NOAA FISHERIES

Public Webinar

Exempted Fishing Permit (EFP) to Conduct Research and Evaluate Pelagic Longline (PLL) Catch Rates in a Portion of the East Florida Coast PLL Closed Area

Atlantic Highly Migratory Species
Management Division

March 9, 2017

OUTLINE

- **Background** (1999 to Present)
  - PLL Closures and Other Measures Implemented to Address Overfishing and Bycatch
  - 2008 – 2010 Research Project in East Florida Coast (EFC) PLL Closed Area
  - Current Status of HMS PLL Fishery
  - Receipt of Current EFP Request
- **Alternatives Analyzed in the Draft Environmental Assessment (EA)**
  - Areas, Amount of Fishing Effort Being Requested, Sampling Protocols, Observer Coverage, Reporting Requirements, Additional Terms and Conditions
- **Ecological & Socio-Economic Impacts**
  - Projected Catches
  - Ecological Impacts
  - Socio-Economic Impacts
- **Information on Submitting Comments**

BACKGROUND

- In 1999, NMFS stated that a “comprehensive approach to time-area closures would be undertaken as part of a PLL bycatch reduction strategy”*
- Swordfish, blue & white marlin, sailfish, & bluefin tuna were overfished & overfishing was occurring; PLL fleet used J-hooks
- In 2001, NMFS implemented several measures (65 FR 47213):
  - **Year-round PLL closure of EFC**
  - **Seasonal PLL closure of the Charleston Bump**
  - **Year-round PLL closure of the Desoto Canyon**
  - **PLL live bait prohibition in the Gulf of Mexico**

*1999 FMP for Atlantic Tunas, Swordfish, & Sharks and Amendment 1 to Atlantic Billfish FMP

BACKGROUND

- Since 2001, NMFS has continued to implement other measures in the PLL fishery to reduce the bycatch of sea turtles, bluefin tuna & other species

  - **Circle hooks (large non-stainless steel) fleet-wide**
  - **Weak circle hooks in the Gulf of Mexico**
  - **Mandatory training, possession, and use of careful release gears**
  - **Bait restrictions (whole finfish and/or squid)**
  - **Individual Bluefin Tuna Quotas (IBQs)**
  - **Prohibited species, quotas, minimum sizes, retention limits**

BACKGROUND

- In combination, the reported numbers of swordfish kept and discarded, large coastal sharks kept, and BAYS tuna kept from 2005 - 2015 decreased by more than predicted values developed in 1999
- Reported discards of pelagic sharks, all billfish, and turtle interactions also declined by more than the predicted values
  - **SWO Kept: -41%**
  - **SWO Discarded: -63%**
  - **LCS Kept: -93%**
  - **BAYS Kept: -36%**
  - **Pelagic Sharks Discarded: -32%**
  - **Billfish Discarded: appr. -53%**
  - **Sea Turtles Discarded: -70%**

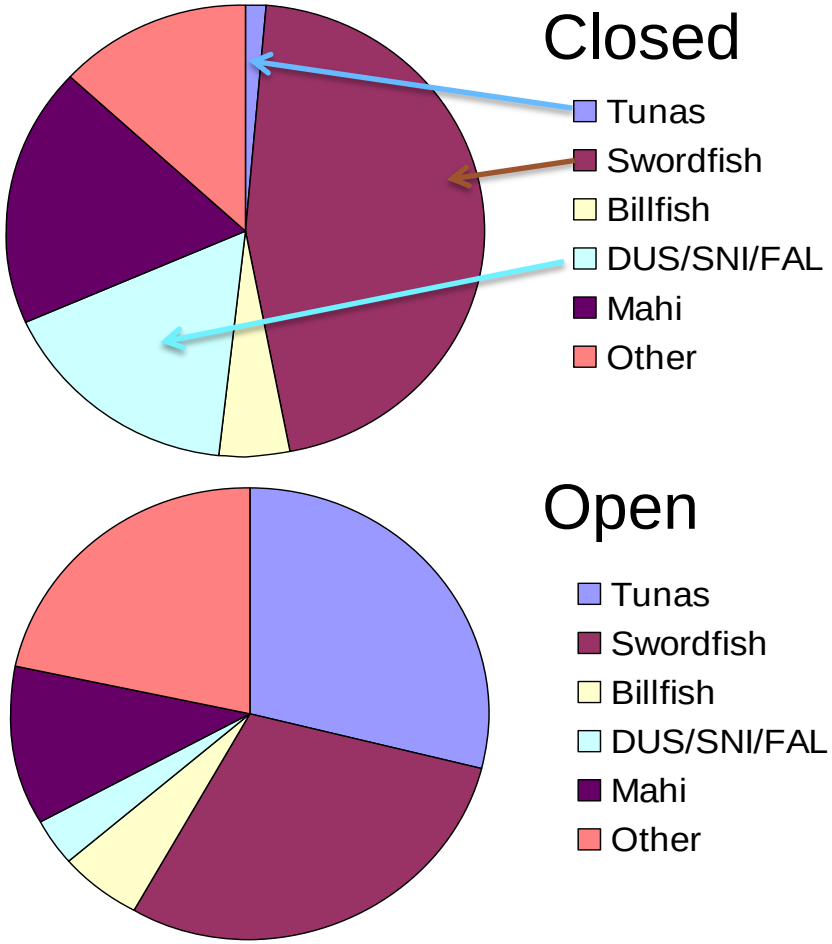
Source: 2016 HMS Stock Assessment and Fishery Evaluation (SAFE) Report

