



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

Permit No. 18102
Expiration Date: July 17, 2024
Reports Due: January 31 (annually);
Monthly reports will be due within one week of the previous month (monthly)

PERMIT TO INCIDENTALLY TAKE ENDANGERED/THREATENED SPECIES

I. AUTHORIZATION

This permit is issued to North Carolina Department of Environment and Natural Resources, Division of Marine Fisheries, Louis B. Daniel, III, Ph.D., in his capacity as Director of North Carolina Division of Marine Fisheries (NCDMF; hereinafter "Permit Holder"), 3441 Arendell Street PO Box 769 Morehead City, North Carolina 28557. This permit is subject to the provisions of Section 10 of the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531-1543); and the regulations governing listed species permits (50 CFR Parts 222); and conditions of this permit.

II. ABSTRACT

On June 28, 2013, NCDMF submitted a complete application for a ESA Section 10(a)(1)(B) permit, including a conservation plan with an adaptive management program for the operation of their inshore anchored gill net fishery to further monitor, minimize, and mitigate the impacts of incidental take of Atlantic sturgeon in the fishery to the maximum extent practicable. On July 9, 2013, NMFS published a notice of receipt of the NCDMF application (File No. 18102) in the Federal Register (78 FR 41034). The comment period ended August 8, 2013. On January 3, 2014, NCDMF submitted a revised complete application based on public comments and reviews by NMFS. There was not a substantial change to the application to warrant another comment period.

Gill net fishing in North Carolina is managed by NCDMF through rules that regulate fishing times, areas, fishing gear, seasons, size limits, and quantities of fish harvested and possessed adopted by the North Carolina Marine Fisheries Commission (General Statutes 113-182; 143B-289.51; 143B-289.52) and proclamations issued by the Director (General Statute 143B-289.52). NCDMF will maintain their regulations, which include mandatory attendance, yardage limits, soak-time restrictions, net shot limits, net height tie down requirements, closed areas, mesh size restrictions, minimum distance between fishing operations, marking requirements, permit mandates, and observer requirements.

The conservation plan prepared by NCDMF describes measures designed to monitor, minimize, and mitigate the incidental take of ESA-listed Atlantic sturgeon DPSs. The conservation plan includes managing inshore gill net fisheries by dividing estuarine waters into 7 management units for Atlantic sturgeon (i.e., A1, A2, A3, B, C, D, E). Each of the management units would be monitored seasonally and by fishery. This permit applies only to the areas defined as follows:

Management Unit A is divided into three subunits: A-1, A-2, and A-3 to allow NCDMF to effectively address subunits where proactive management actions may be taken at a finer scale.



- **Management Subunit A-1** will encompass Albemarle Sound as well as contributing river systems in the unit not crossing a line 36° 4.30'N -75° 47.64'W east to a point 36° 2.50'N -75° 44.27'W in Currituck Sound or 35° 57.22'N -75° 48.26'W east to a point 35° 56.11'N -75° 43.60'W in Croatan Sound and 36° 58.36'N -75° 40.07'W west to a point 35° 56.11'N -75° 43.60'W in Roanoke Sound.
- **Management Subunit A-2** will encompass Currituck Sound north of a line beginning at 36° 4.30'N -75° 47.64' east to a point at 36° 2.50'N -75° 44.27'W as well as the contributing river systems in this unit.
- **Management Subunit A-3** will encompass Croatan Sound waters south from a point at 35° 57.22'N -75° 48.26'W east to a point 35° 56.11'N -75° 43.60'W and Roanoke Sound waters south from a point 36° 58.36'N -75° 40.07'W west to a point 35° 56.11'N -75° 43.60'W south to 35° 46.30'N.

Management Unit B includes all inshore waters south of 35°46.30'N, east of 76°30.00'W and north of 34°48.2'N. This management unit will include all of Pamlico Sound and the northern portion of Core Sound.

Management Unit C includes the Pamlico, Pungo, Bay, and Neuse river drainages west of 76° 30.00'W.

Management Unit D includes all inshore waters south of 34°48.27'N and west to a line running from 34°40.70'N - 76°22.50'W to 34°42.48'N - 76°36.70'W to the Highway 58 bridge. Management in unit D includes the southern Core Sound, Back Sound, Bogue Sound, North River, and Newport River.

