UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
PROGRAM PLANNING AND INTEGRATION
Silver Spring, Maryland 20910

MAY 16 2013

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act (NEPA), an environmental review has been performed on the following action.

TITLE:	Supplemental Environmental Assessment for the Issuance of a Modification to Scientific Research Permit No. 13543 to Increase the Number of Sea Turtles taken during Research
LOCATION:	Coastal waters from Cape Hatteras, NC to Cape Canaveral, FL
SUMMARY:	The National Marine Fisheries Service (NMFS) proposes to issue a modification to Scientific Research Permit No. 13543 to increase the number of sea turtles taken annually during authorized activities. The purpose of the research is to further the understanding of growth, distribution, and life history of threatened and endangered sea turtles to better manage and recover sea turtle species. The preferred alternative is expected to result in no more than short-term minimal impacts to target sea turtles and will not significantly impact the quality of the human environment.
RESPONSIBLE OFFICIAL:	Helen M. Golde Acting Director, Office of Protected Resources National Marine Fisheries Service National Oceanic and Atmospheric Administration 1315 East-West Highway, Room 13821 Silver Spring, MD 20910 (301) 427-8400

The environmental review process led us to conclude that this action will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the finding of no significant impact (FONSI) including the supporting supplemental environmental assessment (SEA) is enclosed for your information.

Although NOAA is not soliciting comments on this completed SEA/FONSI we will consider any comments submitted that would assist us in preparing future NEPA documents. Please submit any written comments to the responsible official named above.

Sincerely,

Patricia A. Montanio
NOAA NEPA Coordinator

Enclosure

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

Supplemental Environmental Assessment for the Issuance of a Modification to Scientific Research Permit No. 13543 to Increase the Number of Sea Turtles taken during Research

May 2013

Lead Agency:	USDOC National Oceanic and Atmospheric Administration National Marine Fisheries Service Office of Protected Resources
Responsible Official:	Helen M. Golde, Acting Director, Office of Protected Resources
For Further Information Contact:	Office of Protected Resources National Marine Fisheries Service 1315 East West Highway Silver Spring, MD 20910 (301) 427-8400
Document Being Supplemented:	Environmental Assessment. Scientific Research Permit to the South Carolina Department of Natural Resources (Permit File No. 13543) to Conduct Research on Protected Sea Turtles
Location:	Coastal waters from Cape Hatteras, NC to Cape Canaveral, FL.

Abstract: The National Marine Fisheries Service (NMFS) proposes to issue a major modification to Scientific Research Permit No. 13543 for takes of sea turtles in the wild, pursuant to Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*). Permit No. 13543 authorizes research on sea turtles caught under another authority during trawl surveys. Authorized activities are: handling, measuring, weighing, passive integrated transponder tagging, flipper tagging, and photographing. The research objective, which is to further the understanding of growth, distribution, and life history of threatened and endangered sea turtles to better manage and recover sea turtle species would not change with the modification. The modification would increase the annual number of Kemp's ridley (*Lepidochelys kempii*) and loggerhead (*Caretta caretta*) sea turtles from 15 to 32 and from 45 to 50, respectively, which may be taken for research during surveys due to an increase in capture rates over recent years. The modified permit would expire on April 30, 2014.

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CHAPTER 1 PURPOSE OF AND NEED FOR ACTION

1.1 DESCRIPTION OF ACTION

In response to an application from South Carolina Department of Natural Resources (SCDNR), 217 Ft. Johnson Rd., Charleston, SC 29412 [Responsible Party: Robert Boyles] NMFS proposes to issue a modification to Scientific Research Permit No. 13543 authorizing takes"[1] of sea turtles in the wild under the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*).

1.1.1 Purpose and Need

The ESA prohibits "takes" of threatened and endangered species with only a few specific exceptions. The applicable exception in this case is an exemption for scientific purposes related to species recovery under Section 10(a)(1)(A) of the ESA.

The purpose of the permit modification is to provide the applicant with an exemption from the take prohibitions under the ESA for harm and harassment of sea turtles, including those listed as endangered, associated with an increase in capture rates during research authorized by Permit No. 13543 that is consistent with the ESA issuance criteria.

