

NATIONAL MARINE FISHERIES SERVICE REPORT

National Marine Fisheries Service (NMFS) Southwest Region and Science Center will briefly report on recent developments relevant to highly migratory species fisheries and issues of interest to the Council.

Council Task:

Discussion.

Reference Materials:

1. Agenda Item C.1.a: NMFS Highly Migratory Species Report.
2. Agenda Item C.1.b: Southwest Fisheries Science Center Research Report.

Agenda Order:

- a. Southwest Region Activity Report
- b. Southwest Fishery Science Center Report
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. Council Discussion

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PFMC
02/25/08

NMFS Report Highly Migratory Species

I. Regulatory Activities

Tuna Bag Limits: The final rule establishing a daily bag limit for sport caught albacore and bluefin tuna in the Exclusive Economic Zone off California published in the Federal Register on October 15, 2007, with an effective date of November 15, 2007. The daily bag limit allows possession of 10 albacore per day south of Pt. Conception, 25 albacore per day north of Pt. Conception, and 10 bluefin tuna per day statewide.

II. Meeting Summaries

Pacific Leatherback Closure Area (PLCA): NMFS conducted an internal workshop on November 14, 2007 between NMFS fishery managers and scientists to evaluate existing information on leatherback distributions off the west coast to consider whether sufficient information had been generated since 2001 to justify reconfiguration of the PLCA. The group decided that there was insufficient information on leatherback distributions in the EEZ to justify any change to the PLCA at this time. Attachment 1 recounts that discussion that identifies NMFS' current position on reconfiguring the PLCA as well as provides a research agenda for future work.

General Advisory Committee (GAC) – IATTC: On February 20, 2008, the GAC to the U.S. Section to the Inter-American Tropical Tuna Commission (IATTC) met to receive and discuss information on: (1) 2007 and 2008 IATTC activities, (2) activities of the Commerce and State Departments and the Pacific Fishery Management Council and Western Pacific Fishery Management Council as they relate to the IATTC, including scientific developments, (3) upcoming meetings of the IATTC, including issues such as: conservation and management measures for yellowfin and bigeye tuna for 2008 and beyond, measures to be taken in the absence of conservation and management measures, management of fishing capacity, and other issues, (4) IATTC cooperation with other regional fishery management organizations, and (5) administrative matters pertaining to the GAC.

Summary – Western and Central Pacific Fisheries Commission (WCPFC) 2007:

The fourth annual session of the WCPFC was held in Tumon Bay, Guam, from December 3-7, 2007. The Commission was unable to agree on measures to strengthen the conservation and management of two of the regions most important fish stocks: yellowfin and bigeye tuna.

North Pacific Albacore Tuna. The seventh meeting (July 2007) of the International Scientific Committee (ISC) recommended that fishing mortality for North Pacific (NP) albacore be reduced. The Northern Committee (NC) (September 2007) noted that the NP albacore spawning stock biomass was at an historical levels. Therefore, the NC agreed to maintain the existing Conservation and Management Measure (CMM) that requires

Nations to not increase fishing effort for NP albacore. The fourth meeting of the WCPFC endorsed this recommendation.

Observer Program. Significant progress was made regarding monitoring, control, and surveillance of the WCPFC fisheries. Recommendations adopted were: an implementation schedule for the WCPFC Regional Observer Program, creating a record of vessels actively fishing on the high seas in the Convention area, improving the procedure for listing vessels found to have engaged in illegal, unreported, and unregulated fishing activities, and enhancing the implementation plan for the Commission's vessel monitoring system.

Seabirds. Technical specifications for gear used to mitigate longline interactions with seabirds were adopted for the most commonly used eight mitigation techniques approved in 2006. The techniques with technical specification are: tori lines, weighted branch lines, side setting, night setting, blue dyed bait, and offal discharge.

Sea Turtles. The United States presented a proposal outlining alternative gear options and fishing techniques to effectively reduce sea turtle bycatch but the proposal was not adopted. However, the U.S. kept its proposal on the table and plans to work inter-sessionally with key Nations to determine if and how a comprehensive CMM for sea turtles can be adopted in the future.

The Commission agreed that adopting new CMM's for bigeye and yellowfin tuna was its top priority for 2008. Other priorities for 2008 will include: developing a CMM to monitor and regulate transshipment activities, revising the Commission's procedures for evaluating cooperating non-member applications, and improving the consistency between CMMs for the high seas and the EEZ of member nations.

The Commission tasked the Northern Committee with convening a working group in order to begin the process of developing effective conservation measures for striped marlin in the North Pacific as a recent stock assessment indicates that the North Pacific stock is being fished unsustainably, and landings and stock biomass are low and will continue to decline if the current fishing mortality rate is maintained. The working group is tasked with completing its work in time for presentation at the 2008 Scientific Committee and NC annual meetings. NMFS has prepared a white paper on the striped marlin issue (Attachment 2).

More information regarding the WCPFC can be found at www.wcpfc.int.

III. Upcoming 2008 Meetings

Next Meeting of the IATTC: The 77th IATTC meeting was held March 5-7, 2008, in La Jolla, California, to resolve the issue of tuna conservation for 2008 and beyond. A review of the 2007 fishery in the eastern Pacific Ocean and a status of the stocks will be presented at this meeting.

Five proposals are currently on the table from previous meetings: three (U.S., Spain/Ecuador, and Mexico) proposed at the IATTC June, 2007 meeting, one proposed by Venezuela in October 2007, and one proposed from a five nation coalition consisting of Columbia, Guatemala, Nicaragua, Panama, and Peru at the October 2007 meeting. The IATTC Secretariat agreed to update the analysis of the five proposals with as much data from the 2007 fishery as possible in advance of the March 2008 meeting. This document (IATTC-77-04, *Proposal for Conservation of Yellowfin and Bigeye Tuna in the Eastern Pacific Ocean*), has been posted to the IATTC website www.iattc.org.

US-Canada Albacore Treaty: The default provision in the Treaty, which allows each Party to continue fishing for albacore tuna in each others waters at a level no more than 75 percent of the limit applicable during the last year of the regime (i.e., 94 vessels or 375 vessels months), was used for 2007. There have been preliminary discussions between both countries for meeting this spring in Victoria, British Columbia to perform the annual exchange of information and to discuss the future of the Treaty. There has been mixed support for continuing the Treaty and this will be one of the agenda items.

2008 Meeting Schedule

| Dates | Meeting | Venue |
|-----------------|--|---|
| 2/20/2008 | General Advisory Committee Meeting to the U.S. Section of the IATTC | (via teleconference) |
| 2/28 - 3/6/2008 | ISC ALB Working Group Workshop | La Jolla, CA |
| 3/5-7/2008 | 77th Meeting of the IATTC | La Jolla, CA |
| 05/12-16/2008 | IATTC 9 th Meeting of the Working Group on Stock Assessment | La Jolla, CA |
| TBD | U.S.-Canada Albacore Treaty Annual Meeting | Victoria, BC |
| 5/28/2008 | General Advisory Committee Meeting to the U.S. Section of the IATTC | San Diego, CA |
| 06/16-27/2008 | 78th Meeting of the IATTC | Panama City, Panama |
| TBD | 3 rd IATTC/WCPFC Consultative Meeting | Panama City, Panama |
| 07/16-17/2008 | ISC ALB Working Group Workshop | TBA (Japan) |
| 07/23-28/2008 | Plenary Meeting of the ISC | TBA (Japan) |
| 08/11-22/2008 | 4 th Regular Session of the Scientific Committee Meeting of the WCPFC | Port Moresby, Papua New Guinea |
| 09/09-11/2008 | 4 th Regular Session of the WCPFC Northern Committee Meeting | Tokyo, Japan |
| 09/25-30/2008 | 4 th Regular Session of the WCPFC Technical and Compliance Committee | Pohnpei, Federated States of Micronesia |
| 12/08-12/2008 | 5th Meeting of the WCPFC | Busan, Republic of Korea |
| 12/09-16/2008 | ISC ALB Working Group Workshop | |
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| | Acronym Key | |
| AIDCP | Agreement on the International Dolphin Conservation Program | |
| ALB | Albacore | |

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| IATTC | Inter-American Tropical Tuna Commission | |
| ISC | Interim Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean | |
| WCPFC | Western and Central Pacific Fisheries Commission | |

Attachment I

Status of the Pacific Leatherback Conservation Area

**NOAA’s National Marine Fisheries Service
Southwest Region and Southwest Fisheries Science Center**

Background

Swordfish is a popular seafood choice for U.S. consumers due to its firm, moist and mild flavor. Between 1989 and 2005, U.S. annual swordfish demand averaged 16,556 metric tons (mt) with U.S. landings averaging 6,444 mt (about 39 percent of demand) and imports totaled 10,111 mt (61 percent). Domestic landings of swordfish gradually declined beginning in the early 1990s through early 2000s with demand supplemented by imports ranging from 35 percent (1993) to 77 percent (2005). From 1989 through 2005, imports increased from rough parity with U.S. landings to over three times domestic landings in recent years. In 2005, U.S. imports of swordfish were 10,187 mt, valued at about \$77 million. Singapore, Panama, Canada, and Chile were the dominant suppliers of imports.

In the Eastern Pacific Ocean (EPO), U.S. fishermen use two primary methods to harvest swordfish in commercial quantities: longlines and drift gillnets (DGN). Longline fishing is the method utilized by the swordfish fishery based in Hawaii while DGNs is the primary method used on the U.S. West Coast. There is also a small harpoon fishery that operates out of southern California, but the fishery only successfully operates during periods of calm seas when swordfish “fin” in surface waters, thus harpooning is not considered a commercially viable fishery for most of the West Coast.

While the status of the EPO swordfish stock appears to be relatively healthy, access to this stock is limited in both Hawaii and West Coast fisheries due to Endangered Species Act (ESA) protections, specifically, sea turtle interactions. Hawaii longline swordfish fishermen are required to use specific gear and bait, and effort is limited by fishing permits, set certificates, and the number of annual sea turtle interactions. On the West Coast, the DGN fishery is managed by limiting permits as well as a seasonal implementation of the Pacific Leatherback Closure Area (PLCA) that annually closes the waters north of Point Conception to the mid-Oregon coast and seaward beyond the

Exclusive Economic Zone (EEZ) to 129° West longitude to DGN gear from August 15 – November 15.

The PLCA was developed using the information available at the time as an avoidance strategy established specifically to address anticipated leatherback turtle takes in the DGN fishery and was required under the biological opinion written for this fishery in 2000. NMFS identified an area known to be utilized by leatherback turtles at certain times of the year based upon observed takes in the DGN fishery and established this particular time/area closure to minimize leatherback interactions with DGN gear. At the time of its implementation in 2001, it was not possible to rigorously define the geographic area where interactions with endangered leatherback sea turtles were most likely to occur, necessitating the implementation of a relatively large area closure. Since 2001, much has been learned about the distribution and abundance of leatherbacks within the West Coast EEZ. This information was shared with DGN fishermen. Due to a substantial decline in participation, landings and exvessel revenue in the DGN fishery since implementation of the PLCA, DGN fishermen applied for an exempted fishing permit (EFP) that, if approved by NMFS, would have allowed participating vessels to fish in the PLCA under rigid restrictions that would have limited impacts to sea turtles and other species.

In June 2007, NMFS wrote the Pacific Fishery Management Council and stated that it would not approve the EFP based on concerns for potential mortalities of protected species with DGN gear. By taking this action, NMFS essentially precluded using fishery-dependent methods as a means to potentially modify the configuration of the PLCA. However, NMFS did not rule out the use of fishery-independent information to reconsider the dimensions and timing of the PLCA seasonal closure.

To that end, NMFS conducted an internal workshop on November 14, 2007 between NMFS fishery managers and scientists to evaluate existing information on leatherback distributions off the west coast and determine whether sufficient information had been generated since 2001 to justify consideration of reconfiguring the PLCA. The participants agreed that there was insufficient information on leatherback distributions in the EEZ to justify any change to the PLCA at this time. This paper recounts that discussion and identifies NMFS' current position on reconfiguring the PLCA as well as provides a research agenda for future work.

Current Knowledge of Leatherback Sea Turtles off West Coast

Leatherback nesting populations in the Pacific can essentially be grouped into two distinct genetic stocks, those that nest on beaches in the Eastern Pacific, and those nesting in the Western Pacific. All populations migrate to foraging areas and the leatherback sea turtles found off the West Coast of the USA utilize this area as foraging habitat. These leatherbacks originate from the Western Pacific metapopulation but represent a portion of that population. Tracks of leatherback turtles with satellite-linked transmitters indicate that these turtles nest in Indonesia where there are a number of threats including nest erosion, pig predation, deforestation, and a concern about low

hatchling production on some beaches. Despite these threats, the Western Pacific population is considered much healthier and robust than the Eastern Pacific population.

Satellite-linked telemetry studies of post-nesting females from Indonesia, Papua New Guinea, and the Solomon Islands, undertaken by NMFS Southwest Fishery Science Center (SWFSC) scientists, indicate that leatherbacks originating from these beaches have multiple destinations following nesting including the west coast of North America, the North Pacific Transition Zone, the equatorial Pacific, the South China Sea and southern hemisphere waters. This finding is supported by genetics work also being done by the SWFSC.

The presence of leatherbacks off the U.S. West Coast is related to the distribution and abundance of jellyfish. The Western Pacific population of leatherbacks forage on jellyfish and are known to primarily consume *Chrysaora fuscescens* (brown sea nettle) found in neritic waters between Point Arena and Point Sur. They also consume *Aurelia labiata*. (moon jelly), *Phacellophora camtschatica* (egg yolk jelly), and *Chrysaora colorata* (purple stripe jelly). Due to the low nutrient value of jellyfish prey, leatherbacks must seek large aggregations of prey when foraging.

Satellite-linked telemetry has shown differences in feeding strategies and movements among populations of Pacific leatherbacks. Most leatherbacks tagged off central California have subsequently moved into waters adjacent to the North Equatorial Current and then returned to California coast. NMFS scientists are not clear if this remigration to California is a function of habitat condition, fidelity to foraging sites, or an artifact of tagging, however, the data indicate that these turtles may imprint on the foraging grounds, suggesting that the same animals may return to the West Coast year after year. Unlike the Western Pacific leatherbacks which travel across the entire Pacific to forage, the Eastern Pacific population, which nest in southern Mexico and Costa Rica, have been tracked by satellite-linked transmitters to the southeast Pacific (generally south of the equator and thus not affected by actions within the West Coast EEZ).

The greatest density of leatherbacks off the West Coast has been observed at coastal retention areas during August and September, the usual timing of upwelling relaxation, but they are also seen in lesser numbers during October and November. Because there has been little to no survey effort during April through July, and December, it is not clear if leatherbacks occur at highest densities in August and September, or if this is the result of sampling bias.

NMFS scientists are in the process of expanding their research efforts from monitoring hatchling success rates on Western Pacific nesting beaches and related activities to include a more focused effort on understanding the movements and distribution of leatherbacks off the US West Coast. Part of this effort focuses on understanding the importance of offshore areas to leatherbacks as all of the survey work done thus far in the EEZ has focused on the waters within 30 miles of shore and it is currently unknown whether offshore areas form important primary or secondary foraging habitats relative to nearshore areas. The SWFSC marine turtle research program scientists are also working

with their colleagues at NMFS' Pacific Fisheries Environmental Laboratory in Pacific Grove, California to identify oceanographic seasonal predictors of jellyfish abundance in the fall months as a way to understand the linkage between prey availability and leatherback distributions.

Reconfiguration of PLCA

Based on what is currently known about the coastal abundance of leatherback sea turtles off the West Coast relative to large-scale oceanographic events, NMFS recognizes that insufficient information exists to attempt any reconfiguration of the PCLA with any reasonable degree of confidence at this time. Rather, more research efforts that include the collection of oceanographic data from NOAA ships during simultaneous overflights to record leatherback sea turtle distributions will need to be undertaken to provide the needed information. It is also recognized that there needs to be a greater integration of understanding the relationship between swordfish and leatherback turtle distributions. One source of information missing from current research efforts is the knowledge of commercial fishermen from their fishing experiences with various fishing gears at sea and the sighting of leatherbacks. Participants in the workshop did agree that a collaborative effort with industry and turtle experts is needed to better understand the relationship between the swordfish fishery and sea turtle distributions. NMFS is exploring options for conducting such an information-sharing workshop that will bring together industry experts and scientists and serve as the initial effort to develop a working collaboration. The workshop is in the planning stages with a tentative 2-3 day meeting scheduled to be held in the spring at Scripps Institute of Oceanography in La Jolla, California. The overarching goal of the workshop will be to understand the key life history and ecological traits influencing the distribution and abundance of swordfish and leatherback sea turtles in the California Current. An important objective will be to bring together scientists and fisheries managers conducting research and monitoring projects on these species as well as knowledgeable fishermen who have a history of participation in west coast swordfish fisheries. A major outcome of the workshop will be to highlight areas where further research and monitoring efforts, with emphasis on collaborative projects, would assist in providing sustainable fishing opportunities while minimizing interactions with protected sea turtles.

Finally the collaboration between NMFS biologists and oceanographers may provide NMFS the opportunity to revise its current management strategy of the PCLA for the DGN fishery from a static to a more dynamic one by using oceanographic processes to predict when and where leatherback turtle distributions are likely to occur during the fishing season. This collaboration of various scientific disciplines offers NMFS great potential for adaptively managing the swordfish fishery to minimize sea turtle interactions.

Research Needs

It was also recognized that a more concerted research effort needs to be undertaken to accelerate NMFS' understanding of the presence of leatherback turtle off the West Coast

to manage the swordfish fisheries adaptively. To this end, SWFSC turtle experts have developed the following research priorities that require funding to carry out effectively:

- 1) Expand the research and monitoring of leatherback turtles from central California neritic waters to offshore and Oregon/Washington waters. Previous ecosystem studies of leatherback turtle foraging habitat off California have been confined to shelf waters (<90m depth) within 30 miles of the coast, therefore, data are needed to investigate the presence of leatherback turtles in offshore and Oregon/Washington waters, evaluate the importance of these areas to leatherbacks, and determine how interaction with the proposed fisheries can be reduced or avoided. The initial objective of the Leatherback Use of Temperate Habitat (LUTH) study will be to examine and characterize the abiotic and biotic conditions that create and define leatherback foraging habitat within the offshore fishery area, approximately 40-150 miles off the coasts of California and Oregon. The collaborative effort would be a 'process-oriented' ecosystem investigation involving oceanographic and prey sampling from a NOAA ship and aerial surveys of leatherback turtle distribution from a NOAA Twin Otter aircraft during August-September 2008. Telemetry studies of leatherback turtles have suggested they associate with dynamic oceanographic features (e.g. fronts) within the traditional drift gillnet fishing area. Because the spatial and temporal components of frontal habitat is affected by physical forcing, the precise location of the effort will be determined real-time, with input from ERD collaborators, by identifying frontal features and physical mechanisms (i.e. surface currents) that might aggregate jellyfish prey, via evaluation of remotely sensed and in-situ oceanographic data. The results of this study will improve NMFS' ability to assess presence of leatherback turtles in the proposed fishing areas by identifying likely foraging areas via remote sensing techniques, thereby mitigating potential interactions. The secondary objective is to obtain abundance estimates and knowledge of seasonal distribution of leatherbacks utilizing foraging areas off the coasts of Oregon and Washington from aerial surveys. Previous telemetry data and anecdotal information indicate that Oregon/Washington waters support a foraging population of leatherback turtles, however, it is unknown how many turtles use this area or if they are the same individuals that use California waters. If predictable aggregations of leatherbacks can be identified, telemetry studies would be initiated to examine foraging site fidelity along the North American coast.
- 2) Develop methods to reduce leatherback bycatch in swordfish longline and driftnet fisheries by identifying areas of distributional and habitat overlap. The objectives of this study are to use satellite-linked telemetry of swordfish and leatherbacks to answer the following questions: a) What is the habitat use of both swordfish and leatherbacks off Central California? b) Is habitat separation apparent and if so when and where? c) How does any observed separation vary temporally and spatially and in the face of changing environmental conditions? d) How can fishing methods be modified to take advantage of any habitat separation (vertically or horizontally) to reduce leatherback bycatch in US West Coast longline and driftnet fisheries?

- 3) Convene an agency-wide workshop to compile knowledge of predictive modeling of fishery interactions with protected species among science centers and management offices, including experts in environmental modeling, oceanography, and resource management. This proposal assists the decision making process for fishery management and evaluates existing data and future sampling design necessary for such decision making processes. The objectives of this effort are to:
 - a) compile and build analytical approaches for predicting fishery by-catch of protected species based on environmental data, b) test the performance of these models, c) provide recommendations for applications of predictive models, and d) provide recommendations for the future data collection and sampling considerations.

Striped Marlin Briefing
NOAA National Marine Fisheries Service
Southwest Region and Southwest Fisheries Science Center

Background

The most recent stock assessment for striped marlin indicates that the North Pacific stock is being fished unsustainably, and landings and stock biomass are low and will continue to decline if the current fishing mortality rate is maintained. This stock assessment has raised concern with NMFS scientists and managers. The purpose of this briefing is to draw attention to this issue and provide a basic summary of the relevant information needed for management decisions. This briefing summarizes what is known about the natural history and stock assessment of striped marlin, fisheries that have recorded landings of striped marlin, and some recommendations for what could be done on the national and international scale in order to allow the stock to recover.

Natural History

The striped marlin (*Tetrapturus audax*) is a large, oceanic fish with a long and tall dorsal fin which decreases in height ending just before the second dorsal fin. Striped marlin reach a maximum length of about 12 feet, weighing over 450 pounds. In contrast to the blue marlin, there is no significant sexual size dimorphism in this species. Females are reported to reach first maturity at 50-80 lb; it is not possible to determine onset of sexual maturity in males because change in the size of testes is slight. The species is found throughout the tropical, subtropical, and temperate waters of the Pacific and Indian Oceans. The stock structure of striped marlin in the Pacific has not been well defined. The two most frequently considered hypotheses are: 1) a single-unit stock in the Pacific, which is supported by the continuous “horseshoe-shaped” distribution of striped marlin across the central north, and central south Pacific, with a continuous distribution along the west coast of Central America; or 2) a two-stock structure, with the stocks separated roughly at the Equator, albeit with some intermixing in the eastern Pacific Ocean (EPO). The species seems to be more abundant in the eastern and north central Pacific than elsewhere, and occur between 45° N. and 45° S. latitude.

Movements tend to be diffusive as striped marlin do not tend to form dense schools but occur singularly or in small groups, usually segregated by size¹. Distribution of eggs is unknown. Larvae are reportedly found in the North Pacific west of 180° W. longitude between 10° N. to 30° N. latitude, and in the central South Pacific west of 130° W. longitude between 10° S. to 30° S. latitude². They are most abundant in the respective local early summers, with peak occurrences during May through June in the western North Pacific, and in November and December in the central South Pacific. The seasonal occurrence of mature females coincides with that of the larvae. While the distribution of larvae east of 120° W. longitude is not well known, mature fish are reported to occur there between 5° and 20° N. latitude, largely in May and June³.

¹ Southwest Fisheries Science Center striped marlin research; posted on the website: <http://swfsc.noaa.gov/textblock.aspx?Division=FRD&ParentMenuId=141&id=1126>

² Food and Agriculture Organization of the United Nations Fisheries and Aquaculture Department, Species Fact Sheet for *Tetrapturus audax*: <http://www.fao.org/fishery/species/2501>.

³ Food and Agriculture Organization of the United Nations Fisheries and Aquaculture Department, Species Fact Sheet for *Tetrapturus audax*: <http://www.fao.org/fishery/species/2501>.

Squire and Suzuki (1990) argued that striped marlin make long-term migrations between spawning and feeding areas. Young fish migrate eastward to feeding areas off the Central American coast and subsequently return westward as adults. Similarly, according to the Southwest Fisheries Science Center, tag recapture data also indicate movement from southern California to Baja California Sur, but show little or no movement in the reverse direction⁴. Tag recapture data further reveal movement from off the coasts of Mexico and southern California to waters near Hawaii, Peru, and the Marquesas Islands.

Striped marlin are epipelagic, preferring water temperatures between 20 to 25 degrees Centigrade during all stages of their life cycle. Acoustic telemetry studies indicate they spend 86 percent of their time in the surface layer above the thermocline. Some researchers have argued that depth preference is governed by temperature stratification; the fish they tracked spent the vast majority of time in waters within 2 degrees Centigrade of the mixed layer temperature and never ventured into waters 8 degrees Centigrade colder than the mixed layer temperature (Brill, *et al.* 1993; Holts and Bedford 1990).

Striped marlin are opportunistic feeders on epipelagic fishes including mackerel, sardine, and anchovy, and will take invertebrates including squid and red crab when available. Off southern California, striped marlin are often seen feeding at the surface on these small coastal fish. Predation on adult marlin has not been documented but may occur from large pelagic sharks or toothed whales.

The Billfish Working Group of the ISC has noted that the basic biology of striped marlin needs additional research, with an emphasis on stock structure, life history parameters, and movement (ISC 2007). The Pacific Fisheries Management Council 2007 Stock Assessment and Fishery Evaluation document also reports the need for more age and growth data from locally caught fish, research on the stock structure differences between populations to south and west of the U.S. Exclusive Economic Zone, and research on seasonal migration differences relative to the size, age, and sex of striped marlin (PFMC 2007).

Stock Assessment

Stock status of striped marlin in the EPO has been assessed regularly by the Inter-American Tropical Tuna Commission (IATTC) and the International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific (ISC). The most recent stock assessment of striped marlin in the EPO was conducted by IATTC in 2003. The most recent stock assessment of striped marlin in the North Pacific Ocean was conducted by the Marlin Working Group of ISC in 2007.

ISC and NMFS consider there to be a single stock of striped marlin in the North Pacific; however, IATTC considers there to be multiple stocks. IATTC assumes that there is a single stock of striped marlin in the EPO, based on the analysis of trends in catch per unit of effort (CPUE) in several sub areas, and genetic studies that have suggested that there are separate populations in the eastern and western South Pacific and there may be a separate population with centers of distribution in the regions proximate to Hawaii in the north-central Pacific and to Ecuador and Mexico in the EPO (IATTC 2007). However, the IATTC report notes that because data on daily activities of striped marlin have been obtained by electronic tags that have not provided

⁴ Southwest Fisheries Science Center striped marlin research; posted on the website: <http://swfsc.noaa.gov/textblock.aspx?Division=FRD&ParentMenuId=141&id=1126>

information on movements over long time periods, the conclusions reached for an EPO stock model should be considered tentative.

For the IATTC assessment, standardized catch rates were obtained from a general linear model and from a statistical habitat-based standardization method (IATTC 2007). Analyses of stock status were made using two production models, taking into account the time period when billfish were targeted by longline fishing in the EPO, that were considered the most plausible. A Pella-Tomlinson model yielded estimates of the AMSY in the range of 3,700–4,100 metric tons (mt) with a current biomass being about 47 percent of the unfished biomass. The current biomass is estimated to be greater than the biomass that would produce the AMSY. An analysis, using the Deriso-Schnute delay-difference model, yielded estimates of AMSY in the range of 8,700–9,200 mt, with the current biomass greater than that needed to produce the AMSY, and about 70 percent of the size of the unexploited biomass.

The most recent stock assessment conducted by ISC in 2007 assumed a single Pacific-wide stock of striped marlin (ISC 2007). According to the ISC Billfish Working Group, the stock status is difficult to determine due to a range of uncertainties in the fishery data as well as biological uncertainties (*e.g.* maturity schedule, growth rates, stock structure, the movement of striped marlin between temperate and sub-tropical areas throughout its range, etc.). It is therefore difficult to describe the biomass distribution for this stock throughout its range. Two assessment model scenarios were developed to address the uncertainty in the steepness of the stock recruitment relationship: 1) the maternal effect scenario in which recruitment is estimated by a Beverton-Holt stock recruitment curve; and 2) the environmentally driven recruitment scenario in which recruitment varies about its mean.

The ISC report indicates that spawning biomass has declined from around 40,000 mt in the early 1970s to about 5,000 mt in the early 2000s⁵. Spawning biomass in 2003 was estimated to be 14 to 15 percent of the 1970 level, depending upon model scenario. Recruitment estimates also exhibited a long-term decline since the 1970s, and recent recruitment (1996-2003) is roughly one-half of the long-term average (1965-2003) under both model scenarios. In addition, both model scenarios indicated that landings and spawning biomass will continue to decline if the current fishing mortality rate is maintained. Fishing mortality in the early 2000s has increased to more than three times the amount in the early 1970s. There appears to be some inconsistency in the indices developed for the western Pacific and the eastern Pacific, and in the future modeling efforts will include spatial segregation. The ISC Plenary recognized that current levels of fishing mortality across the North Pacific are not likely to be sustainable, and recommended that the fishing mortality rate of striped marlin (which can be converted into effort or catch in management) should be reduced from the current level (2003 or before), taking into consideration various factors associated with this species and its fishery. The ISC Plenary also recommended that until appropriate measures in this regard are taken, the fishing mortality rate should not be increased.

Regional Fisheries Management Organizations

IATTC has not acted on the most recent ISC recommendations that were released in July 2007. The IATTC annual meeting took place in June 2007, before ISC had finalized its most recent assessment and recommendations. It is expected that the ISC stock assessment and recommendations will be addressed in the upcoming IATTC annual meeting in May 2008.

⁵ Summary presentation given by Gary Sakagawa to the WCPFC Northern Committee at their annual meeting September 11-13, 2007 in Tokyo, Japan. Summary report available: <http://www.wcpfc.int/>.

The Western and Central Pacific Fisheries Commission (WCPFC) Scientific Committee reviewed the ISC report in August 2007 at their annual meeting. For the northern stock of striped marlin the scientific committee acknowledged the work of ISC in their 2007 stock assessment and did not modify ISC management recommendations; however, the inclusion of North Pacific striped marlin as a northern stock was not recommended based on limited information on the spatial distribution of biomass. Under provisions of the Convention, a northern stock must lie mostly north of 20° N. latitude. ISC did not address the spatial distribution of biomass, thus the Scientific Committee could not determine if the stock biomass is mostly north of 20° N. latitude.

The WCPFC Northern Committee (NC) also reviewed the ISC stock assessment in September 2007 at their annual meeting. The NC recognized that striped marlin has neither been designated a northern stock, nor been assigned to the NC for developing management recommendations; however, noting the result of the ISC report, the NC considered it appropriate to provide comments in relation to striped marlin to the Commission at the annual meeting in December 2007. The NC noted that striped marlin are an important resource in the northern portion of the Convention Area as the stock is caught primarily in the northern fisheries that NC members have a special interest in. The NC considered appropriate management strategies for striped marlin and acknowledged that because the species is mostly taken incidentally, strategies aimed at reducing catches of striped marlin (in fisheries directed at other species) may be appropriate. The NC advised its members to make every effort, on a voluntary basis, not to increase their respective current fishing mortality rates (*i.e.* catch or effort) on striped marlin in the North Pacific, and to reduce them to the extent practicable. In addition, the NC recommended that the Commission task the NC with convening a working group that includes fisheries managers, gear technology experts, fishermen, and scientists in order to begin the process of developing effective Conservation Management Measures for striped marlin in the North Pacific. The working group is tasked with completing its work in time for presentation at the 2008 Scientific Committee and NC annual meetings. The report summaries of the Commission’s December 2007 meeting have not been released.

Fisheries Information & Landings

North Pacific

Striped marlin support important commercial and recreational fisheries in the North Pacific. Although directly targeted in the past, currently most are taken as incidental catch in tuna longline fisheries. Pacific-wide landings have been less than 10,000 metric tons per year since 1989, and have averaged approximately 5,215 metric tons per year for the years 1995 to 2005⁶. Striped marlin are caught mostly by longline fisheries; lesser amounts are caught by recreational, gillnet, and other fisheries (see figure 2). During recent years the greatest catches in the North Pacific have been taken by the

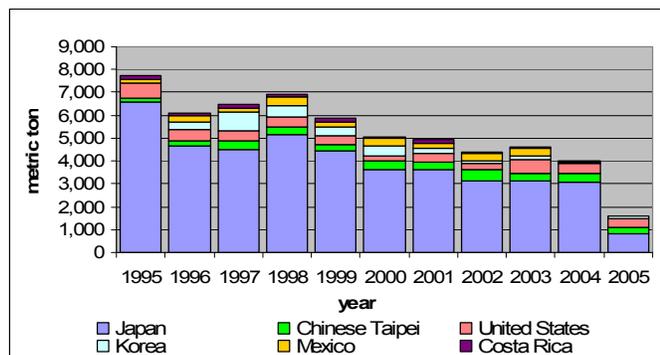


Figure 1. Striped marlin catches in the North Pacific by country, 1995-2005. Data are from the Marlin Working Group catch tables as of February 1, 2007 and may differ from official statistics.

⁶ Data are from the Marlin Working Group catch tables as of February 1, 2007 and may differ from official statistics.

fisheries of Japan, Chinese Taipei, the United States, Mexico and the Republic of Korea (see figure 1).

EPO

The catches and standardized fishing effort for striped marlin has decreased markedly in the EPO since about 1998 (see figure 3). According to the IATTC, the stockwide catch of striped marlin in the EPO from 2001-2005 ranged from 1,500-2,200 mt (round weight)⁷ (PFMC 2007). During recent years the greatest catches in the EPO have been taken by fisheries of Japan, the Republic of Korea, and Costa Rica (IATTC 2007).

U.S. West Coast

The HMS FMP prohibits commercial take of striped marlin; however, there is a small seasonal recreational fishery for striped marlin in the Southern California Bight in the late summer months. The average catch of striped marlin from 2001-2005 by U.S. West Coast fisheries constitutes about one percent of the EPO catch (PFMC 2007). The majority of the U.S. West Coast incidental catch by commercial fisheries was less than 10 mt⁸, and the U.S. West Coast recreational catch was approximately 20 mt, or 300 fish per year, based on club records and commercial passenger fishing vessels logbook recorded catches (PFMC 2007). The California billfish angler survey (1969 to 2005) indicates that the catch rate of billfish (the catch is comprised primarily of striped marlin) in California has remained relatively constant and low since 1969, at about a rate of 0.10 billfish per angler-fishing-day (one fish for every 10 days of fishing)⁹. The total number of billfish caught as reported by the survey ranged from 46 (1973) to 993 (1985); however, catch and release of striped marlin is a trend that seems to be increasing in popularity. Most striped marlin caught in the southern California sport fishery are three to six years old and weigh 120 to 200 pounds.

Recreational and commercial fishing for striped marlin began off southern California in the early 1900s using hand-held harpoons and rod-and-reel. The California State legislature banned the use of harpoons to take striped marlin in

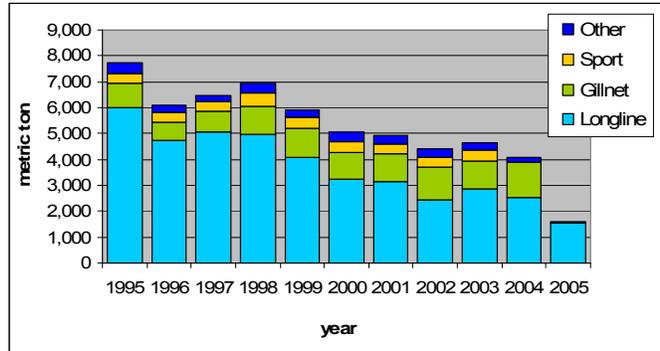


Figure 2. Striped marlin catches in the North Pacific by gear type (1995-2005). Data are from the Marlin Working Group catch tables as of February 1, 2007 and may differ from official statistics.

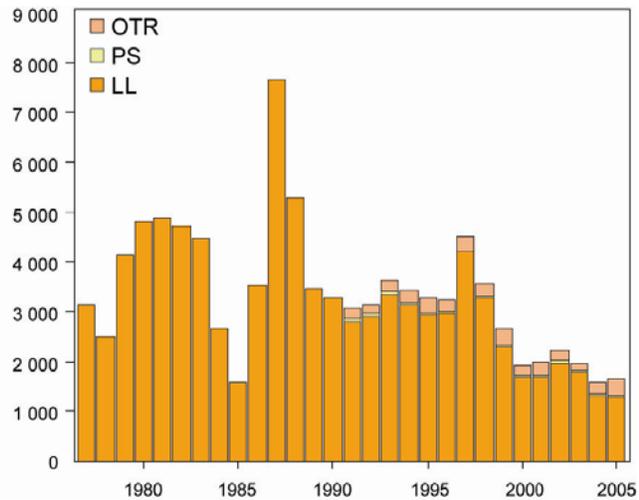


Figure 3. Retained catches of striped marlin in the EPO, 1977-2005, by gear type (in metric tons). Source: Document IATTC-75-06, 2007.

⁷ IATTC catch tables extracted 9/3/07.

⁸ Striped marlin commercial catch includes estimates from the drift gillnet observed catch.

⁹ National Marine Fisheries Service Pacific Billfish Database: <http://www.recfin.org/billfish/>.

1935 and further curtailed the sale and import of striped marlin in 1937, thus preserving the southern California fishery entirely for recreational anglers. California has a recreational daily possession limit of one striped marlin.

Generally, fish begin arriving in the coastal and insular waters off southern California in June and remain until at least October. The number of fish moving into the Southern California Bight during any particular year is associated with water temperatures. The colder water north of Point Conception usually limits their northward distribution; although, during El Niño years they intermittently range north to about San Francisco. According to the National Marine Fisheries Service Pacific Billfish Database, the estimated aggregate cost for billfish trips in California was about \$488,000 in 2005, which is a significant component of the recreational fishing industry in southern California¹⁰

Recommendations

Despite the fact that the U.S. West Coast catch of striped marlin does not constitute a significant portion of the catch of striped marlin in the North Pacific or the EPO, additional conservation measures would be desirable. Because the species is mostly taken incidentally, strategies aimed at reducing catches of striped marlin (in fisheries directed at other species) would probably be the easiest to implement. There should be an effort to not increase the current fishing mortality rates (*i.e.* catch or effort) on striped marlin in the North Pacific, and to reduce them to the extent practicable, even if only on a voluntary basis. Measures such as these are necessary to avoid the experience of the white marlin fisheries in the Atlantic Ocean. NMFS received a petition to list Atlantic white marlin as an endangered or threatened species in 2001; subsequently, two comprehensive reviews (2002 and 2007), of the stock status of the species were conducted, and NMFS eventually determined that an ESA listing for white marlin was not warranted.

The United States should consider the following:

- The possibility of the WCPFC establishing measures to limit the catch of striped marlin in the western Pacific Ocean, which would likely compel vessels to shift their fishing effort to the EPO, unless conservation measures were already put in place by the IATTC to restrict the catch of striped marlin in the EPO.
- Advocating the catch and release of striped marlin in recreational fisheries in the EPO, since recreational fishing constitutes an important component of the striped marlin catch from the United States, Mexico, and Costa Rica.
- Forming a bilateral agreement with Mexico, since striped marlin is an important recreational fishery for both countries.
- Encouraging the use of circle hooks in recreational fishing in order to decrease the mortality of striped marlin once released. The Southwest Fisheries Science Center advocates in its 2006 Billfish Newsletter the use of circle hooks when releasing billfish because it reduces deep or foul hooking when bait fishing or trolling¹¹.

¹⁰ National Marine Fisheries Service Pacific Billfish Database: <http://www.recfin.org/billfish/>.

¹¹ The Southwest Fisheries Science Center 2006 Billfish Newsletter:
<http://swfsc.noaa.gov/textblock.aspx?Division=FRD&id=1199&ParentMenuId=3>

- Encouraging the use of circle hooks in longline fisheries that are still using traditional “J” hooks.
- Encouraging and creating incentives for the development of innovative gear types and methods for decreasing the number of interactions of striped marlin with longline gear, and/or decreasing the post-hooking mortality of striped mortality.
- Funding scientific research to address some of the data limitations that have been discussed by the ISC, WCPFC, IATTC, and PFMC.