Management Unit E includes all inshore waters south and west of the Highway 58 bridge to the North Carolina/South Carolina state line. This includes the Atlantic Intracoastal Waterway and adjacent sounds and the New, Cape Fear, Lockwood Folly, White Oak, and Shallotte rivers.

NCDMF's Conservation Plan in the application specifies further measures, which NMFS had determined will minimize, monitor, and mitigate the impacts of incidental take of ESA-listed Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) Gulf of Maine, New York Bight, Chesapeake, Carolina, and South Atlantic Distinct Population Segments, associated with the otherwise lawful commercial and recreational fisheries operating in inshore North Carolina waters and deploying anchored gill nets (i.e., gill nets anchored or attached to the bottom at both ends or with one end anchored or attached to the bottom and the other end attached to a boat or not attached to the bottom, except for the following types of gill nets: run around, strike, drop or drift gill nets). The Conservation Plan measures include monitoring of the inshore anchored gill net fisheries through onboard and alternative platform observers. NCDMF will observe (7--10% ≥5.0 inch stretched mesh (ISM); 1--2% <5.0 ISM) statewide while gill net fishing occurs. Data on sturgeon incidental take will include gear type, soak time, gear parameters (e.g., mesh size), location, condition of individual caught, length, weight, disposition, and whether a tag was applied or fin clip collected. Information on fishing effort, catch, and discards will also be collected when available. NCDMF Marine Patrol officers will inspect fish houses, conduct aerial surveys, check fishing gear and licenses, interview fishermen, and monitor fishing activities. NCDMF will use data collected through the Trip Ticket Program, which requires fishermen to report on their catch. Dealers are responsible for recording landings on the trip tickets and submitting them

to NCDMF. The data collected through onboard and alternative platform observers, Marine Patrol officer reports, and the Trip Ticket Program will be used to estimate fishing effort, Atlantic sturgeon bycatch, and level of compliance. The Conservation Plan specifies if estimated takes of Atlantic sturgeon approach allowable thresholds in a management unit, NCDMF will issue a proclamation closing the season for the responsible fishery within the applicable management unit. NCDMF will issue proclamations implementing additional restrictions if necessary to provide increased protection of Atlantic sturgeon and other ESA-listed species or lifting gill net or area restrictions if supported by NCDMF or NMFS biological data. Restrictions may include additional measures to reduce fishing effort, reduced yardage, seasonal/area closures, attendance requirements, other gear limitations or modifications, extensive outreach, and an adaptive observer program. NCDMF will also identify and adaptively respond to areas of high potential for Atlantic sturgeon bycatch. These "hotspots" will be defined as any area, determined by geographically enforceable boundaries, where Atlantic sturgeon observations are unusually high within a management unit or subunit, such that the Director determines that closure and evaluation is necessary to (1) avoid violation of a take limit, or (2) provide adequate protection of the Atlantic sturgeon, or (3) to allow Atlantic sturgeon to complete a seasonal migration and minimize interactions. Temporary hotspot closures may be implemented while data are gathered and analyzed. Hotspot areas will be identified and handled proactively and reactively. For any given management unit or subunit during a season that shows high Atlantic sturgeon abundance, NCDMF may close the management unit or subunit for the duration of the defined season. If an area is closed as a hotspot multiple times throughout the year or over a two-year period, NCDMF will take proactive measures to close the area for longer than a defined season. If a particular area within a management unit or subunit can be defined within the unit as the hotspot that area can be defined geographically and closed within the unit temporarily or permanently.