The need for issuance of the amended permit is related to the purposes and policies of the ESA. NMFS has a responsibility to implement the ESA to protect, conserve, and recover threatened and endangered species under its jurisdiction. Facilitating research about species' basic biology and ecology or that identifies, evaluates, or resolves specific conservation problems informs NMFS management of protected species.

1.1.2 Research Objectives

The modification request does not change the research objective: to provide information about growth, distribution, and life history of threatened and endangered sea turtles to better manage and recover them.

1.2 OTHER EA/EIS THAT INFLUENCE SCOPE OF THIS EA

An Environmental Assessment (EA) was completed in April 2009 for Permit No. 13543 (NMFS 2009), resulting in a Finding of No Significant Impact (FONSI). The EA analyzed the impact of research activities conducted on sea turtles during ongoing trawl surveys that authorize the capture of sea turtles. The trawls are part of the Southeast Monitoring and Assessment Program (SEAMAP) Coastal Survey to monitor abundance and distribution of marine species. That EA demonstrated that impacts of the action are limited to minor, short-term effects on individual sea turtles. As the permit does not authorize capture activities, there are no effects on other components of the environment. Captures are covered by an incidental take statement (ITS) in the Biological Opinion (NMFS 2012) prepared for the Southeast U.S. shrimp trawl fishery. Therefore, this Supplemental EA (SEA) focuses on evaluating whether increasing the number of Kemp's ridley and loggerhead sea turtles harmed and harassed will change the manner in which the permit affects the species.

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1 The ESA defines "take" as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

1.3 SCOPING SUMMARY

The scope of this SEA is limited to those analyses that were not included in the 2009 EA: the effects of the increase of annual takes of Kemp's ridley and loggerhead sea turtles from 15 to 32 and from 45 to 50, respectively. No increase in survey or capture effort is associated with the proposed increase in takes. Instead, the proposed increase in takes is associated with the abundance of sea turtles during surveys authorized under SRP No. 13543.

The National Oceanic and Atmospheric Administration (NOAA) has, in NOAA Administrative Order 216-6 (NAO 216-6; 1999), listed issuance of permits for research on protected species as categories of actions that "do not individually or cumulatively have a significant effect on the human environment..." and which therefore do not require preparation of an EA or environmental impact statement (EIS). A possible exception to the use of these categorical exclusions is when the action may adversely affect species listed as threatened or endangered under the ESA (NAO 216-6 Section 5.05c). Therefore, NMFS has prepared this SEA, with a more detailed analysis of the potential for adverse impacts on endangered species resulting from takes of a specified number of the target sea turtles, to assist in making the decision about permit issuance under the ESA.

CHAPTER 2 ALTERNATIVES INCLUDING THE PROPOSED ACTION

This chapter describes the range of potential actions (alternatives) determined reasonable with respect to achieving the stated objective, as well as alternatives eliminated from detailed study. This chapter also summarizes the expected outputs and any related mitigation of each alternative.

2.1 ALTERNATIVE 1 – NO ACTION

Under the No Action alternative, no modification would be issued and the applicant would not receive an exemption from the ESA take prohibitions for additional takes of Kemp's ridley and loggerhead sea turtles during ongoing trawl surveys. The existing permit would remain in effect until it expires on April 30, 2014. However, because the Permit Holder has exceeded the permit's annual take limit for Kemp's ridley sea turtles in the middle of the permit year, they would continue to be prohibited from conducting research on this species for the remainder of the year. Trawl surveys would continue to operate and potentially capture sea turtles under the authority of an ITS in the Biological Opinion (NMFS 2012) for the Southeast U.S. shrimp trawl fishery, however, no scientific data would be collected for Kemp's ridleys. The SCDNR could continue to conduct research on all other authorized species for the remainder of the year until they reach their annual take limits. Although the SCDNR has not reached their take limit for loggerheads, the SCDNR is requesting a small increase in the annual take number for loggerheads in anticipation of reaching their take limit based on recent capture rates. No other permits or permit requests would be affected by this alternative.