BACKGROUND
2008 – 2010 EFC PLL Research Project

- A research project using commercial PLL vessels was conducted in the EFC PLL Closed Area and the Charleston Bump PLL Closed Area from 2008 – 2010

- Although some significant results were obtained, the data suggested that more research was needed
  - Small sample size (~ 182 sets)
  - 73% of all sets from one vessel
  - Poor spatial distribution of sets

Total Catches from 2008 – 2010 Research: All Species



- Tuna catches lower in the closed area
- Swordfish catches higher in the closed area
- Dusky, night, & silky shark catches higher in the closed area

Source: Kerstetter, NOVA Southeastern University Oceanographic Center, 2011.

BACKGROUND
Current Status of HMS PLL Fishery

- Overall decline in number of "active" PLL vessels*
  - **From 200 vessels (1999) to 104 vessels (2015)**
- Overall decline in number of PLL hooks fished
  - **From 7.6 mil. hooks (2001) to 5.8 mil. hooks (2015)**
- Persistent underharvest of U.S. North Atlantic swordfish quota
  - **In 2016, preliminary data indicate 36.7% of the base and 32.6% of the adjusted U.S. swordfish quota was landed**
- Change in status of several species
  - **North Atlantic swordfish fully rebuilt (2009)**
  - **Western bluefin tuna no longer experiencing overfishing (2014)**
  - **North Atlantic albacore rebuilt (2016)**
  - **Sailfish no longer experiencing overfishing (2016)**

*** "Active" refers to vessels that landed swordfish in 2015**

BACKGROUND
Current Status of HMS PLL Fishery

In summary...

