Excerpts from final environmental assessment (EA) on issuing an exempted fishing permit (EFP) to conduct scientific research and evaluate catch rates using pelagic longline (PLL) gear in two sub-areas in a portion of the East Florida Coast (EFC) PLL Closed Area of the Atlantic Ocean:

Whether fishing occurs at the level requested by the applicant or at the level commensurate with past fishing effort (the "expected likely" scenario at the Draft EA stage but now a hard limit preferred in the Final EA and included in the EFP), NMFS does not anticipate that these additional swordfish landings would have a negative environmental effect. The additional swordfish landings would be counted against the ICCAT-recommended U.S. swordfish quota, which has been consistently underharvested in recent years and catch would remain well within the available quotas. Furthermore, swordfish allocations are being renegotiated at ICCAT this fall, and the United States may face concerted efforts to reallocate our quota to other countries with less stringent fishery conservation practices (e.g., circle hooks are not required), which could increase bycatch of numerous species. Additional catches within the swordfish quota would help demonstrate increased revitalization of the U.S. swordfish fishery and an ability to catch more of the available quota. Furthermore, the effect of the catch of juvenile swordfish is not expected to result in overfishing of the stock because the amount of juvenile swordfish projected to be caught under this EFP is low and would remain consistent with the catch at size estimates of juveniles assumed in the latest swordfish stock assessment. Additionally, the North Atlantic swordfish stock is fully rebuilt, overfishing is not occurring, the U.S. catches only a small percentage of overall Atlantic swordfish landings (7.5% in 2015), circle hooks reduce post release mortality, and the U.S. has not caught its ICCAT-recommended quota in many years.

Catches of all tunas, except skipjack, are projected to decrease relative to otherwise authorized routine fishing operations in the open area under either alternative if fished the level of effort requested by the applicant. It is projected that 38, 74, and 55 fewer bluefin tuna would be kept, discarded dead, and discarded alive, respectively, under either Alternative 2 or Alternative 3 at the level of effort requested by the applicant. The largest projected difference would occur for bigeye tuna, where there would be a decrease, of 2,366 kept, 329 discarded dead, and 349 discarded alive (compared to the baseline) under both Alternative 2 and Alternative 3 at the level of effort requested by the applicant. Any retention of bluefin tuna would be subject to otherwise applicable individual bluefin quotas (IBQs), seasons, and retention limits at the time of the research project.

Bycatch of all billfish, except sailfish, is projected to decrease relative to otherwise authorized routine fishing operations in the open area under both Alternative 2 and Alternative 3 at the level of effort requested by the applicant. There is no commercial retention allowed for Atlantic billfish, so all catches would be discarded. It is projected that 48 fewer white marlin would be discarded dead, and 42 more would be discarded alive under the proposed research project. Similarly, the projection indicates that 69 fewer roundscale spearfish would be discarded dead, and 10 fewer would be discarded alive under the proposed research project under both Alternative 2 and Alternative 3 at the level of effort requested by the applicant. There is a projected increase, under both Alternative 2 and Alternative 3 at the level of effort requested by the applicant, of 424 sailfish discarded dead, and 1,208 sailfish discarded alive. There is also a projected increase, attributable to the research project, of 12 blue marlin discarded dead, and a decrease of 38 blue marlin discarded alive.

Under regulations administered by the Southeast Regional Office of NMFS, the retention of both dolphin and wahoo is prohibited when PLL gear is onboard a vessel in the EFC PLL Closed Area (50 CFR

§ 622.274(a)(1)(3)). The researcher submitted an EFP application to that office requesting an exemption from this regulation during research operations authorized under this EFP, if issued by the HMS Management Division. In a separate determination memorandum, the Administrator of the Southeast Regional Office approved issuance of such an exempted fishing permit after determining that issuance of the EFP for the retention of dolphin and wahoo should not affect dolphin or wahoo in any way that was not already considered and analyzed under the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic, and it would not result in exceeding the annual catch limits for those species.

Under existing regulations, many highly migratory Atlantic shark species are either in the prohibited shark complex or otherwise cannot be retained by PLL vessels. For other sharks species, any commercial retention of sharks by the vessels operating under this EFP would be subject to the quotas, seasons, retention limits, and other shark conservation and management measures applicable to the PLL fishery when the research occurs.