2.2 ALTERNATIVE 2 – PROPOSED ACTION (ISSUANCE OF PERMIT WITH STANDARD CONDITIONS)

Under the Proposed Action alternative, a permit modification would be issued to exempt the applicant from ESA take prohibitions for additional takes of sea turtles as described in Ch.1.3

during conduct of research that is consistent with the purposes and policies of the ESA and applicable permit issuance criteria.

The permit expiration date would remain April 30, 2014. The modified permit would contain the terms and conditions in Permit No. 13543, which are standard to such permits as issued by NMFS. No additional permit conditions would be required.

Action area

The action area would not change. As noted in the 2009 EA, the survey region is bounded to the north by Cape Hatteras, North Carolina and to the south by Cape Canaveral, Florida. It is further defined as falling in near-shore waters between the fifteen foot and thirty foot contours on NOS navigation charts.

Proposed Activities

The methods would not change from what was analyzed in the 2009 EA. The proposed modification would increase the annual number of Kemp's ridley and loggerhead sea turtles from 15 to 32 and from 45 to 50, respectively that may be taken for research procedures during SEAMAP trawl surveys. Researchers would be authorized to perform the following procedures on sea turtles: handling, measuring, weighing, passive integrated transponder (PIT) tagging, flipper tagging, and photographing as described in Chapter 2 of the EA prepared for Permit No. 13543, incorporated here by reference.

The increase in take numbers is requested so that the SCDNR can continue to carry out research as planned. No other changes would be made to the permit. No increase in research effort is associated with the proposed increase in take.

Table 1. Proposed annual takes of sea turtles under Permit No. 13543-01. Changes to take numbers appear in bold font.

Species	Life Stage	Sex	No. Animals	Take Action	Location
Caretta caretta	Juvenile-Adult	M, F	**50**	Measure, weigh, PIT tag, flipper tag, photograph	Nearshore: Cape Hatteras, NC to Cape Canaveral, FL
Chelonia mydas	Juvenile-Adult	M, F	6	Measure, weigh, PIT tag, flipper tag, photograph	Nearshore: Cape Hatteras, NC to Cape Canaveral, FL
Lepidochelys kempii	Juvenile-Subadult	M, F	**32**	Measure, weigh, PIT tag, flipper tag, photograph	Nearshore: Cape Hatteras, NC to Cape Canaveral, FL
Dermochelys coriacea	Subadult-Adult	M, F	6	Measure, weigh, PIT tag, flipper tag, photograph	Nearshore: Cape Hatteras, NC to Cape Canaveral, FL
Eretmochelys imbricata	Subadult-Adult	M, F	2	Measure, weigh, PIT tag, flipper tag, photograph	Nearshore: Cape Hatteras, NC to Cape Canaveral, FL

Lepidochelys olivacea	Juvenile-Adult	M, F	2	Measure, weigh, PIT tag, flipper tag, photograph	Nearshore: Cape Hatteras, NC to Cape Canaveral, FL

CHAPTER 3 AFFECTED ENVIRONMENT

- The affected ecosystem and biodiversity would not change from what was described in Chapter 3 of the EA prepared for Permit No. 13543, incorporated here by reference and summarized as: Social or Economic environment; there are no significant impacts of the research interrelated with significant natural or physical environmental effects.
- Physical environment:
    - Research would occur from Cape Hatteras, North Carolina to Cape Canaveral, Florida.
    - The study area includes a portion of right whale critical habitat, called the South Atlantic Bight (also referred to as the SEUS). The SEUS area extends roughly from Cape Hatteras, North Carolina, to West Palm Beach, Florida.
    - Although Essential Fish Habitat (EFH) is found within the action area, none of the activities in the Proposed Action are directed at or likely to have any impact on any designated EFH.

The statuses of the species have not changed since the April 2009 EA was prepared.

CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

This chapter represents the scientific and analytic basis for comparison of the direct, indirect, and cumulative effects of the alternatives. Regulations for implementing the provisions of NEPA require consideration of both the context and intensity of a proposed action (40 CFR Parts 1500-1508).