Additionally, NCDMF and the National Marine Fisheries Service signed, on July 17, 2014, an implementing agreement to better define responsibilities of the parties under the Conservation Plan, and to provide a pathway to account for and obtain better information in areas where there are Atlantic sturgeon data gaps. This agreement sets up a data collection and analysis portion in years 1-3 of the permit that will provide Atlantic sturgeon distribution, abundance, and population trend to better inform and revisit take numbers in years 4-10 of the permit. From date of issuance of the Permit through the first three years, NCDMF will implement the NCDMF Fisheries Observer Program and monitor and manage "hotspots" to minimize take of the Covered Species. NCDMF will utilize data collected through the Observer Program using the methodologies outlined in the Conservation Plan to conduct analysis in the first three years to better understand bycatch estimates and Atlantic sturgeon distribution, abundance, and population trend. Observer data collected prior to the issuance of the Permit will also be used to create a more robust data set. If during the first three years NCDMF identifies any hotspots, NCDMF will close the area temporarily until analysis can be completed, as described in the Conservation Plan. For years four through ten after issuance of the permit, NCDMF will continue to collect the information described above and will develop, in collaboration with and with concurrence of NMFS, any necessary changes to the adaptive management plan based on the results of their analysis. NCDMF will submit any proposed changes to the NMFS for review and concurrence. NCDMF will implement either the adaptive management plan as described in the original Plan or the changed adaptive management plan based on the analysis of the above referenced data for the remainder of the Permit. During years four through ten, if NCDMF deems it necessary to reanalyze the data based on current observer data, NCDMF will consult with NMFS, submit any proposed changes to the NMFS for review, and continue with the

current adaptive management plan or use reevaluated data.

NCDMF considered and rejected 5 alternatives: (1) no change; (2) no application for a section 10(a)(1)(B) permit; (3) large mesh reduction; (4) expansion of weekly closures; and (5) small mesh effort reduction.

III. INCIDENTAL TAKE AUTHORIZATION

Listed Species Affected:

Endangered: Atlantic sturgeon South Atlantic Distinct Population Segment
 Atlantic sturgeon Carolina Distinct Population Segment
 Atlantic sturgeon Chesapeake Bay Distinct Population Segment
 Atlantic sturgeon New York Bight Distinct Population Segment

Threatened: Atlantic sturgeon Gulf of Maine Distinct Population Segment

Table 1. Estimated annual incidental take per fishing year (for a total of 10 years; the life of the permit) of Atlantic sturgeon in North Carolina's large mesh (≥ 5.0 ISM) inshore gill net fishery.

Management Unit	Season	Carolina DPS Total Interactions (Mortality)	Other DPS Total Interactions (Mortality)
A	Winter	149 (6)	50 (2)
	Spring	460 (19)	154 (6)
	Summer	157 (6)	52 (2)
	Fall	838 (34)	279 (11)
B	Winter	*2 (1)	--
	Spring	*1 (1)	1 (0)
	Summer	*4 (2)	2 (0)
	Fall	*17 (2)	6 (0)
C	Winter	*2 (1)	--
	Spring	*3 (1)	1 (0)
	Summer	*2 (1)	1 (0)
	Fall	*4 (2)	2 (0)
D	Annual	*8 (2)	--
E	Annual	*8 (2)	--
Total		1,655 (80)	548 (21)

*Total interaction number represents actual observed and not estimated based on observer coverage. Mortality estimates could not be completed for Management Units B-E due to low take; thus, if observed interactions were ≤ 5 mortality was one; if observed interactions were >5 mortality was two.

Table 2. Estimated annual incidental take per fishing year (for a total of 10 years; the life of the permit) of Atlantic sturgeon in North Carolina's small mesh (≤ 5.0 ISM) inshore gill net fishery.

		Carolina DPS (Mortality)	Other DPS (Mortality)
A	Winter	175 (14)	35 (3)
	Spring	219 (17)	44 (4)
	Summer	72 (6)	14 (1)
	Fall	103 (8)	21 (2)
B	Winter	*2 (1)	--
	Spring	*6 (2)	1 (0)
	Summer	*3 (1)	1 (0)
	Fall	*3 (1)	1 (0)
C	Winter	*2 (1)	--
	Spring	*2 (1)	--
	Summer	*2 (1)	--
	Fall	*2 (1)	--
D	Annual	*8 (2)	--
E	Annual	*8 (2)	--
Total		607 (58)	117 (10)

*Total interaction number represents actual observed and not estimated based on observer coverage. Mortality estimates could not be completed for Management Units B-E due to low take; thus, if observed interactions were ≤ 5 mortality was one; if observed interactions were >5 mortality was two.