Under either Alternative 2 or Alternative 3 at the level of effort requested by the applicant, NMFS predicts the effects of the EFP would be as follows:

No LCS are predicted to be kept, and 9 pelagic sharks (shortfin mako) would be kept. There are no data available for SCS in the closed area from the 2008-2010 study because no SCS were caught and thus there is no specific basis for approximation within the closed area. In the absence of such data, we would initially presume catch similar to that outside the closed area, where catch with PLL gear does not result in any appreciable SCS interactions, and re-evaluate the effects based on results from the first year of research activity.

No catches (kept or discarded) are projected for the following shark species: porbeagle; spinner; and, smooth hammerhead.

Discards (both dead and alive) are projected to decrease as a result of the research project for the following shark species: shortfin mako; blacktip; blue; bigeye thresher; and, great hammerhead.

Discards (both dead and alive) are projected to increase as a result of the research project for the following shark species: oceanic whitetip; tiger; silky; night; and, scalloped hammerhead.

Dead discards are projected to decrease and live discards are projected to increase as a result of the research project for the following shark species: longfin mako; dusky; and, sandbar.

Based on the 2008-2010 research data, the largest number of projected total shark discards (combined both dead and alive), relative to otherwise authorized fishing operations in the open area, and based upon the level of fishing effort requested by the applicant, would be: silky (2,958); tiger (1,388); night (1,247); oceanic whitetip (196); dusky (120); sandbar (78); scalloped hammerhead (46); common thresher (29); and longfin mako (20). All of these shark interactions would be subject to the quotas, seasons, retention limits, and other shark conservation and management measures applicable to the PLL fishery when the research occurs, except that any sharks that are dead at haulback must be retained to bebiologically sampled (e.g., viscera, reproductive organs, vertebrae, and fin clips). Once sampled, the remainder of the shark may be discarded at sea or, if the shark may be legally sold, it may be landed. Any sharks that are retained for commercial sale would count against the appropriate commercial shark quota.

13.0 FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT

FOR THE APPROVAL OF AN EXEMPTED FISHING PERMIT (EFP) TO CONDUCT SCIENTIFIC RESEARCH AND EVALUATE CATCH RATES USING PELAGIC LONGLINE (PLL) GEAR IN TWO SUB-AREAS INA PORTION OF THE EAST FLORIDA COAST (EFC) PLL CLOSED AREA OF THE ATLANTIC OCEAN ON COMMERCIAL FISHING VESSELS

NATIONAL MARINE FISHERIES SERVICE

BACKGROUND

On November 3, 2016, Dr. David Kerstetter of NOVA Southeastern University submitted an application to the National Oceanic and Atmospheric Administration (NOAA) requesting an Exempted Fishing Permit (EFP) to conduct scientific research experiments on commercial fishing vessels using pelagic longline (PLL) gear in a portion of the EFC PLL Closed Area of the Atlantic Ocean.

In response to Dr. Kerstetter's request, the National Marine Fisheries Service (NMFS), Highly Migratory Species (HMS) Management Division is proposing to issue an EFP pursuant to the Magnuson-Stevens Act (MSA), Atlantic Tunas Convention Act (ATCA) and 50 CFR part 648 or part 697. Generally, the issuance of an EFP allows a fishing vessel of the United States to conduct fishing activities, including fisheries-related research that would be otherwise prohibited. The issuance of this EFP would allow for the collection and evaluation of PLL catches and catch rates of target and non-target species using commercial fishing vessels within a portion of the East Florida Coast (EFC) PLL Closed Area to evaluate the effectiveness of existing area closures at meeting current conservation and management goals under current conditions. Six commercial PLL vessels (with up to six "backup" vessels) would be authorized to deploy a maximum of 30 sets/vessel/quarter using non-offset 16/0 or larger circle hooks (up to 600 hooks per set) both within and outside the EFC PLL Closed Area for one year to conduct scientific research using standardized PLL gear (see figure below). The project would be evaluated annually and could be reauthorized for no more than two additional years. A maximum of 720 sets (six vessels x 120 sets/year) would be deployed annually, with 2/3rds of the sets (480 sets) occurring within the EFC PLL Closed Area and 1/3 (240 sets) occurring in the open area. Vessels would be subject to 40 percent observer coverage (a minimum of 10 EFP sets per quarter per vessel with four observed sets per quarter per vessel in each of the three sub-areas) using either NMFS-approved observers or scientific research staff. Vessels would be required to adhere to current PLL regulations including dehooking and safe handling protocols for sea turtles and other protected species (July 6, 2004; 69 FR 40734). Vessels would be allowed to retain swordfish, tunas, and sharks (subject to applicable quotas, seasons, minimum sizes, and retention limits at the time of the research project) to compensate for the costs of conducting research project operations under NMFS protocols. All at-sea fisheries observers would use NOAA POP protocols and forms to ensure data compatibility with current federal data collection, and all at-sea video from the electronic monitoring system would be reviewed and maintained by NOAA in accordance with current federal regulations.