4.1 EFFECTS OF ALTERNATIVE 1: No Action

The effects of the No Action alternative, in which NMFS does not issue the permit modification, are the same as the effects of issuing the original permit, No. 13543. Those effects were described and evaluated in the EA for 13543, resulting in a FONSI, are hereby incorporated by reference and are summarized here.

In the 2009 EA, NMFS determined that, for the target sea turtles:

- The proposed research activities are non-intrusive or minimally invasive. However, none are likely to result in serious injury or mortality.
- Disturbance from research activities would be temporary and animals would be expected to recover from any harassment fairly quickly (within a day).

- Any harm or harassment is not likely to have a measurable long-term effect on sea turtle individuals or population.

As discussed in Ch. 2.1, the SCDNR will not be able to collect valuable biological information on captured sea turtles without this modification. Because the animals will be captured regardless of whether Permit No. 13543 is modified, this would represent a lost opportunity to gain knowledge on threatened and endangered sea turtles.

4.2 EFFECTS OF ALTERNATIVE 2: Issue permit with standard conditions

Effects to the Ecosystem

The Proposed Action is directed at specific sea turtles and would not have a significant cumulative effect on the ecosystem. Although research may occur within waters designated as critical habitat, Essential Fish Habitat, it is not likely that the taking of sea turtles as described would affect such areas. The proposed research would not occur within a National Marine Sanctuary, thus no sanctuaries would be affected.

Effects to Target Species

Impacts of the Proposed Action would be limited to the additional 17 Kemp's ridley and five loggerhead sea turtles that would be authorized for research. The Proposed Action would not affect any other portion of the environment; therefore, only the increased take number is addressed here.

The effects of the proposed increase in annual takes of Kemp's ridley and loggerhead sea turtles would translate into an adverse effect on the population or species only if the added take results in reduced reproduction or survival of the individual(s) that causes an appreciable reduction in the likelihood of survival or recovery for the species. In order for the Proposed Action to have an adverse effect on the species, the exposure of individual animals to the research activities would first have to result in:

- direct mortality,
- serious injury that would lead to mortality, or
- disruption of essential behaviors such as feeding, mating, or nesting, to a degree that the individual's likelihood of successful reproduction or survival was substantially reduced.

Subsequently, mortality or reduction in the individual's likelihood of successful reproduction or survival would then have to result in a net reduction in the number of individuals of the species. In other words, the loss of the individual or its future offspring would not be offset by the addition, through birth or emigration, of other individuals into the population. That net loss to the species would have to be reasonably expected, directly or indirectly, to appreciably reduce the likelihood of both the survival and recovery of the listed species in the wild.

The effects of the Proposed Action would not be expected to differ from those analyzed in the 2009 EA. All of the research activities are non-intrusive or minimally intrusive and are not

likely to result in serious injury. NMFS expects the authorized procedures to result in no more than temporary, minimal harm or harassment to the target individuals. Animals would be expected to recover from such harassment within the course of a day. Conditions in the proposed permit would be the same as those in Permit No. 13543, and are designed to minimize effects to individual sea turtles.

Given the minimal effects of the research that would occur and the ability of the animals to recover from effects between surveys, NMFS expects that even those animals that may be affected more than once a field season would not suffer any significant consequences. No serious injury or mortality would result from these activities. The research activities considered individually and as a group are not likely to disrupt the migration, breathing, feeding, or sheltering behavior of sea turtles or appreciably reduce their reproductive success.

A Biological Opinion prepared under Section 7 of the ESA determined that issuance of the permit modification is not likely to jeopardize the continued existence of Kemp's ridley or loggerhead sea turtles. In addition, upon review and comment on the modification request, the Florida Fish and Wildlife Conservation Commission recommended approval noting that the work is bona fide research, how it meets ESA scientific research permit issuance criteria, and that the research has contributed to sea turtle recovery plan objectives.

Based on the above analysis, the proposed minor increase in takes would not be expected to result in serious injury or mortality or disrupt essential behaviors to the extent that reproduction or survival would be reduced. Therefore no population or species level effects are expected.