Configuration of Takes Per DPS. NCDMF will use the total number of live and also the total number of dead per unit and season to determine if NCDMF is approaching or has reached allowable Atlantic sturgeon takes as depicted above. However, there is no "real time" method to determine the actual DPS taken. The required genetic sampling will provide the actual take numbers per DPS, but this will not be determined until after genetic samples are processed and if funding allows for processing every fish. The best available information for estimating takes per DPS is from mixed stock assessments done by Ike Wirgin and Tim King. The method for estimation of takes per DPS before capture is outlined in Section 6.3.3 and 9 of the Biological Opinion for this permit.

While NMFS will know more about the exact probability of each DPS being affected by these fisheries after genetic processing is completed, NCDMF has provided information on the sizes of Atlantic sturgeon captured in previous monitoring. The sizes indicate the majority of Atlantic sturgeon captured as bycatch range from juveniles to small sub-adults. Because of this, NMFS believes that as many as 75% of the sturgeon and half of the sub-adult sturgeon will likely be from the Carolina DPS. That percentage during any given year, however, could be lower due to a small juvenile population and a higher percentage of sub-adult fish present from other areas. There will be years when as many as 40% of the Atlantic sturgeon captured could be from the South Atlantic or Chesapeake Bay DPSs. The Hudson River population, based on mixed stock assessments from the

Chesapeake Bay (Bartron et al. 2007), New York (Wirgin and King 2011), and Canada (Wirgin et al. 2012) is more concentrated around the northeast coast of North America, with fewer proportional individuals in Canada and fewer individuals south of Chesapeake Bay. The highest composition of New York Bight DPS fish likely to be present in North Carolina during any year could be as high as 10%. The Gulf of Maine, which makes up less than 3% of the Atlantic sturgeon identified as far south as the Chesapeake Bay (Bartron et al. 2007) is not likely to account for any more than 3% of the sturgeon captured in North Carolina. These percentage estimates are reflected in Tables 3 and 4. However, it is important to note that, because of uncertainty about the exact proportion of each DPS in inshore waters of North Carolina, the fact that a sample of the entire population will be representative of the actual proportion of each DPS but will vary around the mean, and the fact that the proportions of each DPS in inshore waters of North Carolina will naturally fluctuate seasonally and annually, the take estimates provide a maximum proportion of each DPS to be affected and do not attempt to estimate the exact proportion of each DPS to be taken.

Table 3: Total annual harassment caused by small mesh and large mesh gill nets in North Carolina.

Atlantic sturgeon DPS	Annual small mesh	Annual large mesh	Total
Total	724	2,203	2,927
Carolina DPS	Up to 543 of 724*	Up to 1,653 of 2,203*	Up to 2,196 of 2,927*
Chesapeake Bay DPS	Up to 290 of 724*	Up to 882 of 2,203*	Up to 1,171 of 2,927*
South Atlantic DPS	Up to 290 of 724*	Up to 882 of 2,203*	Up to 1,171 of 2,927*
New York Bight DPS	Up to 73 of 724*	Up to 221 of 2,203*	Up to 293 of 2,927*
Gulf of Maine DPS	Up to 22 of 724*	Up to 67 of 2,203*	Up to 88 of 2,927*

* Total annual take will not exceed the identified totals, however the DPS make-up of that total take may fluctuate annually.

Table 4: Total annual mortalities caused by small mesh and large mesh gill nets in North Carolina.

Atlantic sturgeon DPS	Annual small mesh	Annual large mesh	Total
Total	68	101	169
Carolina DPS	Up to 51 of 68*	Up to 76 of 101*	Up to 127 of 169*
Chesapeake Bay DPS	Up to 28 of 68*	Up to 41 of 101*	Up to 68 of 169*
South Atlantic DPS	Up to 28 of 68*	Up to 41 of 101*	Up to 68 of 169*
New York Bight DPS	Up to 7 of 68*	Up to 11 of 101*	Up to 17 of 169*
Gulf of Maine DPS	Up to 3 of 68*	Up to 4 of 101*	Up to 6 of 169*

* Total annual take will not exceed the identified totals, however the DPS make-up of that total take may fluctuate annually.