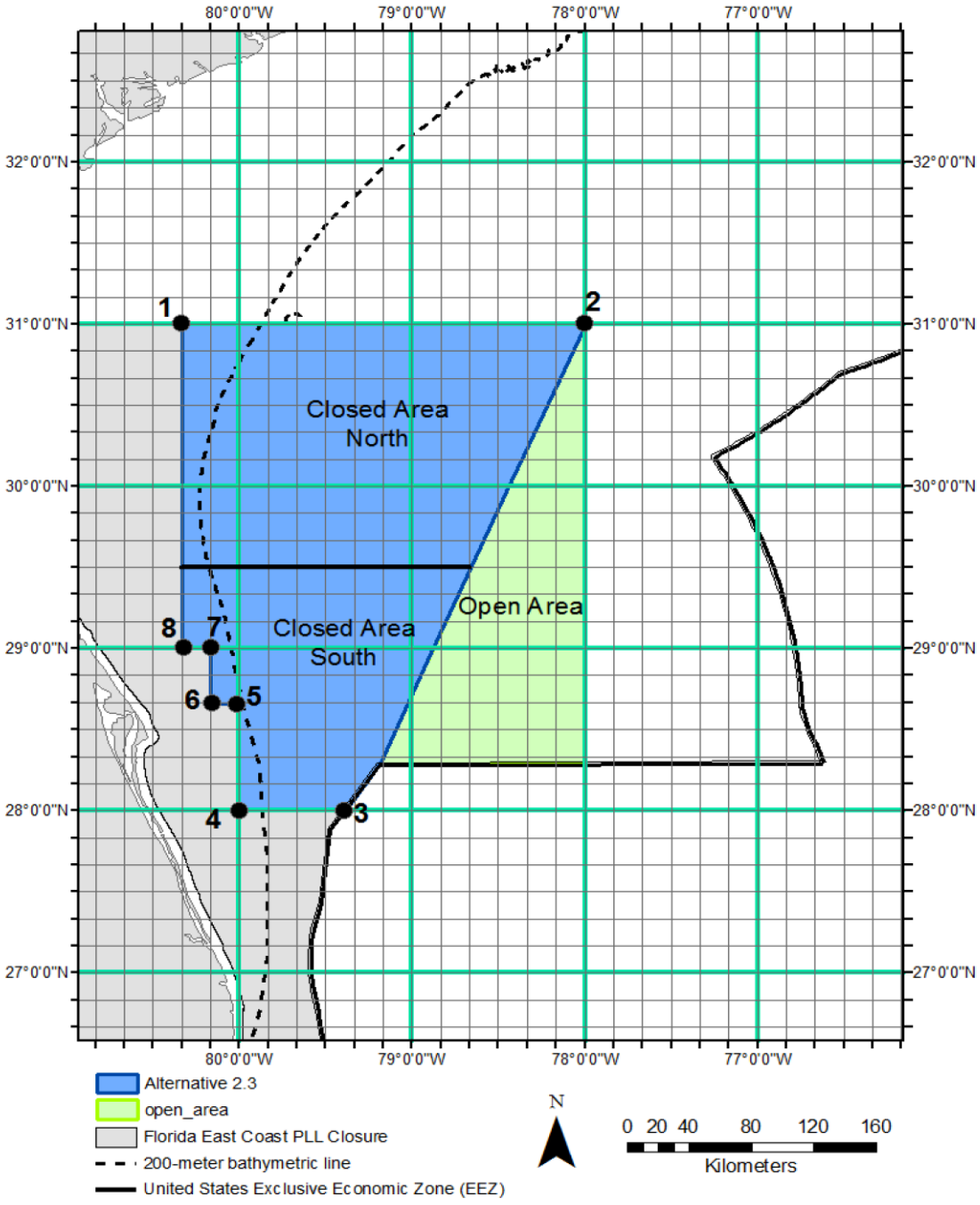
In accordance with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. §§ 4321 *et seq.*), NMFS prepared an Environmental Assessment (EA) titled, "*Issuance of an Exempted Fishing Permit to Conduct Scientific Research Using Pelagic Longline Gear in a Portion of the East Florida Coast Closed Area of the Atlantic Ocean*" (hereinafter, EA). This Finding of No Significant Impact (FONSI) evaluates