4.3 COMPARISON OF ALTERNATIVES

The No Action alternative would result in the environmental effects evaluated for issuing the original permit, No. 13543. Under the No Action alternative, the SCDNR may not be able to conduct the research as originally planned as discussed in Ch. 2.1. The SCDNR would not be able to collect additional information that could contribute to a better understanding of Kemp's ridley and loggerhead sea turtles and that could provide information needed to implement NMFS' management activities, as directed by the ESA and implementing regulations.

The Proposed Action would affect additional sea turtles taken during surveys. The effects would be limited to the short-term stresses of taking those additional sea turtles and would not result in any serious injury or mortality, just like the No Action alternative. The authorization to take the additional sea turtles would:

- Reduce the disruption to field efforts and allow SCDNR to complete the field seasons as originally planned.
- Provide data on endangered and threatened sea turtles that would go otherwise uncollected.

Neither the No Action nor the Proposed Action alternatives are anticipated to have adverse population or species-level effects on sea turtles.

While the No Action alternative would result in fewer sea turtles from being handled for research, they would still be caught during SEAMAP trawls. Thus, the opportunity would be lost to collect additional information that may contribute to a better understanding of these species and that could provide information that is needed to implement NMFS management activities. This could help conserve and manage sea turtles as required by the ESA and NMFS's implementing regulations. The Proposed Action alternative would allow the SCDNR to continue research activities for the remainder of the permit year and collect the additional information that could help NMFS' efforts to recover these sea turtles.

4.4 MITIGATION MEASURES

There are no additional mitigation measures beyond those currently required by Permit No. 13543.

4.5 UNAVOIDABLE ADVERSE EFFECTS

The mitigation measures imposed by permit conditions are intended to reduce, to the maximum extent practical, the potential for adverse effects of the research on the targeted species as well as any other species that may be incidentally harassed. The taking is not expected to have more than a short-term, minimal effect on individual sea turtles. No effect to the ecosystem, populations or species is expected.

4.6 CUMULATIVE EFFECTS

Cumulative effects are defined as those that result from incremental impacts of a proposed action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (federal or nonfederal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions that take place over a period of time. There may already be substantial adverse impacts on sea turtles and their ecosystem from the existing levels of human activities. However, the relative incremental effect of the proposed action would not be significant.

The 2009 EA included a summary of identified natural and anthropogenic activities that may impact the target sea turtles and their ecosystem. Those factors are still relevant, but have not changed since the 2009 EA, so they will not be re-evaluated here.

NMFS expects that the proposed action as discussed above, and as analyzed in the 2009 EA which is hereby incorporated by reference, would not have a significant cumulative effect on either the human or marine environment. Specifically the 2009 EA determined that:

- The most common human threats to sea turtles remain entanglement in fishing gear, vessel collision, and marine debris which have the potential to seriously injure or kill sea turtles.

- Other impacts, such as ecosystem and habitat degradation, energy development, and noise, may temporarily impair or harass individual sea turtles, but are not likely to be life threatening.

- Sea turtles are not exposed to all human activities at all times, particularly given this species' migratory nature. The short-term stresses (separately and cumulatively when

added to other stresses sea turtles face in the environment) resulting from the proposed research activities would be expected to be minimal to targeted sea turtles. Behavioral reactions suggest that harassment is brief, lasting minutes, before animals resume normal behaviors. NMFS expects any effects of research activities to dissipate before animals could be harassed by other human activities.

- Significant cumulative ecosystem impacts are not expected because no serious injury or mortality is expected (resulting in no direct loss of animals from the population) nor an appreciable reduction in the fecundity of target individuals. Therefore, the proposed research would contribute a negligible increment of harassment over and above the effects of the baseline activities currently occurring in the marine environment of the action area over the life of the permit.

The proposed action would be directed at Kemp's ridley and loggerhead sea turtles and would similarly not be likely to have a significant cumulative effect on target and non-target species.

The taking of sea turtles under the Proposed Action alternative is not expected to result in more than minimal, temporary harassment or harm of animals in the action area. It is likely the effects of the disturbance would be short-term and that the affected areas would recover between disturbances and following conclusion of the permitted research. NMFS does not expect the issuance of the proposed permit modification to appreciably reduce the species' likelihood of survival and recovery in the wild because it would not likely adversely affect their birth rates, death rates, or recruitment rates. In particular, NMFS does not expect the taking of the additional 17 Kemp's ridley and five loggerhead sea turtles to appreciably reduce the reproductive success of adults, the survival of young, or the number of young that annually recruit into the breeding population.