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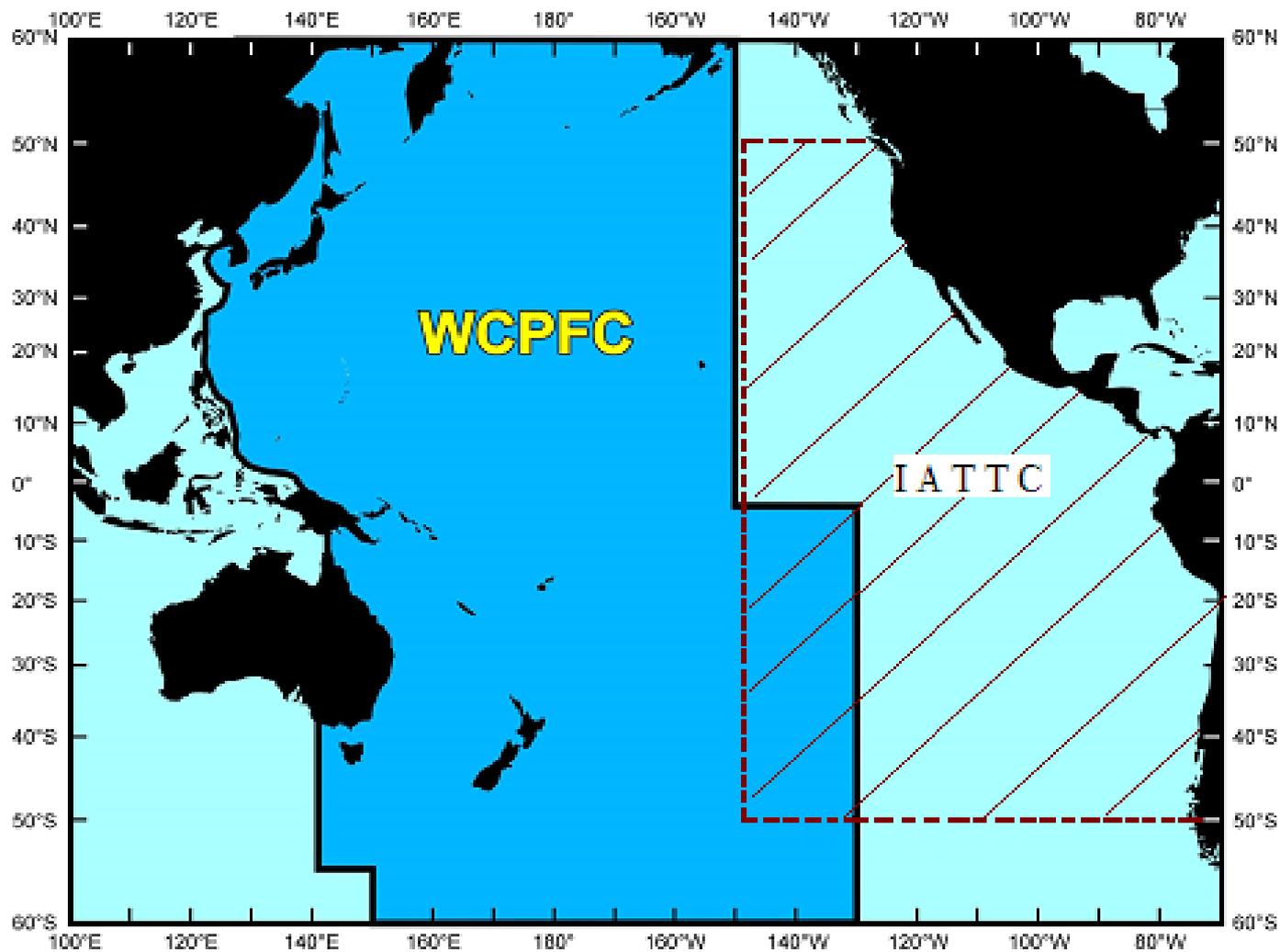
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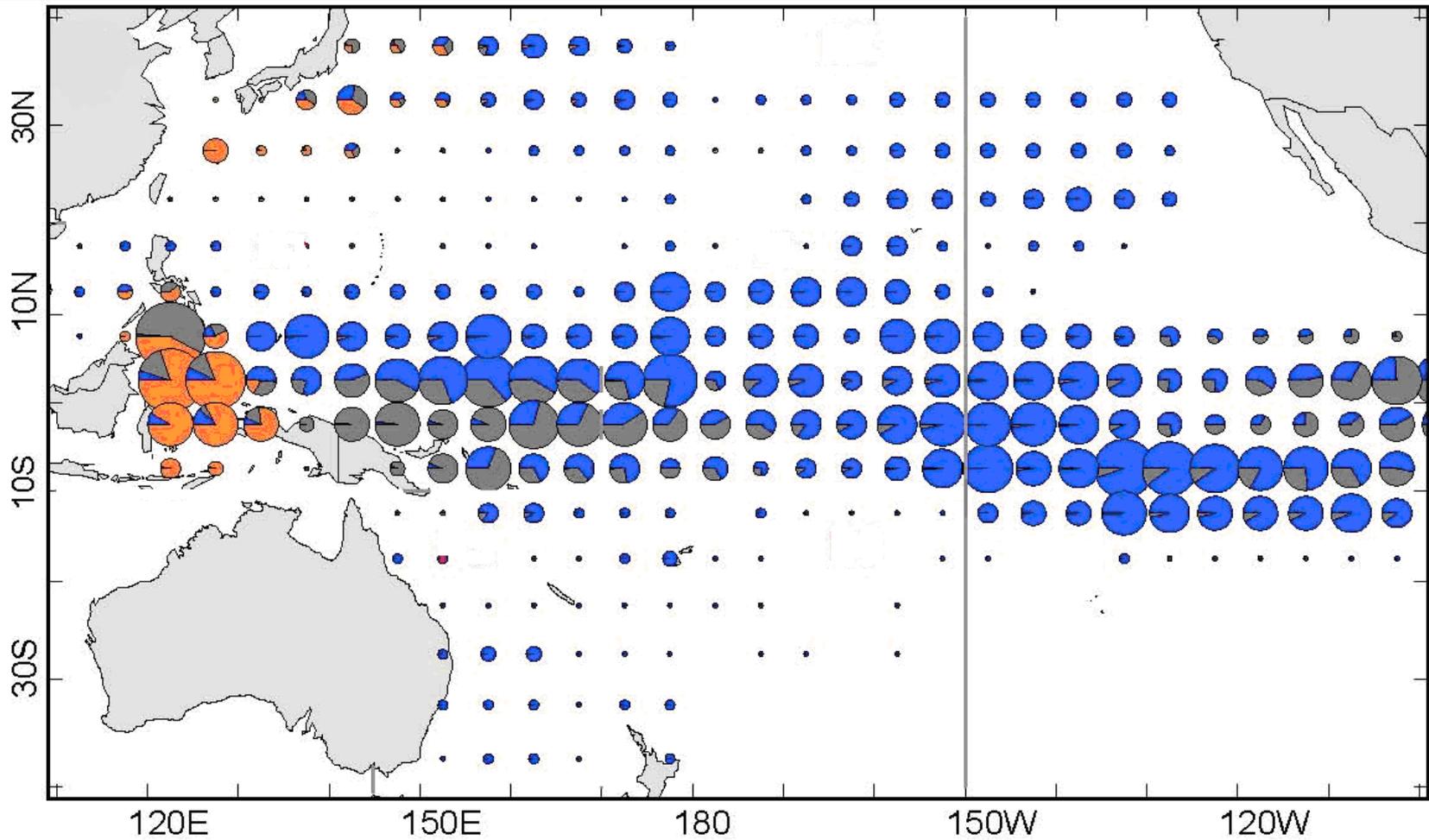
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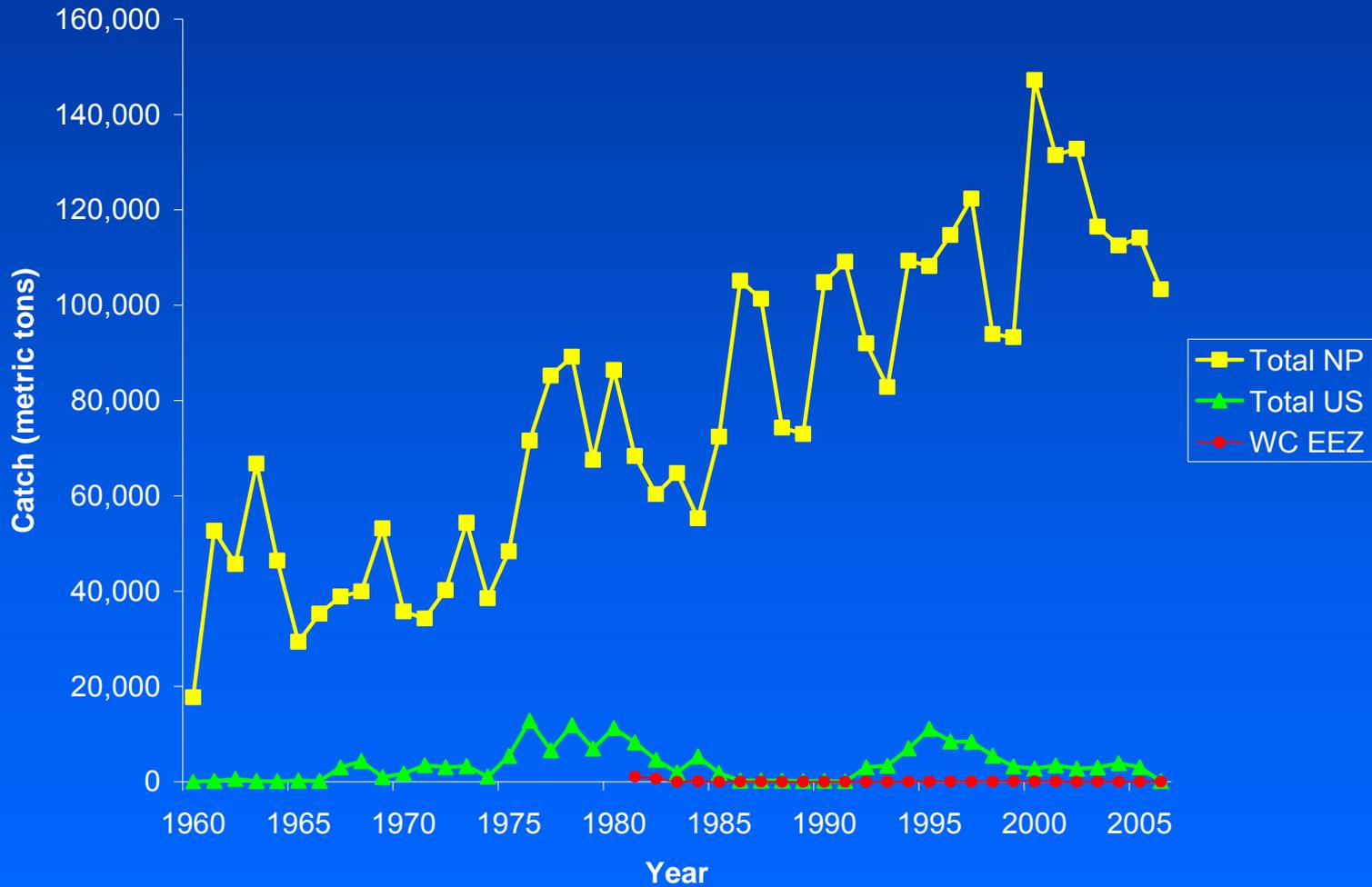
- PFMC and the RFMO's
- Distribution of tuna and billfish species - stock
- Score card for species - stock



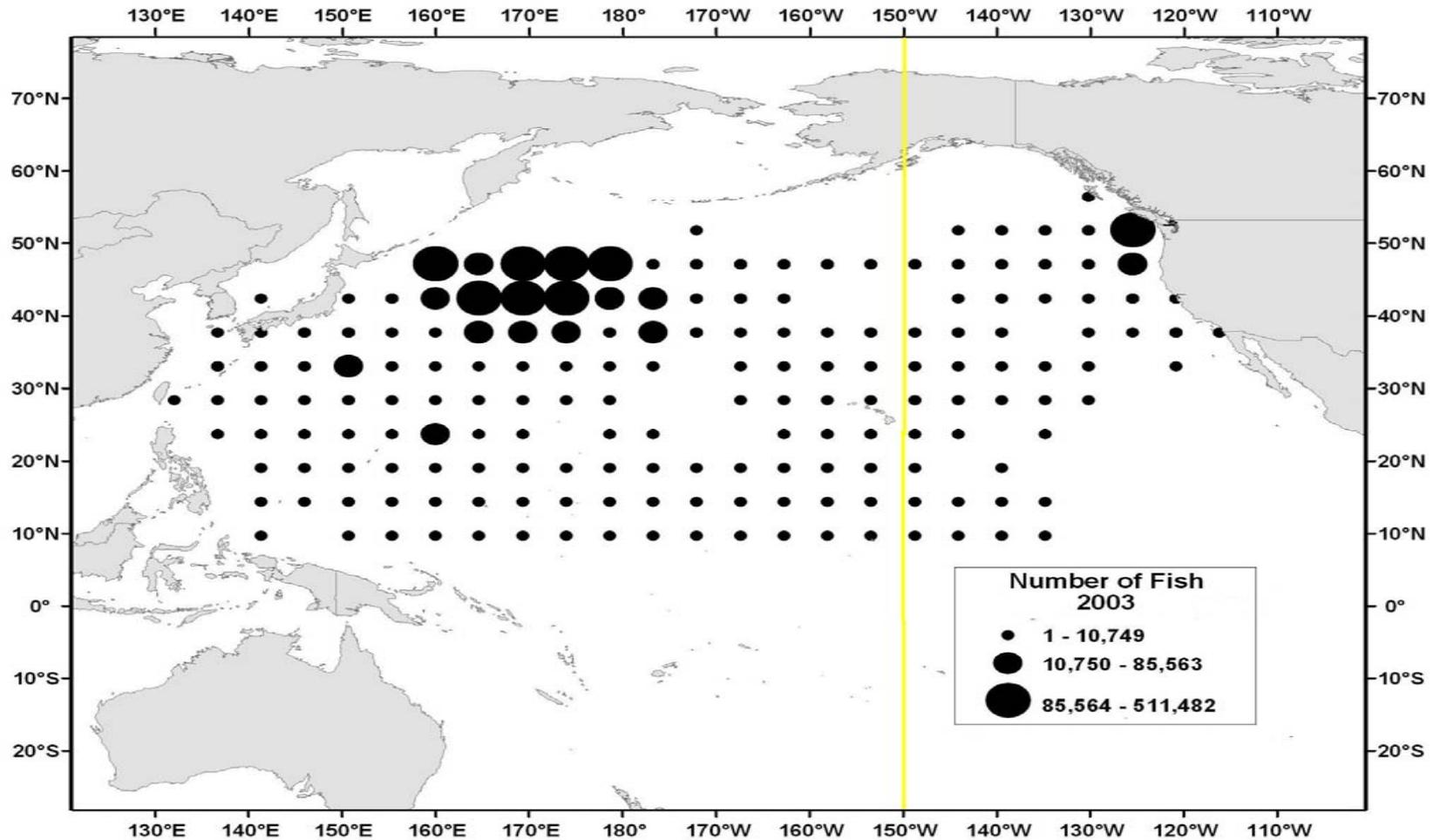
Bigeye Tuna Catch (1990-2004)



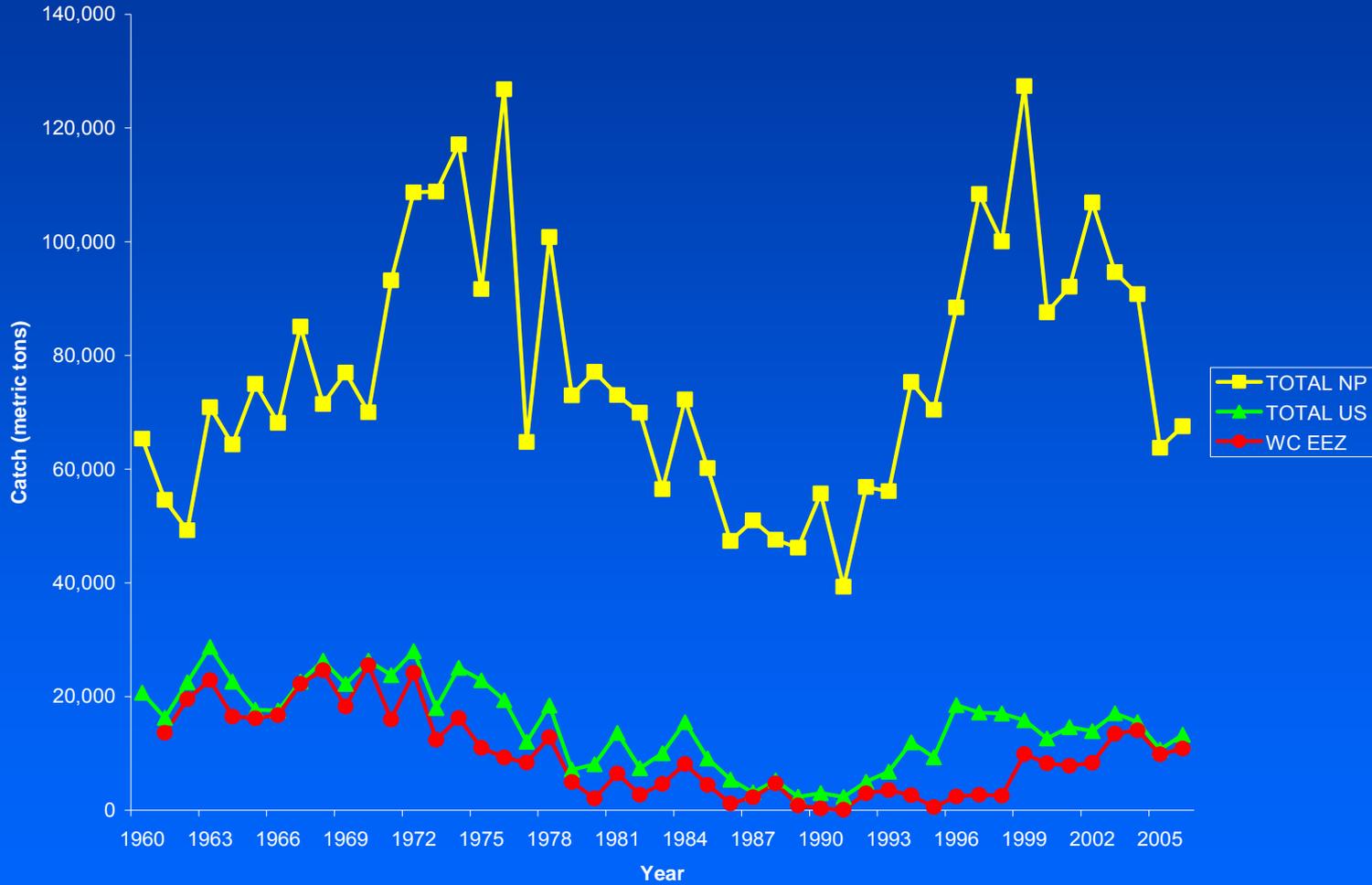
Catch Distribution – Bigeye Tuna



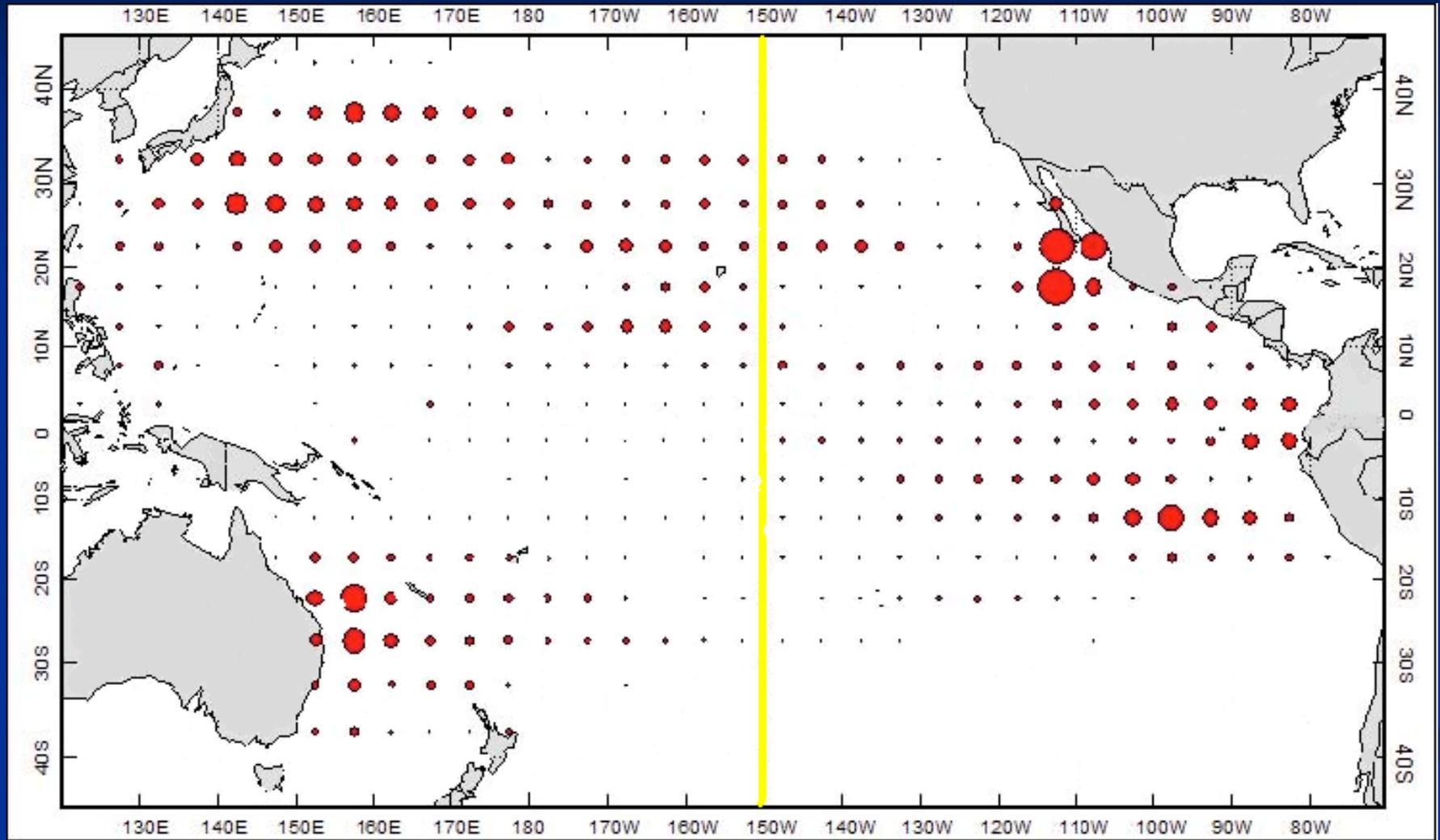
North Pacific Albacore Catch (2003)



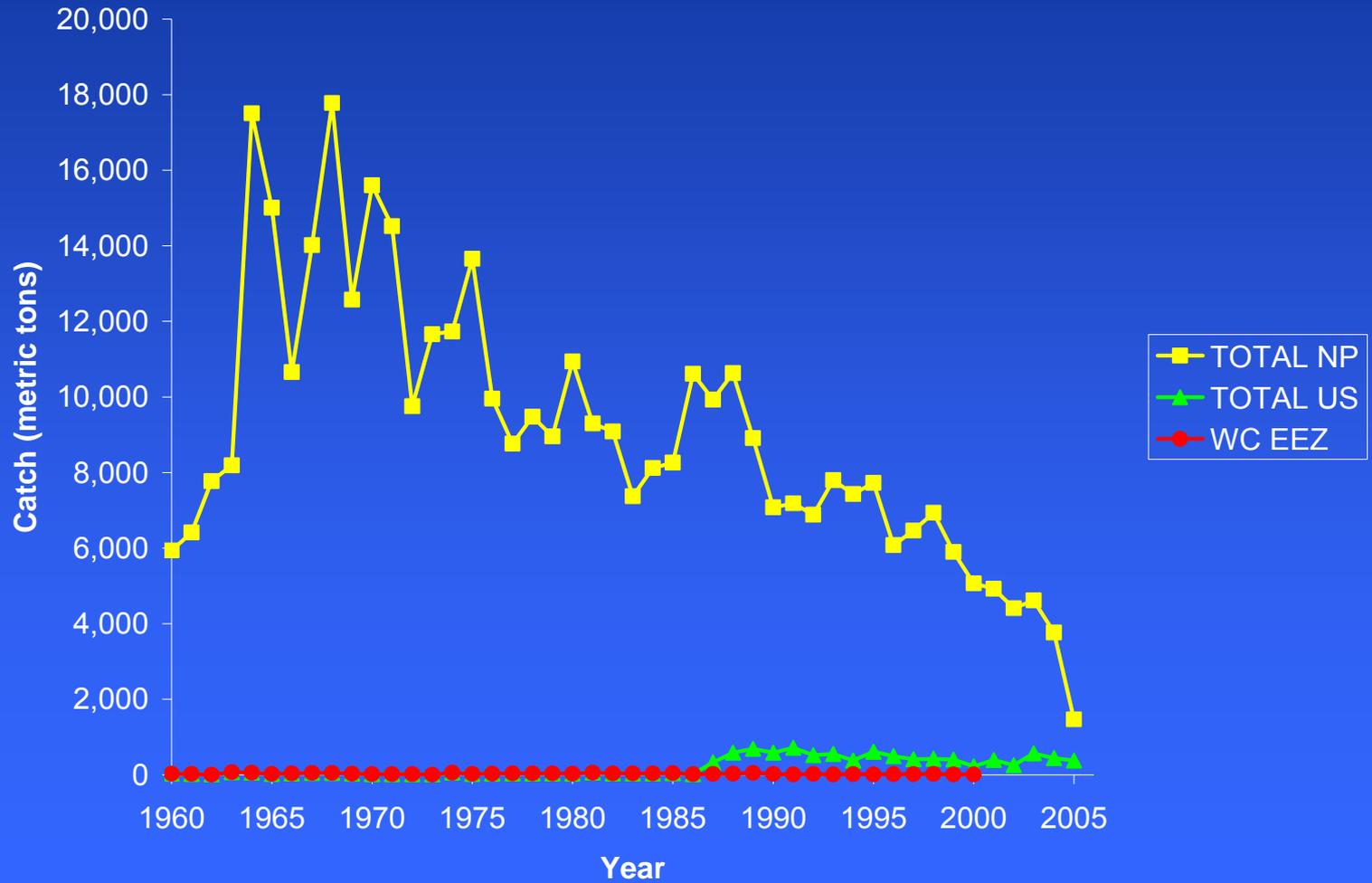
Catch Distribution - Albacore



Striped Marlin Longline Catch (1952-2004)



Catch Distribution – Striped Marlin



Score Card for species stock – March 2008

| Species-Stock | RFMO | Fcurrent | SP ratio | BRP | | Next Full Assessment |
|----------------------------|------------------|----------|----------|---------------------|---------------------|----------------------|
| | | | | Overfishing | Overfished | |
| EPO Bigeye Tuna | IATTC | | 0.20 | Fcurrent/Fmsy* 1.23 | Bcurrent/Bmsy* 1.08 | May '08 |
| NPO Albacore | IATTC & WCPFC | 0.75 | >1.0 | Undecided | Undecided | July '09 |
| NPO Stripped Marlin | IATTC & WCPFC | 0.72 | 0.09 | Undecided | Undecided | July '09 |
| PO Pacific Bluefin Tuna | IATTC & WCPFC | (high) | Unk | Undecided | Undecided | July '08 |
| NPO Swordfish | IATTC & WCPFC | (low) | Unk | Undecided | Undecided | '09 |

Conservation Advice and Action

| Species-Stock | RFMO | Science | Year | Conservation Advice | RFMO Action |
|-------------------------|---------------|---------|------|---------------------|-------------|
| EPO Bigeye Tuna | IATTC | IATTC | 2007 | Reduce F by ~15% | No |
| EPO Yellowfin Tuna | IATTC | IATTC | 2007 | Reduce F by ~3% | No |
| NPO Albacore | IATTC & WCPFC | ISC | 2007 | Reduce F | No* (WCPFC) |
| NPO Striped Marlin | IATTC & WCPFC | ISC | 2007 | Reduce F | No (WCPFC) |
| PO Pacific Bluefin Tuna | IATTC & WCPFC | ISC | 2007 | No increase in F | No (WCPFC) |

SOUTHWEST FISHERIES SCIENCE CENTER RESEARCH REPORT

The Southwest Fisheries Science Center (SWFSC) executed a number of highly migratory species (HMS) research projects in 2007 in collaboration with various domestic and international partners. During the latter half of 2007, projects executed included:

The SWFSC and Southwest Region (SWR) have been working on a project to determine the survivability of blue sharks caught and released alive by the California drift gillnet fishery. Blue sharks are the second greatest bycatch species in number behind the common mola in this fishery. Roughly 35 percent of the blue sharks caught are released alive, but their fate is unknown. During the 2007-08 fishing season, seven sharks in various conditions at time of release were tagged with satellite tags. The tagged fish were tracked and preliminary results indicate that survivability is high. The study is to continue in the 2008-09 season with smaller-sized sharks tagged to determine size variation in survival.

A collaborative project was initiated by the SWFSC, SWR and Pflieger Institute of Environmental Research in spring 2007 to determine the survivability of thresher sharks caught and released alive by recreational fishermen. Anglers often hook the tails of thresher sharks and pull the fish backwards to the boat. When long fight time is involved, the fish can be exhausted by the time it is drawn to the boat for release. Four thresher sharks, hooked by the tail by anglers, were fitted with satellite tags and released. Preliminary results indicated that mortality occurs soon after release; however, the sample size was small. Further tagging is planned for 2008 to increase the sample size, undertake physiological studies to assess capture stress and explore modifications to the gear to reduce tail hooking.

In a continued effort with the American Fishermen's Research Foundation since 2001, the SWFSC scheduled a cruise for tagging of albacore with archival tags off Oregon in October 2007. Owing to poor weather conditions and lack of fish, however, the cruise was cancelled. Another cruise is being planned for 2008 to make up for the lost opportunity and tag about 100 albacore with archival tags.

SWFSC scientists participated in a number of HMS stock assessments during 2007. One set of assessments involved review of work done by the Inter-American Tropical Tuna Commission (IATTC) staff on Eastern Pacific Ocean yellowfin tuna and bigeye tuna. The scientists were part of an international group organized by the IATTC to review their results. The scientists found the assessments to be of high quality with data as recent as 2006. Results indicated that the Eastern Pacific Ocean yellowfin tuna and bigeye tuna stocks were being heavily exploited. Fishing mortality estimates indicated that a reduction by 15 percent for bigeye tuna and by 3 percent for yellowfin tuna would be necessary to maintain the spawning stock biomass at levels producing the long-term average maximum sustainable yields.

Another set of assessments involved collaborations with Interim Scientific Committee (ISC) member scientists in conducting stock assessments for North Pacific albacore, striped marlin and Pacific bluefin tuna. The assessments for albacore and striped marlin were full assessments and

with data as recent as 2004. Results for albacore indicated that recent fishing mortality is high and recent spawning stock biomass is at record high. The ISC advised that fishing mortality be reduced to prevent the spawning stock biomass from falling to historical low levels in the future. Results for striped marlin indicated that recent fishing mortality is high and the spawning stock biomass is at extremely low levels. The ISC advised that fishing mortality be reduced.

The stock assessment for Pacific bluefin tuna was a partial assessment to verify whether the 2001 recruitment was exceptionally large and hence, able to replenish a low spawning stock biomass and support a high fishing mortality. Results indicated that the recruitment was not exceptional, but may be larger than average. Additional years of data will be required to verify if the 2001 was above average. The ISC, however, advised that fishing mortality, F , not be increased above recent levels as a precautionary measure. In the meantime, the ISC will be completing a full stock assessment in 2008.

PFMC
02/25/08

HIGHLY MIGRATORY SPECIES ADVISORY SUBPANEL COMMENTS ON
CALIFORNIA LEGISLATION

It has come to the attention of the Highly Migratory Species Advisory Subpanel (HMSAS) that there is a proposed California State Senate Concurrent Proposed Resolution, No. 85 (Attachment 1), referring to the management of Pacific bluefin tuna and California Assembly Bill No. 2712 (Attachment 2), requiring “a prescribed Forage Species Management Plan...”. Because in both the Resolution and the Assembly Bill, responsibilities of the Council and National Marine Fisheries Service are referenced, the HMSAS suggests that the Council staff review both documents and report back to the Council with recommendations on the issues that affect the Council as soon as possible.

PFMC
3/10/08

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Senate Concurrent Resolution

No. 85

Introduced by Senators Kuehl, Migden, and Wiggins
(Coauthors: Assembly Members DeSaulnier, Feuer, Jones, and Saldana)

February 26, 2008

Senate Concurrent Resolution No. 85—Relative to the Pacific bluefin tuna.

LEGISLATIVE COUNSEL'S DIGEST

SCR 85, as introduced, Kuehl. Pacific bluefin tuna.

This measure would seek the assistance of the Governor, the Department of Fish and Game, and the Ocean Protection Council in initiating, at the highest international level, the cessation of illegal, unreported, and unregulated bluefin tuna overfishing, the creation of marine protected areas, and the imposition and enforcement of catch limits for countries fishing for Pacific bluefin tuna in the Exclusive Economic Zone.

Fiscal committee: yes.

- 1 WHEREAS, The Pacific bluefin tuna is rapidly approaching
- 2 the fate of the collapsed Atlantic bluefin tuna population, which
- 3 has diminished by 90 percent in the Atlantic Ocean and in the
- 4 Mediterranean Sea, due to overfishing and the lack of effective
- 5 conservation and protection efforts; and
- 6 WHEREAS, The coastal economic losses for California as a
- 7 result of the diminishing bluefin tuna population in the Pacific
- 8 Ocean include decreased security of the pelagic (open ocean)
- 9 seafood market and fishing industry, decreased reliability and
- 10 productivity of coastal goods and services, and depletion of jobs
- 11 and income for those communities and stakeholders involved in
- 12 the pelagic seafood fishing industry; and

1 WHEREAS, The commercial catch of Pacific bluefin tuna for
2 California's coast from 1950 to 1998 averaged 11,434,390 pounds
3 per year; however, since 1999, the average catch has spiraled down
4 to an average of 294,544 pounds of tuna per year, a devastating
5 drop; and

6 WHEREAS, Overfishing of the Pacific bluefin tuna, sparked
7 by increasing demand by countries around the world, poses an
8 imminent threat to California's coastal economy that has created
9 a need for global solutions to preserve the population of the species
10 for California; and

11 WHEREAS, The crisis facing the Pacific bluefin tuna population
12 could portend future oceanic ecological losses because of the loss
13 of habitat and the inability of the ocean environment to recover
14 from a biological disruption of such significance that could
15 adversely affect the sustainability of current marine life; and

16 WHEREAS, Without the abundance of the Pacific bluefin tuna
17 serving as predators along California's coastline, an environment
18 is provided for the Humboldt squid (*Dosidicus gigas*) to invade
19 and devour marine life, thereby drastically altering the composition
20 and structure of the pelagic community for the coast of California;
21 and

22 WHEREAS, Tuna swim in enormous schools, often numbering
23 in the thousands, that allow modern fishing nets to scoop up entire
24 schools of bluefin tuna, threatening the survival of the bluefin tuna
25 population and significantly facilitating overfishing of the bluefin
26 tuna; and

27 WHEREAS, The Pacific bluefin tuna is a slow growing,
28 endothermic fish that migrates thousands of miles across the open
29 ocean to feed and spawn; and

30 WHEREAS, The Pacific bluefin tuna is endangered by the
31 fishing fleets of nations that capture the tuna at their spawning
32 areas near Japan, Taiwan, and the Philippines before they have a
33 chance to spawn, which further decimates the Pacific bluefin tuna
34 population; and

35 WHEREAS, The Pacific Fishery Management Council, which
36 manages fisheries that include highly migratory species, like tunas,
37 in the Exclusive Economic Zone, three to 200 miles off the coasts
38 of Washington, Oregon, and California, has difficulty enforcing
39 the federal Magnuson-Stevens Fishery Conservation and

1 Management Act and other laws that affect fisheries management
2 and which dictate catch limits of the Pacific bluefin tuna; and

3 WHEREAS, Research institutions that support and promote
4 bluefin tuna protection through governance stewardship include
5 the Monterey Bay Aquarium, the Monterey Bay Aquarium
6 Research Institute of Science and Engineering, the Blue Oceans
7 Institute, the National Environmental Trust, the World Wildlife
8 Fund, the Tuna Research and Conservation Center, Hopkins Marine
9 Station of Stanford University, the Ocean Conservancy, the
10 California Coastal Commission, the National Oceanic and
11 Atmospheric Administration, the Natural Resources Defense
12 Council, the Food and Agriculture Organization of the United
13 Nations, and the National Marine Fisheries Service; now, therefore,
14 be it

15 *Resolved by the Senate of the State of California, the Assembly*
16 *thereof concurring,* That the state Legislature acknowledges the
17 devastation to the pelagic community off California's coast from
18 the mismanagement of the seriously imperiled Pacific bluefin tuna
19 species, and supports efforts to recover and preserve the population;
20 and be it further

21 *Resolved,* That the Secretary of the Senate transmit copies of
22 this resolution to the Governor, the Department of Fish and Game,
23 and the Ocean Protection Council, to seek their assistance in
24 initiating, at the highest international level, the cessation of illegal,
25 unreported, and unregulated bluefin tuna overfishing, the creation
26 of marine protected areas, and the imposition and enforcement of
27 catch limits for countries fishing for Pacific bluefin tuna in the
28 Exclusive Economic Zone.

CALIFORNIA LEGISLATURE—2007—08 REGULAR SESSION

ASSEMBLY BILL

No. 2712

**Introduced by Assembly Member Plescia
(Principal coauthor: Assembly Member DeSaulnier)**

February 22, 2008

An act to add Chapter 9 (commencing with Section 7095) to Part 1.7 of Division 6 of the Fish and Game Code, relating to marine fisheries.

LEGISLATIVE COUNSEL'S DIGEST

AB 2712, as introduced, Plescia. Marine Life Management Act: marine fisheries: forage species.

(1) Existing law, enacted as part of the Marine Life Management Act, generally establishes a comprehensive plan for the management of marine life resources, and utilizes fishery management plans as the primary basis for managing the state's sport and commercial marine fisheries.

This bill would require the Department of Fish and Game, on or before January 1, 2010, to prepare, and submit to the Fish and Game Commission for adoption, a prescribed Forage Species Management Plan that governs the management of forage species within state waters in accordance with specified policy.

The bill would generally prohibit a state fishery for an actively managed forage species that allows for a geographic expansion of an existing fishery beyond those areas fished between the years 2002 and 2007, inclusive, or allows catch levels for an actively managed forage species to exceed levels caught in 2007. The bill, with specified exceptions, would prohibit the state from authorizing any commercial fishery for a forage species in state waters other than an actively managed forage species for which there is an existing commercial

fishery in state waters for any purpose. The bill would generally require the department to limit commercial fishing for forage species to areas of state waters in which fishing for those species took place between the years 2002 and 2007, and would generally prohibit the department from permitting fishing for forage species other than those managed under a certain federal plan in state waters at levels greater than those species were taken in 2007, until the department has performed prescribed optimum yield calculations.

The bill would require the department, on or before January 1, 2010, to prepare and submit to the Fish and Game Commission a plan for additional research on the ecological role of forage species in California’s coastal and marine ecosystems and a report that analyzes the ecological and economic effects of harvesting forage species.

(2) Existing law generally makes any violation of fish and game laws, or of any rule, regulation, or order made or adopted pursuant to those laws, a crime.

This bill, by imposing new restrictions on forage species fisheries, the violation of which would be a crime, would impose a state-mandated local program by creating new crimes.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes.

State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. Chapter 9 (commencing with Section 7095) is
2 added to Part 1.7 of Division 6 of the Fish and Game Code, to
3 read:

4

5

CHAPTER 9. FORAGE SPECIES

6

7 7095. The Legislature finds and declares all of the following:

8 (a) The long-term health of California’s coastal and marine
9 ecosystems depends upon the health and viability of forage species.

10 (b) Populations of forage species face many threats, including
11 global climate change, ocean acidification, pollution, and industrial

1 aquaculture that uses wild-caught forage fish reduced into fish
2 meal.

3 (c) Maintaining healthy and abundant populations of forage
4 species will help other marine species cope with, and adapt to,
5 environmental changes.

6 (d) There is not sufficient scientific study in place to support
7 the conclusion that industrial fishing for forage species can take
8 place without reducing the resilience of marine ecosystems or
9 populations of marine predators.

10 (e) It is the state's priority to recognize and protect the role of
11 forage species in California's marine ecosystems and to encourage
12 additional scientific research regarding the role of forage species
13 in the ecosystem.

14 (f) The commission can best ensure that forage species will be
15 managed from an ecosystem perspective.

16 7096. (a) It shall be the policy of the commission to maintain
17 healthy populations of forage species while ensuring the integrity
18 of the ecosystem and habitat upon which these species depend by
19 prioritizing the protection of forage species over extractive uses
20 and by moving management of fisheries targeting forage species
21 away from single-species management and toward an ecosystem
22 approach.

23 (b) The objective of this policy shall be to accomplish all of the
24 following:

25 (1) Maintain healthy populations of forage species.

26 (2) Protect the food web, including the functional role of forage
27 species as prey for fish, birds, and marine mammals.

28 (4) Ensure the long-term health and viability of California's
29 coastal and marine ecosystems through the conservation,
30 sustainable use, and protection of forage species for the benefit of
31 all citizens of the state.

32 (4) Encourage scientific research that focuses on the role of
33 forage species in the ecosystem.

34 (5) Require management entities to consider, evaluate, and
35 prioritize the role of forage species in the marine ecosystem and
36 the need to maintain sufficient abundance of forage species for
37 ecosystem needs.

38 (c) On and after January 1, 2009, the commission shall manage
39 forage species in accordance with the requirements of this part.

40 7097. As used in this chapter:

1 (a) "Actively managed forage species" means those forage
2 species, as of January 1, 2008, managed under existing sport or
3 commercial fishery management measures implemented by the
4 commission or department.

5 (b) "Forage species" means small schooling pelagic fish and
6 invertebrates that serve as an important source of food for other
7 fish species, birds, and marine mammals. Forage species include
8 herring, sardine and anchovy (*Clupeiformes*), Pacific sandlance
9 (*Ammodytidae*), smelt (*Osmeridae*), krill (*Euphausiacea*), market
10 squid (*Loligo opalescens*), pelagic juvenile salmonids
11 (*Salmonidae*), pelagic juvenile rockfish (*Sebastes spp.*), jack
12 mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber*
13 *japonicus*), and Pacific saury (*Scomberesocidae*).

14 (c) "Optimum yield" has the same meaning as that term is
15 defined in Section 97.

16 (d) "Plan" means the Forage Species Management Plan adopted
17 in accordance with this chapter.

18 7098. (a) On or before January 1, 2010, the department shall
19 prepare, and submit to the commission for adoption, a Forage
20 Species Management Plan that governs the management of forage
21 species within state waters in accordance with the policy
22 established in this chapter. The plan shall do all of the following:

23 (1) Specify the process and the resources needed to prepare,
24 adopt, and implement existing forage species management for
25 sport and commercial marine fisheries managed by the state.

26 (2) Identify and protect spawning habitat of forage species from
27 any activity that threatens its functions as habitat.

28 (3) Explicitly analyze and consider the role of forage species
29 in the ecosystem by identifying all species in the marine ecosystem
30 that directly or indirectly consume each forage species, and
31 compare ecosystem effects to a baseline in which no forage species
32 were harvested.

33 (4) Identify and describe the locations where fisheries targeting
34 forage species took place between the years 2002 and 2007,
35 inclusive.

36 (5) Include management measures and controls to cap bycatch
37 in fisheries targeting forage species and provide consistent annual
38 reporting, including but not limited to, bycatch estimates.

39 (b) In calculating optimum yield for actively managed forage
40 species, the protection of marine ecosystems shall be prioritized,

1 and optimum yield shall be reduced for ecological factors that shall
2 include ensuring sufficient quantities of forage species to maintain
3 predators and other ecosystem needs, such as community stability
4 and resilience.

5 (c) If there is uncertainty about the status of a stock, the stock
6 is in decline, or the stock condition is poor, the plan shall take a
7 conservative and precautionary management approach.

8 (d) The plan shall be prepared with the advice, assistance, and
9 involvement of participants in the various fisheries and their
10 representatives, marine conservationists, marine scientists, and
11 other interested persons.

12 (e) The department shall review the plan not less than every
13 five years for its effectiveness in achieving ecosystem sustainability
14 goals and for fairness and reasonableness in its interaction with
15 people affected by management in accordance with this chapter.
16 Review shall include the involvement of persons listed in
17 subdivision (d).

18 (f) The plan shall be consistent with Section 7099.

19 (g) The plan modifies, but is not intended to supplant, the
20 existing management plan for market squid as required under
21 Article 9.7 (commencing with Section 8420 of Chapter 2 of Part
22 3.

23 (h) This chapter does not alter Section 8510 regarding the take
24 or landing of krill.

25 7099. There shall be no state fishery for an actively managed
26 forage species that does either of the following:

27 (a) Allows for a geographic expansion of an existing fishery
28 beyond those areas fished between the years 2002 and 2007,
29 inclusive, unless and until scientific information, with peer review
30 by independent experts, indicates fishery activities are not directly
31 or indirectly adversely affecting marine life dependant on forage
32 species in those areas.

33 (b) Allows catch levels for an actively managed forage species
34 to exceed levels caught in 2007 until the department, with peer
35 review by independent experts, determines that increased harvest
36 will not jeopardize ecosystem protection goals and provides
37 optimum yield calculations that explicitly account for the role of
38 targeted forage species in the marine ecosystem and the need to
39 provide a sufficient abundance of forage species for predators and
40 other ecosystem needs.

1 7099.1 Except as specified in Section 7099.2, the state shall
2 not authorize any commercial fishery for a forage species in state
3 waters other than an actively managed forage species for which
4 there is an existing commercial fishery in state waters for any
5 purpose except scientific research pursuant to regulations adopted
6 by the commission.

7 7099.2. (a) Section 7099.1 does not apply to Northern anchovy
8 (*Engraulis mordax*) and jack mackerel (*Trachurus symmetricus*)
9 until January 1, 2010. On and after January 1, 2010, there shall be
10 no direct harvest of those species unless they are managed under
11 the plan.

12 (b) The department shall limit commercial fishing for forage
13 species, other than those specified in subdivision (a), managed
14 under the federal Coastal Pelagic Species Fishery Management
15 Plan (Pacific mackerel and Pacific sardine) to areas of state waters
16 in which fishing for those species took place between the years
17 2002 and 2007, inclusive. The department shall not permit fishing
18 for those species addressed in this subdivision in other areas of
19 state waters until the department determines that scientific
20 information shows conclusively that fishery activities are not
21 directly or indirectly adversely affecting marine life dependent on
22 forage species in those areas.

23 (b) The department shall not permit fishing for forage species
24 other than those specified in subdivision (a), managed under the
25 federal Coastal Pelagic Species Fishery Management Plan in state
26 waters at levels greater than those species were taken in 2007, until
27 the department has performed optimum yield calculations that
28 explicitly account for the role of those forage species in the marine
29 ecosystem and the need to provide a sufficient abundance of forage
30 species for predator species and other ecosystem needs.

31 7099.3. (a) On or before January 1, 2010, the department shall
32 prepare, and submit to the commission both of the following:

33 (1) A plan for additional research on the ecological role of forage
34 species in California's coastal and marine ecosystems. The research
35 plan shall include all of the following:

36 (A) Research on the effects of fisheries removals of forage
37 species on other fish populations, pinnipeds, whales and seabirds.

38 (B) Research on the effects of ocean conditions, including global
39 warming-associated impacts on forage species populations and
40 other associated ecological communities.

1 (C) External peer review.

2 (2) A report that analyzes the ecological and economic effects
3 of harvesting forage species. This analysis shall include external
4 peer review.

5 7099.4. This chapter does not prohibit or otherwise limit the
6 authority of the director or the commission under this part.

7 SEC. 2. No reimbursement is required by this act pursuant to
8 Section 6 of Article XIII B of the California Constitution because
9 the only costs that may be incurred by a local agency or school
10 district will be incurred because this act creates a new crime or
11 infraction, eliminates a crime or infraction, or changes the penalty
12 for a crime or infraction, within the meaning of Section 17556 of
13 the Government Code, or changes the definition of a crime within
14 the meaning of Section 6 of Article XIII B of the California
15 Constitution.

ASSEMBLY BILL

No. 2712

**Introduced by Assembly Member Plescia
(Principal coauthor: Assembly Member DeSaulnier)**

February 22, 2008

YELLOWFIN TUNA OVERFISHING

In 2007, Mr. Rod McInnis, National Marine Fisheries Service (NMFS) Southwest Regional Administrator, notified the Council that the Eastern Pacific Ocean (EPO) yellowfin tuna stock is subject to overfishing, requiring a Council response under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) Section 304(i) applicable to international overfishing. Based on this letter, the Council has until March 30, 2008, to (1) develop recommendations for domestic regulations to address the relative impact of U.S. fishing vessels on the stock, and (2) develop and submit recommendations to the Secretary of State and Congress for international actions to end overfishing and rebuild the stocks, recognizing the relative impact of foreign vessels and U.S. vessels.

The Council discussed this issue at their September 2007 meeting and received reports from the Highly Migratory Species Management Team (HMSMT) and Highly Migratory Species Advisory Subpanel (HMSAS). In their September 2007 report the HMSMT stated that the current domestic regulations are satisfactory and no new regulations are needed to address overfishing by U.S. vessels. They also provided a range of international management measure recommendations.