III. TERMS AND CONDITIONS OF THE PERMIT

The incidental take of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) Gulf of Maine, New York Bight, Chesapeake, Carolina, and South Atlantic Distinct Population Segments, associated with the otherwise lawful commercial and recreational fisheries operating in inshore waters and deploying anchored gill nets (i.e gill nets anchored or attached to the bottom at both ends or with one end anchored or attached to the bottom and the other end attached to a boat or not attached to the bottom , except for the following types of gill nets: run around, strike, drop or drift gill nets) is authorized as described in the application, Conservation Plan, and supporting documents and subject to both the provisions of the Conservation Plan, Implementing Agreement, and the conditions of this permit. The monitoring, minimization, and mitigation measures are incorporated as conditions of this permit. NMFS has included additional conditions determined necessary or appropriate to minimize the impacts of incidental take to the covered species.

A. Duration of Permit

1. The permit covers incidental take from the date of issuance (July 17, 2014) for a 10-year period (July 17, 2024).
2. If incidental captures or mortalities of any species in any management unit reach or exceed the established levels (Tables 1, 2), activities authorized under this permit must stop and the Permit Holder must submit an Incident Report as described in Condition C.1.

B. Conditions to Monitor, Minimize, and Mitigate Impacts to Listed Species

1. NCDMF must continue to implement the inshore anchored gill net fishing regulations as described in the application. If during the effective period of this permit, North Carolina proposes to amend inshore gill net fishing regulations in a manner that could affect the taking authorized in this permit, NCDMF must work with NMFS to ensure that amended regulations are not less protective of the species covered by this permit.
2. Sturgeon incidentally captured by fisherman must be released unharmed into the waters from which they were taken. Fishermen must report these interactions to NCDMF by calling 252-726-7021 or 1-800-682-2632 and abide by safe handling instructions provided by NCDMF.
3. Atlantic sturgeon incidentally captured by a vessel (upon which an observer is present) must be passive integrated transponders (PIT) tagged and fin clipped for genetic processing as described in the monitoring plan, up to the limits in Table 1 or 2 depending on gear, before being released into the waters from which they were taken. (NMFS will provide, based on available funding, support for PIT and T-Bar tagging of collected individuals as well as collection and processing of fin clips for genetic testing to identify from which DPS the collected fish originated. If NMFS cannot provide funding, NCDMF will seek the help of university researchers).

- a. Extreme care must be used when collecting genetic samples. Instruments must be disinfected and gloves must be changed between each fish sampled to avoid possible disease transmission or cross contamination of genetic material.
 - b. Prior to placement of PIT tags, the entire dorsal surface of each fish must be scanned with a PIT tag reader to ensure detection of fish tagged in other studies. Previously tagged fish must not be retagged.
 - c. PIT tags must be inserted immediately anterior to the dorsal fin of the sturgeon.
 - d. PIT tags may not be larger than 11.5 mm x 2.1 mm when inserted into juvenile sturgeon less than 330 mm in length.
 - e. Sturgeon less than 250 mm (10 inches) must not be tagged.
4. If sturgeon incidentally captured by fishermen are retrieved dead from inshore gill nets, they may not be retained, consumed, sold, landed, offloaded, or transported. Dead sturgeon should immediately be returned to the waters from which they were retrieved and fishermen should report them to NCDMF by calling 252-726-7021 or 1-800-682-2632.
 5. If practicable, NCDMF staff may retain dead sturgeon retrieved from inshore gill nets and submit an Incidental Take Report as described in C.1. Upon submission of the Incident Report, the Endangered Species Conservation Division will direct NCDMF on the final disposition of dead sturgeon. If retaining dead sturgeon is not practicable, they should immediately be returned to the waters from which they were retrieved.
 6. NCDMF must implement the mitigation and monitoring described in the Conservation Plan to remain in compliance with the conditions of this permit. This includes:
 - a. Identifying, to the maximum extent practicable, all participants in the inshore gill net fishery prior to the opening of the season annually to provide educational materials.
 - b. Provide education and outreach for identifying sturgeon species, and proper handling of sturgeon, including their safe release to waters from where they were taken and disposition of dead or injured animals.
 - c. Monitor incidental captures of Atlantic sturgeon reported by commercial and recreational anchored gill net fishermen.
 - d. Conducting direct observations on a minimum of 7--10% ≥ 5.0 ISM; 1--2% < 5.0 ISM statewide while inshore anchored gill net fishing occurs. Monitoring efforts will be adaptive to the timing of the sturgeon spawning migration and the number of observed sturgeon intercepts.
 - e. During monitoring conducted under conditions B.6.d NCDMF must gather data, to the greatest extent practicable, on post-release injury and mortality of sturgeon.