the significance of the impacts of the selected alternative – Alternative 3 (Preferred Alternative) – which is to issue the EFP to conduct year-round research with commercial pelagic longline vessels in the EFC PLL Closed Area seaward of a straight line connecting 31° 00" N. Lat., 80º 20" W. Long, to 29° 00" N. Lat, 80º 20" W. Long. and then proceeding southward in straight lines located just west of the 100 fathom isobath to 28° 00" N. Lat., 80º 10" W. Long. (see chart below). The responses in this FONSI are supported by the analyses in the EA as well as in the other NEPA documents referenced. Copies of the EA are available at the following address:

Highly Migratory Species Management Division, F/SF1
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
(301) 427-8503

or

http://www.nmfs.noaa.gov/sfa/hms


80°0'0"W
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27°0'0"N
1
2
3
4
5
6
7
8
Closed Area North
Closed Area South
Open Area
Alternative 2.3
open_area
Florida East Coast PLL Closure
200-meter bathymetric line
United States Exclusive Economic Zone (EEZ)
N
0 20 40 80 120 160
Kilometers

ANALYSIS

The Council on Environmental Quality 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. These include:

1. Can the action be reasonably expected to jeopardize the sustainability of any target species that may be affected by the action?

No. The exempted fishing permit (EFP) would allow a specified number of PLL fishing vessels the opportunity to conduct catch and bycatch research consistent with conservation and management objectives of the MSA, ATCA, and other applicable law. Target species include swordfish, yellowfin tuna, and bigeye tuna, which are currently subject to active fishing in open areas. Approval of this EFP would not jeopardize the sustainability of any target species, because any such catches would be counted against, and stay within, the appropriate species specific quotas as analyzed in existing fishery management plans for the stocks. Projections indicate that swordfish catches would increase under both Alternative 2 and Preferred Alternative 3 relative to otherwise authorized fishing operations in the open area. These additional swordfish landings would not have a negative environmental effect. The additional landings would be counted against the ICCAT-recommended U.S. swordfish quota, which has been consistently underharvested in recent years and catch would remain well within the available quota. If it is assumed that most discarded swordfish are juveniles, then the discard rate for juvenile swordfish is higher in the closed areas as compared to the open area of the FEC. However, the effect of the catch of juvenile swordfish is not expected to result in overfishing of the stock because the amount of juvenile swordfish projected to be caught under the EFP is low and would remain consistent with the catch at size estimates of juveniles assumed in the latest swordfish stock assessment. Additionally, the North Atlantic swordfish stock is fully rebuilt, overfishing is not occurring, the U.S. catches only a small percentage of overall Atlantic swordfish landings (7.5% in 2015), circle hooks reduce post release mortality, and the U.S. has not caught its ICCAT-recommended quota in many years. Catches of yellowfin tuna and bigeye tuna are projected to decrease; thus there would be no negative environmental effect for these species. Investigation of catch and bycatch rates in the EFC PLL Closed Area would provide updated information important for future fishery management, which could enhance efforts to maintain healthy and sustainable fisheries.