The Inter-American Tropical Tuna Commission (IATTC) is the principal international body responsible for international management of EPO tuna stocks, including yellowfin. In 2007 the IATTC was unable to adopt a new resolution containing conservation measures for yellowfin and bigeye tunas to replace Resolution C-06-02, which expired at the end of 2007. They are scheduled to meet March 5–7, 2008, in La Jolla, California in order to again try to adopt a resolution with conservation measures. Attachment 1 is a proposal for conservation measures from the IATTC Secretariat for consideration at that meeting.

Attachment 2 is a staff white paper prepared to assist the Council in identifying recommendations they wish to make in order to satisfy the requirements of Section 304(i). With respect to recommendations for international actions, the paper identifies eight potential recommendations for the Council to consider as a basis for formulating their response. These possible recommendations are broader in scope than ideas previously considered by the Council, suggesting broader U.S. policy initiatives to be considered by Congress and the State Department for ending international overfishing.

Based on Council discussion and action at this meeting, letters will be drafted to NMFS, Congress, and the Department of State containing respectively, recommendations for domestic regulations and recommendations for international action.

Council Action:

Adopt final Council recommendations to address yellowfin tuna overfishing per MSA §304(i).

Reference Materials:

1. Agenda Item C.2.a, Attachment 1: Document IATTC-77-04, Proposal for Conservation of Yellowfin and Bigeye Tuna in the Eastern Pacific Ocean.
2. Agenda Item C.2.a, Attachment 2: Potential Pacific Fishery Management Council Response to International Overfishing of Yellowfin Tuna: A Pacific Council Staff White Paper.

Agenda Order:

- a. Agenda Item Overview Kit Dahl
- b. Reports and Comments of Advisory Bodies
- c. Public Comment
- d. **Council Action:** Adopt Final Recommendations to Address Yellowfin Tuna Overfishing

PFMC
02/22/08

INTER-AMERICAN TROPICAL TUNA COMMISSION
COMISIÓN INTERAMERICANA DEL ATÚN TROPICAL

77TH MEETING

LA JOLLA, CALIFORNIA (USA)
5-7 MARCH 2008

DOCUMENT IATTC-77-04

**PROPOSAL FOR CONSERVATION OF YELLOWFIN AND BIGEYE TUNA
IN THE EASTERN PACIFIC OCEAN**

This paper evaluates the effect of a proposal for the conservation of bigeye and yellowfin tuna in the eastern Pacific Ocean (EPO).

For the purse-seine fishery, the proposal consists of two components: a 12-week closure in the entire EPO from 20 June through 11 September, and a closure of the offshore area (Figure 1; proposal D1 in Document [IATTC-76-04](#)) during 12 September through 31 December.

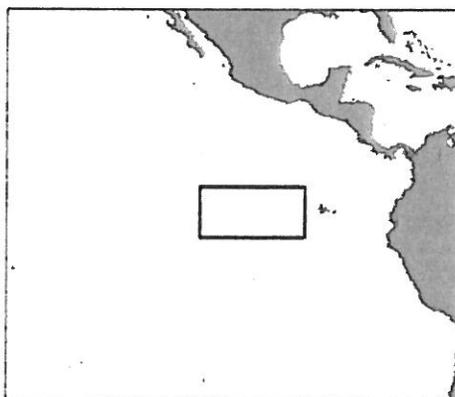


FIGURE 1. Proposed closure area between 94° and 110°W and from 3°N to 5°S.

For the longline fishery:

1. China, Japan, Korea, and Chinese Taipei shall take the measures necessary to ensure that their total annual longline catches of bigeye tuna in the EPO during 2008, 2009, and 2010 do not exceed the following levels:

| | |
|----------------|--------------------|
| China | 2,190 metric tons |
| Japan | 28,283 metric tons |
| Korea | 10,438 metric tons |
| Chinese Taipei | 6,601 metric tons |

2. Other CPCs shall take the measures necessary to ensure that their total annual longline catches of bigeye tuna in the EPO during 2008, 2009, and 2010 do not exceed the greater of 83% of 2001 catches or 500 t.

Method

The method employed to evaluate the proposed conservation measure is focused upon the change expected from the purse-seine fishery. The longline measures are the same as those proposed at the 2007 annual meeting (Document [IATTC 75-07b](#)). The evaluation was made by estimating the reduction in catch due to the closures and comparing this with the desired reduction in fishing mortality (F). The advantage of this approach is that we have fine-scale temporal and spatial information on catch and effort that can be used to provide estimates that are more exact than those based on forward projections, such as

were presented in Document IATTC-76-04.

Reference points for conservation

The target reference point for conservation purposes is the F multiplier obtained in the previous stock assessment for yellowfin and bigeye (IATTC, 2007), which corresponds to the effort reduction necessary to attain F_{MSY} , the fishing mortality that will produce the maximum sustainable yield (MSY). The F multiplier is then adjusted to account for the increase in fishing capacity in 2007. The percentage reduction in fishing mortality needed to achieve the conservation targets were 9% and 21% for yellowfin and bigeye tunas, respectively. When evaluating years prior to the implementation of the six-week closures (1995-2003), an adjustment is needed to produce comparable expected catch reductions in those years. The expected catch reductions were increased to reflect the absence of closures, so that in years prior to 2003 the conservation targets were 20% and 30% for yellowfin and bigeye tunas, respectively.

Results

Table 1 presents the estimated annual proportional reduction in catch of yellowfin, skipjack and bigeye tuna if the proposal is implemented. These values are also plotted in Figure 2. The threshold values to attain for conservation purposes are 20% and 30% for yellowfin and bigeye tunas, respectively. These values should be applied only to the 1995-2003 period.

For yellowfin, the proposal would achieve the conservation goals (reduction in catch $\geq 20\%$) in all years of the the 1995-2003 period. With respect to bigeye, it would achieve the conservation goals (reduction in catch $\geq 30\%$) on average; however, there is inter-annual variability, and in four out of nine years the reduction in catch would be insufficient. The effect of the proposal on skipjack catch would be an average reduction in catch of 23%.

The effect of temporal closures is related to the temporal distribution of catch and effort. Effort is constant throughout most of the year, except for a major reduction around the start and end of the year (Figure 2). There is more variation in catch per day fished (CPDF; Figure 3). Yellowfin catch rates decline gradually throughout the year, while the CPDF of skipjack peaks around the end of the first quarter. The CPDF of both skipjack and bigeye increase at the start and end of the year. This indicates that the reduction in effort seen at the start and the end of the year (Figure 2) is predominantly a reduction in effort targeting yellowfin. The impact of 12- and 6-week temporal closures at different times of the year is shown in Figure 4. In general, temporal closures in the first half of the year are more effective for yellowfin and skipjack, and closures in the middle of the year are more effective for bigeye.

The spatial distribution of the catches of bigeye, yellowfin and skipjack in the EPO during the offshore closure period (12 September–31 December) are shown in Appendix 2.

TABLE 1. Proportional reduction in catch of yellowfin (YFT), bigeye (BET) and skipjack (SKJ) resulting from implementation of the conservation proposal.

| | YFT | SKJ | BET |
|-------------------|------|------|------|
| 1995 | 0.20 | 0.32 | 0.31 |
| 1996 | 0.20 | 0.21 | 0.25 |
| 1997 | 0.20 | 0.26 | 0.31 |
| 1998 | 0.25 | 0.23 | 0.23 |
| 1999 | 0.22 | 0.25 | 0.28 |
| 2000 | 0.21 | 0.17 | 0.30 |
| 2001 | 0.21 | 0.23 | 0.27 |
| 2002 | 0.22 | 0.22 | 0.36 |
| 2003 | 0.22 | 0.26 | 0.33 |
| 2004 | 0.17 | 0.20 | 0.38 |
| 2005 | 0.13 | 0.21 | 0.28 |
| 2006 | 0.17 | 0.23 | 0.27 |
| 2007 | 0.17 | 0.20 | 0.17 |
| 1995-2003 average | 0.20 | 0.23 | 0.29 |

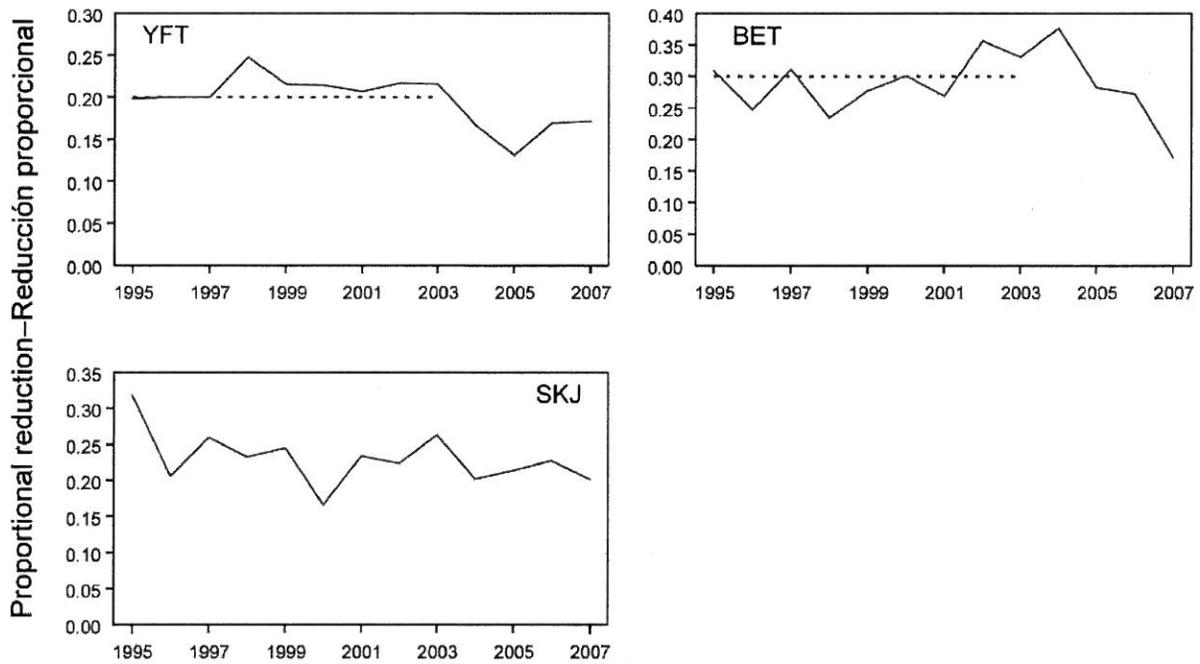


FIGURE 2. Proportional reduction in catch of yellowfin (YFT), bigeye (BET) and skipjack (SKJ) resulting from implementation of the conservation proposal. The dashed lines represent the target reference points for conservation purposes.

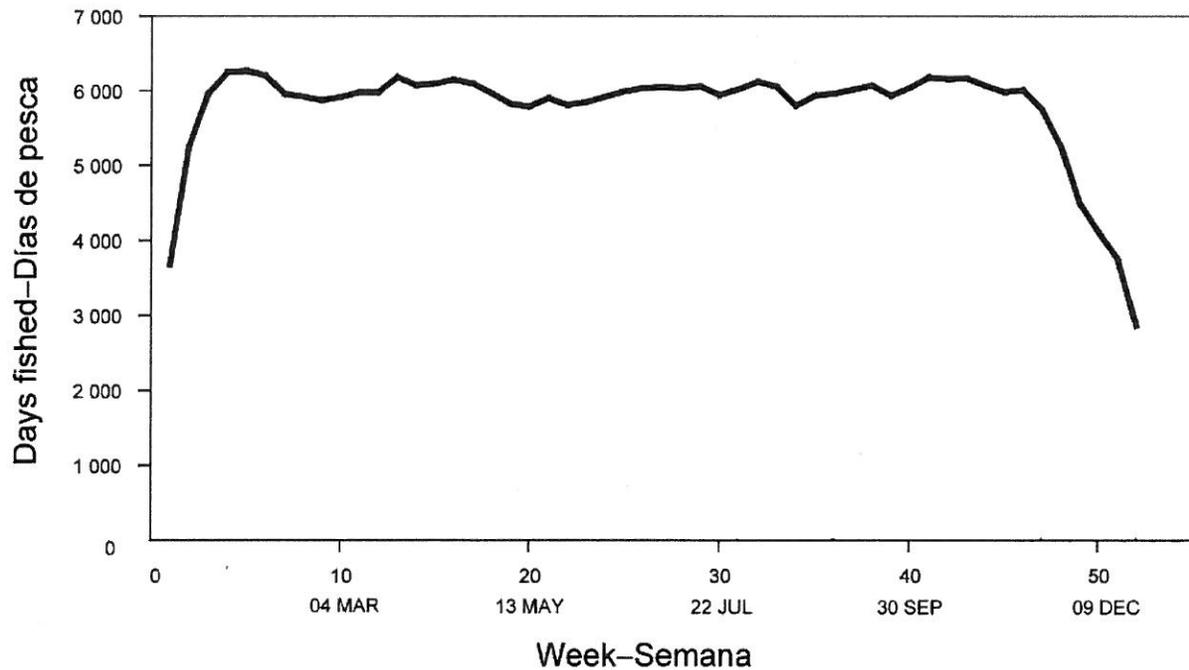


FIGURE 3. Effort, in days fished, in the EPO, summed over the 1995-2003 period. The data used for this figure are not raised to the total effort; therefore, the figure illustrates the trend in effort, not the total effort.

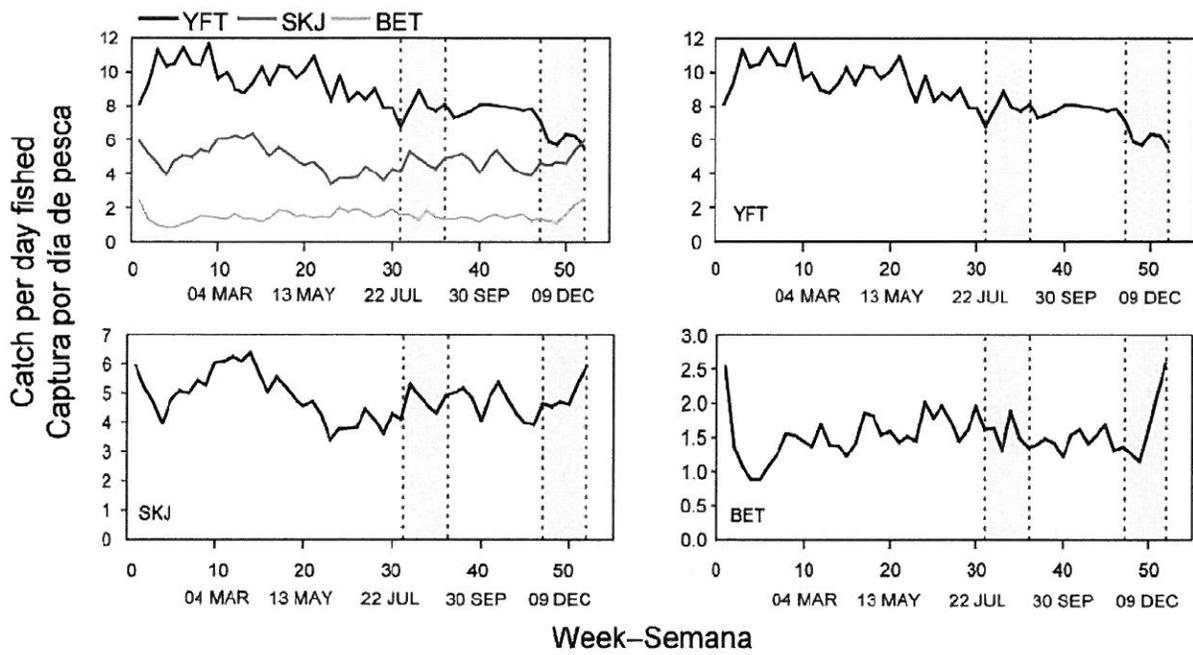


FIGURE 4. Catch per day fished for yellowfin, skipjack, and bigeye in the EPO, calculated using data for 1995-2003. The vertical dashed lines represent the two existing closures.

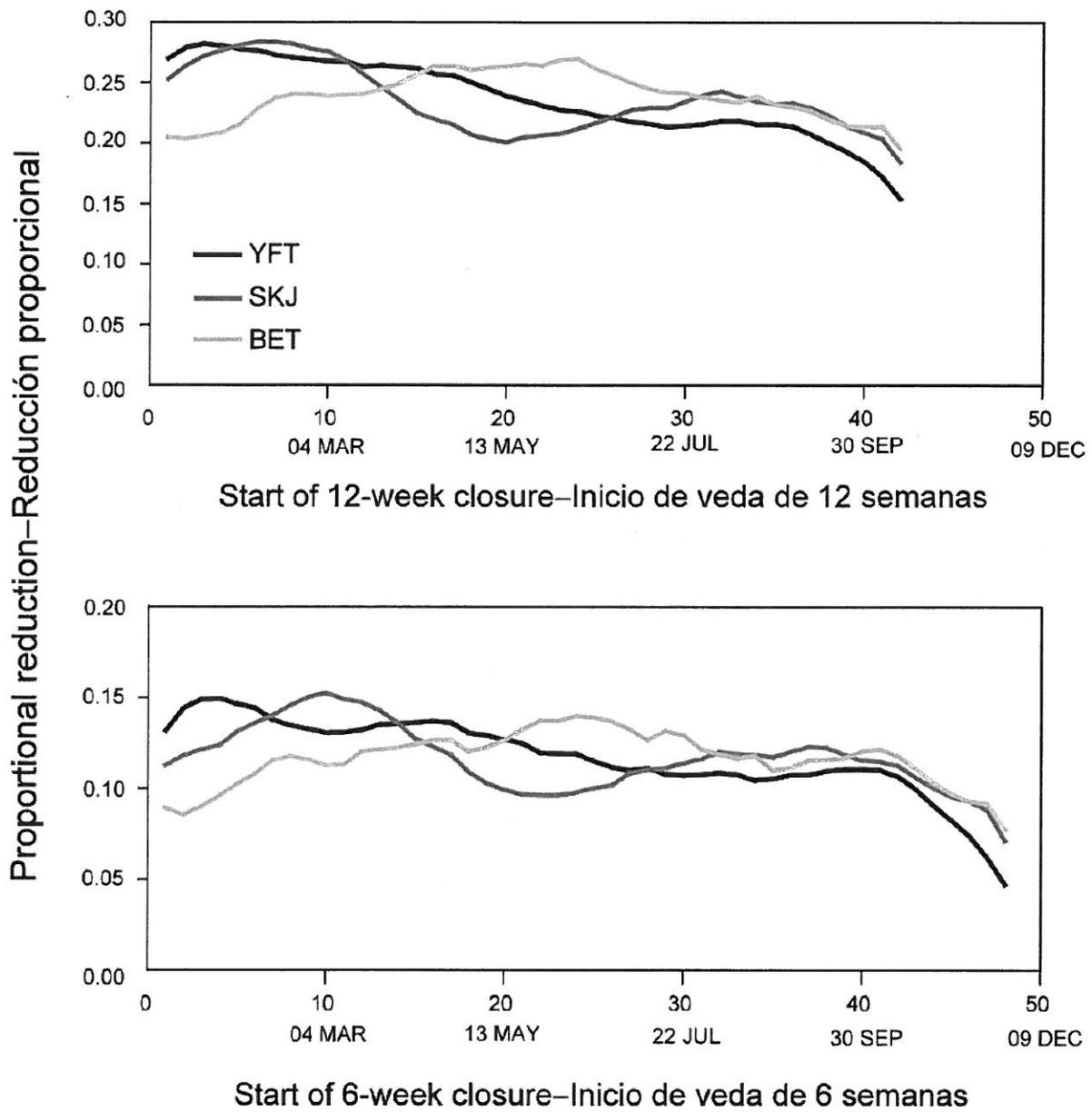


FIGURE 5. Reduction in catch as a proportion of the total catch for 12-week (top) and 6-week (bottom) closures starting at different times of the year. The reductions, based on data from 1995-2003, are calculated independently for each species.

APPENDIX 1

Methods

The closures of the entire EPO are implemented in the analysis by assuming that there will be no purse-seine effort during the closures.

The fishing effort within the offshore closure area (Figure 1) is reallocated to the area outside this area, but south of 10°N. The restriction to south of 10°N corresponds roughly to the assumption that those vessels will not switch to dolphin-associated fishing in the north.

The reduced total annual catch in the EPO after implementation of the the proposal is:

$$C_R = C_T - \sum_{i=1 \text{ to } 3} C_i + CPUE_{outside3} E_3,$$

in which:

C_R is the reduced total catch in the EPO after implementation of the proposal;

C_T is the total catch in the EPO before implementation of the proposal;

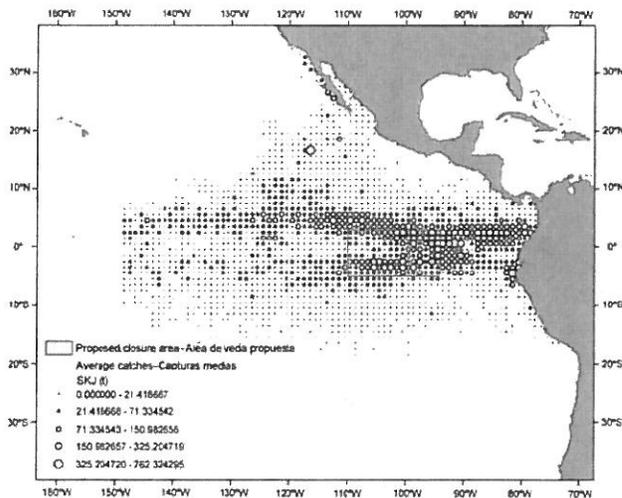
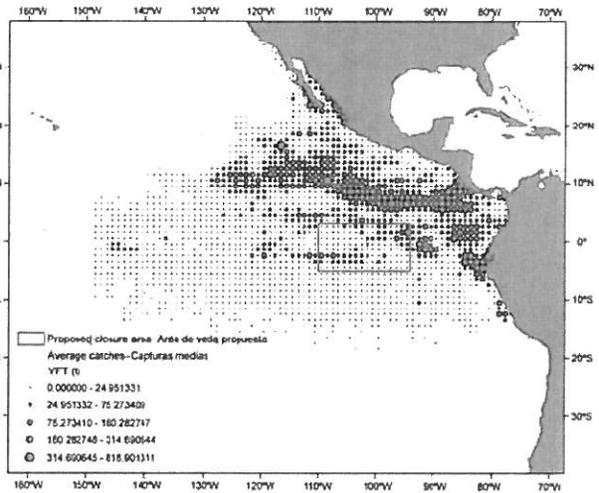
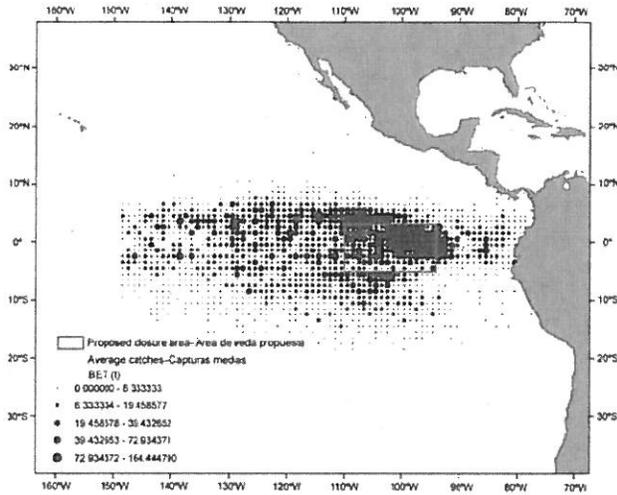
C_i is the catch inside the closed area during closure i ;

E_3 is the effort inside the offshore area during the offshore closure;

$CPUE_{outside3}$ is the catch per unit of effort outside the offshore closure area during the closure period, excluding data from north of 10°N.

APPENDIX 2.

Distribution of the catches of bigeye, yellowfin and skipjack in the EPO during the offshore closure period (12 September–31 December), 1995-2006.



Potential Pacific Fishery Management Council Response to International Overfishing of Yellowfin Tuna

Pursuant to Section 304(i) of the Magnuson-Stevens Fishery Conservation and Management Act (as Amended)

A PFMC Staff White Paper

Summary

This white paper covers the following topics:

- An **introduction** describing why and how the Council must respond to international overfishing of yellowfin tuna.
- A description of **current stock status**, which summarizes information contained in the most recent yellowfin tuna stock assessment.
- A description of **U.S. catches of yellowfin tuna** to provide perspective on the U.S. contribution to yellowfin tuna overfishing.
- Information to help the Council arrive at **recommendations for domestic regulations** in response to yellowfin tuna overfishing.
- A discussion of eight **recommendations for Council consideration** with respect to international actions that will end yellowfin tuna overfishing.

Introduction

In a letter dated October 25, 2006, the National Marine Fisheries Service (NMFS) Southwest Regional Administrator notified the Pacific Fishery Management Council (Council) that overfishing is occurring on the Eastern Pacific Ocean (EPO) yellowfin tuna stock.¹ NMFS made this determination pursuant to Section 304(e)(2) (16 U.S.C. 1854(e)) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), which states that within one year of such a notification “the appropriate Council ... shall prepare a fishery management plan, plan amendment, or proposed regulations for the fishery to which the identification or notice applies...” Under the current law, the Council would have been required to amend the Fishery Management Plan for U.S. West Coast Fisheries for Highly Migratory Species (HMS FMP) and/or propose regulations to address overfishing of EPO yellowfin tuna. However, the MSA was amended by P.L. 109-479 (the Magnuson-Stevens Fishery Conservation and Reauthorization Act of 2006), which became effective January 12, 2007; it added Section 304(i)² to the MSA applicable to “a fishery that the Secretary determines is overfished or approaching a condition of being overfished due to excessive international fishing pressure, and for which there are no management measures to end overfishing under an international agreement to which the United States is a party.”

A second letter from the NMFS Southwest Regional Administrator, dated March 30, 2007, said this section is applicable to the EPO yellowfin tuna stock. According to Section 304(i) within one year the Council must: (1) develop recommendations for domestic regulations to address the relative impact of fishing vessels of the United States on the stock and, if developed by a Council, the Council shall submit such recommendations to the Secretary of Commerce (or in effect, NMFS); and (2) develop and submit recommendations to the Secretary of State, and to Congress, for international actions that will end

¹ For the purposes of fishery management the EPO refers to waters east of 150° W longitude.

² Note that P.L. 109-479 erroneously added two subsections to the MSA as 304(i), the other describing a new environmental review process.

overfishing in the fishery and rebuild the affected stocks, taking into account the relative impact of vessels of other nations and vessels of the United States on the relevant stock.

Based on the date of the second notification, the Council must submit such recommendations on or before March 30, 2008.

The Council is scheduled to take final action to adopt recommendations to satisfy the requirements of Section 304(i) on March 10, 2008. This paper provides background information on current stock status and U.S. catches of yellowfin tuna. It also outlines a variety of recommendations the Council could adopt as part of their action. These recommendations are consistent with recommendations previously made by the Council in a letter to the U.S. delegation to the Inter-American Tropical Tuna Commission (IATTC) and those made by the Highly Migratory Species Management Team in their report at the September 2007 Council meeting (Agenda Item F.3.b). However, the range of recommendations for international action is somewhat broader than those previous sets of recommendations. After Council action, but before March 30, 2008, separate letters need to be sent to NMFS (on behalf of the Secretary of Commerce with recommendations for domestic actions) and to Congress and the Department of State (for international actions). These letters would satisfy the obligations described in Section 304(i).

Current Stock Status

The IATTC scientific staff produces a stock assessment report for EPO yellowfin tuna on an annual basis in advance of its annual meeting in June. The October 25, 2006, letter notifying the Council that overfishing is occurring references *Status of Yellowfin Tuna in the Eastern Pacific Ocean in 2005 and Outlook for 2006* (Hoyle and Maunder 2006), which was the basis for a summary of the HMS FMP managed yellowfin tuna's stock status reported in the Council's 2006 HMS SAFE. A subsequent stock assessment (Maunder 2007) reaches similar conclusions. Some key points of the 2007 IATTC assessment, relative to management recommendations, are summarized here.³

Stock status may be evaluated in terms of stock-specific reference points related to the level of fishing effort imposed on the stock and the resulting stock size, or biomass. National Standard Guidelines pursuant to the MSA identify two thresholds relevant to such a determination, maximum fishing mortality threshold (MFMT) and minimum stock size threshold (MSST), which should be specified in the relevant FMP, and are then used as the basis for a Secretarial determination according to MSA Section 304(e). A stock may be subject to overfishing, indicating that the fishing mortality rate has exceeded the identified MFMT; be overfished, meaning the stock biomass has fallen below the MSST, or subject to both conditions. The aforementioned determination letter notes that the HMS FMP establishes the overfishing (fishing mortality) threshold as a rate for yellowfin tuna that exceeds the rate expected to produce the maximum sustainable yield (MSY). With respect to stock size, the HMS FMP establishes a default threshold that biomass should be at least half the biomass at MSY (B_{MSY}). If stock size falls below this level, then the stock would be considered overfished. The HMS FMP does not identify stock-specific reference points and the need to establish them has been identified as a high priority action. According to the most recent stock assessment, the IATTC has not yet identified a single reference point for management of yellowfin tuna that would formally guide decision making.⁴ However, a phase diagram, or "Kobe plot," is a common way of graphically summarizing stock status. The vertical axis represents

³ The Council's Scientific and Statistic Committee reviewed this stock assessment in September 2007.

⁴ The stock assessment identified possible candidates for reference points as: (1) S_{AMS_Y} , the spawning biomass corresponding to the average MSY (AMS_Y is defined as the maximum long-term yield that can be achieved under average conditions using the current, age-specific selectivity pattern of all fisheries combined); (2) F_{AMS_Y} , the fishing mortality corresponding to the AMS_Y; (3) S_{min} , the minimum spawning biomass seen in the modeling period.

the ratio of recent fishing mortality (F_{recent}) to the rate expected to produce MSY (F_{MSY}). The horizontal axis represents the ratio of current biomass (B_{recent}) to B_{MSY} . The plot is divided into four panels, indicating stock status, from not overfished and not experiencing overfishing in the lower right to overfished and experiencing overfishing in the upper left. (This assumes that the stock size threshold is B_{MSY} rather than one-half B_{MSY} .) Figure 1 shows a phase diagram for yellowfin tuna reproduced from the 2007 stock assessment report (Maunder 2007). Each small dot on the irregular line in the graph represents a 3-year running average for fishing mortality and biomass. The most recent point, the large representing 2006, indicates that both thresholds are exceeded. The horizontal and vertical lines emanating from the 2006 point represent the 95 percent confidence interval (a measure of uncertainty about the estimated value), showing that stock status could actually fall within one of the other stock status panels.

Although the phase diagram in Figure 1 suggests that EPO yellowfin $F_{\text{recent}}/F_{\text{MSY}}$ and $B_{\text{recent}}/B_{\text{MSY}}$ are near 1 (the implicit target in the diagram), it is important to bear in mind that without a reduction in fishing effort stock size could decline over time. Stock size depends on recruitment of new members into the fishable population (called recruits). A population that is more productive, with more recruits entering the fishable population, can sustain higher fishing mortality. The stock assessment posits two or possibly three recruitment regimes (1975–82, 1983–2001, and 2002–06) corresponding to low, high, and intermediate levels of recruitment and presumably resulting from varying environmental conditions. Although strong recruitment occurred from 1998 to 2001, it has subsequently declined and the large cohorts from the late '90s have moved through the population. The stock assessment predicts that “[u]nder 2006 levels of effort (2004 for the longline fisheries) the biomass is predicted to increase slightly and then decrease to around the current level...”

Another important factor is the effect of the selectivity patterns of different fisheries targeting yellowfin tuna on yield. Different fisheries catch (or select for) fish of different average size. Catching smaller fish removes more fish, in terms of numbers, from the population per unit weight caught, affecting both present and future biomass as these fish would otherwise grow to a larger size and contribute relatively more to biomass. This is partially offset by the relatively higher natural mortality rate of younger fish; thus, if those fish are not removed by fishing then a larger number are likely to die instead from natural mortality and not contribute to overall future biomass. Ideally (in the absence of technological constraints) all fish would be caught at an age that balances growth and natural mortality to produce the highest yield (this is called the critical weight).

For the purposes of the assessment, the yellowfin fishery is subdivided into 16 segments, or fisheries, defined by gear type and geographic extent.⁵ In relation to differences in the size of fish caught in different fisheries, the important distinction is between longline fisheries and purse seine fisheries setting on tuna associated with dolphins, free-swimming schools, and those associated with floating objects or fish aggregating devices (FADs).⁶ The stock assessment summarizes the selectivity pattern of the fisheries as follows:

The average weights of yellowfin taken from the fishery have been fairly consistent over time, but vary substantially among the different fisheries. In general, the floating-object, unassociated, and pole-and-line fisheries capture younger, smaller yellowfin than do the dolphin-associated and longline fisheries. The longline fisheries and the dolphin-associated fishery in the southern region

⁵ Four of these segments are used in the model to account for discards of small fish by purse seine vessels and are not fisheries in the conventional sense.

⁶ Although fishers have long observed and exploited the tendency of tropical tunas to aggregate around floating objects in the open ocean (such as logs), the past few decades has seen increasing use of artificial devices—FADs—deployed by purse seine vessels to effectively increase catch per unit of effort.

capture older, larger yellowfin than do the northern and coastal dolphin-associated fisheries. (Maunder 2007, p. 4)

Overall, the dolphin-associated fishery catches the largest proportion by weight and thus has the largest impact on the population, in terms of total biomass removed, but, as the stock assessment points out, it has the least impact per unit of weight caught. Across all fisheries, the current average weight of yellowfin in the catch is much less than the critical weight. Yield could be increased if relatively more fishing effort was deployed by fisheries that catch larger fish on average. For example, the highest yields could be obtained if all fishing was conducted by longline but it is not technically or economically feasible for the full quantity at MSY to be caught by this gear alone. Encouraging relatively more effort in the dolphin-associated fishery, or discouraging fishing effort in the FAD-associated fishery, could be a more feasible policy objective to address overfishing and increase the yield.

The “base case” or default assumption in the stock assessment is that there is no relation between the size of the spawning population and the resulting number of fish recruited to the population. Such an assumption is often based on the lack of such a correlation between spawning stock size and recruitment in the historical data. Although counterintuitive, the lack of such a relationship can have a biological basis across a range of population sizes above some very low level. Since individual fish produce a large number of eggs, even with a reduction in the number of spawning fish the absolute number of eggs produced by the population will still be very large. Environmental conditions and the phenomenon known as compensation—whereby competition for resources is less at lower population densities—can overwhelm any effect resulting from changes in spawning stock size, making it impossible to discern a stock recruitment relationship. As a sensitivity analysis, the stock assessment also models the population under the assumption that there is a stock recruitment relationship and finds that this assumption produces more pessimistic results. From a policy perspective this suggests a higher level of precaution since the base case assumption is more optimistic.

Table 1 reproduces several stock status metrics provided in the assessment (as Table 5.1) for both the base case and stock recruitment relationship scenarios.

U.S. Catches of EPO Yellowfin Tuna

The language in Section 304(i) references the relative impact of U.S. vessels, and the relation to the relative impact of vessels of other nations when recommending both domestic regulations and international conservation and management measures. The IATTC, the principal regional fishery management organization in the EPO, is responsible for the conservation and management of fisheries for tunas and other species taken by tuna-fishing vessels in the area east of 150° W longitude between 40° N and 40° S latitudes. It is the principal repository of data on catches of tuna and tuna-like species in this region. Historically, the U.S. was a major fishing nation in the region, with purse seine vessels accounting for the overwhelming proportion of overall catch. Figure 2 shows the historical trend of EPO yellowfin catch by the U.S. and other nations as reported to the IATTC. At the beginning of this time series, U.S. catch accounted for 90 percent of the total. Since then the U.S. share has dramatically declined, with a precipitous fall in the late 1980s and early 90s in the amount of catch. This was principally due to the relative cost disadvantage of west coast based vessels and associated canneries in comparison to foreign competitors. Measures to reduce incidental mortality of dolphins may have also had an effect, both by increasing cost and prompting vessels to move into the Western Pacific and make deliveries elsewhere, such as Pago Pago in American Samoa. In the last few years the U.S. share has comprised 1 percent or less of the total. For example, in 2004, the last year for which complete data for all gear types and flags are available, the U.S. accounted for 3,698 mt out of a total of 291,471 mt, or 1.3 percent of the total.

Furthermore, with respect to domestic fisheries regulation, the Council may only make recommendations relative to fisheries and vessels that make landings on the U.S. west coast and are thus subject to the Council's HMS FMP. Although historically, because of the existence of canneries in Southern California, a large proportion of U.S. EPO catch was landed on the west coast, today no long distance tuna purse seiners make such landings. Figure 3 compares historical total commercial U.S. EPO yellowfin catch with landings on the west coast. Table 2 shows the percent value of the west coast share; it can be seen that after 1983 the proportion remained relatively constant, at about a quarter, albeit of a diminishing total. West coast commercial yellowfin landings are principally made by a small coastal purse seine fleet based in Southern California. These vessels usually target coastal pelagic species such as Pacific mackerel, Pacific sardine, and market squid. However, in years when tropical tunas are more abundant in the Southern California Bight they may advantageously target these species, including yellowfin tuna. These catches typically occur in the warmer months from May to October.

Today, recreational catch of yellowfin tuna is an important component of west coast landings. Anglers fishing on boats for hire, known as Commercial Passenger Fishing Vessels (CPFVs, also referred to as charter boats or party boats) and anglers fishing on private vessels originating from Southern California ports account for this catch. Although the IATTC catch records include an estimate of U.S. west coast recreational catch in metric tons, which is a component of the total U.S. yellowfin catch referenced above, data collected by west coast states and submitted to the Recreational Fisheries Information Network (RecFIN) are used because the source of that data is better documented. The Southern California CPFV fleet fishes both in the U.S. west coast Exclusive Economic Zone (EEZ) and adjacent Mexican waters. Although catch from Mexican waters is landed in west coast ports, for the purpose of considering recommendations for domestic regulations this catch should not be considered because Mexico has adopted management and conservation regulations that apply to these U.S. flag vessels when fishing in Mexican waters.

RecFIN reports HMS recreational catch in numbers of fish. An average weight of 5.4 kg has been used to convert these numbers into a yellowfin tuna weight value in order to make the comparison with commercial catches.⁷ Table 3 presents the counts of yellowfin tunas caught in U.S. waters reported in the 2007 HMS SAFE (PFMC 2007) for private recreational and CPFV fleets along with the converted weight and compares this information to west coast commercial landings. Because private vessel catch estimates are more uncertain before 2004, when a new recreational sampling program was implemented in California, Table 3 only reports data from 2004 onward. Furthermore, recreational catch data provided by the IATTC, which is for the CPFV fleet only, does not correspond to the CPFV catch estimates in Table 3. For these reasons, recreational catch could account for a smaller or larger proportion of west coast catches, but it still represents a tiny fraction of total EPO yellowfin catch.

Recommendations for Domestic Regulations

The HMS FMP recognizes that unilateral action may be legally required but that measures, "such as a reduction in the U.S. west coast harvest or effort, would not likely have a significant biological effect on the stock." As discussed above, both total U.S. and west coast commercial landings of EPO yellowfin have declined substantially in the last two decades. West coast catches comprise a tiny fraction of total EPO catches—averaging two-tenths of a percent annually from 2002 to 2006. Because west coast fisheries are a negligible contributor to total fishing effort on the stock, further curtailment of these catches would have no practical effect on ending overfishing. In addition, because the language in

⁷ The 5.4 kg value was used in the HMS SAFE, Table 5-2, to estimate U.S. west coast catches by weight from recreational fisheries.

Section 304(i)(2)(A) states that regulations should address the relative impact of U.S. fishing vessels, the absolute value of any needed reduction in catch would be a very small number. The IATTC Secretariat recommends an overall reduction in yellowfin catches ≥ 20 percent (IATTC 2008). Averaging 2004-06 U.S. west coast catches (see Table3) such a reduction equates to 2,247 fish or 12 mt for the recreational fishery and 57 mt for commercial catches. Developing management measures that could effectively achieve this reduction and not be an undue regulatory burden (having a significant adverse socioeconomic impact and inadvertently reducing catch more than necessary, for example) would be difficult.

Currently, California state regulations authorize a recreational daily bag limit of 10 fish yellowfin tuna per day with a multi-trip permit option that allows for up to three daily bag limits to be possessed. There are no state or Federal regulations specifically limiting yellowfin tuna catch by commercial vessels. This reflects the modest size of west coast yellowfin catch in comparison to both overall EPO catch and stock size. However, should conditions change the framework established by the HMS FMP allows for a relatively quick response. The HMS FMP management framework allows the Council to periodically develop management measures that can be implemented through Federal rule making without the need to amend the FMP. This can allow more timely response to emerging issues, for example if the west coast fishery for yellowfin tuna expanded rapidly.

The FMP specifies a two-year cycle for the establishment of such regulations. Once Council decision making is completed, over the course of three meetings, the resulting recommendation is then implemented by NMFS for at least two years or until changed. The first biennial cycle for which the Council made such a recommendation is for the period April 2007 to March 2009 and offers an example of how this framework is used to respond to management concerns. The Council recommended, and NMFS implemented, a Federal daily bag limit for albacore and bluefin tuna, which are the main tuna species targeted by west coast anglers. This species-specific bag limit represents a response to resolutions adopted by both the IATTC and the Western and Central Pacific Fisheries Commission (WCPFC) calling for no increase of fishing effort on the stock. Although a similar measure is not being recommended for yellowfin tuna at this time (because it is a less important recreational species, in terms of the number caught) this example demonstrates that management measures can be implemented within a year of first being considered. The framework also allows the Council to establish catch limits for commercial fisheries in the form of a quota or harvest guideline.

The U.S. west coast has a robust fisheries data collection program for commercial fisheries where landings are documented and sampled and entered into a comprehensive data system (the Pacific Fisheries Information Network, PacFIN). CPFVs maintain logbooks to document catches. As noted above, data from private recreational vessels are more uncertain, but recent sampling improvements have been made through the implementation of the California Recreational Fisheries Survey. These data systems would alert fishery managers to changes in catch trends and allow initiation of the kinds of responses outlined here.

Section 304(i)(2) directs Councils to develop regulations to address the relative impact of U.S. fishing vessels. As discussed above, the impact on the stock is negligible and the current management framework allows for a timely response in the event that conditions in the fishery change such that additional measures are warranted.

Recommendations for International Actions

U.S. Trade

As noted in the section above, U.S. catch of yellowfin tuna—and tropical tunas generally—landed on the west coast has declined substantially over the past 20 years along with processing capacity. The minor role the U.S. now plays in harvesting tropical tunas in the EPO likely diminishes our influence in the IATTC. On the other hand, the U.S. continues to be a major importer of processed tuna, including yellowfin tuna. U.S. imports of all tuna species in all product forms accounts for about 6 percent of world catch over the past few years while imports of yellowfin tuna in frozen or fresh product forms accounts for about 1.5 percent of world catch (see Table 4).⁸ Canned tuna consistently ranks first or second in U.S. per capita consumption of seafood by type (National Fisheries Institute, www.aboutseafood.com/media/top_10.cfm). The U.S. also continues to be a major producer of processed tuna products. On average, 1996–2005, the U.S. accounted for 18 percent of global production (see Figure 4), although the U.S. share has been steadily declining over time, from 24.5 percent to 13.1 percent during that period (see Figure 5). In the larger context of trade, then, the U.S. remains a major player. This takes on added significance because the formula for calculating national contributions to the IATTC’s budget includes both catch and consumption. For this reason the U.S. continues to be a major contributor to the organization’s budget. Figure 6 shows imports of all tunas and yellowfin tuna from the 10 highest ranked source countries (the remainder summed under “other”). In terms of imports from IATTC member countries, for all tunas Ecuador falls within the top 10 while yellowfin tuna imports additionally include Panama, Mexico, and Costa Rica.

