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

Finding of No Significant Impact
Issuance of Scientific Research Permit No. 15135

Background

In January 2010, the National Marine Fisheries Service (NMFS) received an application for a permit (File No. 15135) from Mr. Blake Price to conduct research on sea turtles in Core Sound, North Carolina. In accordance with the National Environmental Policy Act, NMFS has prepared an Environmental Assessment (EA) analyzing the impacts on the human environment associated with permit issuance (Environmental Assessment on Issuance of a Scientific Research Permit for Sea Turtle Research in North Carolina). In addition, a Biological Opinion was issued under the Endangered Species Act summarizing the results of an intra-agency consultation. The analyses in the EA, as informed by the Biological Opinion, support the below findings and determination.

Analysis

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." 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 (EFH) as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans?

> No, the proposed action cannot reasonably be expected to cause substantial damage to habitats. The effect of the nets and the anchor on bottom habitat is expected to be minimal. The gillnets would be deployed in relatively shallow water (1-3 feet) throughout Core Sound and set almost exclusively on sandy bottom. Anchors would be placed on either end of the set, but these would create minimal bottom disturbance. Once nets are set, the lead core line should remain stationary and thus not disturb the substrate. If the edge of the operations is at or near a grassy bottom, every effort would be made to ensure that placement and removal of the anchors does not disturb submerged vegetation.
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> The Permits Division consulted with the NMFS Southeast Region's Habitat Conservation Division (HCD). After reviewing the application and considering the experimental design, nature of the survey, and limited scope of the activity, the HCD had no EFH conservation recommendations.

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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.)?

No substantial impacts would be expected to occur as a result of the proposed action. The effects of the action on the target endangered species, and their habitat, EFH, and other non-target species were all considered in the EA and the Biological Opinion. Although the proposed action would investigate the effect of experimental fishing nets on sea turtles, the research is not anticipated to affect predator-prey relationships, biodiversity, or other non-target species. The numbers of marketable fish kept and sold are within the sustainable limits set by the appropriate management agency. The majority of discarded fish (unmarketable or not up to regulatory standards) would be released alive.

While the research that would be authorized by Permit No. 15135 could result in the combined mortality (observed and post-release) of up to 5 loggerheads, 15 green, and 5 Kemp's ridley sea turtles over the course of one field season, the permit is of limited duration and the take level would not be sufficient to appreciably reduce the likelihood of these species surviving and recovering in the wild. An additional two hawksbill and two leatherback captures and mortalities would be authorized, but it is highly unlikely that these species would be in the study area. Even if the deaths of these two species occurred, the take level would not be sufficient to appreciably reduce the likelihood of these species surviving and recovering in the wild.

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

No negative impacts on human health or safety are anticipated during the proposed research. The proposed action involves setting fishing gear and comparing how control and experimental nets interact with sea turtles. It would not involve hazardous methods, toxic agents or pathogens, or other materials 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?

As determined in the Biological Opinion, the proposed action would not likely jeopardize the continued existence of any ESA-listed species and would not likely destroy or adversely modify designated critical habitat. The action would not have an adverse impact on any marine mammals or any critical habitat. Researchers would not set the nets during times when marine mammals are present in the area. The permit would contain mitigation measures if the researchers observe a manatee in the study area.

The permit would authorize a limited number of sea turtle mortalities. These mortalities would occur over a limited time period and the permit would be conditioned to ensure the applicant does not go over the allotted number of mortality takes. The take level would not be sufficient to appreciably reduce the likelihood of these species surviving and recovering in the wild.

Additionally, the permit would contain mitigation measures to minimize the effects of the research and to avoid unnecessary stress by requiring use of specific research protocols.

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

NMFS does not expect any significant social or economic impacts as a result of or interrelated with the natural effects of the proposed action. Effects of the research would be limited to those species captured in the nets, including sea turtles and the fishery's target species, southern flounder. Permitting the proposed research would result in an economic benefit to the fishermen involved in the research because they would be allowed to sell commercially valuable species. This, in turn, could result in a low level of economic benefit to local economies in the action area. However, the project would only authorize a total of 60 fishing trips. The impacts of which would be negligible on a national or regional level and therefore are not considered significant.