2. Can the action be reasonably expected to jeopardize the sustainability of any non-target species?

No. The action is not expected to jeopardize the sustainability of any non-target species. The research project is of limited size, scope, and duration with a specified number of participating vessels and amount of allowable sets. The participating PLL vessels are already fishing in areas that are currently open. The EFP would authorize the same amount of fishing effort compared to the baseline of normal operations that occur in open areas. There would be no overall increase in fishing effort as a result of this project, although fishing would occur in different areas and certain catches and interactions would be expected to increase. None of these increases are expected to adversely affect the stocks or to have significant environmental impacts. The management measures that have been implemented in the PLL fishery since 2001, (including, but not limited to, circle hooks, gear restrictions, careful release equipment and training, individual bluefin tuna quotas, catch quotas, prohibited species, and electronic video monitoring) in combination with the strict research protocols associated with the research project are expected to mitigate ecological impacts. Overall, a domestic quota controls catches of many non-target species with which

PLL vessels interact. For these species, all catches associated with the research project would be counted against, and stay within, these established species specific quotas.

For certain prohibited stocks of sharks, there are no quotas because catch is prohibited. For these stocks, NMFS does not anticipate that the level of additional catch resulting from implementation of the preferred alternative will result in overfishing of silky sharks, night sharks and dusky sharks nor affect measures intended to prevent overfishing and rebuild stocks. The levels of catch of these species is expected to remain small and consistent with ACLs set at zero. Furthermore, given the uncertainty in data available for the closed area and the issues related to these shark stocks, as well as the value of additional data on these shark species, NMFS has identified certain terms and conditions to appropriately monitor interactions and limit mortality and to ensure that sharks are accurately identified. The terms and conditions would include: 1) Fin clips and photographs be safely taken of all live sharks that are not being retained to confirm which species are actually being caught; 2) When three dusky sharks have been caught and discarded dead by a fishing vessel, a maximum PLL set soak time limit of ten hours is established for all sets deployed under this EFP; 3) if three additional dusky sharks are discarded dead, then that vessel could not make a trip inside the EFC PLL Closed Area for the remainder of the 12-month project period, unless otherwise authorized by NMFS; 4) all sharks dead at haul back (including prohibited species) or legally retained for sale would be biologically sampled (e.g., vertebra and reproductive organs removed) and sent to the SEFSC; 5) hooks and sets deployed inside and outside the EFC PLL Closed Area must be equipped with hook timers, in accordance with protocols established by NMFS, to determine when animals were captured and when mortality occurs; and 6) SEFSC shark scientists would provide training to the researchers, vessel captains, and observers before the project begins to ensure that they understand the distinguishing features and identification methodologies for these three shark species. In addition to these measures, NMFS will review data about shark interactions and mortality from the first year of research project operations and will consider additional permit terms and conditions if necessary for any subsequent authorized years.

NMFS estimates that leatherback and loggerhead sea turtle interactions would be reduced if the EFP were approved (versus if the same amount of fishing effort were to occur only in open areas). Prior research in the EFC closure area from 2008 – 2010 found no interactions with marine mammals. Similarly, only five observed interactions occurred in the open area of the FEC from 2013 -2015 based upon observer data (2015: one pilot whale; 2014: one pan-tropical spotted dolphin; 2013: one unidentified marine mammal; one unidentified beaked whale, one Minke whale). With such low interaction rates, an extrapolation would yield less than one animal given the effort in the research study. Therefore, the anticipated impact on marine mammals is minimal. Any interactions with sea turtles or marine mammals must immediately be reported to the HMS Management Division.

NMFS anticipates that overall bycatch of blue marlin, white marlin, and bluefin tuna would decrease under this EFP. Bycatch of sailfish could increase, however projections indicate that most sailfish would be released alive. The ecological impact is expected to be neutral because the use of electronic logbooks, 100 percent video monitoring, and increased observer coverage (40 percent) would enable the Principal Investigator and NMFS to coordinate an appropriate response (i.e., seasonal restrictions) if bycatch levels of sailfish (or other species) are greater than projected. A 2016 stock assessment conducted by ICCATs Standing Committee on Research and Statistics (SCRS) found that West Atlantic sailfish were not likely to be overfished and that overfishing was not likely occurring. The amount of sailfish catch projected for this research project under the Preferred Alternative (226 individual sailfish) is not expected to lead to

overfishing or have negative effects on the stock, as the overall Total Allowable Catch (TAC) recommended by ICCAT (Rec. 16-11) for this stock is 1,030 mt.