IATTC Conservation Measures for Yellowfin Tuna

The IATTC works by consensus; resolutions thus adopted impose an obligation on member states to implement consistent domestic regulations applicable to their national fleets. In response to indications of overfishing on both yellowfin and bigeye tuna,⁹ the IATTC has in recent years adopted conservation resolutions for these stocks. The most recent such resolution, [C-06-02](#), was adopted in 2006, applicable to 2007 only, and replaced a multi-year resolution (2004–06) adopted in 2004. It contains measures similar to the one it replaced. The main provisions in C-06-02 include a 41-day closure of the EPO purse seine fishery and national quotas for catches of bigeye tuna by longline vessels. (For the purse seine closure, countries chose between two periods defined by specific dates in order to reflect the different seasonal patterns of fisheries in the northern and southern hemispheres.) Subsequent evaluation of the implementation and effectiveness of this proposal by IATTC staff indicated that the measures were insufficient to end overfishing. The IATTC held three meetings in 2007 in order to adopt a conservation proposal to succeed C-06-02 for 2008 and beyond. An ad hoc meeting was held February 5–6 to consider management options for bigeye and yellowfin tuna conservation measures. No agreement could be reached on conservation proposals although additional scientific work evaluating various management concepts was agreed to. ([Document IATTC-75-05a](#), prepared by IATTC staff, responded to this request.) The 75th regular meeting of the IATTC was held in Cancun, Mexico, June 25–29. Three conservation proposals—from the U.S., Ecuador and Spain, and Mexico—were tabled at this meeting but none were adopted. The IATTC met again (the 76th meeting), October 22–24, in an attempt to reach consensus on a resolution based on the proposals put forward at the June meeting. Again, no agreement could be reached. Thus, as of the beginning of 2008 the current tuna conservation resolution expired without any

⁸ Globally yellowfin is a major constituent of canned tuna. However, the import statistics used above don’t distinguish by species for various packaged product forms such as canned or foil pouch packaged tuna.

⁹ A Secretarial determination that overfishing is occurring on bigeye tuna has also been made. The Council was informed December 15, 2004. Under provisions then applicable the Council amended the HMS FMP to address overfishing.

succeeding resolution coming into force. In response the IATTC has scheduled another meeting, March 5–7, 2008, in addition to the regular meeting to be held in June, in the hope of adopting conservation measures as soon as possible. In the absence of an IATTC agreement or unilateral actions by member countries, no measures to prevent overfishing are in place.

Recommendations for Pacific Council Consideration

The Council previously considered its response to overfishing of yellowfin tuna at its November 2006, April 2007, and September 2007 meetings. Based on advice from its advisory committees (the Highly Migratory Species Management Team and Highly Migratory Species Advisory Subpanel) the Council has discussed and evaluated specific conservation proposals. In advance of the June 2007 IATTC meeting, the Council provided recommendations to the U.S. delegation to the IATTC on conservation measures that should be considered for adoption. However, given the fluidity of the situation—the inability of the IATTC to reach agreement as of this writing¹⁰ on new conservation measures, and the fact that whatever is adopted is the product of negotiation between the parties—it does not seem very useful for the Council to identify specific conservation measures. A variety of measures have been proposed (and adopted previously) to address yellowfin overfishing and the IATTC staff has proven fully capable of providing advice on the utility of specific proposals. Thus both the problem and a range of potential solutions are well understood and the difficulty rests with reaching consensus on an efficacious set of measures.

Given these circumstances, this paper describes a broader range of potential Council recommendations than previously discussed by the Council, which are also more general in nature, suggesting areas where U.S. policy could focus. These recommendations take into account potential legislative remedies and the role of Congressional oversight since Section 304(i)(2)(B) directs them to Congress as well as the Department of State. Eight potential recommendations are outlined below. They are more or less ordered from very broad national policy goals to more specific proposals affecting the IATTC and the Council's role in international HMS management. The eight potential recommendations are:

1. Raise the visibility of tuna conservation in the U.S. foreign policy agenda.
2. Consider the role of trade and aid measures to exert pressure on fishing nations.
3. Recognize geographic, stock, and fishery linkages and develop strategic policies accordingly.
4. Ratify the Antigua Convention.
5. Support an external performance review to include an evaluation of decision-making procedures.
6. Vigorously support reducing the capacity of the purse seine fleet.
7. Promote conservation proposals based on national accountability.
8. Encourage and facilitate participation by U.S. Regional Fishery Management Councils in international fishery forums.

These recommendations have been drafted for discussion purposes; the Council may use them as a starting point for their decision making, selecting and modifying the concepts presented here as they deem appropriate. They are also intended to spark comment from the U.S. tuna industry and other stakeholders that would be affected by international actions. It is important to note that although the discussion of recommendations below contains declarative statements, such as “the U.S. should...,” this language is not meant to pre-judge what the Council may finally recommend. The language merely serves as a model of how recommendations could be framed. The Council can provide guidance on how best to set the tone of any final recommendations in terms of what phrasing should be used.

¹⁰ The IATTC is scheduled to meet the week before the Council takes final action to adopt recommendations, so the situation may have changed by that time.

Raise the visibility of tuna conservation in the U.S. foreign policy agenda

Current overfishing of yellowfin tuna is but one part of a larger problem of over-exploitation by various fisheries targeting highly migratory species stocks not under the jurisdiction of any one nation. In the Pacific both the EPO and Western and Central Pacific (WCPO) yellowfin tuna stocks have been designated subject to overfishing by the Secretary of Commerce. Bigeye tuna is considered a single Pacific stock and has also been declared subject to overfishing by the Secretary. North Pacific albacore tuna is likely subject to overfishing although no Secretarial declaration has been made, principally because scientific consensus has not been reached on what reference points should be used in determining stock status. Globally, according to the FAO (Majkowski 2007), about a quarter, 5 to 6 out of 23, of HMS stocks are considered either overexploited, meaning subject to fishing above a level which is sustainable, or depleted, meaning that catches are well below the historical maximum irrespective of fishing effort exerted. Global demand for tuna is unlikely to abate, driving further high levels of exploitation. It also appears that the IATTC is not alone in having difficulty adopting adequate conservation measures in the face of such pressure on the stocks. At its December 2007 meeting the WCPFC was unable to reach agreement on a stronger conservation and management measure for bigeye and yellowfin tunas in the WCPO to succeed the current, inadequate conservation and management measure.¹¹ Likewise, in the Atlantic, bluefin tuna, managed under the auspices of the International Convention for the Conservation of Atlantic Tunas (ICCAT), is severely depleted in the western Atlantic and overexploited in the east, according to the aforementioned FAO report. NMFS has recommended that all fishing on Atlantic bluefin tuna be halted for a specified time period to give the population a chance to rebound from historic lows. To date, this recommendation has not been embraced by the ICCAT membership. These developments suggest that the governance arrangements for managing highly migratory species—regional fishery management organizations or “tuna RFMOs”—may be approaching a point of crises and their future effectiveness in avoiding overfishing and overfished conditions may be called into question.

While the U.S. is an active participant in these governance arrangements, usually supporting needed conservation measures, the global issue of conservation and management of these stocks could be given greater attention as a foreign policy issue. This should be reflected in framing of bilateral relations with respect to countries participating in international tuna fisheries. The U.S. should pay particular attention to activities under a nation’s jurisdiction (fishing, processing, trade, reporting, etc.) that are disproportionately contributing to over-exploitation of a stock. In such cases the U.S. should identify means by which pressure could be exerted bilaterally so that the nation takes appropriate measures at the national level or accedes to the adoption of effective conservation measures, including verifiable monitoring and compliance, within the relevant RFMO.

Simultaneously the U.S. should continue its financial support of tuna RFMOs. Beyond contributions obligated by treaty arrangements, Congress (with advice from the Department of State and the Department of Commerce) should evaluate the feasibility and utility of a program of special grants tied to RFMO performance and directed to specific activities that would enhance such performance.

Consider the role of trade and aid measures to exert pressure on fishing nations

As noted above, while the U.S. may have lost some leverage in the IATTC because we are no longer a major fishing nation in the EPO, the U.S. continues to be a major importer, processor, and consumer of tuna, including yellowfin tuna. This suggests that trade measures could be an instrument to pressure countries to adopt certain conservation measures or environmental standards. This has been tried before

¹¹ The WCPFC distinguishes between resolutions, which are nonbinding, and conservation and management measures which are.

when in 1984 Congress amended the Marine Mammal Protection Act to compel other nations to harvest tuna in a “dolphin safe” manner. These provisions of domestic law ran afoul of our multilateral trade obligations when Mexico brought a complaint under the General Agreement on Tariffs and Trade (the GATT, predecessor of the current World Trade Organization, or WTO) in 1991, arguing that the provisions—which allowed the U.S. to embargo the importation (directly or through intermediary countries) of tuna from countries not adhering to standards in the Act—were an unlawful restraint of trade under GATT rules.¹² According to the WTO (http://www.wto.org/english/tratop_e/envir_e/edis04_e.htm), the reasoning behind the GATT’s finding that the U.S. could not impose comparable environmental standards on exporting nations was “then any country could ban imports of a product from another country merely because the exporting country has different environmental, health, and social policies from its own. This would create a virtually open-ended route for any country to apply trade restrictions unilaterally—and to do so not just to enforce its own laws domestically, but to impose its own standards on other countries.” Thus, while Congress responded to strong public sentiment opposed to the killing of “charismatic” marine mammals during fishing operations through the Marine Mammal Protection Act provisions, the desire to “export” environmental standards through the application of trade sanctions would seem to conflict with U.S. trade policy as reflected in our accession to multilateral trade agreements. This is not to say that the unfettered application of free trade principals is uncontroversial; the argument over “leveling the playing field” by demanding comparable environmental standards from our trading partners continues.

Section 205 of the MSA allows the U.S. to prohibit importation of fish from countries based on a determination from the Secretary of State that 1) the U.S. is unable to conclude an international fishery agreement allowing U.S. vessels access on reasonable terms to HMS fisheries over which a nation has jurisdiction or prohibits U.S. vessels from fishing for tuna in accordance with such an agreement, 2) does not comply with its obligations under an existing international fishery agreement concerning fishing by U.S. vessels, or 3) seizes U.S. vessels on the high seas in violation of an international agreement or bilateral agreement or based on a jurisdictional claim not recognized by the U.S. These provisions relate only to actions by foreign nations in relation to U.S. vessels.

Stock reference points are an environmental standard related to the level of fishing mortality that results in overfishing. In the international HMS fisheries context, Congress could consider an expansion of the aforementioned MSA provisions that would invoke trade measures against countries that demonstrably do not comply with measures adopted by RFMOs to end overfishing on or rebuild overfished stock of highly migratory species, or substantially contribute to overfishing of such stocks as defined by generally agreed upon reference points.

Recognize geographic, stock, and fishery linkages and develop strategic policies accordingly

Overfishing of yellowfin tuna cannot be effectively addressed in isolation; commercial fisheries catching yellowfin frequently catch overfished bigeye tuna, which is considered a single, Pacific-wide stock. Any set of management measures intended to address yellowfin overfishing will affect bigeye tuna. It should be noted that the WCPO yellowfin stock has also been declared subject to overfishing by the Secretary of Commerce. While scientists consider the stocks separate, it is important to bear in mind that the species is being subjected to elevated fishing pressure throughout its range in the Pacific.

¹² GATT sanctions were never imposed because Mexico later withdrew its complaint in favor of a bilateral agreement with the U.S. A related case brought before the GATT by the European Union reached broadly similar conclusions but sanctions were not imposed for procedural reasons. Congress subsequently modified the offending provisions in the Marine Mammal Protection Act.

Furthermore, changes in catchability in the EPO could cause vessels to shift into the WCPO. This has raised concerns among some members of the WCPFC that current excess capacity of fishing vessels could be increased by such a shift. Several Latin American countries have applied for cooperating non-member status with the WCPFC. In 2007 Belize, Costa Rica, and Ecuador applied. Only Belize's application was accepted. Discussion of the applications highlighted member's concerns about the potential increased presence of vessels from nations outside the region. The situation is complicated by the ability of member nations to license foreign vessels to operate within their EEZs.

While there are interconnections in terms of the deployment of fishing effort and their effects on yellowfin and bigeye stocks across the Pacific, institutionally and jurisdictionally the EPO and WCPO are separate, covered by the IATTC and WCPFC respectively. While there are historical and sound institutional reasons for having two RFMOs, the need to coordinate policies and management measures is likely to grow as long as pressure on the stocks continues. The IATTC and WCPFC have taken an initial step through semi-annual coordination meetings between the two secretariats. On the U.S. side separate sets of commissioners are appointed for each RFMO as are the advisory committees established in domestic law to provide stakeholder input. Likewise, different NMFS Regional Administrators lead the U.S. delegations in conjunction with the Department of State. While there are sound reasons for having separate arrangements—it allows NMFS personnel and stakeholders most concerned with regional issues to participate—consideration should be given to arrangements to enhance coordination of policy in a way that remains open to public scrutiny (discussed further below).

Fostering such coordination is principally an administrative obligation exercised through the Departments of State and Commerce. Nonetheless, in support to end yellowfin tuna overfishing, Congress could monitor any such efforts and determine the need for legislative remedies. Current arrangements—such as the size, composition, and function of advisory committees and the number and role of commissioners—are established in law. This suggests a potential Congressional role if oversight indicates inadequate progress in coordinating policy.

Ratify the Antigua Convention

In 2003, the IATTC adopted the Convention for the Strengthening of the Inter-American Tropical Tuna Commission established by the 1949 Convention between the United States of America and the Republic of Costa Rica (“Antigua Convention”). The purpose of the Antigua Convention is to update the original agreement to incorporate modern principals of fishery management; more precisely define the management area; harmonize provisions with international law principals reflected in the United Nations Convention on the Law of the Sea, Food and Agriculture Organization of the United States (FAO) Code of Conduct for Responsible Fisheries, and similar agreements; and allow new membership, including the European Union (a “regional economic integration organization”) and Chinese Taipei (a “fishing entity,” which may be a member but not a Party to the Convention, affording it slightly different rights). The Antigua Convention was opened for signature in Washington on November 14, 2003. The Convention will enter into force 15 months after the deposit of the seventh instrument of ratification or accession of the Parties to the 1949 Convention. To date 12 nations, the European Union, and Chinese Taipei have signed the convention; eight have ratified it but only three of these are Parties to the 1949 Convention. The U.S. has signed the Convention but not yet ratified it.

Implementing legislation to ratify the Antigua Convention is before Congress but currently is not being acted upon. If the conditions necessary for implementation of the Convention were met, this could support the ending of overfishing of yellowfin tuna by allowing the IATTC to operate under a modern charter consistent with current international law and principals of fisheries management.

Support an external performance review to include an evaluation of decision-making procedures

The Government of Japan, with assistance from the FAO, organized a joint meeting of tuna RFMOs, January 22–26, 2007, in Kobe, Japan. One of the outcomes of this meeting is a statement of “urgent actions” the participating RFMOs should take to improve management of tuna stocks. Among these recommendations is a call for each RFMO to undertake a performance review in accordance with guidelines described in an annex to the Course of Actions statement. The annex states that these “reviews should be conducted by a team of individuals drawn from the RFMO secretariat, members of that RFMO and outside experts, with a view to ensuring objectivity and credibility.” RFMOs are expected to act on the results of such performance reviews, and to encourage such actions the results should be made public. The U.S.’s commitment to this objective is reflected in the fact that Mr. David Balton, Deputy Assistant Secretary for Oceans and Fisheries, Department of State, facilitated the session at the Kobe meeting from which the recommendation for performance reviews emerged.

The U.S. should establish as a high priority in its work with the IATTC the completion of a performance review by the organization as described in Annex 1 of the Course of Actions statement, and encourage periodic reviews as recommended in the annex. To encourage and facilitate a performance review, the U.S. should underwrite the cost of outside experts (acceptable to the Parties) with proven expertise in evaluating organizational performance. While recognizing that consensus decision-making is a bedrock principal of the IATTC (and is enshrined in the Antigua Convention), in promoting a performance review the U.S. should highlight the need to investigate procedures and processes within a consensus framework that would help the IATTC to meet its objectives, and specifically make the adoption of conservation measures necessary to end overfishing more likely.

Vigorously support reducing the capacity of the purse seine fleet

In 2000 and 2002 the IATTC adopted resolutions that seek to control total fishing capacity of the purse seine fleet (C-00-10 and C-02-03). The 2000 resolution also called on staff, in cooperation with the Parties, to prepare a plan for regional management of fishing capacity. This plan was released in 2005 (<http://www.iattc.org/PDFFiles2/IATTC-73-EPO-Capacity-Plan.pdf>). The 2002 resolution specifies that the IATTC’s Vessel Register “established by the resolution of the 66th Meeting of the Commission, as of 28 June 2002, with any subsequent modifications that do not increase the total capacity of purse-seine vessels established in the Register, as the definitive list of purse-seine vessels authorized by the participants to fish for tunas in the EPO.” New vessels cannot be added to the Register except if vessels comprising equal or greater volume are removed.¹³ Well volume was adopted as the measure of capacity and the resolution identifies a target level of 158,000 m³. Currently the Register includes 236 purse seine vessels with a total well volume of 233,660 m³ (Figure 7 shows well volume by flag state). Furthermore, the resolution allowed Costa Rica, El Salvador, Nicaragua, and Peru to add vessels to those listed in the Register in 2002, which could potentially increase capacity by 18,720 m³. (The Register does not indicate which vessels, if any, were added under that provision. However, the current list does not include any vessels from Costa Rica, which according to the provision has a reserved capacity of 9,364 m³.) An earlier, 1998 resolution (C-98-11) identifies national capacity limits, which sum to a value close to the target level identified in the 2002 resolution. Table 5 compares capacity values from the Vessel Registry to the national limits identified in 1998.

Excess capacity exacerbates current problems with overfishing. While other controls (e.g., quotas, seasons, closed areas) can sufficiently limit fishing mortality in the absence of capacity limits, it is harder to reach agreement on such limits when there is too much capacity. Excess capacity can also be thought

¹³ A vessel can be temporarily removed from the active category on the registry and another vessel substituted for the inactive period.

of as over-capitalization, a common problem with common pool resources such as fish. Because individual fishers—or within an RFMO like the IATTC, nations—are competing to catch fish, there is a tendency to increase fishing power (through vessel size and other technological investments) beyond what is needed to efficiently catch fish at the target MSY level. Other controls therefore make the invested capital all the more inefficient; within the IATTC, which is essentially a forum for negotiation under consensus rules, this makes agreement much harder.

The U.S. should make capacity reduction for the EPO purse seine fleet a high priority. This should go beyond simply pushing IATTC members to institute measures to achieve the goal identified in C-02-03 and in the plan for regional management of fishing capacity. Domestically, the U.S. has established programs that subsidize purchasing and retiring vessels along with associated fishing rights (such as permits). A 2003 program that reduced capacity in the west coast groundfish trawl fleet offers an example. Through direct subsidy and concessionary loans provided by Congressional appropriation, about a third of the vessels and associated permits were retired, which accounted for half of historic catch. (Because the fishery is subject to license limitation, permit retirement results in a permanent reduction in the number of participants.)

The U.S. should develop a similar proposal for the EPO tuna purse fleet, consistent with the IATTC capacity reduction objective and the framework outlined in the plan for regional management of fishing capacity. If a feasible program can be designed, Congress should consider an appropriation, within existing or as additional foreign aid, to help subsidize loans necessary to fund initial purchase and retirement of vessels with administration through the IATTC and resting primarily at the national government level. Any U.S. financial commitment should be tied to similar national and multilateral commitments, through public financial institutions and the like. Any such program must be contingent on meeting and maintaining a specific capacity target, such as the one identified in C-02-03. (It is apparent that the national capacity limits identified in C-98-11, and generalized to the target in C-02-03, were not sufficient to prevent them from being exceeded. Going forward, these limits must become binding.) One complication, reflected in the IATTC resolution, is the desire—expressed in the resolution as a right—for “coastal States and other States with a longstanding and significant interest in the tuna fisheries of the EPO to develop and maintain their own tuna fishing industries.” This statement reflects the concern of nations with a nascent, or non-existent, purse seine fishery to accede to a program with permanent national limits on capacity. This would have to be taken into account in program design. For example, a cap and trade system could be instituted to allow the transfer of unused capacity, which could become available if a vessel buyback program was able to bring total capacity below targets (and tradability could offer an additional financial incentive to reduce capacity beyond the target if any resulting capacity credit could be sold).

Admittedly, there are a host of other problems and challenges in implementing such a program, such as the disposition of bought back vessels, which if not addressed allows their displacement into other regions and fisheries. However, the biggest constraint is one of U.S. resolve reflected in where a commitment to addressing the status of EPO stocks falls on the national policy agenda, as discussed above.

Promote conservation proposals based on national accountability

The IATTC has under its auspices many of the elements of an effective international fishery management program. The major target stocks are subject to regular and reliable assessment, making it possible in most cases to identify (at least candidate) reference points and targets. The Commission also has a well-developed program for fishery monitoring and data gathering (which supports stock assessment). This makes possible the identification and development of effective management measures, supported by accurate evaluation by Commission staff. As already discussed, the problem lies with the adoption of effective management measures. Although difficult in any national or sub-national program (as

participants in regional fishery management councils can attest to), a forum of sovereign nations reliant on consensus compounds the difficulty when interests significantly diverge. Rather than proposing specific measures, which are likely to become obsolete with the next negotiation, recommendations are made here on the types of management measures that should receive priority.

An output control, in the form of total allowable catch limit (TAC) should have highest priority. The IATTC in fact already applied a TAC to the longline fishery for bigeye tuna in the expired conservation resolution (C-06-02) and both the U.S. and Ecuador/Spain proposals tabled in 2007 included a yellowfin tuna TAC for the purse seine fishery. A TAC is a more direct, transparent method to control catch than effort controls (such as seasons and area closures) that limit inputs. Furthermore, given the long history of IATTC port samplers—who work in member countries to gather fisheries-dependent data, along with landing quantities—a TAC may be a more accurate method to potentially manage overfishing in comparison to a time/area closure. (This is not to say that other types of controls are unnecessary; a TAC cannot address some problems, such as the effect of catching smaller fish on total yield, excess capacity, and “derby” fisheries where individual fishers are competing against one another to catch a share of the available TAC). If feasible, once a TAC is established, additional measures should focus on accountability. Accountability can be achieved by assigning catch limits to vessels (the tabled U.S. proposal included a 500 mt purse seine vessel limit for bigeye tuna). National quotas are an intermediate form of accountability that would allow national governments to design programs for the allocation of fishing privileges (quota) to its flag vessels. Document IATTC-75-05a, *Staff Response to Requests from Ad Hoc Meeting, February 2007*, includes a discussion of the issues surrounding the use of national quotas and individual fishing quotas.¹⁴ The paper notes that allocation would likely be controversial (as it almost always is at the sub-national level) because national quotas are “often seen as unfair by states that have aspirations to develop their tuna industries.” Individual vessel quotas, unless tradability is introduced, are likely to reduce flexibility and efficiency since vessels vary in their effective fishing power or capacity to catch fish (effectiveness is meant to include both human and physical capital, or differences in knowledge and skill that differentiate “highliners” from underperformers). Nonetheless, the U.S. should continue to advocate for TAC-based approaches with an accountability element.

As discussed above, a factor contributing to overfishing, because it reduces yield, is the reduction in the average size of fish caught. (This is a problem for both yellowfin and bigeye tuna.) The increased use of FADs is implicated in this reduction because smaller-sized fish seem to be attracted to these devices. FADs also increase fishing power by concentrating fish in predictable ways. (A vessel can deploy multiple FADs knowing that it can rotate amongst the FADs, returning to each after sufficient time has passed for new fish to have been attracted.) Thus FADs can be viewed as another dimension of the over-capacity problem. Although the IATTC has the Registry and various systems to monitor vessel activity, no equivalent program exists to monitor the number of FADs being deployed, a prerequisite to any agreement to limit their use. The U.S. should promote a program like the Vessel Registry for FADs that would allow accounting for the number being used with some information on their characteristics. Like vessels, FADs should be appropriately marked to enhance monitoring, and ultimately enforcement, if limits are agreed to. Once an effective monitoring program has been instituted, the U.S. should promote an evaluation to see if limits need to be placed on their deployment.

¹⁴ Individual fishing quotas (IFQs) have found wide application in fishery management. Explaining the benefits of and issues surrounding IFQ programs is beyond the scope of this report. Briefly, IFQs assign divisible catch privileges (quota shares) to individuals (effectively, to vessels); the shares can be traded among program participants. The total catch limit is set externally and determines the actual quantity associated with a share. Tradability generally promotes economic efficiency because those with higher profits (lower costs, higher per unit revenue) will purchase shares from less efficient operators, who are thus compensated for not participating.

Encourage and facilitate participation by U.S. Regional Fishery Management Councils in international fishery forums

Unlike the Atlantic, where U.S. HMS fisheries are managed directly by NMFS through a Secretarial FMP, in the Pacific both the Pacific and Western Pacific Councils have developed HMS FMPs. The Councils serve as co-management forums, where state and Federal officials and resource stakeholders work together to develop policies and specific management proposals, which are then implemented by NMFS. Because effective HMS management must involve international action through tuna RFMOs, the Councils can serve as a conduit for domestic interests to play a role in shaping U.S. policy and positions subsequently represented at the RFMOs (and through any related bilateral arrangements). The Western and Central Pacific Fishery Convention Implementation Act (Title V of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006) provides for participation by the Councils with regard to the WCPFC. The Act designates two of the five U.S. Commissioner seats for representatives of the Pacific and Western Pacific Councils. It establishes an advisory committee and designates one seat for a representative from the Western Pacific Council advisory committee (no equivalent designation is made for the Pacific Council). It also directs the Secretary of Commerce, in cooperation with the Secretary of State, to conclude a memorandum of understanding (MOU) with the Pacific, Western Pacific, and North Pacific Councils. The MOU “clarifies the role of the relevant Council or Councils with respect to—

- (1) participation in U.S. delegations to international fishery organizations in the Pacific Ocean, including government-to-government consultations;
- (2) providing formal recommendations to the Secretary and the Secretary of State regarding necessary measures for both domestic and foreign vessels fishing for these species;
- (3) coordinating positions with the U.S. delegation for presentation to the appropriate international fishery organization; and
- (4) recommending those domestic fishing regulations that are consistent with the actions of the international fishery organization, for approval and implementation under the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.)”

These provisions reflect Congress’s intent that the Councils play an active role in formulating U.S. positions and policies with respect to international management of HMS. Subsequent to adoption of the MOU, the Secretary of State and Secretary of Commerce should act in good faith to ensure that the objective of effectively involving the Councils—as a conduit to elevate the concerns of domestic stakeholders to the RFMO arena—is met. Good faith is necessary because the heads of the IATTC and WCPFC delegations, who articulate U.S. positions in bilateral and multilateral discussions, are Federal officials. It is the responsibility of government that the heads of these delegations faithfully and accurately takes account of the views expressed by Councils in representations made at the international level.

In particular, the U.S. representatives to the RFMOs should work with the Councils on the timing of Council and RFMO meetings to facilitate the provision of Council positions. Currently, for example, the Northern Committee, an ancillary body of the WCPFC responsible for species occurring principally north of 20° N latitude (including species important to west coast fisheries), holds its annual meeting during the same week as one of the Pacific Council’s regularly scheduled meetings.

The Secretary of State and Secretary of Commerce should ensure adequate representation of the Councils on the advisory bodies for the RFMOs established in domestic law, beyond the Western Pacific Council

designated position referenced above.¹⁵ In doing so, it is important to distinguish between representation by those involved in the Council process, but expressing their own views, and advisory committee members who would represent positions formally adopted by the Councils.

Mechanisms, mentioned above, to enhance coordination of U.S. policy with respect to the IATTC and WCPFC should also involve the Councils and encourage coordination between the Pacific and Western Pacific Councils with respect to the provision of advice. This could include NMFS, working above the regional level, on measures to coordinate policy that facilitate the two Councils working together to develop a common policy agenda and the organization of joint meetings of the advisory committees for the IATTC and WCPFC.

Congress should monitor the implementation of the MOU and any other measures to enhance stakeholder involvement and at some future date assess the need for additional legislation. Such legislation could:

- Designate IATTC Commissioner seats for the Pacific Council, Western Pacific Council, or both Councils, similar to the current arrangement for WCPFC Commissioners;
- Designate additional seats on the RFMOs advisory bodies for Council representatives;
- Provide for compensation of expenses for IATTC advisory committee members, similar to the terms established for the WCPFC advisory committee;
- Further specify the Councils' role in U.S. delegations to the RFMOs.

References

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IATTC (Inter-American Tropical Tuna Commission). 2008. Document IATTC-77-04, Proposal for Conservation of Yellowfin and Bigeye Tuna in the Eastern Pacific Ocean. IATTC, La Jolla, CA.

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PFMC (Pacific Fishery Management Council). 2007. Status of U.S. west coast fisheries for highly migratory species through 2006; stock assessment and fishery evaluation. Pacific Fishery Management Council, Portland, OR. September 2007.

¹⁵ Nominations to the newly-established WCPFC advisory committee were solicited in 2007 and are currently under review. Nominations for new terms on the existing IATTC advisory committee were solicited in 2006. The Pacific Council did not submit any nominations at that time.

Table 1. Stock status metrics under the base case and stock recruitment relationship scenarios and applying the recent level of fishing mortality. (Source: Maunder 2007, see description below.)

| | Base case | Stock recruitment relationship assumed | Average F 2004-2006 |
|--------------------------|-----------|--|-----------------------|
| AMS _Y | 289,140 | 301,867 | 288,569 |
| B_{AMS_Y} | 417,813 | 550,277 | 416,324 |
| S_{AMS_Y} | 4,738 | 6,539 | 4,712 |
| Crecent/AMS _Y | 0.59 | 0.56 | 0.59 |
| B_{recent}/B_{AMS_Y} | 0.96 | 0.73 | 0.96 |
| S_{recent}/S_{AMS_Y} | 0.94 | 0.68 | 0.95 |
| $S_{AMS_Y}/S_{F=0}$ | 0.36 | 0.42 | 0.36 |
| F multiplier | 0.88 | 0.59 | 0.96 |

Caption for table 5.1 (Maunder 2007): AMS_Y and related quantities for the base case and the stock-recruitment relationship sensitivity analysis, based on average fishing mortality (F) for 2004 and 2005. The quantities are also given based on average F for 2004-2006. B_{recent} and B_{AMS_Y} are defined as the biomass of fish 2+ quarters old at the start of the second quarter of 2007 and at AMS_Y, respectively, and S_{recent} and S_{AMS_Y} are defined as indices of spawning biomass (therefore, they are not in metric tons). Crecent is the estimated total catch from the second quarter of 2006 through the first quarter of 2007.

Table 2. Comparison of yellowfin tuna landings on the U.S. west coast to total U.S. landings in the EPO, 1981-2006. (Note: 2005–06 IATTC data reportedly incomplete.)

| Year | West Coast | Total U.S. EPO | West Coast, % of Total |
|------|------------|----------------|------------------------|
| 1981 | 76,091 | 97,534 | 43.8% |
| 1982 | 61,769 | 93,114 | 39.9% |
| 1983 | 55,482 | 57,909 | 48.9% |
| 1984 | 35,063 | 49,185 | 41.6% |
| 1985 | 15,025 | 75,912 | 16.5% |
| 1986 | 21,517 | 68,098 | 24.0% |
| 1987 | 23,201 | 64,957 | 26.3% |
| 1988 | 19,520 | 65,188 | 23.0% |
| 1989 | 17,615 | 83,877 | 17.4% |
| 1990 | 8,509 | 110,005 | 7.2% |
| 1991 | 4,178 | 126,827 | 3.2% |
| 1992 | 3,350 | 91,315 | 3.5% |
| 1993 | 3,795 | 143,235 | 2.6% |
| 1994 | 5,056 | 154,170 | 3.2% |
| 1995 | 3,038 | 146,188 | 2.0% |
| 1996 | 3,347 | 131,549 | 2.5% |
| 1997 | 4,775 | 162,299 | 2.9% |
| 1998 | 5,799 | 115,775 | 4.8% |
| 1999 | 1,353 | 96,223 | 1.4% |
| 2000 | 1,158 | 108,708 | 1.1% |
| 2001 | 655 | 92,897 | 0.7% |
| 2002 | 544 | 92,829 | 0.6% |
| 2003 | 465 | 72,987 | 0.6% |
| 2004 | 488 | 47,158 | 1.0% |
| 2005 | 285 | 58,874 | 0.5% |
| 2006 | 77 | 84,815 | 0.1% |

west coast landings from 2007 HMS SAFE, Table 4-4; Total U.S. EPO landings from IATTC catch report data available at <http://www.iatcc.org/CatchReportsENG.htm>.

Table 3. Comparison of recreational and commercial yellowfin tuna catch on the west coast. Recreational catch is given in numbers of fish and converted to metric tons using an average weight of 5.4 kg. Note that CPFV catch is for the U.S. EEZ and does not include catches made in Mexican waters. (Source 2007 HMS SAFE)

| Year | Recreational Catch | | | Commercial (mt) | Recreational, % total |
|------|--------------------|-------|-------|--------------------|--------------------------|
| | Private | CPFV | MT | | |
| 2004 | 4,100 | 8,330 | 67.12 | 488 | 12.09% |
| 2005 | 4,200 | 5,630 | 53.08 | 285 | 15.70% |
| 2006 | 6,200 | 5,255 | 61.86 | 77 | 44.55% |

Table 4. U.S. imports of all tunas (all product forms) over total world catch, mt, and U.S. imports of yellowfin tuna (fresh and frozen) over total world catch, mt. (Sources: U.S. imports from NMFS Office of Science and Technology, foreign trade statistics, <http://www.st.nmfs.noaa.gov/st1/trade/index.html>; total production from Food and Agriculture Organization FishStat Plus database, <http://www.fao.org/fishery/topic/16073>.)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| All Tunas* | | | | | | |
| U.S. imports | 268,996 | 232,992 | 249,671 | 296,992 | 284,388 | 287,736 |
| Total catch | 4,421,367 | 4,408,320 | 4,742,835 | 4,898,751 | 4,982,464 | 5,004,199 |
| | 6.1% | 5.3% | 5.3% | 6.1% | 5.7% | 5.7% |
| Yellowfin | | | | | | |
| U.S. imports | 16,443 | 19,531 | 20,585 | 20,879 | 21,457 | 23,067 |
| Total catch | 1,185,804 | 1,335,636 | 1,349,466 | 1,437,057 | 1,323,694 | 1,296,137 |
| | 1.4% | 1.5% | 1.5% | 1.5% | 1.6% | 1.8% |

*For U.S. imports all product forms (all tunas) are shown aggregated; for total production the following species are shown aggregated: Albacore, Atlantic bluefin tuna, Bigeye tuna, Black skipjack, Blackfin tuna, Bullet tuna, Dogtooth tuna, Frigate and bullet tunas, Frigate tuna, Kawakawa, Little tunny(=Atl.black skipj), Longtail tuna, Pacific bluefin tuna, Skipjack tuna, Southern bluefin tuna, Yellowfin tuna,

Table 5. Comparison of vessel capacity listed in IATTC Vessel Registry and national limits identified in IATTC resolution C-98-11. Blank entries under C-98-11 indicate countries for which limits were not identified.

| Country | Current Registry | National limits in C-98-11 | Excess* |
|---------------|------------------|----------------------------|---------------|
| Belize | 0 | 1,877 | -1,877 |
| Bolivia | 222 | | 222 |
| Colombia | 12,974 | 6,608 | 6,366 |
| Costa Rica | 0 | 6,000 | -6,000 |
| Ecuador | 61,804 | 32,203 | 29,601 |
| El Salvador | 7,415 | 1,700 | 5,715 |
| Guatemala | 7,337 | | 7,337 |
| Honduras | 1,700 | 499 | 1,201 |
| Mexico | 57,896 | 49,500 | 8,396 |
| Nicaragua | 6,023 | 2,000 | 4,023 |
| Panama | 33,978 | 3,500 | 30,478 |
| Peru | 542 | | 542 |
| Spain | 6,955 | 7,885 | -930 |
| United States | 4,775 | 8,969 | -4,194 |
| Vanuatu | 3,609 | 12,121 | -8,512 |
| Venezuela | 28,430 | 25,975 | 2,455 |
| Total | 233,660 | 158,837 | 74,823 |

*Negative value indicates below resolution limit

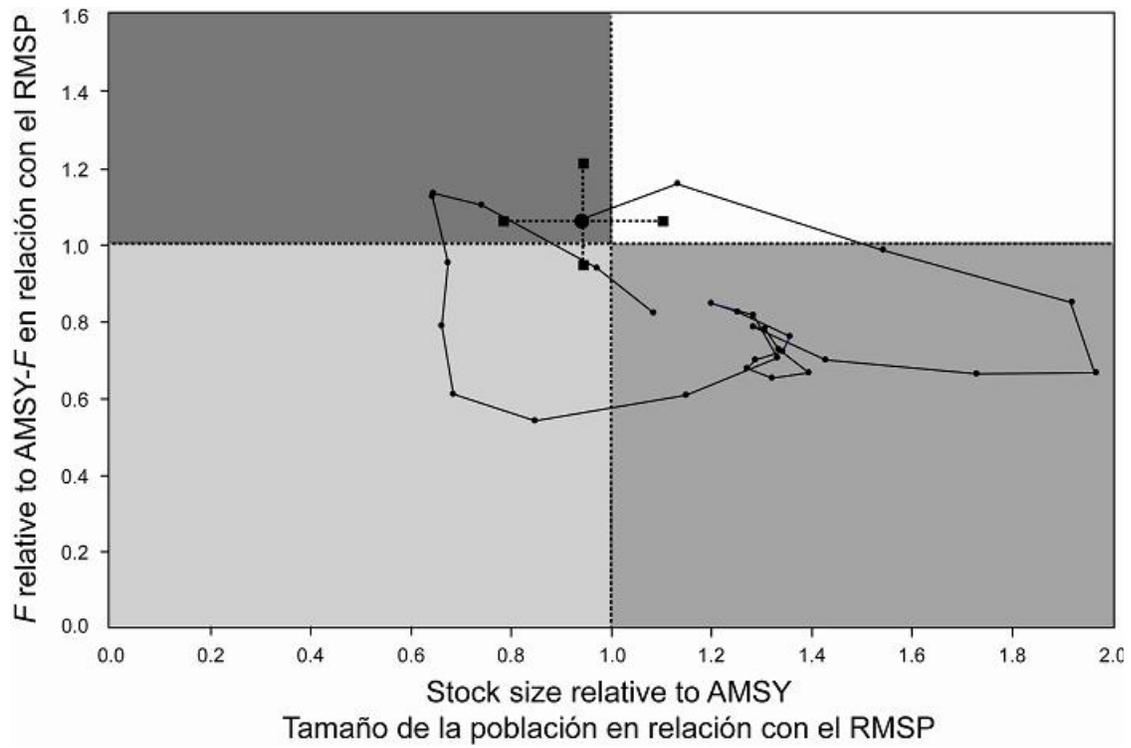


Figure 1. Phase plot for yellowfin tuna. (Reproduced from Maunder 2007)

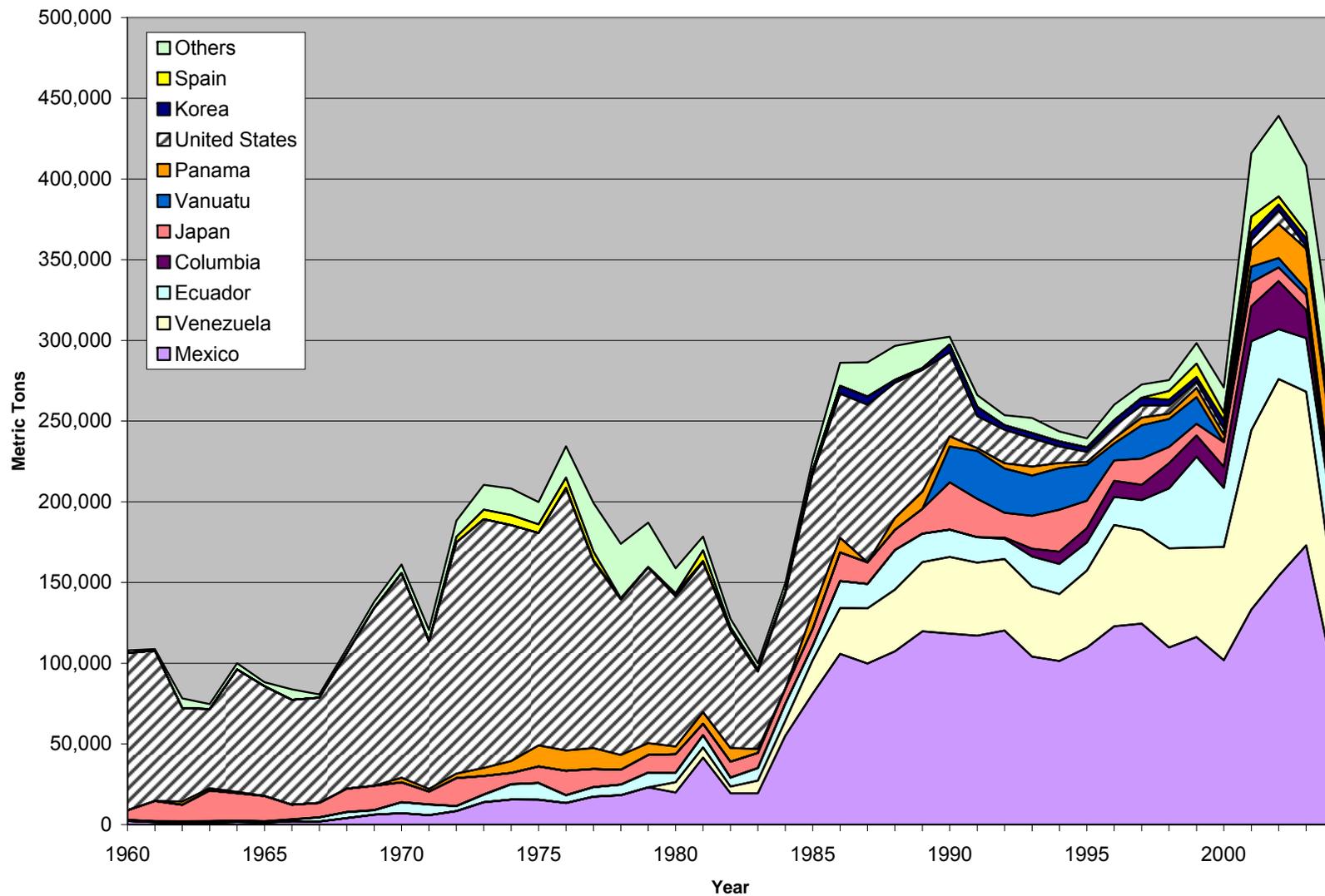


Figure 2. Catch of yellowfin tuna in the EPO (mt), by nation, 1960-2004. The top ten countries for average landings, 1994- 2004, are shown. The following are grouped under other: El Salvador, Chinese Taipei, China, Honduras, Costa Rica, Belize, French Polynesia, Peru, Chile, Nicaragua, Guatemala, Bermuda, Canada, Cayman Islands, Netherlands, Senegal, Other (IATTC category). (Source: IATTC catch report data, available at <http://www.iattc.org/CatchReportsENG.htm>)

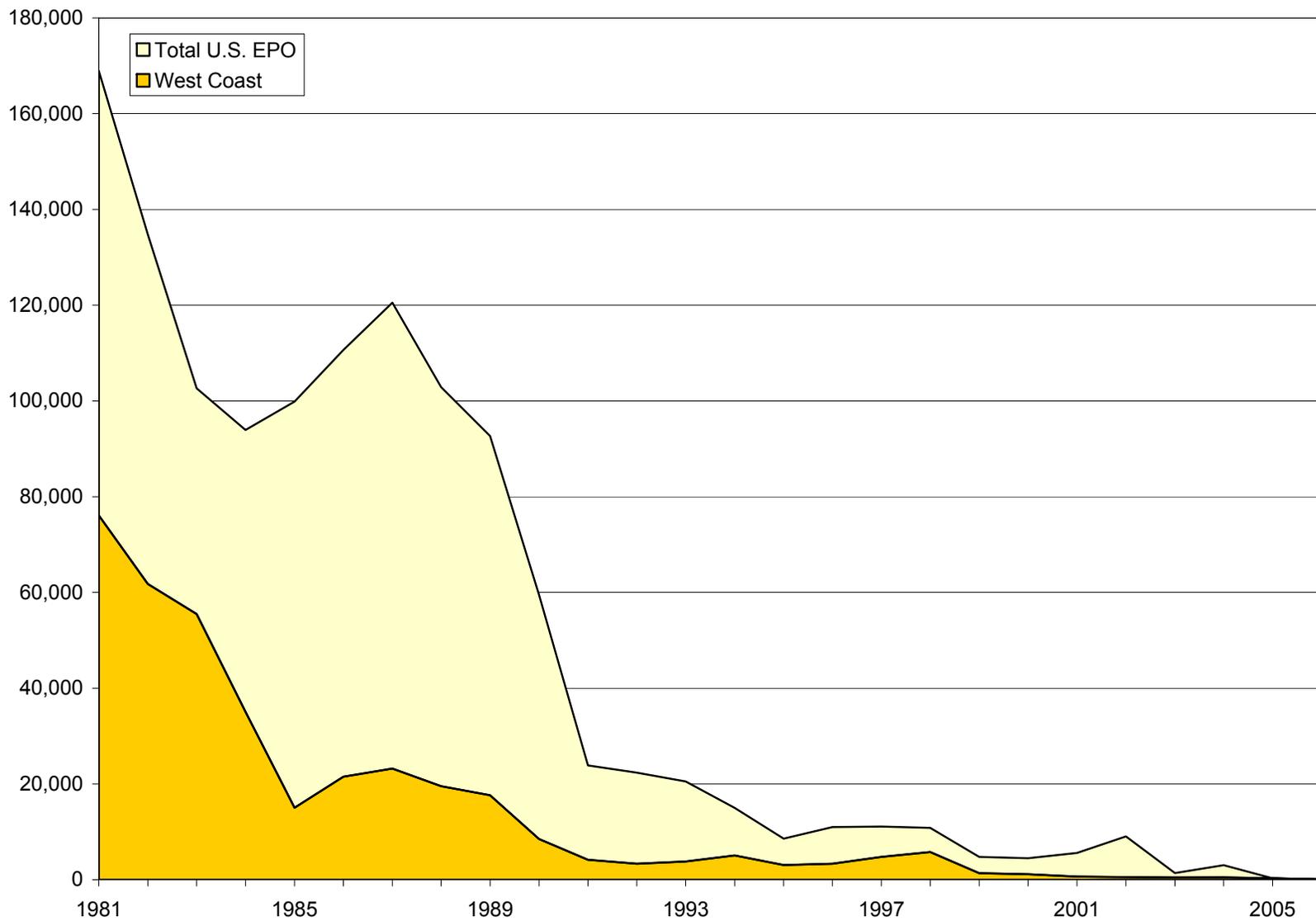


Figure 3. Comparison of total U.S. EPO yellowfin catch with west coast landings (sources: IATTC catch data and 2007 HMS SAFE).