Considering the nature of the proposed research activities, the mitigation measures that would be employed, and that these types of research activities are not novel in the marine environment, the proposed increase in take numbers would contribute a negligible increment over and above the effects of the baseline activities currently occurring in the marine environment where the research would occur.

CHAPTER 5 LIST OF PREPARERS AND AGENCIES CONSULTED

This document was prepared by the Permits and Conservation Division of NMFS' Office of Protected Resources in Silver Spring, Maryland.

Agency consulted: Florida Fish and Wildlife Conservation Commission

LITERATURE CITED

NMFS. 2009. Environmental Assessment. Scientific Research Permit to the South Carolina Department of Natural Resources (Permit File No. 13543) to Conduct Research on Protected Sea Turtles. National Marine Fisheries Service. Silver Spring, Maryland. 26 pp.

NMFS. 2012. Reinitiation of Endangered Species Act (ESA) Section 7 Consultation on the Continued Implementation of the Sea Turtle Conservation Regulations, as Proposed to Be Amended, and the Continued Authorization of the Southeast U.S. Shrimp Fisheries in Federal Waters under the Magnuson-Stevens Act. May 8, 2012.

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

Finding of No Significant Impact for Issuance of Permit No. 13543-01 to Increase Takes of Protected Sea Turtles during Research

National Marine Fisheries Service

National Oceanic and Atmospheric Administration Administrative Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." The proposed action is to issue a modification to Permit No. 13543 held by the South Carolina Department of Natural Resources (SCDNR) to increase the number of Kemp's ridley (*Lepidochelys kempii*) and loggerhead (*Caretta caretta*) sea turtles that may be taken for research. Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans?

Response: This action would not cause substantial damage to any ocean, coastal habitats, or essential fish habitat (EFH). Physical habitat is beyond the scope of the action because the action is limited to activities occurring onboard a vessel on sea turtles already captured by trawl under a separate authority during the Southeast Monitoring and Assessment Program (SEAMAP) Coastal Survey. The action would allow SCDNR to perform authorized research procedures on a small number of additional sea turtles each year prior to their release from the vessel. Thus, researchers would not interact with any habitat. The SEAMAP activity (the capture of fish) is independent of the proposed action and would continue to occur whether or not NMFS issues the proposed permit modification. Therefore the proposed action will not impact habitat. Since the proposed action would not affect any habitat, no damage would occur.

2) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: The proposed increase in take would not substantially affect biodiversity and/or ecosystem function. The subject sea turtles would be captured regardless of whether or not research activities may be performed. Second, the research procedures are not likely to result in more than short-term effects to target sea turtles. They would not

be significantly impacted by research, and population- or species-level effects are not expected. No other species or portion of the environment would be affected.

3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: The proposed action involves basic research of sea turtles and does not involve hazardous methods, toxic agents or pathogens, other materials, or activities that would have a substantial adverse impact on public health and safety.

4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: The proposed action would affect endangered and threatened sea turtles. However, the effects of the proposed action would not be severe and would be short-term in nature. No significant injuries to any species would be expected and they would be released after they are sampled. Permit No. 13543-01 would continue to contain measures to minimize the effects of the research and to avoid unnecessary stress to the sea turtles. The proposed action would not likely jeopardize the continued existence of any ESA endangered or threatened species and would not destroy or adversely modify any critical habitat. The action would not have an adverse impact on any marine mammals or other non-target species, as it would not interact with them.

5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: Effects of the research would be limited to the short-term harassment of target animals. Issuance of this permit modification and conduct of the authorized research would not substantially impact short- or long-term use of the environment or result in use of natural or depletable resources, such as might be expected from construction or resource extraction activities. Issuance of this permit modification and conduct of the research would not result in inequitable distributions of environmental burdens or access to environmental goods. Permitting an increase in take of animals that have already been captured during trawls would have negligible economic impacts.