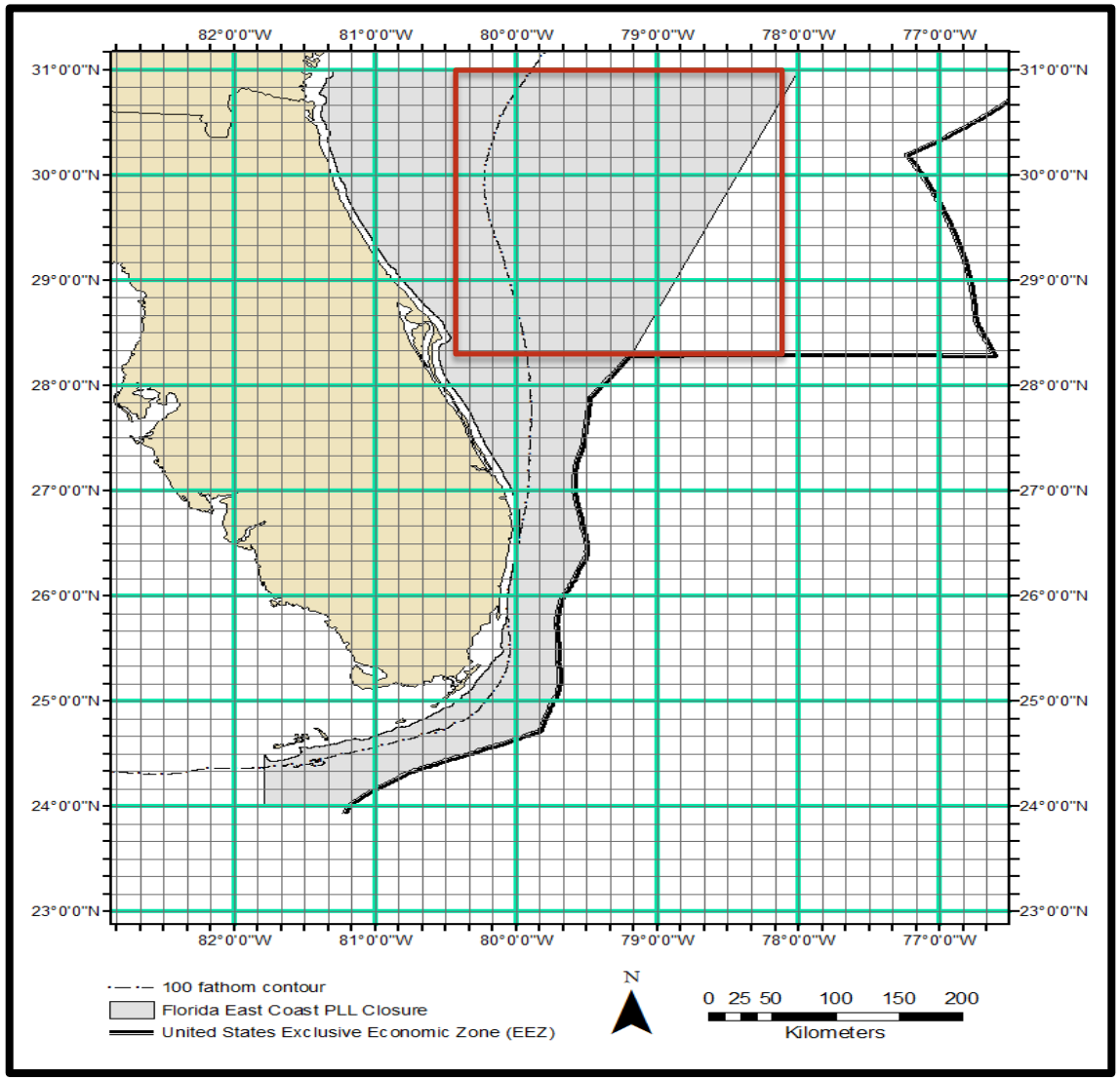
- PLL fleet & fishing effort has been reduced since 1999
- NMFS has implemented several management measures to reduce bycatch and bycatch mortality in the PLL fishery
- Since the EFC PLL Closed Area was implemented in 2001, there may have been environmental changes in available forage species and HMS migratory patterns and ranges

- The absence of current catch and bycatch data from within the PLL closed area may affect fishery management options