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

The effects on the quality of the human environment are not likely to be highly controversial. Although the state fisheries of North Carolina have been the subject of a recent lawsuit, the proposed action is not seen as controversial. The proposed research would investigate gear modifications that may reduce the number of sea turtles incidentally caught in fishing nets. This objective is beneficial to the conservation and recovery of sea turtle species.

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, or ecologically critical areas?

The proposed research would not be expected to result in substantial impacts to any such area. The study area is small and does not contain unique areas. As discussed in Question #1, the Permits Division consulted on EFH and the HCD did not think conservation recommendations were warranted.

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

The risks to the human environment are not unique or unknown. The basic design of the project mimics a commercial fishery that has been in place for many years. The applicant has performed similar gear experiments, under previous permits, to examine bycatch rates of sea turtles in North Carolina. Although the applicant has not used light sticks before, his experimental design is based on a project in Baja California that used illuminated nets. Data from the fishery and the past experiments were used to estimate the number of turtles and other species that may be caught and potentially killed as a result of the proposed research project. Thus the effects on the human environment are not uncertain or unknown.

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

The proposed action is not related to other actions with individually insignificant, but cumulatively significant impacts. While these species are impacted by other human activities, including other scientific research, these activities are not occurring simultaneously on the same individuals of a population. The short-term stresses (separately and cumulatively when added to other stresses the turtles face in the environment) resulting from the research, sampling, and tagging activities would be expected to be minimal. The permit would contain conditions to mitigate adverse impacts to turtles from these activities. Hence, NMFS expects that for most individuals, any effects of the research will dissipate before the animals could be harassed by other human activities

The permit would authorize a limited number of sea turtle mortalities. These mortalities would occur over a limited time period and the permit would be conditioned to ensure the applicant does not go over the allotted number of mortality takes. The take level would not be sufficient to appreciably reduce the likelihood of these species surviving and recovering in the wild.

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?

No, the action would not take place in any district, site, highway, structure, or object listed in or eligible for listing in the National Register of Historic Places. Issuance of the permit would not cause the loss or destruction of any significant scientific, cultural or historical resources.

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

The action would not remove or introduce any species to the study area; therefore, it would not likely result in the introduction or spread of a non-indigenous species. Researchers would be working from smaller vessels that do not take on ballast water and do not move between large water bodies.

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

The decision to issue the permit would not be precedent setting and would not affect any future decisions. Issuance of a permit to a specific individual or organization for a given research activity does not in any way guarantee or imply that NMFS will authorize other individuals or organizations to conduct the same research activity. Any future request received would be evaluated upon its own merits relative to the criteria established in the MMPA, ESA, and NMFS' implementing regulations.

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?

The action would not be expected to violate any Federal, State, or local laws for environmental protection. Although not required, the applicant chose to change the experimental regimen to match the restrictions placed on the commercial fishery by a recent lawsuit settlement. The permit would contain language stating that the applicant is required to obtain any state and local permits 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?

The action is not expected to result in any cumulative adverse effects to the sea turtle species that are the subject of the proposed research. For most turtles, the proposed action would not be expected to have more than short-term effects. However, the permit would authorize a limited number of mortalities. These mortalities would occur over a limited time period and the permit would be conditioned to ensure the applicant does not go over the allotted number of mortality takes. The take level would not be sufficient to appreciably reduce the likelihood of these species surviving and recovering in the wild.

No adverse effects on other non-target ESA listed species are expected. The effects on non-target non-ESA species were also considered and no substantial effects 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 analyses contained in the EA and Biological Opinion prepared for issuance of Permit No. 15135, it is hereby determined that permit issuance will not significantly impact the quality of the human environment. 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 Environmental Impact Statement for this action is not necessary.

MAY 23 2011

James H. Lecky
Director, Office of Protected Resources

Date