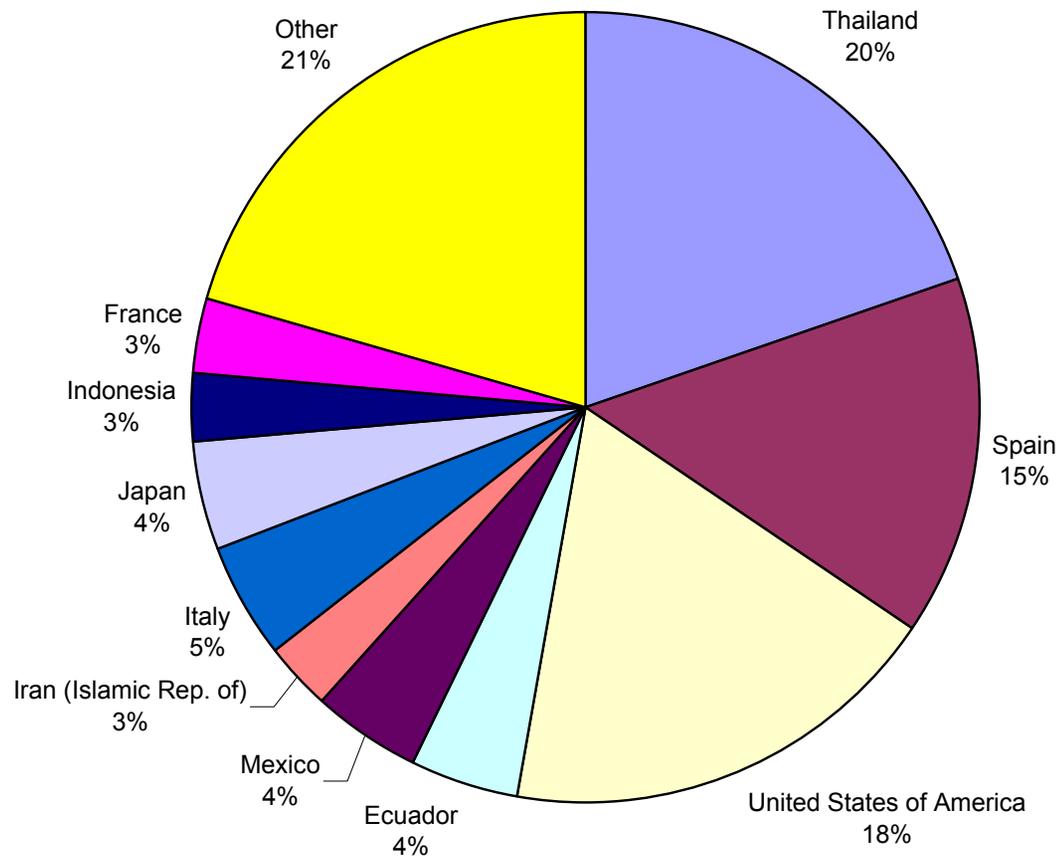


Figure 4. Average production of tuna products by country, 1996–2005. (Source: FAO FishStat Plus)

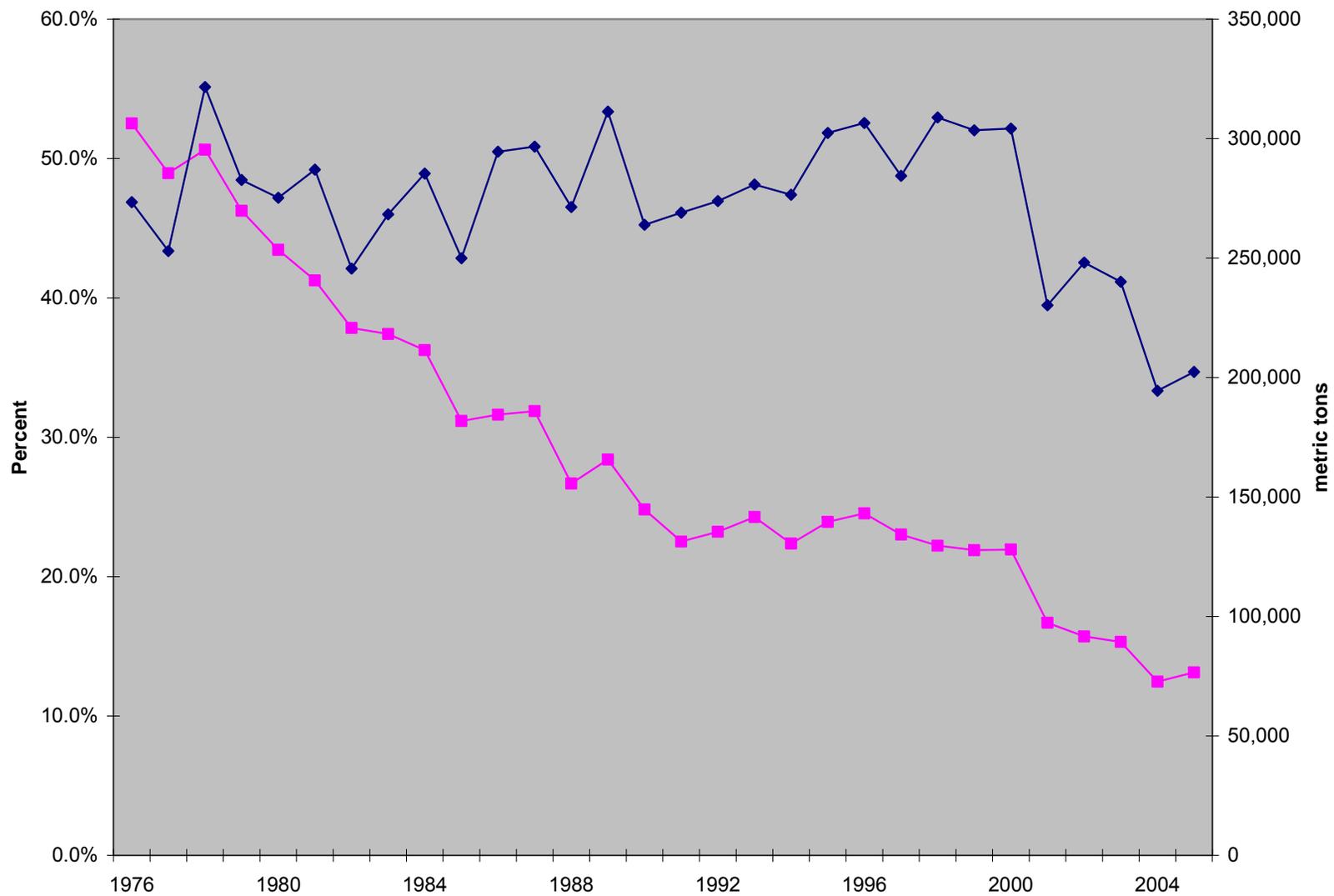


Figure 5. U.S. production of tuna products, mt, (blue line) and share of global production (red line), 1976–2005. (Source: FAO FishStat Plus.)

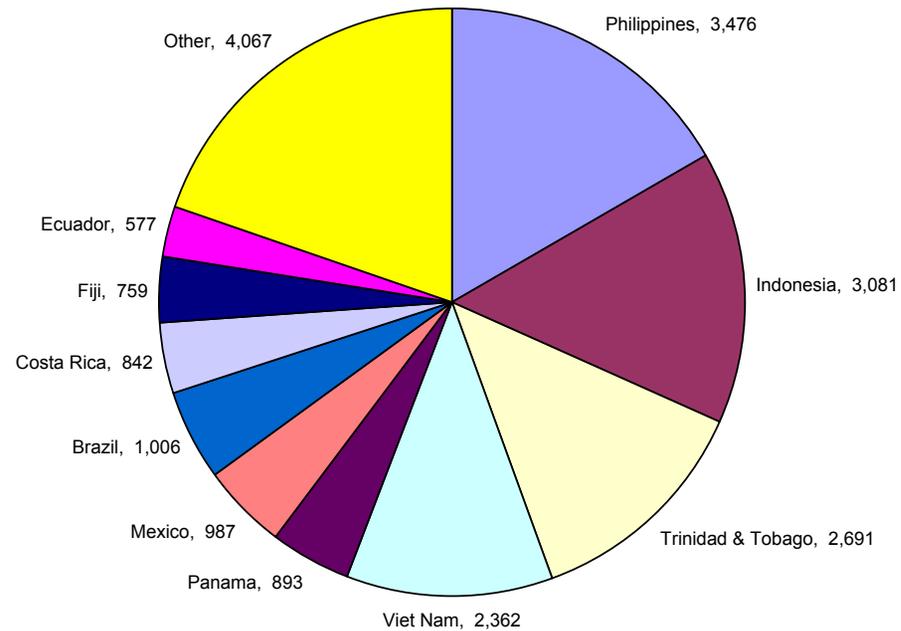
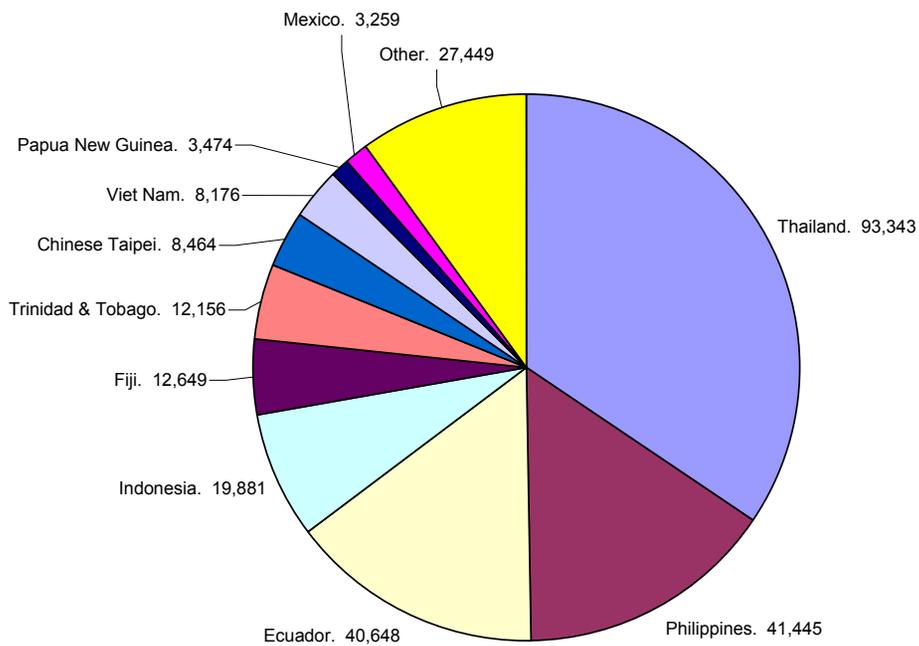


Figure 6. U.S. imports, mt, by country for all tunas (left) and yellowfin tuna (right), average 2000–06. (Source NMFS Office of Science and Technology, foreign trade statistics, <http://www.st.nmfs.noaa.gov/st1/trade/index.html>)

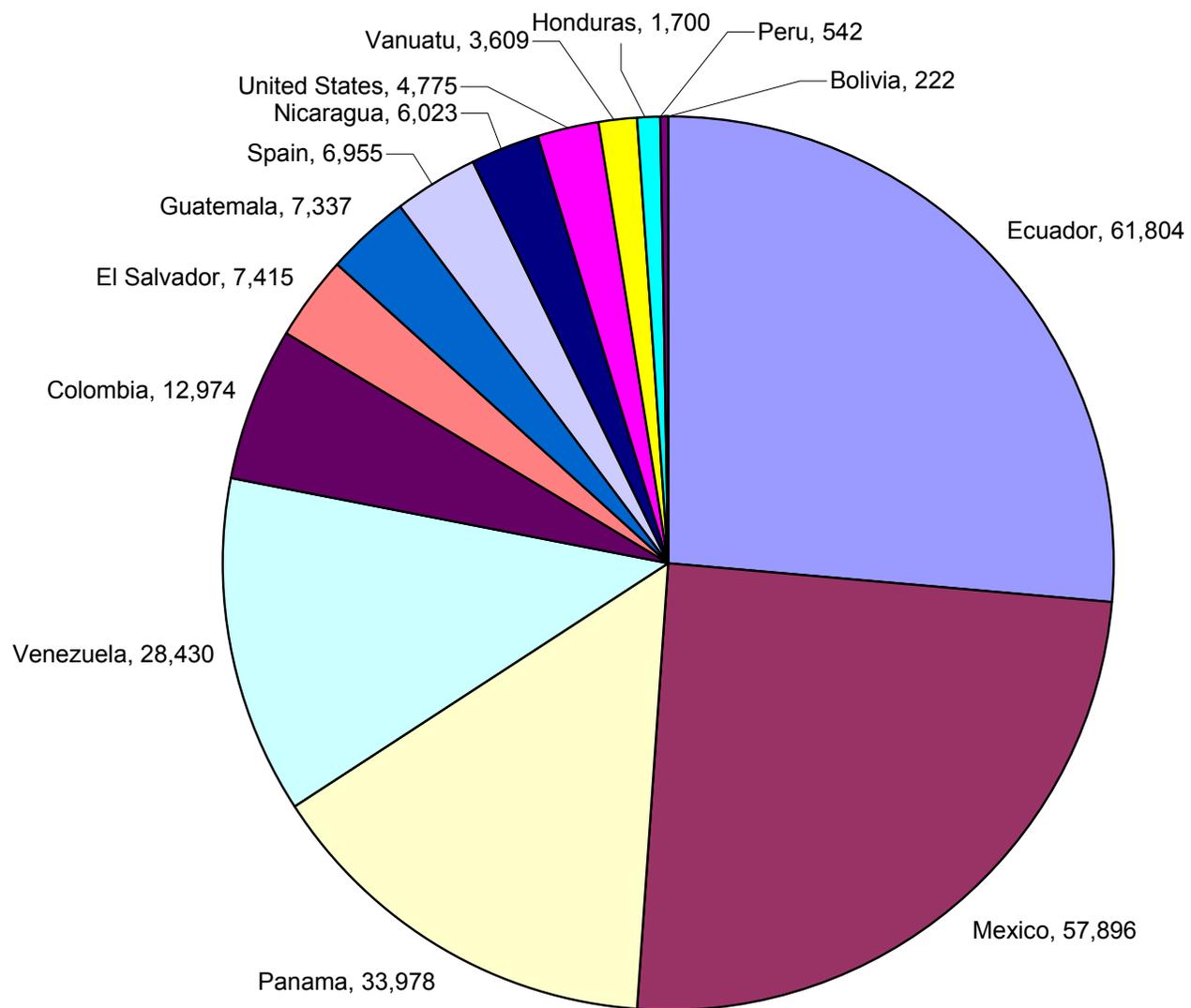


Figure 7. Well volume (cubic meters) of vessels on the Vessel Registry, by country. (Source: IATTC)

HIGHLY MIGRATORY SPECIES ADVISORY SUBPANEL REPORT ON YELLOWFIN OVERFISHING

As stated in the Council Agenda Item C.2.a Attachment 2, “Because west coast fisheries are a negligible contributor to the total fishing effort on the stock, further curtailment of these catches would have no practical effect on overfishing.” The Highly Migratory Species Advisory Subpanel (HMSAS) recommends that no measures to reduce this fishery be established by the Council in 2008. The HMSAS suggests that the Inter-American Tropical Tuna Commission (IATTC) scientific staff recommendations for the conservation measures to recover the yellowfin tuna should be supported with consideration for an exemption for national purse seine fleets of class I-V vessels that harvest a minor portion of the total Eastern Pacific Ocean (EPO) yellowfin harvest. The definition of “minor portion” should be determined by the IATTC scientific staff to ensure conservation targets are achieved.

The HMSAS notes that Agenda Item C.2.a Attachment 2 recommends that the Council support ratifying the Antigua Convention. The HMSAS would like to suggest that the Council request a copy of the Antigua Convention enabling legislation from the State and Commerce Departments for the Council’s Legislative Committee to review. That review should ensure that

- The Council is represented on the IATTC General Advisory Committee (GAC) as the Western Pacific Fishery Management Council (WPFMC) is represented in the WCPFC Advisory Committee
- The IATTC GAC gets the same status as the Advisory Committee to the WCPFC
- The IATTC GAC gets proper financial support

PFMC
3/9/08

HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM REPORT ON YELLOWFIN TUNA OVERFISHING

In September 2007, the Highly Migratory Species Management Team (HMSMT) reported its preliminary recommendations on potential management measures to address yellowfin tuna overfishing (attached Agenda Item C.3.b. HMSMT Report).

For domestic regulations, the HMSMT continues to recommend that new management measures are not needed. As the HMSMT reported in September 2007, current measures included in the HMS fishery management plan are adequate to address the very low impact of U.S. fisheries on the stock.

For international fisheries, the HMSMT had indicated that it would incorporate relevant outcomes from upcoming Inter-American Tropical Tuna Commission (IATTC) meetings in its recommendations for Council consideration in March 2008. The IATTC met last October to consider yellowfin and bigeye tuna conservation measures for 2008, but failed to adopt any. Measures adopted for 2007 expired at the end of the year, and therefore, no conservation measures are currently in place for bigeye and yellowfin tuna. In early March 2008, the IATTC again considered conservation measures, including new proposals developed by the IATTC staff and country delegations (Agenda Item C.2.a, Attachment 1). These proposals included time-area closures for the purse seine fishery and total allowable catch (TAC) limits for the longline fishery for 2008 through 2010. As in October, the IATTC again did not reach consensus and no conservation measures were adopted. The HMSMT endorses the full suite of conservation measures recommended in the March IATTC proposal.

Based on the outcomes of recent IATTC meetings, combined with reports that yellowfin tuna stocks continue to decline and fishing effort has increased to extremely high levels, the HMSMT recommends the Council strongly support adoption at the earliest possible date and full implementation of recommended conservation measures for international fisheries.

The team had considerable discussion on the proper scope of the “international actions” asked for by section 304(i)(2)(B) and concluded that the paragraph asks the Council to consider the international fishery as a whole and to recommend conservation and management measures needed to end overfishing. The team thought that conservation and management measures should be discussed without regard to how they would be implemented in the international arena. With that understanding, the challenge of implementing regulations within the IATTC forum is the real hurdle to ending overfishing on the yellowfin stock.

Council Action:

The HMSMT reiterates its specific recommendations outlined in its September 2007 report to the Council. In particular, the HMSMT recommends four critical actions to end overfishing and rebuild the Eastern Pacific Ocean (EPO) yellowfin tuna stocks:

- 1. Reduce capacity in the purse seine fishery, consistent with IATTC resolutions C-00-10 and C-02-03 to control total fishing capacity.**

- 2. Design and implement an IATTC program to collect information on fish aggregating devices (FADs) and assess their impacts on target stocks, especially juvenile tunas.**
- 3. Set appropriate TAC limits for the purse seine fishery in the EPO, consistent with IATTC staff recommendations. In June 2007, an adjustable TAC of 200,000 mt was recommended.**
- 4. Implement time-area closures consistent with IATTC staff recommendations to reduce fishing mortality on yellowfin tuna stocks.**

3/9/08
PFMC

HIGH SEAS SHALLOW-SET LONGLINE (SSLL) AMENDMENT

In 2003, the Council submitted the Fishery Management Plan (FMP) for U.S. West Coast Fisheries for Highly Migratory Species (HMS) to National Marine Fisheries Service (NMFS) for Secretarial Review; it was approved, with the exception of one provision in the FMP that was disapproved: allowing shallow-set longline (SSLL) fishing east of 150° W longitude. Shallow-set refers to the deployment of the gear so that hooks are at depths of 100 m or less, and is done to target swordfish. The disapproval was based on the results of a Section 7 consultation and biological opinion pursuant to the Endangered Species Act (ESA), which found that the take of sea turtles, and specifically the loggerhead sea turtles, would constitute a jeopardy condition. As a result, regulations were promulgated under the ESA to prohibit this activity.

In his letter partially approving the HMS FMP and in a follow-up letter NMFS Southwest Regional Administrator Rod McInnis encouraged the Council to develop management measures that would allow NMFS to approve a high seas SSLL fishery. In 2004 the Council responded by directing the HMS Management Team (HMSMT) to develop a limited entry program for the SSLL fishery. When other HMS-related priorities came to the fore, work on the FMP amendment stopped. In 2007 the HMSMT again started to work on developing a limited entry program at the request of the Council. At their September 2007 meeting the Council adopted a motion (Agenda Item F.2, WDFW Motion, September 2007) directing the HMSMT to develop three alternatives:

1. Status quo – SSLL fishing seaward of 200 nm and east of 150° W longitude allowed by Hawaii-permitted vessels only; landings can occur on the west coast by Hawaii-permitted vessels.
2. Implement a west coast limited entry program for SSLL fishery seaward of 200 nm.
3. Implement a west coast limited entry program for SSLL fishery seaward of 200 nm; require a drift gillnet permit to participate.

The HMSMT and HMS Advisory Subpanel (HMSAS) met November 6–7, 2007, and discussed possible components of these alternatives. The HMSMT met again January 15–16, 2008, to develop more specific proposals for a range of alternatives. The results of their work are contained in the attached HMSMT Report.

The September 2007 motion also laid out a timeline for Council action with the Council considering a draft range of alternatives for public review and preliminary guidance on qualifying criteria for analysis at this March 2008 meeting. The HMSMT and HMSAS, with guidance from the ad hoc HMS Management Committee, would work on further developing the alternatives during 2008 in anticipation of final Council action at their November 2008 meeting.

Mr. Chuck Janisse submitted a comment letter to the Council in October 2007 with a recommendation for federalizing the current California drift gillnet limited entry permit program. He discusses how this could facilitate gear switching from drift gillnet to SSLL gear. Because there were no HMS agenda items at the November 2007 Council meeting the letter was included under open public comment, but the Council did not have a chance to consider its contents in the context of this action to develop a limited entry program. Therefore the letter has been included under public comment for this agenda item (Agenda Item C.5, Attachment 1). The Council

could consider federalizing the California drift gillnet program as an alternative or complement to the current alternatives for a limited entry program. However, the process to federalize the permits would likely add considerable complexity to limited entry program development, and add to the committees' workload. Therefore, it should probably be considered as a substitute approach to the current set of alternatives developed by the HMSMT.

At this meeting the Council should review the HMSMT report, provide guidance on further refinement of the alternatives and, if appropriate, adopt a range of alternative for public review. Because implementing a limited entry program can be controversial, the Council may wish to provide direction on a schedule for public hearings or other methods for public scoping in 2008.

Council Action:

- 1. Provide guidance on further refinement of a range of alternatives for high seas SSSL limited entry.**
- 2. Adopt a range of alternatives for public review, if appropriate at this time.**
- 3. Provide guidance on public scoping of the alternatives and related future committee meetings.**

Reference Materials:

1. Agenda Item C.3.b, HMSMT Report

Agenda Order:

- a. Agenda Item Overview Kit Dahl
- b. Reports and Comments of Advisory Bodies
- c. **Council Action:** Consider Alternatives for Development of a high seas SSSL fishery

Note: Public comment on this topic and the SSSL exempted fishing permit (agenda item C.4) will be heard under agenda item C.5. After the combined public comment period the Council will return to this agenda item for Council action.

PFMC
02/22/08

HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM REPORT ON HIGH SEAS SHALLOW-SET LONGLINE (SSLL) AMENDMENT

Goals and Objectives of the Management Framework

The goal of this management framework is to provide high seas shallow-set longline (SSLL) fishing opportunity for historic and/or current west coast based fishermen who participated in fisheries targeting swordfish and landed in west coast ports. This may include west coast fishers who used SSLL gear prior to implementation of the HMS FMP and those using other gear types (such as drift gillnet) to target swordfish. This fishery should be managed by the Pacific Fishery Management Council (PFMC) under the Fishery Management Plan for U.S. West Coast Fisheries for Highly Migratory Species (HMS FMP) so that west coast fishermen have a forum to provide input on the design, development, and ongoing refinement of the management framework. However, recognizing the interconnections between any west coast fishery and the current Western Pacific Fishery Management Council (WPFMC) managed Hawaii-based SSLL fishery, the management framework should parallel as closely as possible the key elements and specific regulations applicable to the Hawaii fishery. These interconnections include not only fishers, but also the North Pacific swordfish stock being targeted and many of the same species affected by fishing. According to many stakeholders, an important reason for their support of the HMS FMP was the belief that it would result in a common set of management measures for fishers operating out of the west coast and Hawaii with regard to the SSLL fishery. Thus far, this has not born out; but any west coast management framework should strive to align regulations with those applicable to the Hawaii fishery, to the degree possible. This would ease compliance for anyone who might fish under both regimes.

The management framework for such a fishery must sufficiently minimize impacts to species protected by the Endangered Species Act (ESA), principally the take and mortality of sea turtles. A key issue in this regard is the ability to forecast and appropriately limit the amount of SSLL fishing effort to levels determined not to appreciably reduce the survival and recovery of (i.e., cause jeopardy to) ESA-listed loggerhead and leatherback turtles. Although effort controls could be imposed through seasons or overall limits on the amount of fishing (e.g., set or trip limits), such controls could promote economically inefficient behavior (e.g., derby-style fisheries) that can also complicate management and exacerbate conservation-related problems (due to the possible concentration of fishing effort in time and space when adverse environmental impacts are more likely, for example). Therefore, establishing a license limitation ("limited entry" or LE) program, where a fixed number of permits are distributed and any vessel engaged in the fishery must be registered to such a permit, has been suggested as a prerequisite for establishing a PFMC-managed west coast SSLL fishery. An LE program defines the universe of participants and facilitates the application of other conservation and management measures, such as additional effort limitations and protected species conservation measures.

Background

Prior to implementation of the HMS FMP, a fleet of west coast-based shallow set longline vessels operated in the high seas outside of the U.S. EEZ, landing on average per year over 1,000 metric tons of swordfish to west coast processors and generating an ex-vessel revenue of approximately \$4.5 million per year for the period 1994 to 2003. The Pacific Council included this fishery as part of the HMS FMP; however, on February 4, 2004, NMFS informed the Council that it had approved the HMS FMP with the exception of the provision that would have allowed SSLL fishing by west-coast based vessels targeting swordfish east of 150° W longitude. The disapproval was based on NMFS' determination that the fishery would violate the ESA's jeopardy prohibition with respect to loggerheads.

The MSA requires NMFS, if an FMP is disapproved in part or in whole, to advise the Council of actions it can take to address the disapproved FMP provisions. In a letter dated March 31, 2004, NMFS indicated to the Council that alternative gear and bait options (circle hooks and mackerel bait) being tested in the U.S. Atlantic SSSL swordfish fishery had proven successful in significantly reducing sea turtle interactions and consequent injury to or mortality of sea turtles. NMFS advised the Council that possible use of the alternative gear and bait options by any future west coast-based SSSL fishery might provide the necessary conservation and management measures to prosecute a fishery without jeopardizing the continued existence of ESA listed sea turtles. Since that time, the alternate gear and bait options have also proven to be successful in the Hawaii-based SSSL swordfish fishery resulting in significant reductions in sea turtle interactions while maintaining an economically viable fishery.

Hawaii-permitted vessels currently may fish seaward of 200 nm and east of 150° W longitude and land on the west coast but they have not done so since 2004. Fishers report that the turtle take cap is a disincentive to doing so. They do not want to the risk having the fishery close when they're off the west coast because they've incurred considerable expense to get there and wouldn't be able to recoup it. Effort expansion of the Hawaii-permitted fleet is being considered by the WPFMC. If approved, Hawaii-permitted fishers may reconsider fishing and landing on the west coast because the risk of closure may be sufficiently diminished.

As a result of the successful gear innovations discussed above, NMFS recommended at the April 2007 meeting that the Council re-visit the disapproved portion of the HMS FMP. On September 11 2007, the Council directed the HMSMT to develop the following alternatives for public review to establish a west coast-based SSSL Fishery on the high seas:

1. Status quo – Shallow-set longline fishing seaward of 200 nm and east of 150° W longitude allowed by Hawaii-permitted vessels only; landings can occur on the west coast by Hawaii-permitted vessels.
2. Implement a west coast limited entry program for shallow-set longline fishery seaward of 200 nm.
3. Implement a west coast limited entry program for shallow-set longline fishery seaward of 200 nm; require a drift gillnet permit to participate.

The HMSMT met jointly with the HMS Advisory Subpanel (HMSAS) on November 15-16, 2007, at which time industry representatives recommended moving forward with the establishment of a small and tightly controlled longline fleet, suggesting 10 vessels as a tentative fleet size.

Based on input from the November joint meeting, the HMSMT met again on January 15-16, 2008, and developed the enclosed suite of draft alternatives. These alternatives will be further refined at the March 8-9, 2008, joint HMSMT-HMSAS meeting in Sacramento before being submitted to the Council on March 10 for consideration of adoption for public review. Once adopted, the alternatives are made available to the public for review and comment.

Draft Alternatives

Status Quo Options

1. **Status Quo:** SSSL prohibited west of 150° by FMP, prohibited east of 150° by ESA; can land, fish from west coast if possessing both a Pelagics LE permit and an HMS FMP permit.

2. **Full deferral to WPFMC:** SSSL removed as a legal gear from FMP and prohibited except if possessing a Pelagics LE permit (as under status quo, can land, fish from west coast with Pelagics LE permit). This would include amending the FMP and regulations to remove provisions related to SSSL fishing.

Limited Entry Options

Options for Program Objective

1. Transition willing drift gillnet (DGN) permit holders to shallow-set longline gear. Only those owning a valid California DGN permit qualify. Most, if not all those who fished under an Oregon Developmental Fisheries permit for the DGN fishery may qualify because they also hold a valid California DGN permit.
 - a. Focus on fishery participants adversely affected by the establishment of the Pacific Leatherback Conservation Area (preference given to permit holders with landings made prior to 2001-02 season).
 - b. Focus on current fishery participants (preference given to permit holders with landings made during 2002-03 season to present).

Because this objective is to encourage a transition of willing permit holders from DGN to SSSL gear, one of the following requirements would be applied: (1) surrender of DGN permit to obtain an HMS LE permit, (2) cannot fish both permits in any one year, or (3) combination (e.g., annual restriction for a few years, then surrender requirement kicks in), (4) other option based on industry input.

2. Recognize historic participation in the west coast based SSSL fishery, which operated during the period 1992-2003 before closing with implementation of the HMS FMP in 2004.

The treatment of those currently possessing a WPFMC Pelagics limited entry (Pelagics LE) permit would need to be considered. Under current regulations Pelagics LE permit holders can fish SSSL out of the west coast if they want to, although no such landings have been made since 2004. Allowing someone with a Pelagics LE permit to obtain a new HMS LE permit could give someone who already has the opportunity to land SSSL swordfish on the west coast a second permit for that activity. On the other hand, many of the most active historic west coast participants already possess a Pelagics LE permit. Three options are considered for this issue:

- a. Allow Pelagics LE permit holders to qualify.
- b. Prohibit Pelagics LE permit holders from qualifying.
- c. Allow Pelagics LE permit holders to qualify but prohibit them from fishing the same permit in any one quarter or other yet to be determined time frame.

Options b and c could be hard to implement if there are many cases of partial ownership of Pelagics LE permits (through corporations, partnerships, and the like). Then additional complicated and difficult to enforce rules about partial ownership would have to be developed.

3. A combination of the first two objectives with both DGN permit holders and participants in the historic SSSL fishery qualifying.

Each of these objectives establishes an initial pool of qualifiers. Additional criteria or methods would be applied to match with a specified number of permits (see below).

Options for Number of Permits Issued

1. Small program: 1–25 permits issued
2. Intermediate program: 25–50 permits issued
3. Large program: >50 permits issued

The number of permits that would be issued for a limited entry program would primarily depend on estimated impacts to sea turtles, and secondarily to the available funding for at-sea observers. There is a tradeoff between the number of permits and the maximum amount of fishing effort that could be permitted under the ESA. Issuing a greater number of permits could require imposing an additional effort limit (e.g., maximum number of sets or hooks per year) to prevent jeopardy to sea turtles. As a result, there would be relatively fewer sets available per license holder (vessel). Since total fishing effort would be constrained to limit the takes of sea turtles, the number of vessels allowed to fish should be such that each vessel has enough fishing opportunity to make the activity economically viable. This calculation should be based on the minimum number of trips or sets per year per vessel that is economically viable. In addition, the cost of funding additional observer coverage is likely to be binding constraint that should be factored into the calculation. Given these potential ESA, observer, and fishery economic constraints, the large program (> 50 permits) and even the intermediate program (25-50 permits) may not be realistic options.

Options for Additional Qualification Criteria

DGN Landings History

- Landings history associated with the DGN permit would be used because permits have been registered to more than one vessel over time so permit ownership is easier to track.
- The window period for landings would be 1996–2006, which gives an equal number of years before and after 2001, when the Pacific Leatherback Conservation Area (PLCA) was implemented.
- Total landings of swordfish and thresher shark during the window period would constitute the DGN permit landings history.
- This landings history would be used to rank-order DGN permits. Depending on whether the program objective is to favor those adversely affected by the PLCA or recent participants, each year's landings during the window period could be weighted differently, giving greater weight to either earlier or later years. Once DGN permits are ranked, permits would be issued in rank order up to the total number of permits determined for the program.
- The new SSSL limited entry permit would be issued to the current DGN permit owner.
- A right of first refusal provision would allow issuance to skip over potential qualifiers who do not wish to receive the new SSSL limited entry permit. This could be an important factor if mandatory DGN permit surrender (or simultaneous use of both permits) was a feature of the program.

Historic West Coast SSSL History

- Landings history associated with the vessel that made the landings using SSSL gear from outside the EEZ would be the basis for the qualification since there is no single, stable permit covering all those who made such landings.

- The window period for such landings would be 1993–2003. The landings history would be based on total landings of swordfish during the window period. The beginning of this window period represents the inception of the Hawaii pelagics FMP limited entry program. The west coast fishery was closed in April 2004 so 2003 represents the last full year when landings could be made.
- Vessel landings history would be rank ordered to prioritize issuing permits up to the number of permits authorized under the program, as described above for DGN permits.
- The new SSSL limited entry permit would be issued to the current vessel owner.

Combined History

If the objective is to consider both participants in the DGN fishery and those who historically participated in the west coast SSSL fishery, then landings history in both fisheries would be considered, recognizing that there may be individuals who have histories in both fisheries due to DGN permit and vessel ownership. For the DGN fishery some consideration would have to be given for latent permits; that is, permits that have been renewed but not fished. The simplest approach would be to use the landings histories as described above and:

- Compute a normalized landings history for each fishery. This is done by dividing the landings history for each DGN permit or vessel by the sum of all the landings history in the relevant fishery. In other words, we are simply computing what fraction of the total landings history is attributable to a given DGN permit or historic SSSL vessel. We will call this L_{DGN} or L_{SSLL} .
- Optionally, we could assign a weighting factor to each fishery-specific normalized landings history. We will call this W_{DGN} or W_{SSLL} .
- Each potential qualifying person is scored as $(L_{SSLL} * W_{SSLL}) + (L_{DGN} * W_{DGN})$. The scores are used to rank order potential qualifiers based on current ownership of the DGN permit and/or historic SSSL vessel.
- As described above, permits are issued up to whatever number of permits is determined for the program.

Auction or Lottery

Another way of distributing LE permits once a pool of potential qualifiers (e.g., DGN permits, SSSL vessels, or both) is determined is by holding an auction or lottery. From an administrative standpoint this would be simpler because it is not necessary to develop any additional qualifying criteria to distribute permits, assuming that the number of permits available is less than the number of people interested in obtaining one. An auction or lottery could be appropriate in this situation because there is no existing fishery. Unlike a typical limited entry program where there is an active fleet and the program objective is to limit further growth or reduce fleet size, a SSSL LE program seems like it would be more “demand driven.” The HMSMT has found it difficult to determine how many people would be interested in obtaining an SSSL permit. Members of industry might be unsure as well because interest could be determined in part by the particular conditions that would be place on use of such permit. Since the pool of potential applicants is not clearly defined, an auction or lottery would be an easy way to distribute permits based on an applicant’s interest in obtaining a permit.

Auctions are usually unpopular with fishers because they give advantage to those with the deepest pockets instead of rewarding historical participation in a fishery. But from an economic perspective, an auction will distribute permits to those that value the fishing opportunity the most. Rather than rely on imperfect qualifying criteria to select who gets a permit, an auction allows fishers to in effect self-select

who participates. And by using broad qualifying criteria to control access to the auction, the Council could protect against the deep pocket problem.

A lottery is more neutral than an auction in the sense that it favors neither social objectives (e.g., historic participation) nor those with the financial resources to successfully bid in an auction. However, it means that permits could be a windfall to those that receive them but do not have the interest or means to use them (yet this is also a problem with allocating by qualifying criteria). They would be likely to sell the permits on, resulting in an outcome similar to an auction. This could be addressed by requiring lottery winners to give up the DGN permits in order to receive a SSSL permit. In addition, the Council could also target a set of individuals (e.g., DGN permit holders) using qualification criteria and a point system or other means to give better odds to the targeted individuals. For example, the number of entries in the lottery could be related to landings history.

Harvest of Non-Target Species

To address potential resource concerns or fishery conflicts for species not designated and managed as protected species, additional management measures may need to be considered. These measures could address bycatch of non-targeted species or undesirable targeting on species other than swordfish, if the need arises. This may include, but is not limited to, striped marlin, and commercially important tuna species that are part of RFMO conservation measures and/or have over-exploitation concerns.

Protected Species Mitigation Measures

Gear Requirements

The SSSL fishery would be subject to the same gear restrictions applicable to the Hawaii fishery, including the use of circle hooks and mackerel-type bait. As much as possible gear-related regulations would be harmonized with the Hawaii regulations to ease compliance and minimize impacts to protected sea turtles.

Observer Coverage Requirements

Any future west coast-based SSSL fishery would almost certainly be required to have 100 percent observer coverage given protected species interactions. Unlike Hawaii, which has a substantial and permanent longline observer budget in excess of four million dollars per year, no permanent observer budget currently exists for west coast-based longline trips. Limited funds, allocated on an annual basis through National Observer Program competitive review of proposals, have sustained observer coverage for the west coast-based deep-set longline (DSSL) fishery to this point. Additional funds will need to be secured to cover any future west coast-based SSSL fishery. The availability of funds will most likely act as a constraining factor, in conjunction with any ESA-related effort limitations, on the annual number of trips that can be prosecuted in this fishery.

Sea Turtle Take Caps

Establish take caps for loggerhead and leatherback sea turtles, similar to the caps currently in place for the Hawaii fishery. The HMSMT is not recommending take caps for other protected species at this time, based on the scope of the proposed action area and the assumed species interactions, but a final decision will hinge on the level of modification to the draft alternatives. The Council could recommend specific take caps as part of their preferred alternative, based on preliminary estimates of take provided by NMFS Protected Resources Division or use the numbers in the incidental take statement that would be part of the Biological opinion produced as part of the formal section 7 consultation process.

Guidance has been provided on the level of takes that would likely be allowed (i.e., determined not to cause jeopardy). In the February 4, 2004, letter partially approving the HMS FMP, Rodney McInnis noted the results of those studies and the pending regulatory amendment opening the Hawaii fishery and stated:

I recommend that the Council direct its management team to review this information and to begin developing and analyzing alternative sets of comparable conservation measures under which a longline fishery off the west coast might be able to target swordfish with low levels of marine turtle takes. This could include consideration of limited longline fishing for swordfish with effort limits, gear and bait requirements, time/area limits, turtle take limits, or other measures **that would limit sea turtle mortality to low levels approximating those that had previously been found in the drift gillnet fishery not to result in jeopardy to any listed sea turtles.** (Emphasis added)

The current ITS for the DGN fishery is annually 3 takes with 2 mortalities for leatherbacks, 5 takes with 2 mortalities for loggerhead, and 4 takes with 1 mortality for olive ridley and green turtles during certain oceanographic conditions. This provides some broad guidance on the level of sea turtle takes that would be determined not to cause jeopardy. However, there have been various developments—in terms of knowledge about the behavior, distribution, and status of sea turtle stocks—since 2004. Therefore, consultation with NMFS PRD on any likely jeopardy thresholds will be important in fully developing the alternatives and choosing a preferred alternative.

Effort Limit

The Council should consider a precautionary overall effort limit for the fishery. The purpose of such an effort limit would be to prevent rapid expansion of the fishery due to technological change and/or capacity increases. For example, some fishers have talked about switching from a fresh fish / ice fishery to equipping their vessels with blast freeze capability. This can significantly increase the duration of trips and thus also vessel range. An effort limit might prove helpful in regards to constraints on the days at sea any one vessel could operate with an observer onboard.

Area Closures

The following area closure options have been identified based in part on historic protected species interactions with SSSL fisheries and as well as the economic constraints of delivering fresh product to market.

Prohibit the fishery from operating on the high seas west of:

- a. 140° W longitude
- b. 145° W longitude
- c. 150° W longitude
- d. No area restriction

Analyses developed in conjunction with the HMS FMP suggested that loggerhead incidental takes were lower the farther east fishing occurred. At the time of FMP development NMFS recommended restricting SSSL east of 140° W longitude. This range covers the closure line proposed by the Council (150° W longitude) and the one recommended by NMFS. Figure 1 shows the location of these closure lines in relation to historical west coast SSSL fishing.

Seasonal Restrictions

The following seasonal closure options have been identified based in part on historic SSLL interactions with protected species and on target swordfish availability tied to market constraints:

- a. Close 2nd – 3rd quarter
- b. Close 1st – 2nd quarter
- c. No season closure

The 2nd and 3rd quarters historically comprised a period when little SSLL fishing occurred from the west coast. Closing that time period could concentrate fishing in a time period with higher swordfish CPUE while lessening effects on other species. The first half of the year (1st and 2nd quarters) is also a time period when less SSLL fishing occurred out of the west coast.

Participate in the PIFSC Turtle Watch Program

The HMSMT heard a presentation on the NMFS Pacific Island Science Center's (PIFSC) Turtle Watch Program at its January 15–16, 2008, meeting. Based on information from the Hawaii fishery and satellite tagging of loggerhead sea turtles, scientists have identified a band of sea surface temperatures where they believe loggerhead sea turtles are more likely to occur. They have been providing real time plots of this temperature band to Hawaii SSLL fishers to give them the opportunity of avoiding these areas and thereby reducing sea turtle takes. However, currently they are not providing plots for the area east of 150° W longitude, where a west coast fishery would likely operate. Furthermore, the HMSMT received additional information at their meeting that the temperature band that seems to work in the central Pacific around Hawaii may not work further east where the California Current affects oceanographic conditions. The Council, NMFS Southwest Region and Southwest Fisheries Science Center would work with PIFSC to extend the Turtle Watch Program to the areas where a west coast SSLL fishery would occur, taking into account information on the relationship between sea surface temperature and sea turtle occurrence in the area.