BACKGROUND
Receipt of Current EFP Request

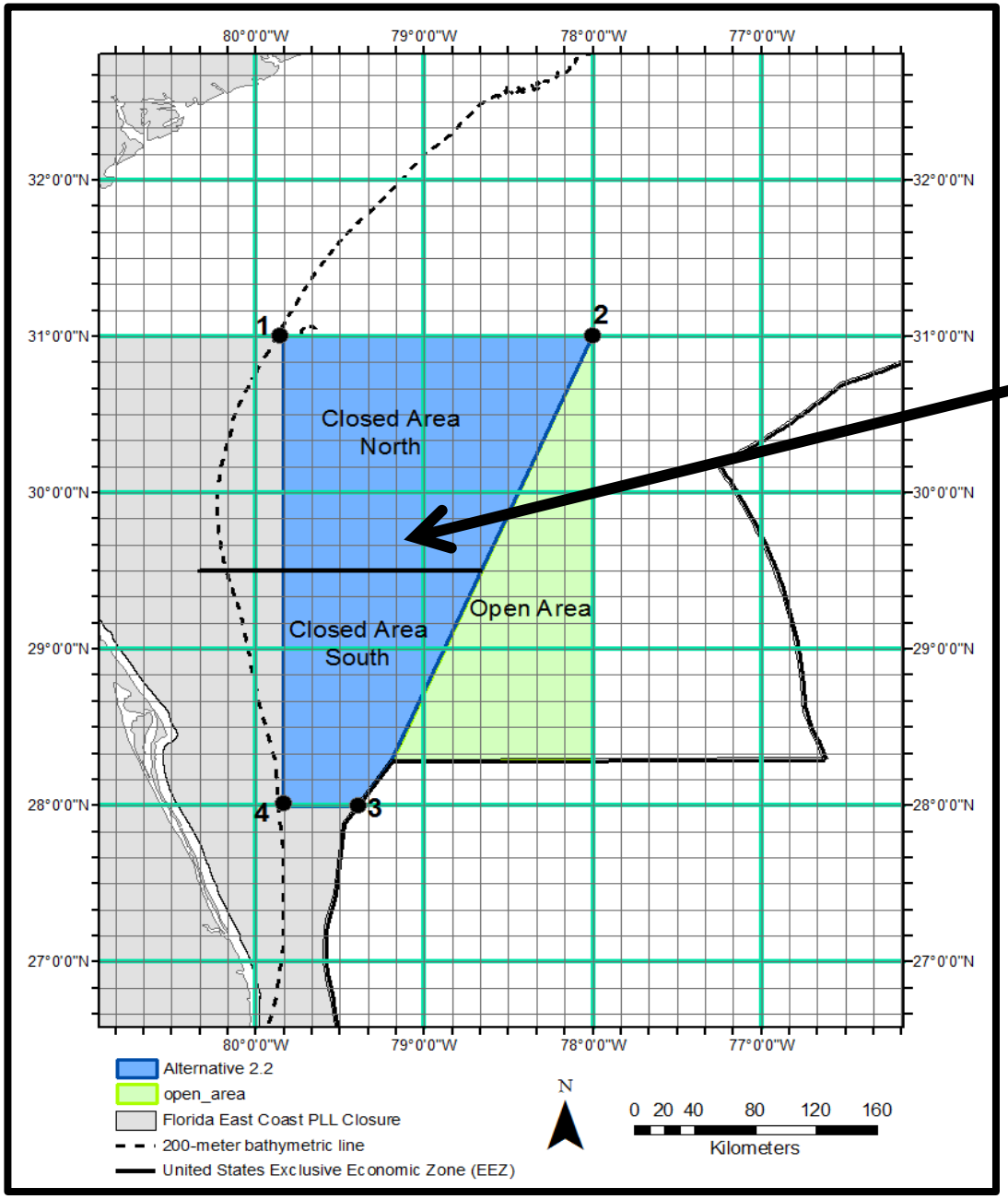
- EFP application from Dr. David Kerstetter (NOVA Southeastern University) received on Nov. 3, 2016, to conduct experimental fishing activities in a northern portion of the EFC PLL Closed Area for up to three years
  - 6 vessels (with 7 “backup” vessels)
  - All vessels associated with Dayboat Seafood, LLC. of Fort Pierce, FL
  - NMFS determined that the EFP application warrants additional consideration and an opportunity for public comment
  - NMFS prepared an EA to analyze the potential effects of granting the EFP application. The EA was released on January 13, 2017