As recommended by the South Atlantic Fishery Management Council (SAFMC), a dolphin and wahoo exemption has been approved by the SERO Regional Administrator pending approval of this EFP by the HMS Management Division. Participating vessels would be limited to a 4,000 pound whole weight trip limit for dolphin when any portion of the trip occurs in the EFC PLL Closed Area. Additionally, participating vessels would also be limited to the existing 500-pound trip limit for wahoo specified at 50 CFR Part § 622.278(a)(1)(i). All otherwise applicable commercial dolphin and wahoo regulations, including the requirement to be issued a commercial dolphin-wahoo permit, would also apply. The environmental effects of this exemption have been analyzed in this Final EA. NMFS has determined that issuance of the EFP should not affect dolphin or wahoo in any way not already considered and analyzed under the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic and it would not result in exceeding the annual catch limits for those species.

3. Can the action be reasonably expected to allow substantial damage to the ocean and coastal habitats and/or essential fish habitat (EFH) as defined under the Magnuson-Stevens Act and identified in FMPs?

No. NMFS completed reviews of HMS fishing gear impacts in the 1999 FMP, Amendment 1 to the 1988 Billfish FMP, the 2006 Consolidated HMS FMP, Amendment 1 to the 2006 Consolidated HMS FMP, and the 2015 Final 5-Year Review of Atlantic HMS EFH. These analyses determined that PLL gear is fished within the upper water column and does not make contact with the sea floor. Most HMS reside in the upper part of the water column and habitat preferences are likely influenced by oceanic factors such as current confluences, temperature edges, and surface structure. PLL gear is fished in the upper water column and does not pose any adverse impact to HMS EFH. In Draft Amendment 10 to the Consolidated Atlantic HMS FMP, NMFS did not find any significant changes in impacts to HMS EFH from HMS and non-HMS fishing gears since the gear analysis was conducted for Amendment 1 and the Final Atlantic HMS EFH 5-Year Review document.

4. Can the action be reasonably expected to have a substantial adverse impact on public health and safety?

No. The action would impact domestic fishing vessels that would otherwise be fishing in open areas of the Atlantic Ocean. Because this action is not expected to change current fishery practices and behaviors, no effects to public health and safety are anticipated from implementation of the EFP.

5. Can the action be reasonably expected to have an adverse impact on endangered or threatened species, marine mammals, or critical habitat of these species?

No. The action would not have an adverse impact on endangered or threatened species, marine mammals, or critical habitat of these species. Any incidental takes of, or interactions with, protected species that are listed as threatened or endangered under the ESA taking place under the EFP would be counted against the authorized incidental take levels specified in the June 2004, BiOp for the Atlantic HMS PLL fishery. Fishing activity authorized under this EFP would be conducted using the same fishing methods and at the same level of fishing effort as currently exists outside of the project area. Furthermore, catches of sea turtles are projected to decrease as a result of this EFP. The 2004 PLL BiOp states that if the fishing type

is similar, and the associated fishing effort does not represent a significant increase over the effort levels for the overall fishery considered in this BiOp, then issuance of some EFPs would be expected to fall within the level of effort and impacts considered in the 2004 BiOp. For example, issuance of an EFP to an active commercial vessel likely does not add additional effects than would otherwise accrue from the vessel's normal commercial activities. Thus, this research project is consistent with the findings of the 2004 BiOp.

The effect of Atlantic HMS PLL fleet operations is the subject of an ongoing ESA Section 7 consultation. Reinitiation of consultation was requested on March 31, 2014, to reassess impacts on listed species, including several turtle species. Pending completion of consultation, the PLL fishery continues to operate consistent with the RPA and Terms and Conditions specified in a 2004 BiOp (e.g., hook type, bait type, careful release and disentanglement gear, mandatory training workshops). NMFS has made a determination that the continued operation of the PLL fishery during consultation does not constitute an irretrievable or irreversible commitment of resources in accordance with section 7(d) of the ESA and that continued compliance with the RPAs and RPMs in existing biological opinions will avoid jeopardy to listed species. The research project is not anticipated to affect listed species in any way not previously analyzed in previous BiOps because an overall increase in PLL fishing effort is not anticipated. The projected interactions would not cause the ITS in the 2004 BiOp for the PLL fishery to be exceeded, and would not be expected to jeopardize the continued existence of sea turtles.