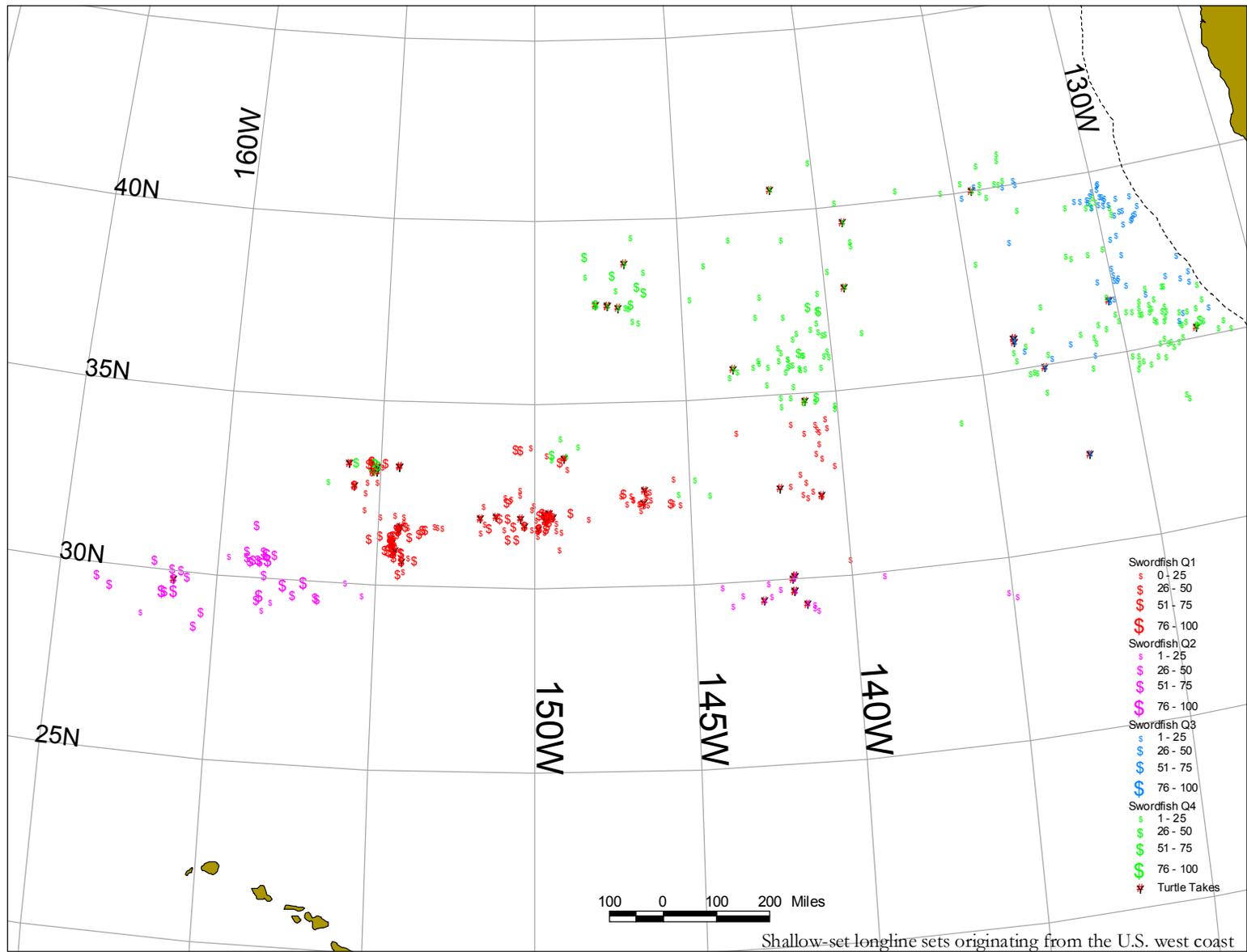


Figure 1. Observed shallow-set longline sets originating from the west coast, 2002-04.

Attachment 1: Preliminary estimates of loggerhead and leatherback sea turtle takes in a high seas SLL fishery

Scenario A

One million hooks, all set east of 150.

| Quarter | | Effort (hooks) | CC* CPUE | Adjusted CPUE | Est takes | DC* CPUE | Adjusted CPUE | Est takes |
|---------|-------|----------------|----------|---------------|--------------|----------|---------------|-------------|
| 1st | n=320 | 208,211 | 0.25556 | 0.025556 | 5.32 | 0 | 0 | 0.00 |
| 2nd | n=61 | 49,853 | 0.24264 | 0.024264 | 1.21 | 0.04044 | 0.006066 | 0.30 |
| 3rd | n=100 | 187,683 | 0.11596 | 0.011596 | 2.18 | 0 | 0 | 0.00 |
| 4th | n=376 | 554,252 | 0.06096 | 0.006096 | 3.38 | 0.05379 | 0.008069 | 4.47 |
| | | | | | 12.09 | | | 4.77 |

Mortalities

| | | | |
|--------|-------------|--------|-------------|
| 17% | 2.06 | 13.00% | 0.62 |
| 9.30% | 1.12 | 22.50% | 1.07 |
| 20.50% | 2.48 | | |

East of 145

| Quarter | | Effort (hooks) | CC CPUE | Adjusted CPUE | Est takes | DC CPUE | Adjusted CPUE | Est takes |
|---------|-------|----------------|---------|---------------|--------------|---------|---------------|-------------|
| 1st | n=320 | 208,211 | 0.24577 | 0.024577 | 5.12 | 0 | 0 | |
| 2nd | n=61 | 49,853 | 0.29422 | 0.029422 | 1.47 | 0 | 0 | |
| 3rd | n=100 | 187,683 | 0.11596 | 0.011596 | 2.18 | 0 | 0 | |
| 4th | n=376 | 554,252 | 0.0304 | 0.00304 | 1.68 | 0.05646 | 0.008469 | 4.69 |
| | | | | | 10.45 | | | 4.69 |

Mortalities

| | | | |
|--------|-------------|--------|-------------|
| 17% | 1.78 | 13.00% | 0.61 |
| 9.30% | 0.97 | 22.50% | 1.06 |
| 20.50% | 2.14 | | |

East of 140

| Quarter | | Effort (hooks) | CC CPUE | Adjusted CPUE | Est takes | DC CPUE | Adjusted CPUE | Est takes |
|---------|-------|----------------|---------|---------------|-------------|---------|---------------|-------------|
| 1st | n=320 | 208,211 | 0.15114 | 0.015114 | 3.15 | 0 | 0 | |
| 2nd | n=61 | 49,853 | 0 | 0 | 0.00 | 0 | 0 | |
| 3rd | n=100 | 187,683 | 0.11596 | 0.011596 | 2.18 | 0 | 0 | |
| 4th | n=376 | 554,252 | 0.02652 | 0.002652 | 1.47 | 0.0464 | 0.00696 | 3.86 |
| | | | | | 6.79 | | | 3.86 |

Mortalities

| | | | |
|--------|-------------|--------|-------------|
| 17% | 1.15 | 13.00% | 0.50 |
| 9.30% | 0.63 | 22.50% | 0.87 |
| 20.50% | 1.39 | | |

* CC = loggerhead; DC = leatherback

Scenario B

One million hooks, all set east of 150.

| Quarter | | Effort (hooks) | CC* CPUE | Adjusted CPUE | Est takes | DC* CPUE | Adjusted CPUE | Est takes |
|---------|-------|----------------|----------|---------------|--------------|----------|---------------|-------------|
| 1st | n=320 | 322,511 | 0.25556 | 0.025556 | 8.24 | 0 | 0 | 0.00 |
| 2nd | n=61 | 121,212 | 0.24264 | 0.024264 | 2.94 | 0.04044 | 0.006066 | 0.74 |
| 3rd | n=100 | 138,528 | 0.11596 | 0.011596 | 1.61 | 0 | 0 | 0.00 |
| 4th | n=376 | 417,749 | 0.06096 | 0.006096 | 2.55 | 0.05379 | 0.008069 | 3.37 |
| | | | | | 15.34 | | | 4.11 |

Mortalities

| | | | |
|--------|-------------|--------|-------------|
| 17% | 2.59 | 13.00% | 0.53 |
| 9.30% | 1.42 | 22.50% | 0.92 |
| 20.50% | 3.12 | | |

East of 145

| Quarter | | Effort (hooks) | CC CPUE | Adjusted CPUE | Est takes | DC CPUE | Adjusted CPUE | Est takes |
|---------|-------|----------------|---------|---------------|--------------|---------|---------------|-------------|
| 1st | n=320 | 322,511 | 0.24577 | 0.024577 | 7.93 | 0 | 0 | |
| 2nd | n=61 | 121,212 | 0.29422 | 0.029422 | 3.57 | 0 | 0 | |
| 3rd | n=100 | 138,528 | 0.11596 | 0.011596 | 1.61 | 0 | 0 | |
| 4th | n=376 | 417,749 | 0.0304 | 0.00304 | 1.27 | 0.05646 | 0.008469 | 3.54 |
| | | | | | 14.37 | | | 3.54 |

Mortalities

| | | | |
|--------|-------------|--------|-------------|
| 17% | 2.44 | 13.00% | 0.46 |
| 9.30% | 1.34 | 22.50% | 0.80 |
| 20.50% | 2.95 | | |

East of 140

| Quarter | | Effort (hooks) | CC CPUE | Adjusted CPUE | Est takes | DC CPUE | Adjusted CPUE | Est takes |
|---------|-------|----------------|---------|---------------|-------------|---------|---------------|-------------|
| 1st | n=320 | 322,511 | 0.15114 | 0.015114 | 4.87 | 0 | 0 | |
| 2nd | n=61 | 121,212 | 0 | 0 | 0.00 | 0 | 0 | |
| 3rd | n=100 | 138,528 | 0.11596 | 0.011596 | 1.61 | 0 | 0 | |
| 4th | n=376 | 417,749 | 0.02652 | 0.002652 | 1.11 | 0.0464 | 0.00696 | 2.91 |
| | | | | | 7.59 | | | 2.91 |

Mortalities

| | | | |
|--------|-------------|--------|-------------|
| 17% | 1.29 | 13.00% | 0.38 |
| 9.30% | 0.71 | 22.50% | 0.65 |
| 20.50% | 1.56 | | |

* CC = loggerhead; DC = leatherback

Assumptions

- Ran numbers under scenario A and B
- Used the level of effort used in the 2004 biological opinion, one million hooks.
- Used the most recent CPUEs developed by Jim Carretta, based upon HI and CA based SSLL observer records
- Adjusted CPUE rates consistent with HI SSLL reductions, i.e., 90% reduction in loggerhead takes, 85% reduction in leatherback takes
- Post hooking mortality rates are currently being debated and all are included. Some recent papers suggest that rates may be as low as 9.5%. The SSLL EFP BO used 0.17 for loggerheads and 0.13 for leatherbacks, consistent with calculations used in the Atlantic HMS BiOp (2004), based on NED
- A recent review of post-hooking mortality in the HI SSLL suggests 20.5% for loggerhead, 22.3% for leatherbacks.

Scenario A: seasonal effort distribution east of 150° W

Scenario A calculates seasonal distribution by quarter corresponding to all fishing occurring east of 150° W, essentially the 2004 proposed action

| Quarter | % of effort | Hooks |
|---------|-------------|-----------|
| 1st | 0.21 | 208,211 |
| 2nd | 0.05 | 49,853 |
| 3rd | 0.19 | 187,683 |
| 4th | 0.55 | 554,252 |
| Total | 1.00 | 1,000,000 |

Scenario B: east and west of 150° W

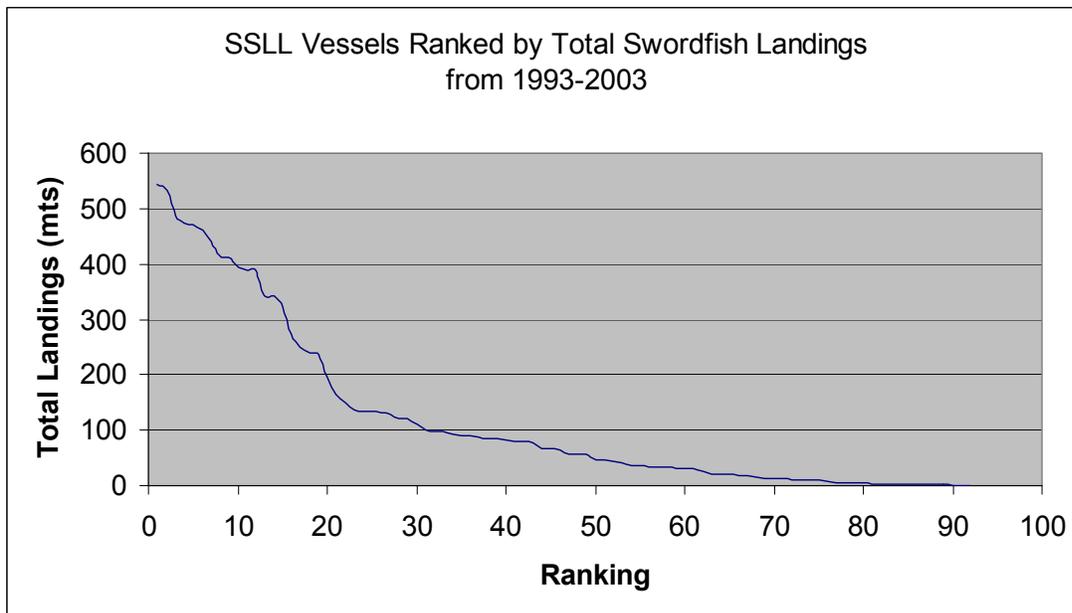
Scenario B assumes seasonal distribution of effort by quarter corresponds to distribution across entire area, historical fishery effort,

| Quarter | % of effort | Hooks |
|---------|-------------|-----------|
| 1st | 0.32 | 322,511 |
| 2nd | 0.12 | 121,212 |
| 3rd | 0.14 | 138,528 |
| 4th | 0.42 | 417,749 |
| Total | 1.00 | 1,000,000 |

Attachment 2: Number of vessels with landings of swordfish (mt) that fished with SLL from the west coast, 1993-2003, categorized by amount.

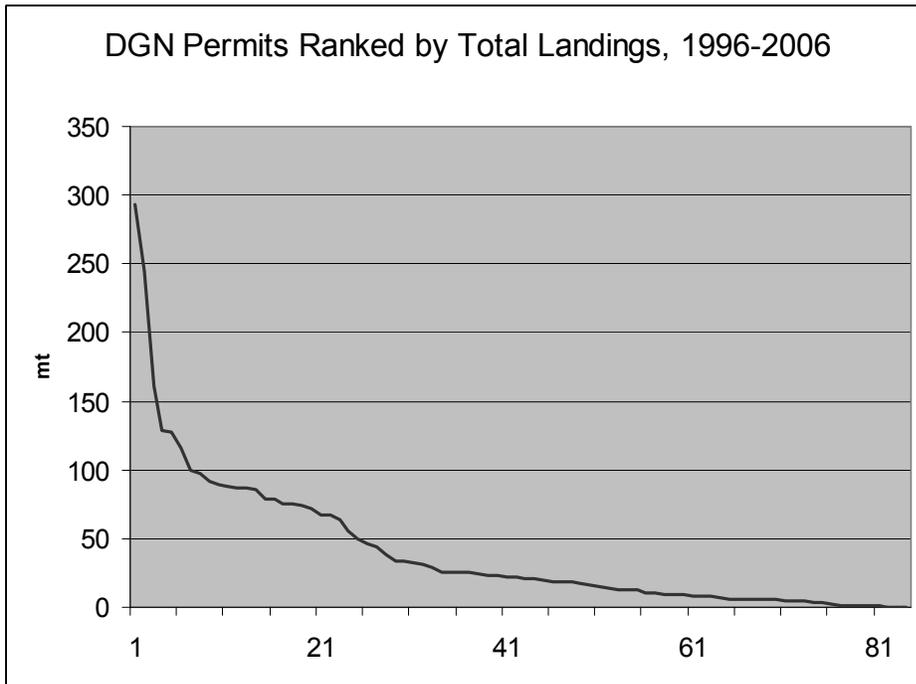
- (1) Includes all PacFIN records with longline landings of swordfish from 1993-2003.
- (2) Landed weight is converted to round weight through multiplying by the conversion factor on each fish ticket then dividing by 2204.6.
- (3) Includes all swordfish landings per vessel without regard to gear or location where it was caught.

| Cutoff (mt), landings ≥ | Number of Vessels |
|-------------------------|-------------------|
| 450 | 5 |
| 425 | 7 |
| 400 | 10 |
| 375 | 10 |
| 350 | 12 |
| 325 | 13 |
| 300 | 13 |
| 275 | 14 |
| 250 | 17 |
| 225 | 17 |
| 200 | 18 |
| 175 | 20 |
| 150 | 25 |
| 125 | 28 |
| 100 | 41 |
| 75 | 47 |
| 50 | 60 |
| 25 | 90 |



Attachment 3: landings of swordfish and thresher shark (mt), 1996-2006, by DGN permittees.

| Cutoff (mt), landings \geq | No. of Permittees |
|------------------------------|-------------------|
| 25 | 84 |
| 50 | 35 |
| 75 | 24 |
| 100 | 18 |
| 125 | 6 |
| 150 | 5 |
| 175 | 5 |



HIGHLY MIGRATORY SPECIES ADVISORY SUBPANEL REPORT ON HIGH SEAS SHALLOW-SET LONGLINE (SSLL) AMENDMENT

The Highly Migratory Species Advisory Subpanel (HMSAS) would like to emphasize the following goals for the High Seas SSLL amendment:

- Provide opportunity for historic and/or current west coast based fishermen who participated in fisheries targeting swordfish and landed in west coast ports.
- Not to increase fleet size operating from the west coast that is targeting swordfish.
- There is a need to proceed with this amendment or the Hawaii-based fleet will likely utilize Endangered Species Act (ESA) allowed turtle impacts.
-

The HMSAS has been advised by the Highly Migratory Species Management Team (HMSMT) that approximately one million hooks can potentially qualify which the HMSAS estimates would support between 12 and 25 active permits. However, the western boundary is yet to be determined and the availability of observers will be factors in determining actual participation. The HMSAS suggests that a point ranking system with the following categories be included in the range of alternatives, which will identify a pool of eligible fishermen to receive permits to participate in fishery. Following is a list of categories that would be assigned points leading to the permit ranking:

- Owning a current drift gillnet (DGN) permit and having current landings of swordfish by longline.
- Owning a current DGN permit.
- Owning a current DGN permit and have swordfish landings between 2001 and 2007.
- Length of ownership of a DGN permit.
- Medical reasons for not meeting requirements.
- A review board would rate unforeseen circumstances.

The HMSAS suggests that the ranking remains regardless if licensee refuses opportunity, that one fishing operation is restricted to one longline permit, that one vessel cannot own both a westcoast and hawaiian longline permit simultaneously, that a vessel cannot have both DGN and longline gear on the vessel at the same time, and that the framework amendment is written so the participants, number of hooks, number of sets, etc. can be expanded or contracted by the Pacific Fishery Management Council (Council) without a Fishery Management Plan (FMP) amendment.

Some members of the HMSAS, have recommended that a Pacific-wide conservation and management strategy or joint pelagic fisheries management plan with the Western Pacific Fishery Management Council (WPFMC) is necessary to establish a high seas SSLL fishery off the U.S. west coast.

However, progress has not been achieved in developing a joint conservation and management strategy between the councils and the WPFMC is proceeding with a unilateral swordfish

amendment to their Pelagic FMP to increase longlining effort in the Western and Eastern Pacific Ocean.

The historic west coast high seas shallow set longline fishery was terminated upon the implementation of the Council's HMS FMP out of concerns for turtle takes.

The HMAS recommends that the Council ask the Secretary to not approve the WPFMC Pelagics FMP amendment until there is an opportunity to jointly review the proposed Council SSL amendment and evaluate the cumulative impact of proposed actions on sea turtles and other protected species as well as vulnerable non-target fish species.

Furthermore, a minority of the HMSAS (Bob Osborn, United Anglers of Southern California, and Meghan Jeans, Ocean Conservancy) recommend that the Council not take unilateral action to establish a high seas SSL fishery but instead should pursue other alternatives, including but not limited to collaboration with the WPFMC, to ensure that a west coast longline fishery does not add to the take of turtles.

PFMC
03/10/08
10:53 am

HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM REPORT ON
HIGH SEAS SHALLOW-SET LONGLINE (SSLL) AMENDMENT

The Highly Migratory Species Management Team (HMSMT) discussed the management framework for a high seas shallow-set longline fishery with members of the Highly Migratory Species Advisory Subpanel (HMSAS). The HMSMT Report (Agenda Item C.3.b) proposes a number of alternatives, including a status quo option along with various possible configurations of a west coast based high seas shallow set longline fishery. The HMSMT then solicited comments from industry representatives who were present at the meeting regarding their opinions on what fishing areas, effort level, and fleet size would be appropriate.

The HMSAS suggested a small initial fleet size of 12 permitted vessels based on the likely level of effort which would not create potential jeopardy to protected loggerhead and leatherback turtle stocks, while allowing for an economically viable level of effort for participants. The HMSMT recommends considering whether it would be possible to develop an adaptive management policy which provides for periodic review of success in meeting protected species conservation requirements. This review could include an assessment of impacts on target, nontarget, and protected species along with any cumulative impacts. If conservation goals were attained, the policy would allow for an increase in the number of permits without requiring a new fishery management plan amendment or a reinitiation of the Section 7 consultation process.

The HMSMT notes that the current level of observer funding would limit observer availability and may constrain effort below the level that might otherwise be possible for a given number of permits. Similarly, if sea turtle take caps were established to limit the allowable takes of loggerhead and leatherback sea turtles subject to 100 percent observer coverage requirements, effort would potentially be constrained below the level otherwise anticipated. The HMSMT suggests that a balance between the number of permits and allowable effort is necessary to ensure a reasonable chance for participants to achieve an economically viable level of effort.

Given that the Western Pacific Fishery Management Council has initiated a process to prepare a Supplemental Environmental Impact Statement, the HMSMT believes there may be an advantage to immediately beginning the public review process rather than waiting for a more refined list of alternatives later. Therefore, the HMSMT suggests the Council consider whether to initiate the public review process based on the current range of alternatives, or to develop a more detailed proposal for future consideration at the September Council meeting.

Council Action:

- 1. Consider whether to begin the public review process immediately or postpone until a later Council meeting (for example, September 2008).**
- 2. If the Council wishes to immediately initiate the public review process, adopt a range of alternatives for public review.**
- 3. Provide guidance on the timeline for public comment.**



The Ocean Conservancy

Agenda Item C.3

March 7, 2008

Dr. Donald McIsaac
Executive Director, Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220-1384

RE: Agenda Item C.3 – High Seas Shallow-Set Longline Amendment

Dear Dr. McIsaac and Members of the Council:

On behalf of Ocean Conservancy, I am writing to urge the Pacific Fishery Management Council (PFMC) to defer the development a management framework for a high seas shallow-set longline fishery off the west coast of the United States. We believe that the development of a high seas longline fishery is inappropriate given the potential ecological consequences. Instead, we recommend that the Council consider a broader range of alternatives to achieve the goal of providing more sustainable fishing opportunities while promoting the recovery of endangered sea turtles and over-exploited fish populations. We also encourage the Council to prioritize the development of a coordinated management strategy for pelagic fisheries with the Western Pacific Fishery Management Council.

A high seas shallow-set longline fishery poses a threat to endangered sea turtles.

Sea turtles throughout the Pacific are hovering on the brink of extinction due in large part to incidental mortality associated with fishing operations. Fisheries mortality has been especially problematic for loggerhead and leatherback sea turtles, with nesting population reductions in excess of 80 percent over the last three generations for both species. Leatherbacks are classified as “endangered” under the Endangered Species Act (ESA) and “critically endangered” by the World Conservation Union (IUCN). The status of the leatherback has been the focus of much attention in recent years, however conservation, protection and support is as critical for the loggerhead as for the leatherback. According to the latest surveys, there are fewer nesting loggerheads in the Pacific than nesting leatherbacks. The two major loggerhead populations in the Pacific are found in Japan and Australia, with less than 1,000 and 300 turtles, respectively, nesting annually. The IUCN’s Red List of Threatened Species identifies loggerheads as “endangered” while the ESA classifies loggerheads as “threatened” throughout their range. A pending petition to uplist and reclassify the Pacific loggerhead population as endangered under the ESA suggests that Pacific loggerhead populations warrant even greater protection.

The Pacific longline fisheries out of California and Hawaii were both previously found to cause jeopardy to leatherback and loggerhead sea turtle populations under the ESA. In November 1999, concerned about the high level of sea turtle mortality associated with longlining, Ocean

Conservancy (previously known as the “Center for Marine Conservation”) secured an injunction restricting longline fishing under the fishery management plan (FMP) for pelagic fisheries in the western Pacific. The objective of the injunction was to reduce leatherback sea turtle mortality by the shallow-set longline fishery targeting swordfish around the Hawaiian Islands.¹ NMFS subsequently issued a Biological Opinion pursuant to Section of 7 of the ESA on the pelagics FMP. The agency concluded that continued operation of the fishery would jeopardize the existence of leatherback, loggerhead, and green sea turtles, and amended the FMP to close the Hawaii-based shallow-set longline fishery. The fishery was allowed to re-open again in 2004 subject to the conditions that only large 18/0 circle hooks be used, that an effort cap be established to control the number of longline sets, and that a hard cap on turtle take be established to close the fishery if it approached the limits of its take authorization. In March 2006, the annual hard cap on take of loggerheads was reached after the fishery operated for less than three months.²

Scientists have concluded that, “[t]he critical issue for an individual turtle is the likelihood of capture across an ocean region, not capture by a particular nation. With multiple fleets deployed the cumulative effects of pelagic longlines across fleets in large ocean regions must be taken into account.”³ It would be inappropriate to allow the capture of turtles by a California-based fishery when the Hawaii fishery was closed for exactly this reason only two years ago. The Hawaii and California based fleets fish in the same manner, often in the same area, and catch the same turtles.⁴ In addition, the fleets consist of many of the same boats that have had a history of moving back and forth to avoid the closures to protect sea turtles that have alternated between Hawaii and California in recent years.

Where fish stocks and associated non-target species act as a single unit, a more comprehensive and coordinated impact evaluation is crucial. The ad hoc approach employed by U.S. fishery managers does not properly account for the cumulative effect of all U.S. managed pelagic fisheries on fish and wildlife populations. Evaluations of the relative impact of longline fishing on Pacific turtle populations have concluded that “[a]lthough bycatch rates from individual longline vessels are extremely low, the amount of gear deployed by longline vessels suggests that cumulative bycatch of turtles from older age classes is substantial.”⁵ The conservation community has repeatedly called for a comprehensive evaluation of the impacts of all U.S. longlining in the Pacific on imperiled sea turtle populations, yet that essential step still has not occurred.

The recovery plan for Pacific Leatherback populations noted that “...the waters off the west coast of the United States may represent some of the most important foraging habitat in the entire world for the leatherback turtle.”⁶ In June 2007, NMFS rejected an EFP application that would have authorized expansion of the drift gillnet fishery into the Pacific Leatherback Conservation Area, citing recent satellite-tracking studies which confirm the importance of the waters off the

¹ *Center for Marine Conservation, et al., v. National Marine Fisheries Service, et al.*, (Civ. No. 99-00152 DAE)(D. Hawaii)

² 71 Fed. Reg. 14824 (March 24, 2006)

³ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. *Conservation Biology* 2007, Volume 21, No.1, p. 81.

⁴ 69 Fed. Reg. 11540, 11543 (March 11, 2004) (preamble to final rule closing Pacific longline fishery east of 150 degrees West long.)

⁵ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. *Conservation Biology* 2007, Volume 21, No.1, p.79.

⁶ NMFS and USFWS. 1998. Recovery Plan for US Pacific Populations of Leatherback Turtle (*Dermochelys coriacea*), p. 14.

California coast as vital foraging grounds for endangered leatherback turtles.⁷ Since the tracking studies referenced by NMFS in their decision were limited to the neritic zone, scientists speculate that the number of sea turtles and the leatherback habitat range off the coast of California and Oregon may be underestimated. Despite these findings, the proposed high seas longline fishery would overlap with portions permit Pacific Leatherback Conservation Area and occur during the time of year when leatherbacks are migrating through the region.

Non-fishery conservation measures do not offset fisheries-related sea turtle mortality.

Sea turtles face a myriad of threats throughout their range and at every stage in their life cycle. Under the ESA, NMFS has a duty to use its authority and all of its programs to provide for the conservation of endangered and threatened species. As such, we strongly support both domestic and international conservation measures that will help reverse the decline of Pacific sea turtle populations and promote their recovery. Protecting nesting beach habitat, identifying prime foraging grounds, educating the public and engaging local communities is critical to the recovery of sea turtle populations around the world. We are troubled however with the suggestion that fisheries-related turtle mortality could be offset with non-fishery conservation strategies. It would not be appropriate (or consistent with Section 7(a)(2) of the Endangered Species Act) to consider non-fishery related conservation measures as offset measures or compensatory strategies justifying additional fishery-related mortality. Despite strong scientific backing, the ultimate effect of such non-fishery conservation measures on turtle populations is, at this point, entirely speculative. While we certainly hope that they will result in larger populations of turtles in the future, predictions that larger numbers of nests and eggs will be saved cannot be used to allow takes of *any* existing turtles, let alone reproductively mature animals. For example, the recovery of the Kemp's Ridley turtle is the result of decades of conservation of primary nesting habitat in Mexico *and* full implementation of measures to protect these animals from drowning in shrimp trawls. Only by focusing on reducing mortality throughout the range of these species and at all stages of life will recovery efforts be successful.

Increased longline fishing effort and capacity threatens vulnerable fish populations.

In addition to potential negative interactions between shallow-set longline gear and endangered sea turtle populations, we are concerned about the impact of increased fishing effort and capacity on select target and non-target fish species. While the proposed high seas shallow set longline fishery specifies swordfish as the target catch, other more vulnerable highly migratory species may be targeted or caught incidentally. The 2007 draft environmental assessment for the failed exempted longline fishery within the EEZ noted that shallow set longlining off the west coast may lead to a greater level of interactions with protected shark species including great white sharks and basking sharks.⁸ Characterized by their slow growth, late maturity and low fecundity, shark species are particularly vulnerable to the impacts of longline fisheries.

Proponents of the high seas longline fishery acknowledge that several tuna species are likely to be caught intentionally and incidentally to shallow-set longline activities. Of greatest concern is the potential impact to yellowfin, bigeye and albacore, all of which have been classified as overfished and/or experiencing overfishing. Both the Inter-American Tropical Tuna

⁷ Benson, S.R., K.A. Forney, J.T. Harvey, J.V. Carretta, and P.H. Dutton. In press. Abundance, distribution, and habitat of leatherback turtles (*Dermochelys coriacea*) off California, 1990-2003. Fishery Bulletin.

⁸ Draft Longline Exempted Fishing Permit Environmental Assessment, March 2007, p.51.

Commission (IATTC) and U.S. stock assessment scientists have identified Pacific bigeye and yellowfin tuna populations as being overfished and subject to overfishing.⁹ The IATTC has put forth a resolution which states that “bigeye stocks are below the level that would produce the average maximum sustainable yield (AMSY)” and directs member nations to implement a seasonal closure for commercial purse seine and longline vessels targeting bigeye (and yellowfin) tuna.¹⁰ Likewise, the IATTC and WCPFC adopted resolutions in 2005 identifying North Pacific albacore populations as experiencing overfishing and requiring member nations to cap current levels of effort.¹¹ The first Stock Assessment and Fishery Evaluation (SAFE) Report for the U.S. West Coast HMS FMP echoed this conclusion and warned that “[t]he current fishing mortality rate is high...and may be cause for concern regarding the current stock status of North Pacific albacore.”¹² In light of the vulnerable status of these tuna populations, expanding capacity, increasing fishing effort and establishing a high seas shallow set longline fishery off the U.S. West Coast is not consistent with international resolutions, domestic regulations, the best available science and the principles of precautionary management.

Clarify objectives and consider a broad range of management alternatives.

As an initial matter, Ocean Conservancy recommends that the Council and NMFS reframe this issue as a broader policy discussion and articulate a more accurate and inclusive “purpose and need” statement. For years, fishermen and fishery managers have expressed a desire to create domestic opportunities to target swordfish and transition the drift gillnet fleet to a more selective and less destructive method of fishing. If, in fact, there is legitimate interest in developing a cleaner and more sustainable swordfish fishery, the Council and NMFS must identify that as an objective and evaluate a wider range of alternatives than simply establishing a limited entry high seas shallow set longline fleet of variable sizes. The purpose and need must, at a minimum, be broad enough to allow consideration of a *reasonable* range of alternatives.

In 2004, NMFS imposed a moratorium on pelagic longline fishing east of 150 degrees West longitude to guard against jeopardy to loggerheads even after the Pacific Council banned longlining west of 150 degrees West longitude. Likewise, the Hawaii-based longline fishery was shut down in 2006 after only three months because of excessive turtle interactions. These far reaching closures demonstrate just how vulnerable sea turtles are to the impacts of longline fishing. As such, it would be inappropriate to artificially limit range of alternatives considered to longlining exclusively. Of the action alternatives being presented to the Council, it has been suggested by agency scientists that two (the medium and large size limited entry fleet options), if not all, are patently unreasonable. Such a dramatic increase in capacity and fishing effort is likely to have significant impacts on over-exploited and protected species and run afoul of international overfishing resolutions, the Endangered Species Act, the Marine Mammal Protection Act, the Migratory Bird Treaty Act (MBTA), and the Magnuson-Stevens Act among others. Since both Hawaii and California-based longline fisheries were previously closed due to their adverse impacts on sea turtle populations, it is improper to again call for a renewed longline fishery off the west coast without also evaluating options that would provide more protections for sea turtles and other non-target species. A “reasonable” alternative must also be practicable. The stated goal in establishing a high seas shallow set longline fishery is to create a viable and more selective alternative to drift gillnetting while not increasing overall fishing

⁹ 2005 HMS Stock Assessment and Fishery Evaluation Report, Table 5-1, p. 111.

¹⁰ Resolution C-06-02, IATTC, June 2006

¹¹ PROP IATTC-73-C1, June 2005

¹² 2005 HMS Stock Assessment and Fishery Evaluation Report, Section 5.3.1, page 106.

capacity. It is unclear however how the drift gillnet fleet might transition to longline fleet when, as the PFMC's staff white paper notes, "the size and configuration of drift gillnet vessels makes it unlikely that existing vessels could be fitted for distant water fishing beyond the EEZ."

The Council is charged with developing and refining a range of alternatives for public review and conducting further environmental analysis pursuant to the National Environmental Policy Act (NEPA). The alternatives analysis "is the heart of the environmental impact statement."¹³ It "should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public."¹⁴ Moreover, it should "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated,"¹⁵ and "devote substantial treatment to each alternative considered in detail,"¹⁶ Should the Council opt to proceed with the development of a management framework, we urge managers to revise the purpose and need statement to more accurately reflect the objective of indentifying more selective fishing strategies to target swordfish. We also recommend that the Council and NMFS broaden the scope of alternatives and not prematurely discount other reasonable options including the potential expansion of a California-based harpoon fishery for swordfish.

Investigate options to expand the California harpoon fishery.

To the extent that fishery managers are interested in transitioning the California drift gillnet fleet to a more selective gear type, we recommend that the Council and NMFS investigate opportunities to expand the California-based harpoon fishery for swordfish. The high value, zero bycatch harpoon fishery has been in existence for nearly a century and may provide a viable and more sustainable alternative to drift gillnets and longlines for targeting swordfish. At its peak in 1978, the harpoon fishery had 309 vessels landing 2,700 metric tons of swordfish. Since then, the harpoon fishery has gradually, albeit not entirely, been replaced by the more efficient yet more destructive drift gillnet fishery. Critics claim that a harpoon fishery could not match the volume of fish yielded by the drift gillnet fleet, however drift gillnet landings of swordfish peaked in 1984 at 2,400 metric tons. What's more, research is underway to improve the efficiency of harpooning by analyzing swordfish movement data to better understand how environmental conditions influence swordfish basking rates and times.¹⁷

Prioritize development of a coordinated management framework for pelagic fisheries throughout the Pacific.

The conservation community has repeatedly called for more coordinated management between the Western Pacific and Pacific fishery management councils and a comprehensive evaluation of the impacts of all U.S. longlining in the Pacific on imperiled sea turtle populations, yet these essential steps still have not occurred. The Hawaii and California based fleets fish in the same manner, often in the same area, and catch the same turtles.¹⁸ In addition, the fleets consist of many of the same boats as they have historically moved back and forth to avoid the closures to protect sea turtles that have alternated between Hawaii and California in recent years.

¹³ 40 C.F.R. §1502.14

¹⁴ *Id.*

¹⁵ 40 C.F.R. §1502.14(a)

¹⁶ 40 C.F.R. §1502.14(b).

¹⁷ Pflieger Institute of Environmental Research (PIER), http://www.pier.org/hm_fishes_swordfish.shtml.

¹⁸ 2004 Draft BiOp at 90

Scientists warn that, “[t]he critical issue for an individual turtle is the likelihood of capture across an ocean region, not capture by a particular nation. With multiple fleets deployed the cumulative effects of pelagic longlines across fleets in large ocean regions must be taken into account.”¹⁹

If current fishing practices continue, scientists predict that the extinction of Pacific leatherback sea turtles within the next 10-30 years is imminent.²⁰ Time/area closures and more selective fishing practices can help avert the alarming decline in population of these ancient reptiles, but it will depend on efforts at both the national and international level. The United States has an important leadership role to play in investigating ways to fish more selectively. Towards that end, we recommend that the Pacific Council work closely with fishery managers in the Western Pacific and elsewhere to develop more selective and innovative fishing practices and gear technologies in existing fisheries. To promote sustainability on a global scale, the U.S. must lead by example, by minimizing domestic capacity and developing strong conservation measures that promote ecosystem health and ensure the recovery of endangered sea turtle populations. Even with the most stringent conservation measures in place, reintroduction of longline fishing off the US west coast will result in a net increase in capacity and fishing effort and put vulnerable finfish, marine mammal and turtle populations at even greater risk.

At the same time that the Pacific Council is taking steps to establish a high seas limited entry longline fleet off the west coast, fishery managers in the Western Pacific are considering rolling back critical bycatch mitigation measures in their shallow-set longline fishery. Should both efforts be successful, the likely result would be a overall increase in longline fishing effort Pacific-wide and jeopardy determinations for many species of sea turtles. Any proposed changes to the status quo management regime for longlining off the west coast and in Hawaii, should be well-vetted by *both* Councils and NMFS before time and resources are expended. Absent better communication and coordination, existing longline fisheries may be subject to even greater constraints and sea turtle recovery efforts may be irreversibly compromised. As such, we recommend that the Pacific Council defer development of a west-coast based longline fishery and initiate a process to develop a joint pelagics management framework with the Western Pacific Fishery Management Council.

Adopt import restrictions and demand-side strategies to reduce reliance on imported swordfish.

Proponents of the high seas longline proposal also claim that a west coast based fishery is warranted and necessary to meet the domestic demand for swordfish and reduce our reliance on imported swordfish from countries that may have weaker standards for sustainability and conservation. While these are legitimate concerns, the implied assumption is that demand is static and therefore we must increase supply in order to meet demand. Previous efforts to inform and educate consumers about the ecological impacts of fishery operations have been tremendously successful at influencing demand and paving the way for more effective management strategies. For example, the tuna-dolphin issue is part of the broader public consciousness of American consumers and influences many purchasing decisions. Likewise, a recent campaign to discourage consumers from buying severely depleted Chilean sea bass (Patagonian toothfish) was hugely successful. It is clear that informed consumers can

¹⁹ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. Conservation Biology 2007, Volume 21, No.1, p. 81.

²⁰ Nature 405, June 2000

substantially influence the demand side of the equation; therefore a more prudent approach would be to focus agency efforts on educating the public about the relative sustainability and associated impacts of the domestic and international swordfish fisheries.

If the objective in establishing a longline fishery off the west coast is to meet consumer demand while promoting more sustainable management approaches abroad, a better approach would be to monitor and control imports. The U.S. has the authority and the legal responsibility to monitor and control imports from countries whose vessels are fishing in a manner that undermines the conservation of protected species. The recent reauthorization of the Magnuson-Stevens Act (MSA) clarified the intent of Congress to crack down on illegal, unreported or unregulated (IUU) fishing to raise the bar for sustainability. Specifically, the Act requires that NMFS identify fishing vessels engaged in "fishing activities or practices...that result in bycatch of protected living marine resources..."²¹ Moreover, the MSA specifically endorses the use of market-related measures such as import prohibitions and landing restrictions to combat IUU fishing.²² Likewise, the Marine Mammal Protection Act (MMPA) is another statutory tool by which the U.S. can restrict imports of swordfish from countries that do not meet strong conservation standards to minimize the impact of fisheries on marine mammals. Though still pending, the Center for Biological Diversity and Turtle Island Restoration Network recently submitted a petition to ban imports of swordfish from countries failing to submit proof of the effects of fishing technology on marine mammals pursuant to Section 101 of the MMPA. Indeed, if NMFS is sincerely concerned about the impacts that foreign fleets are having on protected resources, limiting or restricting the importation of swordfish caught in an unsustainable manner is a powerful tool that should not be discounted.

It would be irresponsible to re-establish the longline fishery without the necessary conservation safeguards, a thorough environmental impacts analysis, consideration of alternative gear types to target swordfish, and a coordinated management strategy with the WesPac. We do not believe there is sufficient evidence to justify allowing a renewed longline fishery at this time and urge the Council to discontinue development of a management framework for a high seas shallow set longline fishery.

Sincerely,



Meghan Jeans
Pacific Fish Conservation Manager

²¹ 16 USC 1826d et seq., Section 610(a)(1)(A)

²² 16 USC 1826d et seq., Section 608(2)

EXEMPTED FISHING PERMIT (EFP) FOR LONGLINE FISHING IN THE WEST COAST EXCLUSIVE ECONOMIC ZONE

In April 2007 the Council recommended that National Marine Fisheries Service (NMFS) issue an exempted fishing permit (EFP) allowing a single vessel to target swordfish with shallow set longline gear in the West Coast Exclusive Economic Zone (EEZ). The purpose of the EFP fishery would be to gather preliminary information to help determine whether longline fishing could be an economically viable alternative to the current drift gillnet fishery with less environmental impact. Longline fishing is currently prohibited in the West Coast EEZ under regulations pursuant to the Fishery Management Plan for U.S. West Coast Fisheries for Highly Migratory Species (HMS FMP). The general purpose of an EFP is to allow fishing that would normally be prohibited under regulations in order to gather information and test new methods. This information gathering supports any future decision to modify management regulations related to the activity.

The Council also recommended a number of terms and conditions be placed on the EFP in order to minimize impacts to protected species and other non-target species. Key mitigation measures included:

- No fishing within 30 miles of the coastline;
- No fishing within the Southern California Bight;
- No fishing north of 45° N latitude;
- Compliance with existing HMS FMP regulations, including protected species conservation measures;
- Mandatory 100% observer coverage;
- A cap on total fishing effort of no more than four trips, 14 sets per trip, 400-1,200 hooks per set (for a maximum of 67,200 hooks deployed overall);
- Fishing conducted between September and December;
- Use of 18/0 circle hooks with 10° offset;
- Use of mackerel bait and light sticks;
- Setting gear at night to reduce seabird mortality.

In addition, the Council recommended a catch cap of 12 striped marlin, and a take cap of one short-finned pilot whale. Caps on humpback and sperm whales and leatherback and loggerhead sea turtles, which are listed under the Endangered Species Act, would be equivalent to any amounts in the Incidental Take Statement that will be part of the Biological Opinion NMFS will prepare for the action.

NMFS then began the review process leading up to issuance of the EFP, which would have allowed fishing to occur from September to December 2007. Pursuant to section 1456(c)(1)(A) of the Coastal Zone Management Act of 1972 (CZMA), Federal agencies must determine if an action will affect the state's coastal zone and whether it is consistent with the enforceable policies of the state's program, and then must notify the state agency of this determination. The state agency then has 60 days to inform the Federal agency whether it concurs with or objects to the Federal determination. On August 10, 2007, the California Coastal Commission (CCC) held a hearing on the proposed EFP at which they initially determined that they did not concur with

NMFS's determination that the EFP would be consistent. However, they then decided that the action was actually subject to section 1456(c)(3)(A) of the CZMA relating to an applicant for a Federal license or permit to conduct an activity affecting the state's coastal zone. The CCC scheduled a second hearing in December of 2007 to again consider concurrence under that section of the CZMA. However, the applicant, Mr. Pete Dupuy, withdrew his application in advance of the hearing upon learning that the concurrence would only be applicable to 2007. Because of the timing of the hearing and the fact that the EFP was only applicable to the 2007 calendar year, the CCC's actions essentially rendered any concurrence moot.

Mr. Dupuy has resubmitted a slightly updated EFP proposal from the one originally submitted in March 2006 (which was then deferred for consideration in 2007) for consideration during 2008 (see Attachment 1). The proposal is the same except for changes described in the cover letter to the resubmitted proposal. The applicant proposes to change the time period for fishing to November through March (previously the time period was September through December). He also will not fish within 50 miles offshore instead of 30 miles. Finally, recognizing the amount of time it may take for the proposal to go through all required reviews, he would like the option to conduct fishing from November 2009 to March 2010 if the EFP cannot be issued in time for him to fish from November 2008 to March 2009. In other words, if he cannot fish under the EFP in 2008-09 he asks to instead fish in 2009-10 without further review of the proposal by the Council.