Alternatives Analyzed in Draft EA

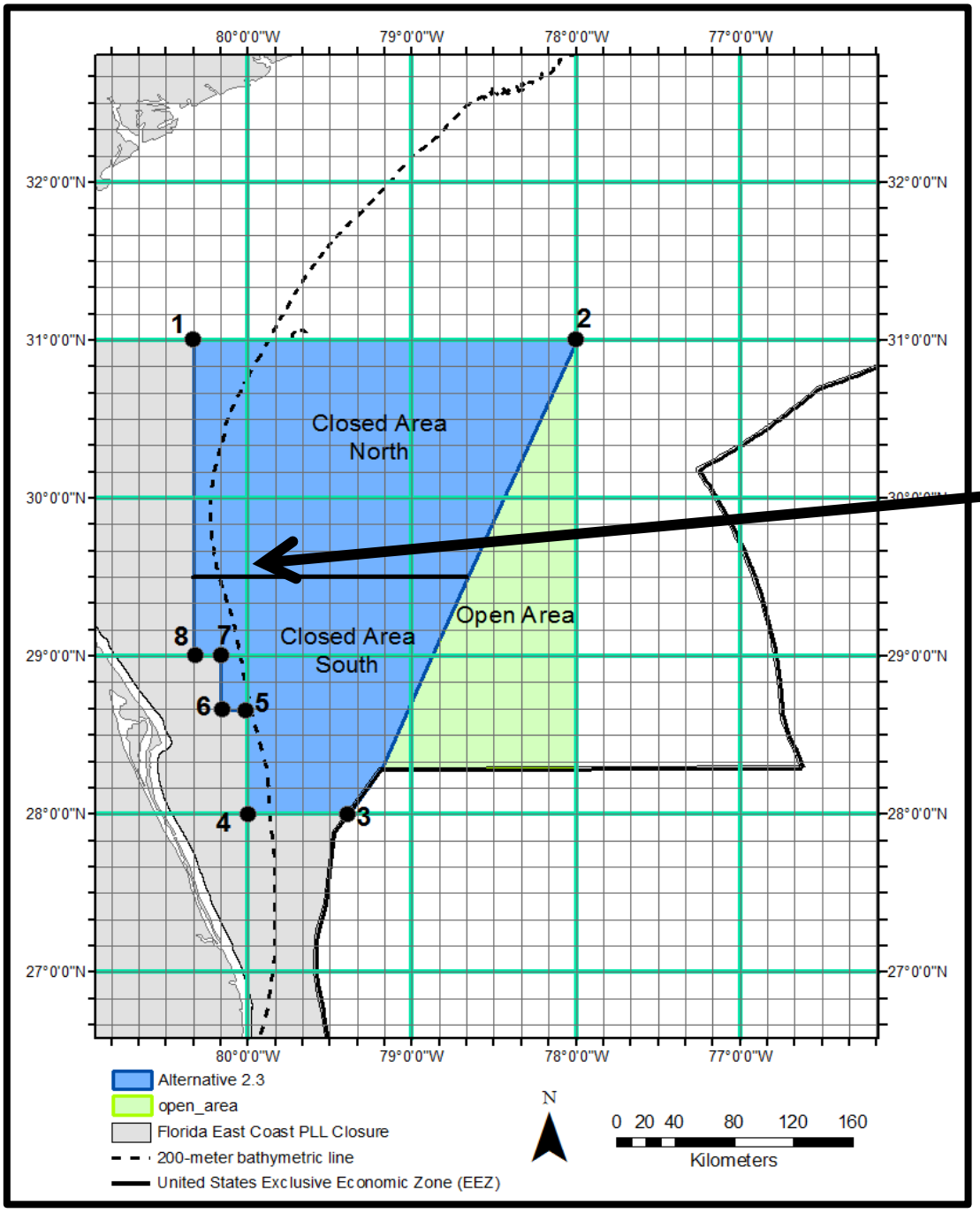


Alternative 1: No Action - Do not issue an EFP to conduct research with PLL vessels in EFC PLL Closed Area

Red box denotes general area of proposed research as described in Alternatives 1 and 2 in next slides



Alternative 2: Issue an EFP to conduct year-round research with commercial PLL vessels in this area of EFC Closed Area and the adjacent open area



Alternative 3:

Preferred- Issue an EFP to conduct year-round research with commercial PLL vessels in this area of EFC Closed Area and the adjacent open area

- Point 1: 67 nm from shore
- Point 4: 32 nm from shore

Details of Alternatives 2 and 3

- Overall purpose of project would be to evaluate PLL catches and catch rates of target and non-target species within a portion of the EFC PLL Closed Area to evaluate the effectiveness of existing area closures at meeting current conservation and management goals
- Project would be authorized for 12 months and, pending annual review, could be re-authorized for two additional 12-month periods
- All fish legally caught and otherwise authorized for retention and sale could be sold

Details of Alternatives 2 and 3

- Alternatives 2 and 3 are identical except that project area is larger under Alternative 3
- Six commercial PLL vessels
- Up to 180 sets/year/vessel would be authorized
- Up to 750 16/0 circle hooks per set
- Sets distributed equally between the three areas
- 33% observer coverage between the three areas