Prior research in the EFC closure area from 2008 – 2010 found no interactions with marine mammals. Similarly, only five observed interactions occurred in the open area of the FEC from 2013 -2015 based upon observer data. With such low interaction rates, an extrapolation would yield less than one animal given the effort proposed in the research study. Therefore, the anticipated impact on marine mammals is minimal.

6. Can the 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. The action is not expected to result in substantial impact on biodiversity and ecosystem function within the affected area, because the action is not expected to increase fishing effort or change fishing practices, and/or interactions with non-target and endangered or threatened species because these vessels would be fishing elsewhere if they not participating in the research project. To ensure that shark bycatch mortality, particularly dusky shark mortality, is minimized, PLL soak times would be reduced after three dusky sharks are discarded dead and, if three additional dusky sharks are discarded dead, that vessel would be prohibited from fishing in the EFC PLL Closed Area for the remainder of the project period. Additionally, participating vessels would be required to abide by all other existing fishery regulations including, but not limited to: circle hook requirements, bait restrictions, careful release protocols, VMS requirements, electronic monitoring requirements, logbook reporting requirements, quotas, retention limits, individual bluefin tuna quotas, minimum size limits, landing restrictions, a commercial billfish possession prohibition, authorized gears, and observer coverage.

7. Are significant social or economic impacts interrelated with significant natural or physical environmental effects?

No. There are no anticipated significant natural or physical environmental effects associated with the action and no significant social or economic impacts interrelated with natural or physical environmental effects that would result from the action. NMFS has conducted an economic analysis of the scientific

research project. The economic impact of the project is not expected to be significant. Therefore, no interrelated significant natural or physical environmental effects are expected. The exempted fishing permit would allow participating vessels to conduct catch and bycatch research in the EFC PLL Closed Area. These vessels would be allowed to retain and sell legal and legal-sized species as compensation to offset the increased economic costs associated with conducting the scientific research.

8. To what degree are the effects on the quality of the human environment expected to be highly controversial?

The effects on the quality of the human environment associated with this action are not expected to be highly controversial because a significant change in fishing effort or fishing practices is not anticipated. These vessels would otherwise be actively fishing in open areas of the Atlantic Ocean if the research project were not conducted. Further, all research would be conducted under strict scientific protocols with enhanced observer coverage (40 percent) and 100% electronic monitoring. There is opposition or concern from environmentalists, recreational fishermen, and other interested parties that are opposed to any PLL fishing effort in the EFC PLL Closed Area. A small, but similar, research project comparing catch and catch rates within the EFC and Charleston Bump Closed Areas from 2008-2010 generated public controversy at the time. The project area was selected to reduce public controversy because the research activities would occur in areas not heavily utilized by recreational fisheries. Additionally, all participating vessels would be required to abide by other existing regulations including, but not limited to: circle hook requirements, bait restrictions, careful release protocols, VMS requirements, electronic monitoring requirements, reporting requirements, quotas, retention limits, individual bluefin tuna quotas, minimum size limits, landing restrictions, a commercial billfish possession prohibition, authorized gears, and observer coverage.

9. Can the action be reasonably expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

No. This action would not result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas because fishing effort would occur primarily in offshore areas, and within the upper oceanic water column of the Atlantic Ocean. The waters of the Florida Straits, bordered approximately from Key West through West Palm Beach, Florida out to the border of the U.S. Exclusive Economic Zone, particularly from the Middle Keys through Fort Lauderdale, are known nursery grounds for juvenile swordfish. However, all of this research would occur northward of 28°N (approximately Fort Pierce), which is north of the main nursery grounds. In addition, there are no park land, prime farmlands, wetlands, or wild and scenic rivers within the action area so there would be no impacts to these areas. Therefore, none of the unique areas listed above occur within the action area.