If the Council recommends the EFP for implementation in 2008, they could also recommend the same terms and conditions as outlined above along with the changes proposed by the applicant. Given the relatively minor changes to the applicant's proposal, leaving the other terms and conditions the same could simplify the implementation process, because much of the environmental impact analysis developed by NMFS in 2007 could be used to evaluate potential impacts of the EFP in 2008-09.

At this meeting the Council needs to decide whether to adopt the EFP proposal for public review. If they decide to do so, then at the April 7-12, 2008 meeting the Council would finalize their recommendation to NMFS on EFP issuance.

Council Action:

Adopt EFP for public review.

Reference Materials:

1. Agenda Item C.4.a, Attachment 1: Application for an Exempted Fishing Permit to Fish with Longline Gear in the West Coast Exclusive Economic Zone.

Agenda Order:

- a. Agenda Item Overview
- b. Reports and Comments of Advisory Bodies
- c. **Council Action:** Adopt EFP for Public Review

Kit Dahl

Note: Public comment on this topic and the high seas shallow-set longline FMP amendment (agenda item C.3) will be heard under agenda item C.5. After the combined public comment period the Council will return to this agenda item for Council action.

PFMC
02/20/08

Subject: (no subject)
From: LaPazKD@aol.com
Date: Tue, 19 Feb 2008 15:13:54 -0500 (EST)
To: Kit.Dahl@noaa.gov

Dear Kit,

I would like to re-submit my experimental fishery permit and I would like to make two changes. One, I would like the time limit changed that I have now to complete my experiment to 2008 through 2009. I would still make only four trips with the same amount of sets and hooks but would need the additional time to get through the California Bureaucracy.

After getting the okay from the Council the California Coastal Commission said they didn't have enough information on the experimental fishery. By the time a hearing had been scheduled my time limit with P.M.F.C. had expired.

The second change would be to move no fishing within 30 miles out to fifty miles out.

Thanks,

Pete

Delicious ideas to please the pickiest eaters. [Watch the video on AOL Living.](#)

EXEMPTED FISHERY PERMIT

1. *Date of application:*

February 20, 2008

2. *Applicant's name, address, and telephone numbers:*

Pete Dupuy
18212 Rosita St.,
Tarzana, CA 91356

(818) 343-9927
FAX: (818) 881-5003
lapazkd@aol.com

3. *Statement of the purpose and goals of the exempted fishing for which an EFP is needed, including a general description of the arrangements for the disposition of all species harvested under the EFP:*

The purpose of this EFP is to conduct a small scale (1 vessel) pelagic longline fishery within the West Coast EEZ to determine if longline gear is an economically viable HMS harvest substitute for drift gillnet (DGN) gear.

If pelagic longline proves to be an economically viable substitute for DGN, this information enables the Council to make informed management decisions regarding the phasing out of DGN and substituting longline thereby balancing the HMS FMP's management goals of providing a long-term, stable supply of high-quality, locally caught fish to the public, minimizing economic waste and adverse impacts on fishing communities, and providing viable and diverse commercial fishing opportunity for highly migratory species, while also managing the DGN fishery to prevent adverse impacts, and promote the recovery, of protected species.

Disposition of the species harvested under the EFP will be as follows:

- All marketable finfish species caught during the EFP may be retained and sold as prescribed through current regulations.
- Prohibited species may not be retained or sold.

4. *Justification explaining why issuance of an EFP is warranted:*

In 1996, the U.S. ratified a U.N. agreement ¹ concerning HMS which requires nations to “minimize pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species,...[and] to the extent practicable, the development of selective environmentally safe and cost effective fishing gear and techniques.”

Closure of the DGN swordfish fishery, and substitution with pelagic longline, occurred in the North Atlantic because, with the two gears fishing side by side, longline was deemed to be a more selective, environmentally safe and cost effective fishing gear. The federal rule proposing a prohibition of DGN gear by NMFS in 1998 states: “The proposed rule is intended to reduce the take of marine mammals in the Atlantic swordfish fishery. Observer and vessel logbooks indicate that, in the Atlantic swordfish fishery, driftnet gear results in a significantly higher rate of take of protected marine mammals relative to other gear (i.e. pelagic longline and harpoon).” ² Also noted is that the Atlantic driftnet fishery has had takes of protected sea turtles, that the high take rates necessitate high levels of observer coverage, and that the fishery is difficult and costly to manage. The final rule prohibiting the use of driftnet gear in the north Atlantic swordfish fishery reiterates: “ The intent of the rule is to reduce marine mammal bycatch in the swordfish driftnet fishery while increasing the net benefits to the nation.” ³ This was accomplished by converting the Atlantic swordfish DGN permits to Atlantic pelagic longline permits.

In the Southern California Bight, a study evaluating an experimental drift longline shark fishery found that: “ This drift longline gear appeared to bring in less bycatch than the California drift gill net fishery. Observers recorded a total of 9 species captured on drift longline gear, whereas 71 species were documented from the drift gill net fishery (Hanan et al. 1993). Unlike fish caught in drift gill nets, most of the longline bycatch can be released alive.” ⁴

The California/Oregon DGN fishery continues in steep decline since the closure of a huge portion of its historic fishing grounds in 2000 to protect leatherback sea turtles. It continually operates under a threat of complete closure. A single observed mortality of a sperm, humpback, or fin whale, all of which have been previously taken in the DGN fishery, would revoke the MMPA §101(a)(5)(E) permit. ⁵ Given this level of vulnerability, the DGN fishery would be well served if an alternative fishery were available.

¹ The Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.

² 55998 Federal Register/ Vol. 63, No. 202 / Tuesday, October 20, 1998.

³ 4055 Federal Register / Vol. 64, No. 17 / Wednesday, January 27, 1999.

⁴ A Review Of The Southern California Experimental Drift Longline Fishery For Sharks, 1988-1991, John W. O'Brien and John S. Sunada, CalCOFI Rep., Vol. 35, 1994.

⁵ Under current MMPA guidelines, fishery takes above PBR for any ESA listed marine mammal would prohibit issuance, or revoke an existing §101(a)(5)(E) permit. With observed DGN takes extrapolated five times, one observed take equals 5. The PBR is 2.1 for sperm whales, 3.1 for

In fact, as indicated by HMS FMP permit DGN endorsements, California/Oregon DGN fishermen are interested in a longline option. Of the 131 HMS fishermen selecting a DGN endorsement on their HMS commercial fishing permit, 71 (54%) also selected a pelagic longline endorsement.

Comparing what is known about marine mammal, sea turtle and finfish bycatch in the DGN fishery to what is known about such takes in longline fisheries, it can be reasonably assumed that takes and/or mortalities of marine mammals will be substantially reduced with longline gear; sea turtle mortalities, if not overall takes, will also be substantially reduced with longline gear; and finfish bycatch (especially unmarketable shark), and mortality will be substantially reduced with longline gear.

There is little question that pelagic longline gear has less of an impact on sea turtles, marine mammals, and finfish bycatch. The only question is whether or not pelagic longline gear is economically viable as a substitute for DGN gear.

5. *Statement of whether the proposed exempted fishing has broader significance than the applicant's individual goals:*

If successful, the proposed EFP could result in longer-term regulatory action (i.e., substitution of DGN gear with longline) which could provide increased fishing opportunity, and economic benefit to all DGN permit holders.

6. *Expected total duration of the EFP (number of years proposed to conduct exempted fishing activities):*

EFP is proposed for a one-year period with the option for continuing it on an annual basis for up to three years pending review and evaluation.

7. *Number of vessels covered under the EFP and a copy of each vessel's USCG documentation, state license, and any other registration required for participation in the fishery:*

A single vessel, F/V Ventura II, will participate in this EFP. Ventura II is a 90' LOA steel hulled vessel, U.S. Document No. 536620. Copies of all required documents and permits will be submitted upon approval of the EFP.

8. *Description of species (target and incidental) to be harvested under the EFP and the amount(s) of such harvest necessary to conduct the exempted fishing; this description should include harvest estimates of overfished species and effects on marine mammals and protected species:*

humpback whales, and 3.2 for fin whales. Any single observed mortality of any of these endangered whales exceeds PBR.

Target species include swordfish (*Xiphias gladius*), bigeye tuna (*Thunnus obesus*), yellowfin tuna (*Thunnus albacares*), northern bluefin tuna (*Thunnus orientalis*), and albacore tuna (*Thunnus alalunga*). All are managed domestically under the PFMC HMS FMP. The Inter-American Tropical Tuna Commission also manages these species internationally, in the area east of 150°W longitude. Bigeye tuna is currently subject to overfishing, and the IATTC has recommended harvest limits for longline which have been imposed by NMFS through 2006. No other target species are subject to harvest limits. Estimated harvests of swordfish are from 15,000 to 40,000 lbs. The potential for tuna harvest also exists but projected amounts are impossible to predict due to lack of data.

Marketable bycatch species include mahi-mahi (*Coryphaena hippurus*), opah (*Lampris regius*), and shortfin mako shark (*Isurus oxyrinchus*). Blue shark (*Prionace glauca*) will comprise most of the non-marketable bycatch. It is expected that a high percentage of hooked blue shark will be dehooked and released alive.

Marine mammals that are known to inhabit the area within the EEZ, and have been observed taken in the Hawaii longline fishery, include: bottlenose dolphin (*Tursiops truncatus*), Risso's dolphin, short-finned pilot whale (*Globicephala macrorhynchus*), all hooked; and common dolphin (*Delphinus delphis*), humpback whale (*Megaptera novaeangliae*), and sperm whale (*Physeter macrocephalus*), all entangled.⁶

The short-tailed albatross (*Phoebastria albatrus*) is a rare visitor in the EFP proposed area. Combined Hawaii ('97 to '01) and California ('01 to '03) longline fishery observer data for 586 sets (444,833 hooks) east of 140°W longitude records no takes of Laysan albatross (*Phoebastria immutabilis*), and 41 takes of black-footed albatross (*Phoebastria nigripes*).⁷ However, specific deterrents have been identified that provide significant levels of sea bird protection. These deterrents are required pursuant to federal regulations⁸ and will be complied with under this EFP.

Due to the lack of take data by longline within the EEZ, impacts on sea turtles by longline gear can be somewhat projected from DGN observer data. Green turtles are rarely taken in the DGN fishery. Observer data from 1990 to 2000 records one take of a green sea turtle off south central California in November, 1999, and this take appears to be related to unusual environmental conditions.⁹ There are no takes or mortalities of green turtles within the EEZ expected under the EFP. Olive ridley turtles are also rarely taken in the DGN fishery. Observer

⁶ Hawaii Longline Fishery—Marine Mammal Interaction Summary, 1994-2002; Karin Forney, NMFS/SWFSC October 2002.

⁷ PFMC Exhibit F.2.b, NMFS Report, June 2003; An Analysis of Sea Turtle Take Rates in the High Seas Longline Fishery in the Eastern Pacific Ocean; James V. Carretta.

⁸ 50 CFR § 660.712(c)(1-17)

⁹ Biological Opinion on Issuance of Permit under Section 101(a)(5)(E) of the MMPA to the DGN Fishery, October 23, 2000, p.73.

data from 1990 to 2000 records one take of an olive ridley turtle off southern California in 1999, and this take also appears to be related to unusual environmental conditions.¹⁰ There are no takes or mortalities of olive ridley turtles within the EEZ expected under the EFP. Loggerhead turtles are infrequently taken in the DGN fishery. Observer data from 1990 to 2000 records 17 takes of loggerhead turtles, with 12 (70%) released alive, 1 (6%) injured, and 4 (24%) killed. All these takes occurred in a concentrated area south of San Clemente Island.¹¹ The proposed EFP will not operate in the vicinity of San Clemente Island. Therefore, there are no takes or mortalities of loggerheads within the EEZ expected under the EFP. DGN observer data from 1990 to 2000 records 23 takes of leatherback turtles, 14 were killed (61%), and 9 were released alive and uninjured (39%). All observed takes except one were north of Point Conception, and all were taken between September and January.¹² Worst-case scenario estimates of DGN take rate for leatherbacks is .009 per set. With an estimated 61% mortality from DGN gear, the estimated mortality rate is .005 per DGN set.¹³ For any given level of leatherback population density in a given area, it is difficult to predict what the probability of interaction would be between DGN and longline gears. An average net covers 792,000 square feet of area (5,280 ft x 150 ft.). The probability of interaction for a leatherback in the vicinity of DGN gear is probably very high. On the other hand, the probability of interaction for a leatherback in the vicinity of longline gear, where 1,000 hooks are spaced 200 to 250 feet apart is probably considerably less—especially because leatherbacks are not typically attracted to bait, but tend to be hooked externally when swimming by the gear. Nevertheless, using the worst-case scenario DGN take rate of .009 per set, and assuming the probability of interaction for a longline set is equal to a DGN set, expected leatherback takes within the EEZ under the EFP for 1,000 hook sets and 14 set trips would be .126 per trip, or .504 per season (14 set trips x 4 trips). Based on leatherback post hooking mortality estimate values of 10% when hooked externally and released with all gear removed, 0.012 mortalities per trip, or 0.050 mortalities per season would be expected within the EEZ under the EFP. Additionally, longline fishing operations under this EFP will comply with existing sea turtle take mitigation measures found at 50 CFR §660.712(b)

9. *Description of mechanism, such as at-sea fishery monitoring, to ensure that the harvest limits for targeted and incidental species are not exceeded and are accurately accounted for:*

At sea monitoring at 100% will be employed.

¹⁰ Biological Opinion on Issuance of Permit under Section 101(a)(5)(E) of the MMPA to the DGN Fishery, October 23, 2000, p.78.

¹¹ Biological Opinion on Issuance of Permit under Section 101(a)(5)(E) of the MMPA to the DGN Fishery, October 23, 2000, pp.75-76.

¹² This time period corresponds with the DGN season. DGN fishing is prohibited from January thru April.

¹³ Biological Opinion on Issuance of Permit under Section 101(a)(5)(E) of the MMPA to the DGN Fishery, October 23, 2000, pp.73-75.

10. *Description of proposed data collection and analysis methodology:*

NMFS will provide 100% observer coverage to monitor compliance with provisions of the EFP, note fishing location, and interactions with turtles, marine mammals, and seabirds, including species identification and disposition of released animals. Other data collected will include current fishery reporting data (i.e., logbooks and fish receiving tickets) by the state and NMFS.

11. *Description of how vessels will be chosen to participate in the EFP:*

Applicant's vessel will be the only vessel participating in the EFP.

12. *For each vessel covered by the EFP, the approximate time(s) and place(s) fishing will take place, and the type, size, and amount of gear to be used.*

EFP fishing will utilize traditional longline gear consisting of a main line strung horizontally across 50 to 100km of ocean, supported at appropriate intervals by 18m vertical float lines connected to surface floats. Descending from the main line is some number (2-25) of 24m branch lines each ending in a single baited hook. Longline gear configuration will be consistent with regulations enacted for the Hawaii longline shallow-set swordfish fishery found at 50 CFR §660.33(d),(f) & (g). For targeting swordfish, hooks used will only be offset circle hooks sized 18/0 or larger, with a 10° offset. For targeting tuna, smaller circle hooks with no offset will only be used. For targeting swordfish or tuna, only mackerel-type bait will be used, and no lightsticks will be used. From 400 to 1,200 hooks may be deployed per set. EFP fishing will not occur within 50 miles of the coastline, or within the southern California bight. Each trip will consist of about 14 sets, approximately 14,000 hooks per trip (1,000 hooks per set x 14 sets). This EFP proposes 4 trips (56,000 hooks) during the period November thru March.

13. *Signature of applicant:*

Pete Dupuy

ADDITIONAL MODIFICATIONS TO THE EXEMPTED FISHING PERMIT (EFP)
APPLICATION

There are two additional modifications to the exempted fishing permit (EFP) application (Agenda Item C.4.a, Attachment 1) that are not reflected in the document as submitted (in addition to the terms and conditions described in the situation summary and modifications indicated by the applicant). These modifications are the result of discussions between the applicant and National Marine Fisheries Service after the application was originally submitted to the Council in 2006. These changes are:

1. In section 8, describing the species (target and incidental) to be harvested under the EFP, the applicant does not, as stated in the application, propose to target the tuna species listed nor use small circle hooks for the purpose of targeting tunas. Swordfish is the only target species under the application as modified.
2. Likewise, in section 12, describing the approximate times and places fishing will take place, the statement that small circle hooks will be used to target tuna is not part of the application as modified.
3. In section 12, it states that lightsticks will not be used; they will be used as part of the EFP.

PFMC 3/9/08

HIGHLY MIGRATORY SPECIES ADVISORY SUBPANEL REPORT ON
EXEMPTED FISHING PERMIT (EFP) FOR LONGLINE FISHING IN THE WEST COAST
EXCLUSIVE ECONOMIC ZONE

The Highly Migratory Species Advisory Subpanel voted to support for public review the shallow set longline EFP with changes indicated in the situation statement. The vote was six in favor, two against and one abstention.

PFMC
03/10/08



The Ocean Conservancy

Agenda Item C.4

March 7, 2008

Dr. Donald McIsaac
Executive Director, Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220-1384

RE: Agenda Item C.4 - Exempted Fishing Permit for Longline Fishing in the West Coast Exclusive Economic Zone

Dear Dr. McIsaac and Members of the Council:

On behalf of Ocean Conservancy, I am writing to urge the Pacific Fishery Management Council (PFMC) to disapprove the proposed exempted fishing permit (EFP) application for longline fishing in the west coast exclusive economic zone (EEZ). As we noted in our previous comments and testimony before the Council, we do not believe there is sufficient evidence to justify a renewed longline fishery off the west coast. If implemented, the EFP will compromise successful conservation measures protecting sea turtles, seabirds, marine mammals, billfish, sharks and other fish by allowing pelagic longlines in areas along the California and Oregon coastline where this gear type is currently prohibited. Furthermore, the EFP does not have broad public or governmental support, and is not reasonably designed to achieve its stated objective.

The longline EFP does not have widespread support.

Pelagic longline fishing has been banned within 200 miles of the California coast for well over a decade. In March 2004 this ban was extended to the entire west coast EEZ for all pelagic longlining, and to the high seas beyond the EEZ for west coast-based shallow-set pelagic longlining. As the Council is well aware, previous efforts to reintroduce longlining off the California coast were met with widespread opposition. Scientists, commercial and recreational fishermen, the conservation community, members of the public, and the State of California all voiced concerns about the threat that longlining poses to over-exploited fish populations and vulnerable marine wildlife.

Indeed, representatives to the Council from the California Department of Fish & Game (CDFG) have repeatedly opposed the proposed longline EFP. Likewise, in 2007 the California Coastal Commission ("Commission") voted unanimously to reject the issuance of the EFP finding that it was not consistent with the policies and principles of the California Coastal Management Program, Chapter 3 of the California Coastal Act, and the best available science. The Commission's decision was further bolstered by a 2002 resolution to support conservation

programs and the preservation of safe habitat for endangered sea turtles that forage off the California coast.¹

The EFP application presently before the Council incorporates several modifications to the previous proposal including: a change in the fishing season from September through December to November through March; a shift in the shoreward boundary of the fishing area from 30 to 50 miles offshore; authorization for the EFP to continue through 2010 without further review; and reclassification of several tuna species as target species. Despite these revisions, the concerns and flaws identified by the Commission and its staff remain unaddressed by the current proposal. As such, it is unlikely that this revised EFP application will be granted a consistency certification by the Commission. Further evaluation of this proposal by the Council, NMFS and the Commission will waste valuable time and resources.

The longline EFP threatens endangered sea turtle populations.

Sea turtles throughout the Pacific are hovering on the brink of extinction due in large part to incidental mortality associated with fishing operations. Fisheries mortality has been especially problematic for loggerhead and leatherback sea turtles, with nesting population reductions in excess of 80 percent over the last three generations for both species. Leatherbacks are classified as “endangered” under the Endangered Species Act (ESA) and “critically endangered” by the World Conservation Union (IUCN). The status of the leatherback has been the focus of much attention in recent years, however conservation, protection and support is as critical for the loggerhead as for the leatherback. According to the latest surveys, there are fewer nesting loggerheads in the Pacific than nesting leatherbacks. The two major loggerhead populations in the Pacific are found in Japan and Australia, with less than 1,000 and 300 turtles, respectively, nesting annually. The IUCN’s Red List of Threatened Species identifies loggerheads as “endangered” while the ESA classifies loggerheads as “threatened” throughout their range. A pending petition to uplist and reclassify the Pacific loggerhead population as endangered under the ESA suggests that Pacific loggerhead populations warrant even greater protection.

The Pacific longline fisheries out of California and Hawaii were both previously found to cause jeopardy to leatherback and loggerhead sea turtle populations under the ESA. In November 1999, concerned about the high level of sea turtle mortality associated with longlining, Ocean Conservancy (previously known as the “Center for Marine Conservation”) secured an injunction restricting longline fishing under the fishery management plan (FMP) for pelagic fisheries in the western Pacific. The objective of the injunction was to reduce leatherback sea turtle mortality by the shallow-set longline fishery targeting swordfish around the Hawaiian Islands.² NMFS subsequently issued a Biological Opinion pursuant to Section 7 of the ESA on the pelagics FMP. The agency concluded that continued operation of the fishery would jeopardize the existence of leatherback, loggerhead, and green sea turtles, and amended the FMP to close the Hawaii-based shallow-set longline fishery. The fishery was allowed to re-open again in 2004 subject to the conditions that only large 18/0 circle hooks be used, that an effort cap be established to control the number of longline sets, and that a hard cap on turtle take be established to close the fishery if it approached the limits of its take authorization. In March 2006, the annual hard cap on take of loggerheads was reached after the fishery operated for less than three months.³

¹ Resolution by the California Coastal Commission in Support of the Conservation of Endangered Sea Turtles, December 2002.

² *Center for Marine Conservation, et al., v. National Marine Fisheries Service, et al.*, (Civ. No. 99-00152 DAE)(D. Hawaii)

³ 71 Fed. Reg. 14824 (March 24, 2006)

In 2004, NMFS imposed a moratorium on pelagic longline fishing east of 150 degrees West longitude to guard against jeopardy to loggerheads even after the Pacific Council banned longlining west of 150 degrees West longitude. These far reaching closures demonstrate just how vulnerable sea turtles are to the impacts of longline fishing. Scientists have concluded that, “[t]he critical issue for an individual turtle is the likelihood of capture across an ocean region, not capture by a particular nation. With multiple fleets deployed the cumulative effects of pelagic longlines across fleets in large ocean regions must be taken into account.”⁴ It would be inappropriate to allow the capture of turtles by a California-based fishery – EFP or otherwise – when the Hawaii fishery was closed for exactly this reason only two years ago. The Hawaii and California based fleets fish in the same manner, often in the same area, and catch the same turtles.⁵ In addition, the fleets consist of many of the same boats that have had a history of moving back and forth to avoid the closures to protect sea turtles that have alternated between Hawaii and California in recent years.

Where fish stocks and associated non-target species act as a single unit, a more comprehensive and coordinated impact evaluation is crucial. The ad hoc approach employed by U.S. fishery managers does not properly account for the cumulative effect of all U.S. managed pelagic fisheries on fish and wildlife populations. Evaluations of the relative impact of longline fishing on Pacific turtle populations have concluded that “[a]lthough bycatch rates from individual longline vessels are extremely low, the amount of gear deployed by longline vessels suggests that cumulative bycatch of turtles from older age classes is substantial.”⁶ The conservation community has repeatedly called for a comprehensive evaluation of the impacts of all U.S. longlining in the Pacific on imperiled sea turtle populations, yet that essential step still has not occurred.

In June 2007, NMFS rejected an EFP application that would have authorized expansion of the drift gillnet fishery into the Pacific Leatherback Conservation Area, citing recent satellite-tracking studies which confirm the importance of the waters off the California coast as vital foraging grounds for endangered leatherback turtles.⁷ Despite these findings, the proposed longline EFP would permit longlining within the same Pacific Leatherback Conservation Area during the time when leatherbacks are migrating through the region.

The longline EFP threatens vulnerable finfish populations.

In addition to potential negative interactions between shallow-set longline gear and endangered sea turtle populations, we are concerned about the impact of increased fishing effort on select fish species. While the EFP application proposes to allow a single vessel to target swordfish with shallow-set longline gear in west coast EEZ, other more vulnerable highly migratory species may be targeted or caught incidentally. The draft environmental assessment for the previous EFP proposal noted that the EFP may lead to a greater level of interactions with protected shark species including great white sharks and basking sharks.⁸

⁴ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. Conservation Biology 2007, Volume 21, No.1, p. 81.

⁵ 69 Fed. Reg. 11540, 11543 (March 11, 2004) (preamble to final rule closing Pacific longline fishery east of 150 degrees West long.)

⁶ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. Conservation Biology 2007, Volume 21, No.1, p.79.

⁷ Benson, S.R., K.A. Forney, J.T. Harvey, J.V. Carretta, and P.H. Dutton. In press. Abundance, distribution, and habitat of leatherback turtles (*Dermochelys coriacea*) off California, 1990-2003. Fishery Bulletin.

⁸ Draft Longline Exempted Fishing Permit Environmental Assessment, March 2007, p.51.

Likewise, the previous EFP identified several tuna species as major non-target species likely to be caught incidentally to shallow-set longline activities.⁹ However, the revised proposal reclassifies bigeye, yellowfin, bluefin and albacore tuna as *target* species. Of these target tuna species, three (yellowfin, bigeye and albacore) have been classified as overfished and/or experiencing overfishing. Given the vulnerable status of these tuna populations, expanding capacity, increasing fishing effort and reintroducing longlining off the U.S. West Coast is not consistent with international directives, domestic regulations, the best available science and the principles of precautionary management.

The longline EFP is not designed to achieve its intended purpose.

The EFP is not reasonably designed to meet its stated objective. The purpose of the proposed EFP is to assess whether longline gear is an economically viable substitute for drift gillnet gear. The EFP however would authorize only one vessel to fish for one year. One vessel fishing for one season will not yield statistically significant results that will allow NMFS to reasonably determine whether transitioning the drift gillnet fleet to a shallow-set longline fishery off the West Coast is a viable option. Given our other concerns with the EFP, we are not recommending that fishery managers authorize more vessels to participate in the EFP to remedy this design flaw. However, we do request that the Council and NMFS weigh the ecological risks against the anticipated value of this EFP.

We agree that the U.S. has a leadership role to play in investigating ways to fish more selectively. Nevertheless, even with the most stringent conservation measures in place, reintroduction of longline fishing off the US west coast will result in a net increase in overall fishing effort, putting vulnerable finfish, marine mammal and turtle populations at even greater risk. If NMFS and the State of California are seeking to establish a viable and sustainable west coast based swordfish fishery sustainable, industry representatives and fishery managers initiate a coordinated management strategy with the Western Pacific Fishery Management Council and investigate opportunities to expand more selective California harpoon fishery.

Current longline closures have provided a successful working balance between the interests of industry and the urgent need to protect critically endangered leatherback and loggerhead sea turtles. It would be irresponsible to re-establish the longline fishery without the necessary conservation safeguards and a thorough environmental impacts analysis. The EFP application currently under review is not predicated on a comprehensive assessment of sea turtle populations and fishery interactions and does not adequately consider the associated impacts on endangered and protected species and the marine ecosystem both inside and outside California's coastal zone. We do not believe there is sufficient evidence to justify allowing an exempted or a renewed longline fishery at this time and urge the Council to oppose issuance of the proposed longline EFP.

Sincerely,



Meghan Jeans
Pacific Fish Conservation Manager

⁹ Draft Longline Exempted Fishing Permit Environmental Assessment, March 2007, p.42.

**PUBLIC COMMENT SESSION ON THE HIGH SEAS SHALLOW-SET LONGLINE (SSLL)
AMENDMENT AND SHALLOW-SET LONGLINE EXEMPTED FISHING PERMIT**

This agenda item combines the public comment periods for Agenda Item C.3 and Agenda Item C.4. Following this item, the Council will take action on the shallow-set longline issues.

Council Task:

Receive Public Comment.

Reference Materials:

1. Agenda Item C.5.b, Attachment 1: October 29, 2007, letter from Mr. Chuck Janisse on Federalizing the Current California Drift Gillnet Limited Entry Permit Program.
2. Agenda Item C.5.b, Attachment 2: February 16, 2008, letter from Mr. John Gibbs on SSLL Fishery.

Agenda Order:

- a. Agenda Item Overview
- b. Public Comment

PFMC
02/25/08

To: Graig Heberer

Things to consider when planning the structure of the shallow-set long line fishery seaward of the EEZ on the west coast.

1. Right now Hawaiian swordfish boats have a limited number of sets and a quota of interactions with turtles. These two issues economically keeps the Hawaiian fleet operating in there region which usually begins in the 1st quarter and sometimes extends into the 2nd qtr. However the Hawaiian Long Line Association (HLA) is pushing for a much higher number of sets allowed and an increase in the number of interactions with turtles.(which is fine by me) but this would allow the Hawaiian swordfish fleet to begin their efforts off of the west coast during the 3rd and 4th qtr. which would create a fleet size or amount of effort to great for many environmental issues.
2. Implementation of a West Coast Limited Entry Permit into the SSSL fishery off the west coast with qualifying criteria with past history of SSSL and Drift gillnet (which should be a small number) would give fishery managers time to regulate the amount of effort on the resource, observer funding, and ESA issues. This would also give individuals who gave up DGN (in mid to late 90's)and switched to SSSL an opportunity to recoup from the financial hardship when they were subsequently regulated out of the SSSL fishery. Given the potentially small number of qualifiers you could then draw from the DGN fishermen who have a current DGN permit with a history of operating in the Pacific Leatherback Conservation Area or some other form of entry level.
3. By limiting the number of WC LE Permits to fish seaward of the EEZ there wouldn't be a need for a maximum number of sets or hooks allowed by the SSSL fleet which could also dampen interest into the fishery by DGN fisherman who have no set limits other than area and seasonal closures. However if there is a large amount of interest into the SSSL fishery within a few years, set limits and ESA interactions quotas could then be put in place more accurately with recent and past collected data.

4. Don't over regulate if possible because it's very difficult to relax or resend implemented regulations. Many times in the past, industry has been successful in making adjustments to a fishery to satisfy problem issues.
5. There would not be a need for boundaries of the western longitudes due to the economics of fuel costs and travel time involved with operating to far from the west coast.
6. There are other issues such as gear, bait, bird mitigation set times, and probably a host of ESA items that can be hammered out on the advisory panel level. I feel the most important need right now is to get the go ahead (green light) from the Council, California Coastal Commission, or anybody else who can stop this plan.

SINCERELY, THANK YOU
JOHN GIBBS

FRANK CRIVELLO APPROVES OF THIS ALSO

Federation of Independent Seafood Harvesters

PO Box 352
Bridgewater Corners, VT 05035

October 28, 2007

Donald Hansen
Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220-1384

RECEIVED

OCT 29 2007

Dear Don,

PFMC

FISH supports the Council's efforts to develop management measures to provide the maximum level of swordfish harvest opportunity, and, as is painfully clear for DGN fishermen, recognizes that a fishery's level of protected resource impacts is directly related to the level of harvest opportunity. In this regard, FISH urges the Council to take steps to increase its DGN management options by federalizing the fishery's limited entry status. A simple shift in focus in the development of a high-seas longline limited entry permit to federalizing limited entry for the DGN fishery would provide more swordfish harvest opportunity because a greater range of management options for insuring critical resource protections would be available.

For example, issue a limited entry permit for the harvest of swordfish by DGN gear to current DGN California limited entry permit holders that meet specified qualifying criteria formulated to reduce the latent DGN effort now represented by inactive permit holders. The gear endorsement for this permit could be switched from DGN gear to longline gear, but not the other way around. In this way, the only authorized use of longline gear for the harvest of swordfish (whether its outside the EEZ, or inside the EEZ should that option become available) would arise from the elimination of the DGN fishing option.

Such an approach has the long-term effect of achieving control of longline effort without the potential for an overall effort increase that could result from a longline only limited entry program based on qualifying criteria that would include non-DGN vessels.

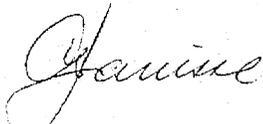
Additionally, this approach has the short-term effect of dramatically increasing the Council's range of management options for the DGN fishery through effort controls that are not now available. For example, with federalized limited entry, framework

management measures could be established that would allow effort quotas, by set certificates or otherwise, for specific times and areas or otherwise, and that could be determined and implemented in much the same way that catch quotas are determined and implemented. If such an approach were applied to the DGN fishery, some fishing might be allowed in the area now completely closed to protect leatherbacks. The Incidental Take Statement for the 2000 Biological Opinion that forms the basis for the current leatherback time/area closure authorizes three leatherback takes per year. With a leatherback take rate in this area of .0077 per set, 389 sets could be allowed in this area without exceeding authorized limits.

As a bonus, the formulation of a limited entry program along these lines might qualify for additional funding under the Limited Access Privilege Program found in section 303A of the Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006.

Hopefully, these suggestions are helpful.

Best regards,

A handwritten signature in cursive script, appearing to read "Janisse".

Chuck Janisse

Agenda Item C.5.b
Attachment 2
March 2008

February 16, 2008

To: Pacific Fishery Management Council
Subject; Shallow-Set Long Line

My name is John Gibbs, I've been a commercial fisherman/boat owner for 33 years home ported in San Diego, Ca. My history of fishing includes hook & line rock cod, troll salmon, troll albacore, harpoon swordfish, drift gillnet swordfish, long line swordfish/tuna, purse seine of tunas and wet-fish.

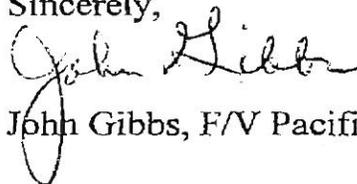
I began long lining for swordfish & tuna in 1986 and have several years of experience fishing deep and shallow-set long line off of California, Hawaii, and American Samoa.

The National Marine Fisheries Service has recognized the benefits of the shallow-set long line fishery as having less interaction and significantly lower mortality rates with protected resources than the current drift gillnet method.

I fully support the intent of the NMFS to make use of the under utilized highly migratory pelagic resources off of our west coast using shallow-set long line. To REESTABLISH this fishery will promote the infrastructure of our once thriving pelagic fishing industry which now relies mainly on foreign imports to supply California consumers with the same product.

I urge this Council to give a green light to NMFS in order to begin the process of designing a sustainable shallow-set long line fishery outside the EEZ of our west coast.

Sincerely,



John Gibbs, F/V Pacific Horizon

SEA TURTLE RESTORATION PROJECT



POB 370 • Forest Knolls, CA USA
Ph. +1 415 663 8590 ext. 106 • Fax +1 415 488 0372
michael@seaturtles.org • www.seaturtles.org

March 4, 2008

Mr. Donald K. Hansen
Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97220-1384

Dear Chairman Hansen:

On behalf of our 7,000+ activists, Turtle Island Restoration Project is writing to oppose the issuance of a proposed exempted fishing permit (EFP) for a shallow-set swordfish longline fishery within the US West Coast Exclusive Economic Zone (EEZ). Pelagic longline fishing has been prohibited within 200 miles of the California and Washington coast for over 15 years. The proposed EFP will undermine successful conservation measures protecting the critically endangered leatherback sea turtle, loggerhead turtle, and other marine wildlife by allowing this non-selective gear type into areas where it is currently prohibited.

The impact of the development of a shallow-set swordfish longline fishery within the US West Coast EEZ on the critically endangered leatherback sea turtle is of great concern. The Pacific leatherback sea turtle population remains extremely low having declined by over 95% in the last two decades.¹ Mortality from fisheries impacts, including longlining, has been identified as a significant contributor to this decline.

The waters of the California and Oregon EEZ are an exceptionally unsuitable location for any increase in longline fishing. Scientists and NMFS personnel agree that this area contains one of the most important leatherback foraging areas on the planet for the critically endangered Pacific leatherback. In 1998, the Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle hypothesized that “the waters off the west coast of the United States may represent some of the most important foraging habitat in the entire world for the leatherback turtle.”² Since then, satellite tracking studies have confirmed that substantial numbers of leatherbacks from nesting beaches in Indonesia travel thousands of miles to feed on aggregations of jellyfish in the California Current.³ NMFS scientists have therefore concluded:

Ultimately, successful conservation efforts for leatherback turtles must include both nesting beach protection and mitigation of at-sea threats in foraging areas and along migratory routes. *This study has demonstrated that waters off central California are a*

¹ James R. Spotila, Richard D. Reina, Anthony C. Steyermark, Pamela T. Plotkin, & Frank V. Paladino, *Pacific leatherback turtles face extinction*, 405 *Nature* 529, 530 (2000).

² Nat'l Marine Fisheries Service & U.S. Fish & Wildlife Service, *Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle (DERMOCHELYS CORIACEA)* 1998.

³ Scott R. Benson, Peter H. Dutton, Creusa Hitipew, Betuel Samber, Jacob Bakarbessy, & Denise Parker, *Post-Nesting Migrations of Leatherback Turtles (Dermochelys coriacea) from Jamursba-Medi, Bird's Head Peninsula, Indonesia*, 6 *Chelonian Conservation and Biology* 150 (2007).

*critical foraging area for one of the largest remaining Pacific nesting populations.*⁴

We believe that turtles originating from the Jambursba Medi nesting beach in Indonesia are the most significant nesting leatherback population left in the Pacific. Therefore, efforts to protect this population are of great importance.

To permit longline fishing in this sensitive foraging area in light of the numerous threats facing Pacific leatherbacks—especially given the specter of global climate change—would be a mistake with potentially irreversible negative consequences. Pacific leatherback populations have declined to such low numbers that the population’s ability to respond to additional mortality is severely limited.⁵ As a result, cumulative impacts of even small numbers of mortalities or fisheries interactions are likely to jeopardize Pacific leatherback and loggerhead populations. Indeed, some scientists have estimated that the Pacific populations of adult leatherbacks cannot sustain an adult mortality rate greater than 1% if this species is to avoid extinction.⁶

The continued by-catch problems of US domestic longline fisheries are evident in the Atlantic and Hawaii-based longline fisheries—both of which have a long history of closures and regulations due to significant bycatch. The Hawaii-based longline fishery—which is considered a model fishery by many—was closed prematurely in March 2006 after just three months into the season despite the use of circle hooks and other turtle interaction reduction measures. Technological fixes such as circle hooks are not likely to sufficiently mitigate the detrimental impacts on Pacific leatherbacks, Pacific loggerheads and other ocean species caused by the development of another longline fishery.

Important scientific uncertainties also undermine the ability of scientists and agency staff to accurately estimate the effects of mitigations designed to reduce fishery-related sea turtle mortalities. The broad range of post-capture mortality estimates (4-27%) for sea turtles illustrates that even the short-term effects of non-lethal fishery interactions are very poorly understood. Likewise, sea turtles’ behavioral and stress responses to fishery interactions as well as the cumulative effects of these interactions on their migrations, foraging, and reproductive behavior are largely unknown.

Recent studies suggest that a significant proportion of the existing Pacific leatherback and loggerhead populations are caught each year in the Pacific on longlines.⁷ If so, the cumulative effects of repeated non-lethal interactions on sea turtles’ capacity to reproduce may be significant. Until scientists have a better grasp of population level effects of so-called “non-lethal” fishery interactions on Pacific leatherbacks and loggerheads, we urge the PFMC to apply a precautionary approach. In this case, a precautionary approach dictates that the PFMC reject the EFP application for a shallow-set swordfish longline fishery.

Given that global climate change will negatively impact Pacific loggerhead and leatherback populations,

⁴ Id. (*emphasis added*).

⁵ Pilar Santidrian Tomillo, Elizabeth Velez, Richard D. Reina, Rotney Piedra, Frank V. Paladino, & James R. Spotila, *Reassessment of the Leatherback Turtle (Dermochelys coriacea) Nesting Population at Parque Nacional Marino Las Baulas, Costa Rica: Effects of Conservation Efforts*. *Chelonian Conservation and Biology* 54 (2007).

⁶ Spotila, J. R., A. E. Dunham, A. J. Leslie, A. C. Steyermark, P. T. Plotkin, and F. V. Paladino. 1996. Worldwide population decline of *Dermochelys coriacea*: are leatherback turtles going extinct? *Chelonian Conservation and Biology* 2: 209-222.

⁷ Rebecca L Lewison, Sloan A Freeman, Larry B Crowder. 2004. Quantifying the effects of fisheries on threatened species: the impact of pelagic longlines on loggerhead and leatherback sea turtles. *Ecology Letters* 7 (3), 221–231.

the PFMC should avoid permitting an activity—such as this longline EFP proposal—that could further threaten these sea turtles. Global warming represents a great long-term challenge to the survival of the leatherback sea turtle. Conservation gains due to reduced fisheries by-catch could be offset in the near future by the inundation of nesting beaches from rising sea levels and increased erosion, by temperature-induced reduction in hatching success and skewed sex ratios, and from declines in ocean productivity from warming waters.

The status of tuna stocks in the Eastern Pacific provides another concern due to the increased fishing efforts that will occur on these species with the development of a pelagic longline fishery in the US West Coast EEZ. Bigeye, yellowfin and albacore tuna will be economic bycatch of a shallow-set swordfish longline fishery. All three species are subject to management measures to constrain effort under resolutions of the Inter-American Tropical Tuna Commission (IATTC) species due to fishing mortality rates above levels estimated to produce average maximum sustainable yield (AMSY). The National Marine Fisheries Service (NMFS) in fact prematurely closed the longline fishery for bigeye tuna in June this year due to catch reaching its limit for the year. Seasonal closures to purse seine fishing for yellowfin and bigeye tuna are also in place. Any expansion of effort or mortality on these species would not be consistent with management measures and conservation goals of both the PFMC and IATTC.

We note that, although the applicant requests an EFP for a single longline vessel, the application raises the possibility of developing a future longline fishery. Given the above outlined concerns we believe the development of a pelagic longline fishery within the US West Coast EEZ would be inappropriate. Therefore, we respectfully request that the PFMC rejects the EFP application for a shallow-set swordfish longline fishery.

Sincerely,

A handwritten signature in cursive script, appearing to read "Michael Milne".