Details of Alternatives 2 and 3

- Logbook reporting
- Also, vessels would submit electronic logbooks at the end of each set to NOVA Southeastern University; data available to NMFS upon request
- NMFS would review 100% of electronic video data from cameras that are already installed
- Vessels required to possess sufficient IBQ before departing port, and any retention of BFT would be subject to the applicable IBQ, fishing seasons, and retention limits at the time of research project

Details of Alternatives 2 and 3

- Fin clips and photographs from all live sharks not being retained
- 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
- Hooks equipped with hook timers, in accordance with NMFS protocols, to determine when fish captured and when mortality occurs.
- If three dusky sharks are caught and discarded dead by a vessel, a maximum PLL set soak time limit of ten hours is established for vessel
- If three more dusky sharks are discarded dead, then that vessel could not make a trip inside EFC PLL Closed Area for remainder of 12-month project period, unless subsequently authorized by NMFS

Analysis of Projected Catches

- NMFS projected catches associated with the EFP by using catch per unit effort (CPUE) rates obtained from the 2008 – 2010 research project for fishing activities inside the EFC PLL Closed Area, and CPUE rates from 2013 – 2015 observer data for fishing activities outside the EFC PLL Closed Area.
  - EFP = two closed areas + one open area
  - No EFP = all effort in open area
- The two CPUE rates were then multiplied by:
  - Fishing effort requested in EFP (6 vessels/180 sets a year/750 hooks per set
  - Historical fishing effort of participating vessels (6 vessels/120 sets a year/600 hooks per set)

Projected Catches*

Species	Likely Expected Difference with EFP Approved* (# of fish)		
	Kept	Dead	Discarded Alive
Swordfish	4,776	977	444
Bluefin Tuna	-20	-39	-29
Yellowfin Tuna	-838	-6	-30
Bigeye Tuna	-1,262	-175	-186
Albacore Tuna	-844	-53	-11
Blue Marlin (no commercial retention)	0	6	-20
White Marlin (no commercial retention)	0	-26	23
Sailfish (no commercial retention)	0	226	644
Dolphin	-315	-37	-13
Dusky Shark (prohibited)	0	-4	67
Silky Shark (prohibited by PLL)	0	718	859
Night Shark (prohibited)	0	330	335
Oceanic Whitetip Shark (prohibited by PLL)	0	18	87
Leatherback Turtle	0	0	-5
Loggerhead Turtle	0	0	-21

* Likely difference scenario based on 6 vessels setting 120 sets per vessel/year with 600 hooks/set

Summary of Ecological Impacts

- Catches (fish kept or discarded dead) of tunas, white marlin, dolphin, and sea turtles are projected to either decline or remain the same
- Swordfish kept, discarded dead, and discarded alive are projected to increase, but would remain within the U.S. swordfish quota*
- Sailfish discards are projected to increase, but the increase is not expected to lead to overfishing
- Discards of dusky, silky, and night sharks are uncertain, but projected to increase, so precautionary measures would be required

* Swordfish discards are presumed to be undersized fish

Summary of Socio-Economic Impacts

- Potential benefits for six PLL vessels through increased swordfish landings and possibly lower fuel, food, and ice costs (from shorter trips)
- Potential long-term benefits from scientifically valid catch rate information between closed and open areas
- Potential long-term benefits from information on real-time electronic logbook reporting, enhanced electronic video monitoring, and improved biological information on shark species and other species

Summary of Socio-Economic Impacts (cont.)

- Potential adverse impacts to recreational fishing community resulting from potential gear conflicts and reduced catches of HMS and other species
- Potential adverse impacts to other commercial PLL vessels not authorized to participate in the research resulting from increased swordfish supply and a possible decrease in ex-vessel prices

Information on Submitting Comments

- Comment Period ends on March 29, 2017

- E-Mail comments to:
  - nmfs.hms.pllefp@noaa.gov
  - Include in subject line identifier: “0648-XF086”

- Mail to:
  - Margo Schulze-Haugen
    HMS Management Division (F/SF1)
    NMFS
    1315 East-West Highway
    Silver Spring, MD 20910

QUESTIONS or COMMENTS?

Thank You!