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

No. Effects on the human environment are not likely to be highly uncertain and do not involve unique risks. The effects of PLL fishing are well known and documented. Duplicate monitoring methods (including electronic monitoring and a 40 percent observer coverage rate) and frequent communication between the Principal Investigator and NMFS staff would help ensure that any unforeseen problems or environmental impacts are quickly addressed. Approval of an exempted fishing permit to compare catch

and catch rates between open and closed areas would result in predictable, beneficial impacts that could aid in future fishery management.

11. Is the action related to other actions with individually insignificant, but cumulatively significant impacts?

No. NMFS does not anticipate there to be any significant cumulative ecological, economic, and social impacts. The action would issue an EFP to participating vessels to compare catch and catch rates between open and closed areas. The EFP is not expected to increase fishing effort, or cause significant ecological, economic, or social impacts. The alternatives analyzed in this EA would continue to prevent overfishing without jeopardizing the sustainability of any target or non-target species. The research project is of limited scope and duration with a specified number of participating vessels and amount of allowable sets. All catches would be counted against, and stay within, established species specific quotas. Additionally, participating vessels would be required to abide by other existing regulations including, but not limited to: circle hook requirements, bait restrictions, careful release protocols, VMS requirements, electronic monitoring requirements, reporting requirements, quotas, retention limits, individual bluefin tuna quotas, minimum size limits, landing restrictions, a commercial billfish possession prohibition, authorized gears, and observer coverage.

12. Is the 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 occur in offshore waters of the Atlantic Ocean and would not occur in any areas listed or eligible for listing in the National Register of Historic Places, and would not cause loss or destruction of significant scientific, cultural, or historical resources because there are no significant scientific, cultural, or historic resources within the action area.

13. Can the action be reasonably expected to result in the introduction or spread of a non-indigenous species?

No. The action is not expected to result in any significant change in fishery patterns or behaviors. Most vessels in the PLL fishery have limited range and hold capacity and do not travel between ecologically different bodies of water or exchange ballast water. Thus, they do not contribute to the introduction or spread of non-indigenous species.

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

No. This action is not likely to establish a precedent for future actions because any similar scientific research programs would be evaluated on their individual merits.

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

No. The action would be consistent with the Magnuson-Stevens Act and the HMS regulations at 50 CFR § 635. The proposed action would not be expected to violate any Federal, state, or local law or requirement imposed for the protection of the environment.

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

No. The research project is of limited size, scope, and duration with a specified number of participating vessels and amount of allowable sets. The participating PLL vessels are already fishing in areas that are currently open. The EFP would authorize the same amount of fishing effort compared to the baseline of normal operations that occur in open areas. There would be no overall increase in fishing effort as a result of this project, although fishing would occur in different areas and certain catches and interactions would be expected to increase. None of these increases are expected to adversely affect the stocks or to have significant environmental impacts. The management measures that have been implemented in the PLL fishery since 2001, (including, but not limited to, circle hooks, gear restrictions, careful release equipment and training, individual bluefin tuna quotas, catch quotas, prohibited species, and electronic video monitoring) in combination with the strict research protocols associated with the research project are expected to mitigate any unforeseen cumulative ecological impacts. Overall, a domestic quota controls catches in the swordfish fishery and many other species with which PLL vessels interact. For these species, all catches associated with the research project would be counted against, and stay within, these established species specific quotas. For certain prohibited stocks of sharks, there are no quotas because catch is prohibited. For these stocks, NMFS does not anticipate that the level of additional catch resulting from implementation of the preferred alternative will result in overfishing of silky sharks, night sharks and dusky sharks nor affect measures intended to prevent overfishing and rebuild stocks. The levels of catch of these species is expected to remain small and consistent with ACLs set at zero.

DETERMINATION

In view of the information presented in this document and the analyses contained in the attached Environmental Assessment prepared by NMFS regarding the approval of an exempted fishing permit to conduct scientific research using PLL gear onboard commercial fishing vessels in the EFC PLL Closed Area of the Atlantic Ocean, it is hereby determined that this action will not significantly impact the quality of the human environment. In addition, all impacts to potentially affected areas, including national, regional and local, have been addressed to reach the conclusion of no significant impact. Accordingly, preparation of an EIS for this action is not necessary.

Approved: _____ AUG 0 8 2017

Alan D. Risenhoover
Director,
Office of Sustainable Fisheries

Date