C. Reporting Requirements

1. *24-48 Hour Incidental Take Reports.* To be consistent with reporting requirements for sea turtles under permit #16230, NCDMF will report all incidental Atlantic sturgeon takes to NMFS Office of Protected Resources (OPR) via email (to heather.coll@noaa.gov (or current sturgeon permit contact) and angela.somma@noaa.gov (or current Chief), cc: kristy.long@noaa.gov) within 24 hours of their occurrence in any season of the year (spring, summer, fall and winter), whether documented by an observer or reported by a fisherman. Reports of incidental take should include the date of the take, the condition of the sturgeon, photographs, and any other pertinent details of the circumstances of the taking (e.g., location, gear description, etc.).

2. *Monthly Incidental Take Reports.* All incidental takes of sturgeon covered by this permit must be reported monthly to:

Chief, Endangered Species Conservation Division Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway Silver Spring, Maryland 20910 Phone: (301) 427-8403; Fax: (301) 713-4060; email angela.somma@noaa.gov (or current Chief) no later than within one week of the previous month for each year of the permit. This monthly take report must include:

- a. A summary of incidental take data collected from reports submitted by fisherman and direct observations of incidental take by NDCMF.
- b. Reports of the incidental take should include the date of the take, the condition of the sturgeon, the species (if known), the river fished, gear type, length of net, total soak time, and number of net sets.

3. *Annual Report.* A year is defined as beginning September 1 and ending the following August 31 (e.g., September 1, 2013 through August 31, 2014). NCDMF will submit annual reports for September 1 through August 31 to NMFS by the following January 31 (i.e., 5 months after the year ends). The annual report must be submitted to:

Chief, Endangered Species Conservation Division Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway Silver Spring, Maryland 20910 Phone: (301) 427-8403; Fax: (301) 713-4060; email angela.somma@noaa.gov (or current Chief)

A summary of the key contents of each annual report is provided below (an can be combined with the sea turtle annual report as outlined in permit #16230):

- a. Actual and estimated incidental takes (including mortality) and the level of uncertainty of the estimates (e.g., confidence intervals) of Atlantic sturgeon by management units;

b. Size composition, disposition (alive/dead), location, and dates of incidental take of Atlantic sturgeon;

c. One or more maps or graphical representations illustrating the geographic distribution of all observed large and small mesh gillnet hauls and the locations of all observed incidental Atlantic sturgeon takes; and

d. A description of the mitigation activities, adaptive management actions, and enforcement activities conducted.

4. *Final Report:* The Permit Holder must submit a final report within one hundred eighty (180) days of the expiration of this Permit summarizing the total take that occurred under the permit and whether the fish was dead, alive, and how it was released. Reports must be submitted to the address in Condition C.2.

D. Requirements for interactions with Endangered Florida Manatee: The following conditions are provided by the U.S. Fish and Wildlife Service (USFWS) to limit interactions and avoid injury to endangered Florida manatee from the USFWS Guidelines to Reduce the Impact to Manatees if Encountered by Fisherman. NCDMF must issue a proclamation specifying the guidelines fishermen must follow in the event that a manatee is encountered.

a. The Permit Holder will inform all fishermen associated with the fisheries that manatees may be present in the area, and the need to avoid any harm to these endangered mammals. The applicant will ensure that all fishermen know the general appearance of the species and their habit of moving about completely or partially submerged in shallow water. All fishermen will be informed that they are responsible for observing water-related activities for the presence of manatees.

b. The Permit Holder will advise all fishermen that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the ESA and the Marine Mammal Protection Act.

