period. Suspension of these rules allows the division to implement requirements for the blue crab fishery in accordance with Amendment 3 to the N.C. Blue Crab Fishery Management Plan. These suspensions were continued in proclamation M-1-2021.

### **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. 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. 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-25-2021.

### **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. 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. 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-8-2021.