6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: A *Federal Register* notice (78 FR 3882) was published for 30 days to allow other agencies and the public the opportunity to review and comment on the action. No public comments were received. The authorized research methodologies would not change, are well known and are expected to have no more than minimal effects to target sea turtles. Thus NMFS believes the effects are not likely to be controversial.

7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat (EFH), or ecologically critical areas?

Response: The research authorized by the permit would occur on the deck of the trawling vessel. As noted in Response #1, the proposed increase in take would not affect any unique or ecologically critical areas. None of these areas are within the scope of the action.

8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: The authorized research activities are not new or unique. The minor increase in take is not expected to result in new or unknown risks. SCDNR has conducted the authorized research activities for over 10 years with no significant impacts to the environment. NMFS believes that the effects on the human environment would not be highly uncertain and the risks would be minimal and known.

9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: The proposed action is not related to other actions with individually insignificant, but cumulatively significant impacts. The proposed modification is connected to the SEAMAP trawl surveys for fisheries research; sea turtles incidentally captured during these surveys would be the source of the proposed increase in take. The incidental capture of these turtles is authorized by the incidental take statement of the ESA Section 7 consultation for the shrimp trawling fishery in the southeastern U.S. If Permit No. 13543-01 is issued, it is not expected that the effects of taking a minor number of additional sea turtles would result in cumulatively significant impacts. The short-term stresses (separately and cumulatively when added to other stresses the species face in the environment, including capture during SEAMAP trawls) resulting from the sampling and tagging activities would be expected to be minimal. Animals would be exposed to low level harassment and no serious injuries would be expected. The permit modification would continue to contain conditions to mitigate adverse impacts to species from these activities.

The proposed action only allows activities on deck of the vessel on sea turtles that are out of the water. The research would not affect any other species or habitat, etc. The SEAMAP activity (the capture of fish) is completely independent and would occur whether or not NMFS issues the proposed permit modification. Since the proposed action is not affecting any habitats or other species (the researchers would be on the deck of the vessel, and the vessel would be there if the researchers went with them or not) no other impacts would occur.

Overall, the proposed action would be expected to have no more than short-term effects on endangered and threatened sea turtles and no effects on other aspects of the

environment. The incremental impact of the action when added to other past, present, and reasonably foreseeable future actions discussed in the environmental assessment would be minimal and not significant.

10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: The modification would authorize an increase in sea turtle takes for currently authorized research procedures. As noted in Response #9, the nature of the action would not affect other portions of the environment, including districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, thus none would be adversely affected. The research would not cause loss or destruction of significant scientific, cultural or historical resources.

11) Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

Response: The action would not remove or introduce any species; therefore, it would not result in the introduction or spread of a nonindigenous species. The research activities would not involve bilge water or other issues of concern relative to nonindigenous species.

12) Is the proposed action likely to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

Response: The decision to issue this permit modification would not be precedent setting and would not affect any future decisions. Issuing a permit to a specific individual or organization for a given activity does not in any way guarantee or imply that NMFS will authorize other individuals or organizations to conduct the same or similar activity, nor does it involve irreversible or irretrievable commitment of resources.

13) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: The action would not result in any violation of Federal, State, or local laws for environmental protection. In addition, the permit modification would not relieve the Permit Holder of the responsibility to obtain any other permits, or comply with any other Federal, State, local, or international laws or regulations necessary to carry out the action.

14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: The action is not expected to result in cumulative adverse effects to the species that are the subject of the proposed research. The proposed action would be

expected to have no more than minimal effects on affected species' populations. No adverse effects on other non-target species are expected. No cumulative adverse effects that could have a substantial effect on any species would be expected.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting Supplemental Environmental Assessment (SEA) prepared for Issuance of Endangered Species Act Section 10(a)(1)(A) Scientific Research Permit No. 13543-01, and the ESA section 7 biological opinion, it is hereby determined that the issuance of Permit No. 13543-01 to the South Carolina Department of Natural Resources will not significantly impact the quality of the human environment as described above and in the SEA. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environment Impact Statement for this action is not necessary.

MAY 15 2013

Helen M. Golde
Acting Director, Office of Protected Resources

Date