c. If a manatee is seen within 300 ft of the active vessel movement, all appropriate precautions shall be implemented to ensure protection of the manatee. The precautions shall include the operation of all moving vessels no closer than 50 ft of a manatee. Operation of any vessels closer than 50 ft to a manatee shall necessitate immediately placing any motors in neutral or shutting them off. Activities will not resume until the manatee has departed the fishing area on its own volition. Manatees should not be herded away or harassed into leaving.

d. Fishermen will monitor and tend nets for manatees at the same time they do so for sturgeon (and sea turtles). For help with an entangled, injured, or stranded manatee, fishermen should contact:

Rachel Lo Piccolo
NOAA, Beaufort Lab
101 Pivers Island Road
Beaufort, NC 28516
252-728-8762 (office)
252-444-8064 (pager)

In the event an entangled manatee is encountered, fishermen should take immediate actions in a manner which best minimizes stress or injury to the animal but is sufficient to free it entirely. The above person should then be contacted as soon as possible.

e. Any boat collision or fishing gear interaction with or injury to a manatee will be reported immediately. The report must be made to the USFWS and North Carolina Wildlife Resources Commission (NCWRC), and fishing should be postponed until cause of injury or mortality can be determined and a revised fishing and or monitoring plan is produced and approved. The addresses for USFWS and NCWRC are:

U.S. Fish and Wildlife Service
P.O. Box 33726
Raleigh, NC 27636-3726
919-856-4520 extension 16

North Carolina Wildlife Resources Commission
183 Paul Drive
Trenton, NC 28585
252-448-1546

f. A sign should be posted in all fish houses associated with the fisheries where it is clearly visible and will be distributed, as appropriate, to vessel operators to post in vessels. The sign should state:

CAUTION: The endangered manatee may occur in these waters during the warmer months, primarily from June through October. Idle speed is required if operating this vessel in shallow water during these months. All motors must be shut down or placed in neutral if a manatee comes within 50 ft of the fishing vessel. A collision with and/or injury to a manatee will be reported immediately to the USFWS and the NCWRC.

g. All vessels associated with the fishing activities will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

E. General Permit Conditions

1. The Permit Holder, NCDMF, may not transfer or assign this permit to any other person(s), as person is defined in Section 3(12) of the ESA. This permit is not in force or effective if transferred or assigned to any other person.
2. Upon request by the Director of the Office of Protected Resources, the Permit Holder must permit any employee(s) of NMFS, or any other person(s) duly designated by the Director, to inspect the Permit Holder's records and facilities if such records and facilities pertain to activities for which a take of ESA-listed species is authorized by this permit, relate to ESA-listed species covered by this permit, or pertain to the Director's responsibilities under the ESA.
3. The provisions of this permit may be amended upon reasonable notice by the Director of the Office of Protected Resources in accordance with the "no surprises" rule (63 FR 8859; February 23, 1998).
4. In the event any ESA-listed species not included in this permit is killed, injured, or collected during the course of activities in the action area of this permit, the Permit Holder must notify NMFS as soon as possible, but not later than two days after the event. This excludes listed sea turtles, as they are covered under Permit #16230, and requirements for incidental takes of listed sea turtles are described under that permit. The Permit Holder must then submit a written report to the Chief of the Endangered Species Conservation Division describing the circumstances of the unauthorized take (see Condition C.2 for contact information). Pending review of these circumstances, NMFS may suspend or amend this permit.
5. The Permit Holder is responsible for the activities of any individual who is operating under the authority of this permit.

6. Under the terms of the regulations, a violation of any of the terms and conditions of this permit will subject the Permit Holder, and/or any individual who is operating under the authority of this permit, to penalties as provided for in the ESA, including suspension or revocation of the permit.
7. 50 CFR Section 222.23(d)(8) provides for a reasonable fee to be charged to cover the costs of issuance of permits under the ESA. The fee for this permit has been waived.

for Perry Garrido
Donna S. Wieting
Director, Office of Protected Resources

JUL 17 2014
Date

L. B. Daniel
Louis B. Daniel, Ph.D.
Director of North Carolina Division of Marine Fisheries
Permit Holder/Principal Investigator

7/22/14
Date