Michael Milne, Leatherback Campaign Coordinator

Protecting Pacific Sea Turtles



“We don’t need to study this problem to learn how much bycatch there is. We already know the Leatherbacks are declining fast, so the goal is no dead Leatherbacks.” Martín Hall, IATTC



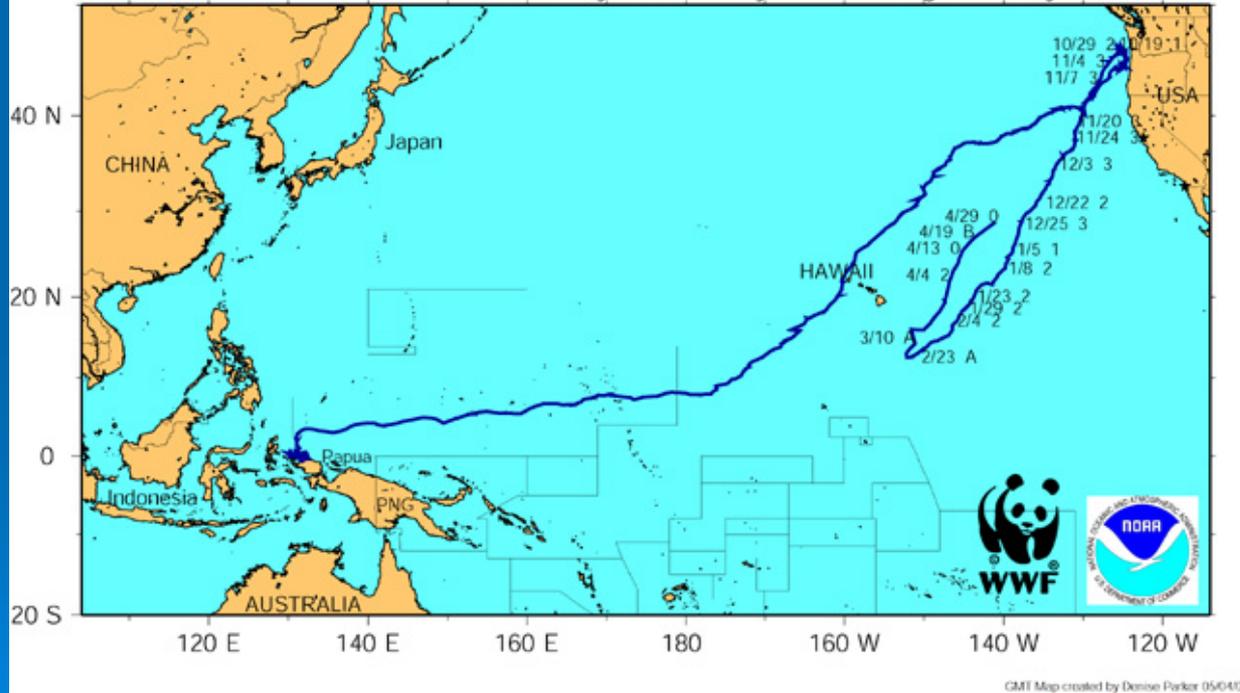
- Quoted in, C. Safina. [Voyage of the Turtle](#)

Leatherback in Monterey Bay, California. Photo: J. Sorensen

Trans-Pacific Leatherback Sea Turtle Migrations

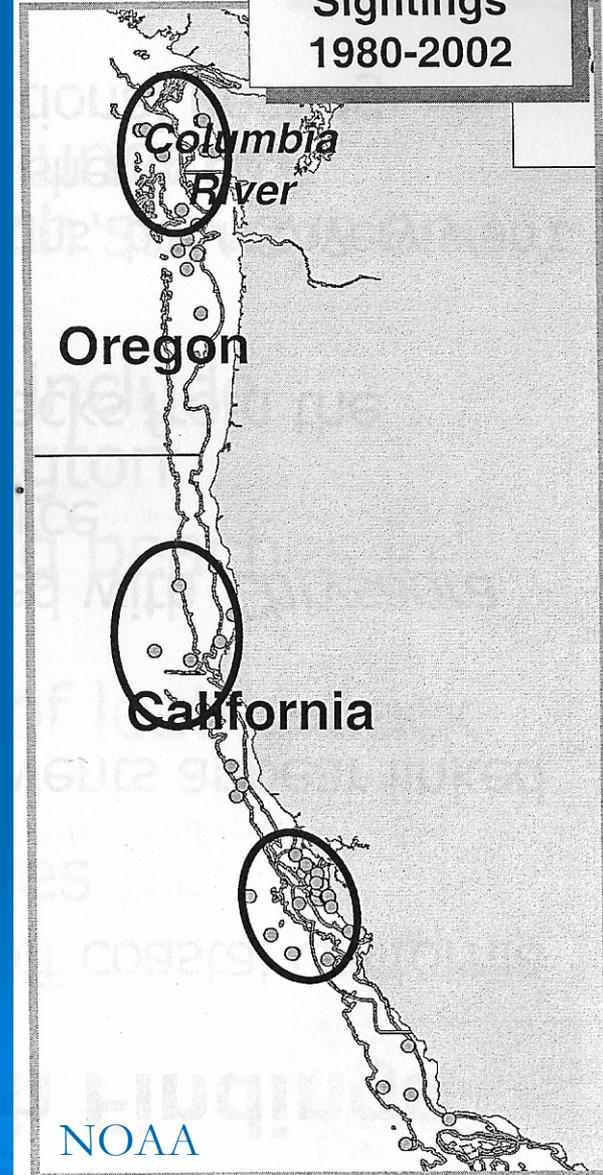
Update as of 5/4/05:

2003-2005 post-nesting movement of Leatherback 27957
that nested in Jamursba Medi in July 2003 Days transmitting: 616 days

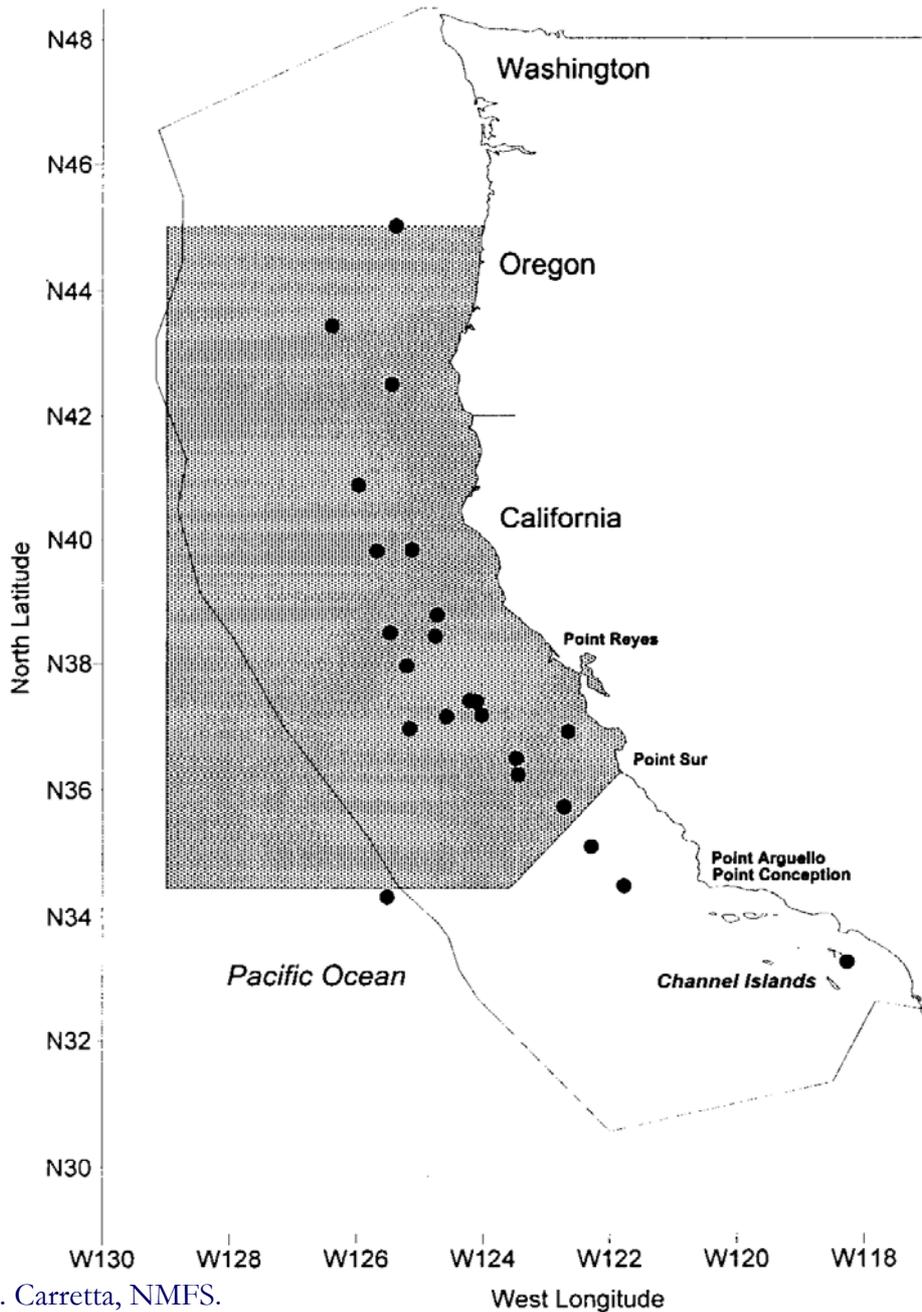


SA

Leatherback Sightings 1980-2002

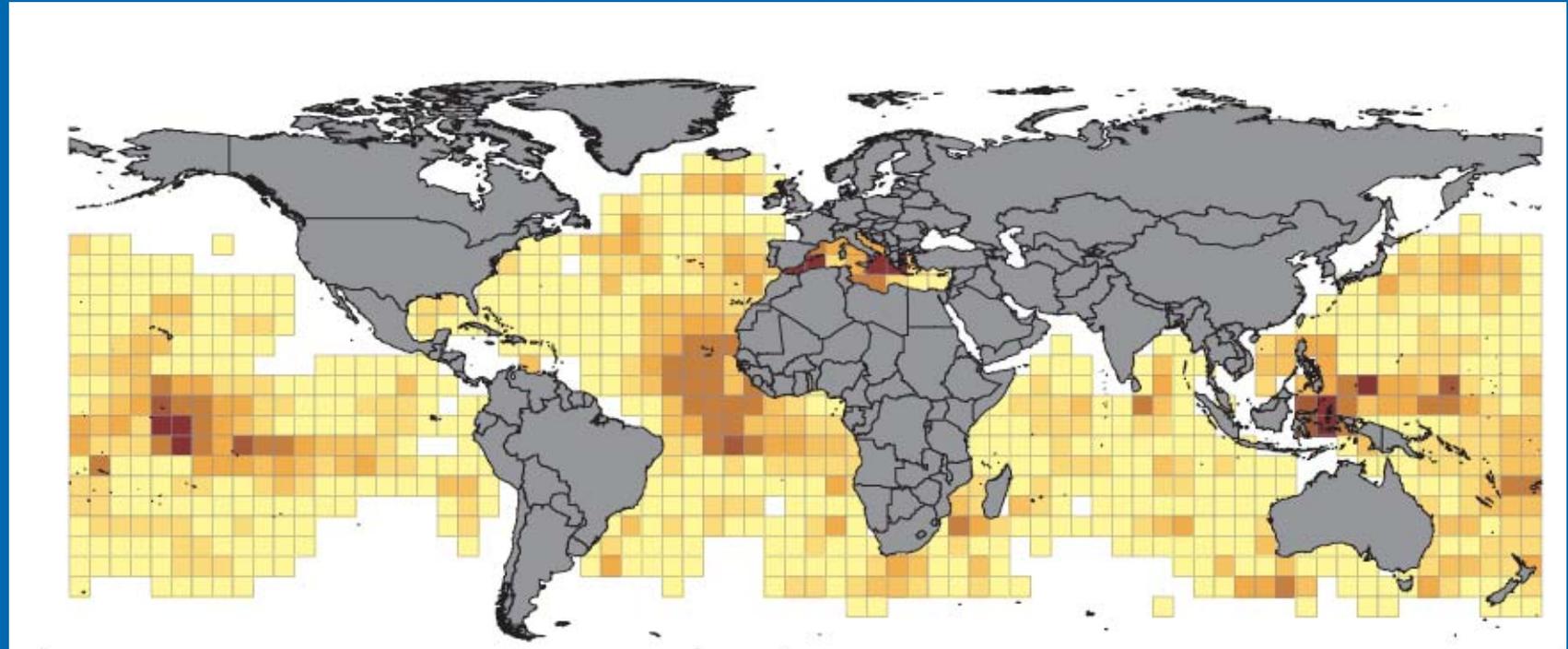


Locations of observed Leatherback takes in the drift gillnet fishery



J. Carretta, NMFS.

Reported longline fishing effort including all tuna and swordfish directed effort for 2000



Reported Fishing Effort per 5x5 degree cell

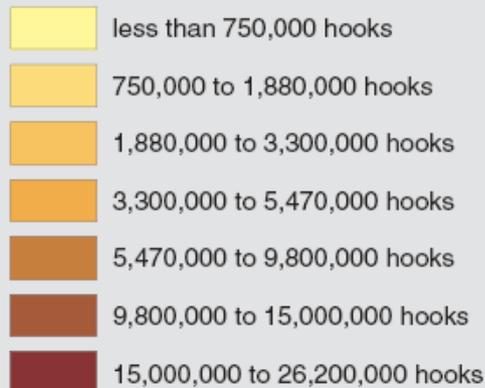


Photo © PRETOMA www.tortugamarina.org

Protecting Pacific Sea Turtles Requires:



- Gear modifications and controls in existing fisheries.
- Time and area closures along migratory corridors and feeding areas.
- Trade, market or regulation based approaches to reduce imports.

Import Prohibitions

- Actions to Strengthen International Fishery Management Organizations
 - “Import prohibitions, landing restrictions, or other market-based measures needed to enforce compliance with international fishery management organization measures, such as quotas and catch limits.”
- The Secretary shall determine whether a harvesting nation:
 - “Has provided documentary evidence of the adoption of a regulatory program governing the conservation of the protected living marine resource that is comparable to that of the United States, taking into account different conditions, and which, in the case of pelagic longline fishing, includes mandatory use of circle hooks, careful handling and release equipment, and training and observer programs.”



Agenda Item C.3

March 7, 2008

Dr. Donald McIsaac
Executive Director, Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220-1384

RE: Agenda Item C.3 – High Seas Shallow-Set Longline Amendment

Dear Dr. McIsaac and Members of the Council:

On behalf of Ocean Conservancy, I am writing to urge the Pacific Fishery Management Council (PFMC) to defer the development a management framework for a high seas shallow-set longline fishery off the west coast of the United States. We believe that the development of a high seas longline fishery is inappropriate given the potential ecological consequences. Instead, we recommend that the Council consider a broader range of alternatives to achieve the goal of providing more sustainable fishing opportunities while promoting the recovery of endangered sea turtles and over-exploited fish populations. We also encourage the Council to prioritize the development of a coordinated management strategy for pelagic fisheries with the Western Pacific Fishery Management Council.

A high seas shallow-set longline fishery poses a threat to endangered sea turtles.

Sea turtles throughout the Pacific are hovering on the brink of extinction due in large part to incidental mortality associated with fishing operations. Fisheries mortality has been especially problematic for loggerhead and leatherback sea turtles, with nesting population reductions in excess of 80 percent over the last three generations for both species. Leatherbacks are classified as “endangered” under the Endangered Species Act (ESA) and “critically endangered” by the World Conservation Union (IUCN). The status of the leatherback has been the focus of much attention in recent years, however conservation, protection and support is as critical for the loggerhead as for the leatherback. According to the latest surveys, there are fewer nesting loggerheads in the Pacific than nesting leatherbacks. The two major loggerhead populations in the Pacific are found in Japan and Australia, with less than 1,000 and 300 turtles, respectively, nesting annually. The IUCN’s Red List of Threatened Species identifies loggerheads as “endangered” while the ESA classifies loggerheads as “threatened” throughout their range. A pending petition to uplist and reclassify the Pacific loggerhead population as endangered under the ESA suggests that Pacific loggerhead populations warrant even greater protection.

The Pacific longline fisheries out of California and Hawaii were both previously found to cause jeopardy to leatherback and loggerhead sea turtle populations under the ESA. In November 1999, concerned about the high level of sea turtle mortality associated with longlining, Ocean

Conservancy (previously known as the “Center for Marine Conservation”) secured an injunction restricting longline fishing under the fishery management plan (FMP) for pelagic fisheries in the western Pacific. The objective of the injunction was to reduce leatherback sea turtle mortality by the shallow-set longline fishery targeting swordfish around the Hawaiian Islands.¹ NMFS subsequently issued a Biological Opinion pursuant to Section 7 of the ESA on the pelagics FMP. The agency concluded that continued operation of the fishery would jeopardize the existence of leatherback, loggerhead, and green sea turtles, and amended the FMP to close the Hawaii-based shallow-set longline fishery. The fishery was allowed to re-open again in 2004 subject to the conditions that only large 18/0 circle hooks be used, that an effort cap be established to control the number of longline sets, and that a hard cap on turtle take be established to close the fishery if it approached the limits of its take authorization. In March 2006, the annual hard cap on take of loggerheads was reached after the fishery operated for less than three months.²

Scientists have concluded that, “[t]he critical issue for an individual turtle is the likelihood of capture across an ocean region, not capture by a particular nation. With multiple fleets deployed the cumulative effects of pelagic longlines across fleets in large ocean regions must be taken into account.”³ It would be inappropriate to allow the capture of turtles by a California-based fishery when the Hawaii fishery was closed for exactly this reason only two years ago. The Hawaii and California based fleets fish in the same manner, often in the same area, and catch the same turtles.⁴ In addition, the fleets consist of many of the same boats that have had a history of moving back and forth to avoid the closures to protect sea turtles that have alternated between Hawaii and California in recent years.

Where fish stocks and associated non-target species act as a single unit, a more comprehensive and coordinated impact evaluation is crucial. The ad hoc approach employed by U.S. fishery managers does not properly account for the cumulative effect of all U.S. managed pelagic fisheries on fish and wildlife populations. Evaluations of the relative impact of longline fishing on Pacific turtle populations have concluded that “[a]lthough bycatch rates from individual longline vessels are extremely low, the amount of gear deployed by longline vessels suggests that cumulative bycatch of turtles from older age classes is substantial.”⁵ The conservation community has repeatedly called for a comprehensive evaluation of the impacts of all U.S. longlining in the Pacific on imperiled sea turtle populations, yet that essential step still has not occurred.

The recovery plan for Pacific Leatherback populations noted that “...the waters off the west coast of the United States may represent some of the most important foraging habitat in the entire world for the leatherback turtle.”⁶ In June 2007, NMFS rejected an EFP application that would have authorized expansion of the drift gillnet fishery into the Pacific Leatherback Conservation Area, citing recent satellite-tracking studies which confirm the importance of the waters off the

¹ Center for Marine Conservation, et al., v. National Marine Fisheries Service, et al., (Civ. No. 99-00152 DAE)(D. Hawaii)

² 71 Fed. Reg. 14824 (March 24, 2006)

³ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. *Conservation Biology* 2007, Volume 21, No.1, p. 81.

⁴ 69 Fed. Reg. 11540, 11543 (March 11, 2004) (preamble to final rule closing Pacific longline fishery east of 150 degrees West long.)

⁵ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. *Conservation Biology* 2007, Volume 21, No.1, p.79.

⁶ NMFS and USFWS. 1998. Recovery Plan for US Pacific Populations of Leatherback Turtle (*Dermochelys coriacea*), p. 14.

California coast as vital foraging grounds for endangered leatherback turtles.⁷ Since the tracking studies referenced by NMFS in their decision were limited to the neritic zone, scientists speculate that the number of sea turtles and the leatherback habitat range off the coast of California and Oregon may be underestimated. Despite these findings, the proposed high seas longline fishery would overlap with portions permit Pacific Leatherback Conservation Area and occur during the time of year when leatherbacks are migrating through the region.

Non-fishery conservation measures do not offset fisheries-related sea turtle mortality.

Sea turtles face a myriad of threats throughout their range and at every stage in their life cycle. Under the ESA, NMFS has a duty to use its authority and all of its programs to provide for the conservation of endangered and threatened species. As such, we strongly support both domestic and international conservation measures that will help reverse the decline of Pacific sea turtle populations and promote their recovery. Protecting nesting beach habitat, identifying prime foraging grounds, educating the public and engaging local communities is critical to the recovery of sea turtle populations around the world. We are troubled however with the suggestion that fisheries-related turtle mortality could be offset with non-fishery conservation strategies. It would not be appropriate (or consistent with Section 7(a)(2) of the Endangered Species Act) to consider non-fishery related conservation measures as offset measures or compensatory strategies justifying additional fishery-related mortality. Despite strong scientific backing, the ultimate effect of such non-fishery conservation measures on turtle populations is, at this point, entirely speculative. While we certainly hope that they will result in larger populations of turtles in the future, predictions that larger numbers of nests and eggs will be saved cannot be used to allow takes of *any* existing turtles, let alone reproductively mature animals. For example, the recovery of the Kemp's Ridley turtle is the result of decades of conservation of primary nesting habitat in Mexico *and* full implementation of measures to protect these animals from drowning in shrimp trawls. Only by focusing on reducing mortality throughout the range of these species and at all stages of life will recovery efforts be successful.

Increased longline fishing effort and capacity threatens vulnerable fish populations.

In addition to potential negative interactions between shallow-set longline gear and endangered sea turtle populations, we are concerned about the impact of increased fishing effort and capacity on select target and non-target fish species. While the proposed high seas shallow set longline fishery specifies swordfish as the target catch, other more vulnerable highly migratory species may be targeted or caught incidentally. The 2007 draft environmental assessment for the failed exempted longline fishery within the EEZ noted that shallow set longlining off the west coast may lead to a greater level of interactions with protected shark species including great white sharks and basking sharks.⁸ Characterized by their slow growth, late maturity and low fecundity, shark species are particularly vulnerable to the impacts of longline fisheries.

Proponents of the high seas longline fishery acknowledge that several tuna species are likely to be caught intentionally and incidentally to shallow-set longline activities. Of greatest concern is the potential impact to yellowfin, bigeye and albacore, all of which have been classified as overfished and/or experiencing overfishing. Both the Inter-American Tropical Tuna

⁷ Benson, S.R., K.A. Forney, J.T. Harvey, J.V. Carretta, and P.H. Dutton. In press. Abundance, distribution, and habitat of leatherback turtles (*Dermochelys coriacea*) off California, 1990-2003. Fishery Bulletin.

⁸ Draft Longline Exempted Fishing Permit Environmental Assessment, March 2007, p.51.

Commission (IATTC) and U.S. stock assessment scientists have identified Pacific bigeye and yellowfin tuna populations as being overfished and subject to overfishing.⁹ The IATTC has put forth a resolution which states that “bigeye stocks are below the level that would produce the average maximum sustainable yield (AMSY)” and directs member nations to implement a seasonal closure for commercial purse seine and longline vessels targeting bigeye (and yellowfin) tuna.¹⁰ Likewise, the IATTC and WCPFC adopted resolutions in 2005 identifying North Pacific albacore populations as experiencing overfishing and requiring member nations to cap current levels of effort.¹¹ The first Stock Assessment and Fishery Evaluation (SAFE) Report for the U.S. West Coast HMS FMP echoed this conclusion and warned that “[t]he current fishing mortality rate is high...and may be cause for concern regarding the current stock status of North Pacific albacore.”¹² In light of the vulnerable status of these tuna populations, expanding capacity, increasing fishing effort and establishing a high seas shallow set longline fishery off the U.S. West Coast is not consistent with international resolutions, domestic regulations, the best available science and the principles of precautionary management.

Clarify objectives and consider a broad range of management alternatives.

As an initial matter, Ocean Conservancy recommends that the Council and NMFS reframe this issue as a broader policy discussion and articulate a more accurate and inclusive “purpose and need” statement. For years, fishermen and fishery managers have expressed a desire to create domestic opportunities to target swordfish and transition the drift gillnet fleet to a more selective and less destructive method of fishing. If, in fact, there is legitimate interest in developing a cleaner and more sustainable swordfish fishery, the Council and NMFS must identify that as an objective and evaluate a wider range of alternatives than simply establishing a limited entry high seas shallow set longline fleet of variable sizes. The purpose and need must, at a minimum, be broad enough to allow consideration of a *reasonable* range of alternatives.

In 2004, NMFS imposed a moratorium on pelagic longline fishing east of 150 degrees West longitude to guard against jeopardy to loggerheads even after the Pacific Council banned longlining west of 150 degrees West longitude. Likewise, the Hawaii-based longline fishery was shut down in 2006 after only three months because of excessive turtle interactions. These far reaching closures demonstrate just how vulnerable sea turtles are to the impacts of longline fishing. As such, it would be inappropriate to artificially limit range of alternatives considered to longlining exclusively. Of the action alternatives being presented to the Council, it has been suggested by agency scientists that two (the medium and large size limited entry fleet options), if not all, are patently unreasonable. Such a dramatic increase in capacity and fishing effort is likely to have significant impacts on over-exploited and protected species and run afoul of international overfishing resolutions, the Endangered Species Act, the Marine Mammal Protection Act, the Migratory Bird Treaty Act (MBTA), and the Magnuson-Stevens Act among others. Since both Hawaii and California-based longline fisheries were previously closed due to their adverse impacts on sea turtle populations, it is improper to again call for a renewed longline fishery off the west coast without also evaluating options that would provide more protections for sea turtles and other non-target species. A “reasonable” alternative must also be practicable. The stated goal in establishing a high seas shallow set longline fishery is to create a viable and more selective alternative to drift gillnetting while not increasing overall fishing

⁹ 2005 HMS Stock Assessment and Fishery Evaluation Report, Table 5-1, p. 111.

¹⁰ Resolution C-06-02, IATTC, June 2006

¹¹ PROP IATTC-73-C1, June 2005

¹² 2005 HMS Stock Assessment and Fishery Evaluation Report, Section 5.3.1, page 106.

capacity. It is unclear however how the drift gillnet fleet might transition to longline fleet when, as the PFMC's staff white paper notes, "the size and configuration of drift gillnet vessels makes it unlikely that existing vessels could be fitted for distant water fishing beyond the EEZ."

The Council is charged with developing and refining a range of alternatives for public review and conducting further environmental analysis pursuant to the National Environmental Policy Act (NEPA). The alternatives analysis "is the heart of the environmental impact statement."¹³ It "should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public."¹⁴ Moreover, it should "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated,"¹⁵ and "devote substantial treatment to each alternative considered in detail,"¹⁶ Should the Council opt to proceed with the development of a management framework, we urge managers to revise the purpose and need statement to more accurately reflect the objective of indentifying more selective fishing strategies to target swordfish. We also recommend that the Council and NMFS broaden the scope of alternatives and not prematurely discount other reasonable options including the potential expansion of a California-based harpoon fishery for swordfish.

Investigate options to expand the California harpoon fishery.

To the extent that fishery managers are interested in transitioning the California drift gillnet fleet to a more selective gear type, we recommend that the Council and NMFS investigate opportunities to expand the California-based harpoon fishery for swordfish. The high value, zero bycatch harpoon fishery has been in existence for nearly a century and may provide a viable and more sustainable alternative to drift gillnets and longlines for targeting swordfish. At its peak in 1978, the harpoon fishery had 309 vessels landing 2,700 metric tons of swordfish. Since then, the harpoon fishery has gradually, albeit not entirely, been replaced by the more efficient yet more destructive drift gillnet fishery. Critics claim that a harpoon fishery could not match the volume of fish yielded by the drift gillnet fleet, however drift gillnet landings of swordfish peaked in 1984 at 2,400 metric tons. What's more, research is underway to improve the efficiency of harpooning by analyzing swordfish movement data to better understand how environmental conditions influence swordfish basking rates and times.¹⁷

Prioritize development of a coordinated management framework for pelagic fisheries throughout the Pacific.

The conservation community has repeatedly called for more coordinated management between the Western Pacific and Pacific fishery management councils and a comprehensive evaluation of the impacts of all U.S. longlining in the Pacific on imperiled sea turtle populations, yet these essential steps still have not occurred. The Hawaii and California based fleets fish in the same manner, often in the same area, and catch the same turtles.¹⁸ In addition, the fleets consist of many of the same boats as they have historically moved back and forth to avoid the closures to protect sea turtles that have alternated between Hawaii and California in recent years.

¹³ 40 C.F.R. §1502.14

¹⁴ *Id.*

¹⁵ 40 C.F.R. §1502.14(a)

¹⁶ 40 C.F.R. §1502.14(b).

¹⁷ Pflieger Institute of Environmental Research (PIER), http://www.pier.org/hm_fishes_swordfish.shtml.

¹⁸ 2004 Draft BiOp at 90

Scientists warn that, “[t]he critical issue for an individual turtle is the likelihood of capture across an ocean region, not capture by a particular nation. With multiple fleets deployed the cumulative effects of pelagic longlines across fleets in large ocean regions must be taken into account.”¹⁹

If current fishing practices continue, scientists predict that the extinction of Pacific leatherback sea turtles within the next 10-30 years is imminent.²⁰ Time/area closures and more selective fishing practices can help avert the alarming decline in population of these ancient reptiles, but it will depend on efforts at both the national and international level. The United States has an important leadership role to play in investigating ways to fish more selectively. Towards that end, we recommend that the Pacific Council work closely with fishery managers in the Western Pacific and elsewhere to develop more selective and innovative fishing practices and gear technologies in existing fisheries. To promote sustainability on a global scale, the U.S. must lead by example, by minimizing domestic capacity and developing strong conservation measures that promote ecosystem health and ensure the recovery of endangered sea turtle populations. Even with the most stringent conservation measures in place, reintroduction of longline fishing off the US west coast will result in a net increase in capacity and fishing effort and put vulnerable finfish, marine mammal and turtle populations at even greater risk.

At the same time that the Pacific Council is taking steps to establish a high seas limited entry longline fleet off the west coast, fishery managers in the Western Pacific are considering rolling back critical bycatch mitigation measures in their shallow-set longline fishery. Should both efforts be successful, the likely result would be an overall increase in longline fishing effort Pacific-wide and jeopardy determinations for many species of sea turtles. Any proposed changes to the status quo management regime for longlining off the west coast and in Hawaii, should be well-vetted by *both* Councils and NMFS before time and resources are expended. Absent better communication and coordination, existing longline fisheries may be subject to even greater constraints and sea turtle recovery efforts may be irreversibly compromised. As such, we recommend that the Pacific Council defer development of a west-coast based longline fishery and initiate a process to develop a joint pelagics management framework with the Western Pacific Fishery Management Council.

Adopt import restrictions and demand-side strategies to reduce reliance on imported swordfish.

Proponents of the high seas longline proposal also claim that a west coast based fishery is warranted and necessary to meet the domestic demand for swordfish and reduce our reliance on imported swordfish from countries that may have weaker standards for sustainability and conservation. While these are legitimate concerns, the implied assumption is that demand is static and therefore we must increase supply in order to meet demand. Previous efforts to inform and educate consumers about the ecological impacts of fishery operations have been tremendously successful at influencing demand and paving the way for more effective management strategies. For example, the tuna-dolphin issue is part of the broader public consciousness of American consumers and influences many purchasing decisions. Likewise, a recent campaign to discourage consumers from buying severely depleted Chilean sea bass (Patagonian toothfish) was hugely successful. It is clear that informed consumers can

¹⁹ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. Conservation Biology 2007, Volume 21, No.1, p. 81.

²⁰ Nature 405, June 2000

substantially influence the demand side of the equation; therefore a more prudent approach would be to focus agency efforts on educating the public about the relative sustainability and associated impacts of the domestic and international swordfish fisheries.

If the objective in establishing a longline fishery off the west coast is to meet consumer demand while promoting more sustainable management approaches abroad, a better approach would be to monitor and control imports. The U.S. has the authority and the legal responsibility to monitor and control imports from countries whose vessels are fishing in a manner that undermines the conservation of protected species. The recent reauthorization of the Magnuson-Stevens Act (MSA) clarified the intent of Congress to crack down on illegal, unreported or unregulated (IUU) fishing to raise the bar for sustainability. Specifically, the Act requires that NMFS identify fishing vessels engaged in “fishing activities or practices...that result in bycatch of protected living marine resources...”²¹ Moreover, the MSA specifically endorses the use of market-related measures such as import prohibitions and landing restrictions to combat IUU fishing.²² Likewise, the Marine Mammal Protection Act (MMPA) is another statutory tool by which the U.S. can restrict imports of swordfish from countries that do not meet strong conservation standards to minimize the impact of fisheries on marine mammals. Though still pending, the Center for Biological Diversity and Turtle Island Restoration Network recently submitted a petition to ban imports of swordfish from countries failing to submit proof of the effects of fishing technology on marine mammals pursuant to Section 101 of the MMPA. Indeed, if NMFS is sincerely concerned about the impacts that foreign fleets are having on protected resources, limiting or restricting the importation of swordfish caught in an unsustainable manner is a powerful tool that should not be discounted.

It would be irresponsible to re-establish the longline fishery without the necessary conservation safeguards, a thorough environmental impacts analysis, consideration of alternative gear types to target swordfish, and a coordinated management strategy with the WesPac. We do not believe there is sufficient evidence to justify allowing a renewed longline fishery at this time and urge the Council to discontinue development of a management framework for a high seas shallow set longline fishery.

Sincerely,



Meghan Jeans
Pacific Fish Conservation Manager

²¹ 16 USC 1826d et seq., Section 610(a)(1)(A)

²² 16 USC 1826d et seq., Section 608(2)



Agenda Item C.4

March 7, 2008

Dr. Donald McIsaac
Executive Director, Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220-1384

RE: Agenda Item C.4 - Exempted Fishing Permit for Longline Fishing in the West Coast Exclusive Economic Zone

Dear Dr. McIsaac and Members of the Council:

On behalf of Ocean Conservancy, I am writing to urge the Pacific Fishery Management Council (PFMC) to disapprove the proposed exempted fishing permit (EFP) application for longline fishing in the west coast exclusive economic zone (EEZ). As we noted in our previous comments and testimony before the Council, we do not believe there is sufficient evidence to justify a renewed longline fishery off the west coast. If implemented, the EFP will compromise successful conservation measures protecting sea turtles, seabirds, marine mammals, billfish, sharks and other fish by allowing pelagic longlines in areas along the California and Oregon coastline where this gear type is currently prohibited. Furthermore, the EFP does not have broad public or governmental support, and is not reasonably designed to achieve its stated objective.

The longline EFP does not have widespread support.

Pelagic longline fishing has been banned within 200 miles of the California coast for well over a decade. In March 2004 this ban was extended to the entire west coast EEZ for all pelagic longlining, and to the high seas beyond the EEZ for west coast-based shallow-set pelagic longlining. As the Council is well aware, previous efforts to reintroduce longlining off the California coast were met with widespread opposition. Scientists, commercial and recreational fishermen, the conservation community, members of the public, and the State of California all voiced concerns about the threat that longlining poses to over-exploited fish populations and vulnerable marine wildlife.

Indeed, representatives to the Council from the California Department of Fish & Game (CDFG) have repeatedly opposed the proposed longline EFP. Likewise, in 2007 the California Coastal Commission ("Commission") voted unanimously to reject the issuance of the EFP finding that it was not consistent with the policies and principles of the California Coastal Management Program, Chapter 3 of the California Coastal Act, and the best available science. The Commission's decision was further bolstered by a 2002 resolution to support conservation

programs and the preservation of safe habitat for endangered sea turtles that forage off the California coast.¹

The EFP application presently before the Council incorporates several modifications to the previous proposal including: a change in the fishing season from September through December to November through March; a shift in the shoreward boundary of the fishing area from 30 to 50 miles offshore; authorization for the EFP to continue through 2010 without further review; and reclassification of several tuna species as target species. Despite these revisions, the concerns and flaws identified by the Commission and its staff remain unaddressed by the current proposal. As such, it is unlikely that this revised EFP application will be granted a consistency certification by the Commission. Further evaluation of this proposal by the Council, NMFS and the Commission will waste valuable time and resources.

The longline EFP threatens endangered sea turtle populations.

Sea turtles throughout the Pacific are hovering on the brink of extinction due in large part to incidental mortality associated with fishing operations. Fisheries mortality has been especially problematic for loggerhead and leatherback sea turtles, with nesting population reductions in excess of 80 percent over the last three generations for both species. Leatherbacks are classified as “endangered” under the Endangered Species Act (ESA) and “critically endangered” by the World Conservation Union (IUCN). The status of the leatherback has been the focus of much attention in recent years, however conservation, protection and support is as critical for the loggerhead as for the leatherback. According to the latest surveys, there are fewer nesting loggerheads in the Pacific than nesting leatherbacks. The two major loggerhead populations in the Pacific are found in Japan and Australia, with less than 1,000 and 300 turtles, respectively, nesting annually. The IUCN’s Red List of Threatened Species identifies loggerheads as “endangered” while the ESA classifies loggerheads as “threatened” throughout their range. A pending petition to uplist and reclassify the Pacific loggerhead population as endangered under the ESA suggests that Pacific loggerhead populations warrant even greater protection.

The Pacific longline fisheries out of California and Hawaii were both previously found to cause jeopardy to leatherback and loggerhead sea turtle populations under the ESA. In November 1999, concerned about the high level of sea turtle mortality associated with longlining, Ocean Conservancy (previously known as the “Center for Marine Conservation”) secured an injunction restricting longline fishing under the fishery management plan (FMP) for pelagic fisheries in the western Pacific. The objective of the injunction was to reduce leatherback sea turtle mortality by the shallow-set longline fishery targeting swordfish around the Hawaiian Islands.² NMFS subsequently issued a Biological Opinion pursuant to Section 7 of the ESA on the pelagics FMP. The agency concluded that continued operation of the fishery would jeopardize the existence of leatherback, loggerhead, and green sea turtles, and amended the FMP to close the Hawaii-based shallow-set longline fishery. The fishery was allowed to re-open again in 2004 subject to the conditions that only large 18/0 circle hooks be used, that an effort cap be established to control the number of longline sets, and that a hard cap on turtle take be established to close the fishery if it approached the limits of its take authorization. In March 2006, the annual hard cap on take of loggerheads was reached after the fishery operated for less than three months.³

¹ Resolution by the California Coastal Commission in Support of the Conservation of Endangered Sea Turtles, December 2002.

² *Center for Marine Conservation, et al., v. National Marine Fisheries Service, et al.*, (Civ. No. 99-00152 DAE) (D. Hawaii)

³ 71 Fed. Reg. 14824 (March 24, 2006)

In 2004, NMFS imposed a moratorium on pelagic longline fishing east of 150 degrees West longitude to guard against jeopardy to loggerheads even after the Pacific Council banned longlining west of 150 degrees West longitude. These far reaching closures demonstrate just how vulnerable sea turtles are to the impacts of longline fishing. Scientists have concluded that, “[t]he critical issue for an individual turtle is the likelihood of capture across an ocean region, not capture by a particular nation. With multiple fleets deployed the cumulative effects of pelagic longlines across fleets in large ocean regions must be taken into account.”⁴ It would be inappropriate to allow the capture of turtles by a California-based fishery – EFP or otherwise – when the Hawaii fishery was closed for exactly this reason only two years ago. The Hawaii and California based fleets fish in the same manner, often in the same area, and catch the same turtles.⁵ In addition, the fleets consist of many of the same boats that have had a history of moving back and forth to avoid the closures to protect sea turtles that have alternated between Hawaii and California in recent years.

Where fish stocks and associated non-target species act as a single unit, a more comprehensive and coordinated impact evaluation is crucial. The ad hoc approach employed by U.S. fishery managers does not properly account for the cumulative effect of all U.S. managed pelagic fisheries on fish and wildlife populations. Evaluations of the relative impact of longline fishing on Pacific turtle populations have concluded that “[a]lthough bycatch rates from individual longline vessels are extremely low, the amount of gear deployed by longline vessels suggests that cumulative bycatch of turtles from older age classes is substantial.”⁶ The conservation community has repeatedly called for a comprehensive evaluation of the impacts of all U.S. longlining in the Pacific on imperiled sea turtle populations, yet that essential step still has not occurred.

In June 2007, NMFS rejected an EFP application that would have authorized expansion of the drift gillnet fishery into the Pacific Leatherback Conservation Area, citing recent satellite-tracking studies which confirm the importance of the waters off the California coast as vital foraging grounds for endangered leatherback turtles.⁷ Despite these findings, the proposed longline EFP would permit longlining within the same Pacific Leatherback Conservation Area during the time when leatherbacks are migrating through the region.

The longline EFP threatens vulnerable finfish populations.

In addition to potential negative interactions between shallow-set longline gear and endangered sea turtle populations, we are concerned about the impact of increased fishing effort on select fish species. While the EFP application proposes to allow a single vessel to target swordfish with shallow-set longline gear in west coast EEZ, other more vulnerable highly migratory species may be targeted or caught incidentally. The draft environmental assessment for the previous EFP proposal noted that the EFP may lead to a greater level of interactions with protected shark species including great white sharks and basking sharks.⁸

⁴ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. *Conservation Biology* 2007, Volume 21, No.1, p. 81.

⁵ 69 Fed. Reg. 11540, 11543 (March 11, 2004) (preamble to final rule closing Pacific longline fishery east of 150 degrees West long.)

⁶ Crowder, L. B and R.I. Lewison. Putting Longline Bycatch of Sea Turtles into Perspective. *Conservation Biology* 2007, Volume 21, No.1, p.79.

⁷ Benson, S.R., K.A. Forney, J.T. Harvey, J.V. Carretta, and P.H. Dutton. In press. Abundance, distribution, and habitat of leatherback turtles (*Dermochelys coriacea*) off California, 1990-2003. *Fishery Bulletin*.

⁸ Draft Longline Exempted Fishing Permit Environmental Assessment, March 2007, p.51.

Likewise, the previous EFP identified several tuna species as major non-target species likely to be caught incidentally to shallow-set longline activities.⁹ However, the revised proposal reclassifies bigeye, yellowfin, bluefin and albacore tuna as *target* species. Of these target tuna species, three (yellowfin, bigeye and albacore) have been classified as overfished and/or experiencing overfishing. Given the vulnerable status of these tuna populations, expanding capacity, increasing fishing effort and reintroducing longlining off the U.S. West Coast is not consistent with international directives, domestic regulations, the best available science and the principles of precautionary management.

The longline EFP is not designed to achieve its intended purpose.

The EFP is not reasonably designed to meet its stated objective. The purpose of the proposed EFP is to assess whether longline gear is an economically viable substitute for drift gillnet gear. The EFP however would authorize only one vessel to fish for one year. One vessel fishing for one season will not yield statistically significant results that will allow NMFS to reasonably determine whether transitioning the drift gillnet fleet to a shallow-set longline fishery off the West Coast is a viable option. Given our other concerns with the EFP, we are not recommending that fishery managers authorize more vessels to participate in the EFP to remedy this design flaw. However, we do request that the Council and NMFS weigh the ecological risks against the anticipated value of this EFP.

We agree that the U.S. has a leadership role to play in investigating ways to fish more selectively. Nevertheless, even with the most stringent conservation measures in place, reintroduction of longline fishing off the US west coast will result in a net increase in overall fishing effort, putting vulnerable finfish, marine mammal and turtle populations at even greater risk. If NMFS and the State of California are seeking to establish a viable and sustainable west coast based swordfish fishery sustainable, industry representatives and fishery managers initiate a coordinated management strategy with the Western Pacific Fishery Management Council and investigate opportunities to expand more selective California harpoon fishery.

Current longline closures have provided a successful working balance between the interests of industry and the urgent need to protect critically endangered leatherback and loggerhead sea turtles. It would be irresponsible to re-establish the longline fishery without the necessary conservation safeguards and a thorough environmental impacts analysis. The EFP application currently under review is not predicated on a comprehensive assessment of sea turtle populations and fishery interactions and does not adequately consider the associated impacts on endangered and protected species and the marine ecosystem both inside and outside California's coastal zone. We do not believe there is sufficient evidence to justify allowing an exempted or a renewed longline fishery at this time and urge the Council to oppose issuance of the proposed longline EFP.

Sincerely,



Meghan Jeans
Pacific Fish Conservation Manager

⁹ Draft Longline Exempted Fishing Permit Environmental Assessment, March 2007, p.42.



March 8, 2008

Distributed at March 10, 2008 Meeting

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RE: Agenda Item C.3.b: High Seas Shallow-Set Longline Amendment

Dear Mr. McIsaac, Dr. Dahl, and members of the Council:

The Center for Biological Diversity (“Center”) and Turtle Island Restoration Network (“TIRN”) submit these comments regarding the proposed high seas shallow-set longline amendment. In light of the significant impacts that the current Hawaii longline fishery has on a number of protected species and the fact that the same species are likely to suffer additional impacts if the proposed high seas longline fishery goes forward, we urge the Council to maintain the current restrictions on longline effort.

The Proposed New High Seas Shallow-Set Longline Fishery Would Result in Unacceptable Impacts to Threatened and Endangered Species.

Any expansion of shallow-set pelagic longlining effort in the Pacific would likely jeopardize the continued existence of at least two ESA-listed species, the Pacific leatherback and loggerhead sea turtles. Section 2(c) of the ESA establishes that it is “...the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act.” 16 U.S.C. § 1531(c)(1). The ESA defines “conservation” to mean “...the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary.” 16 U.S.C. §

1532(3). Similarly, Section 7(a)(1) of the ESA directs that the Secretary review "...other programs administered by him and utilize such programs in furtherance of the purposes of the Act." 16 U.S.C. § 1536(a)(1).

Section 7(a)(2) of the ESA requires federal agencies to "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the adverse modification of habitat of such species . . . determined . . . to be critical" 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). To accomplish this goal, agencies must consult with the delegated agency of the Secretary of Commerce or Interior whenever their actions "may affect" a listed species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). The proposed high seas longline fishery would require consultation with NMFS regarding leatherback and loggerhead sea turtles, as well as other ESA-listed species that may be affected by the proposed fishery.

At the completion of consultation NMFS issues a Biological Opinion that determines if the agency action is likely to jeopardize the species. If so the opinion must specify a Reasonable and Prudent Alternative ("RPA") that will avoid jeopardy and allow the agency to proceed with the action. 16 U.S.C. § 1536(b). An agency's duty to avoid jeopardy is continuing, and "where discretionary Federal involvement or control over the action has been retained or is authorized by law," the agency must in certain circumstances reinitiate formal consultation. 50 C.F.R. § 402.16.

The impacts of longline fishing on sea turtles in particular have been the subject of much study, concern, and litigation. In 2001, NMFS determined that the operation of the western Pacific pelagic longline fishery without the current gear and effort restrictions and without 100% observer coverage would jeopardize the continued existence of leatherback, loggerhead, and green sea turtles. NMFS, Biological Opinion on Authorization of Pelagic Fisheries Under the Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region (2001) at 120-24, 136 (green turtles); 124-29, 136 (leatherbacks); 129-32, 136 (loggerheads). As a result, NMFS prohibited shallow-set longline fishing north of the equator and placed additional restrictions on deep-set longlining, including time-area closures. *Id.* at 138-40.

NMFS reopened the Hawaii-based swordfish fishery in 2004, when it issued a "no jeopardy" biological opinion on impacts to listed sea turtles authorizing the fishery to operate under a number of constraints regarding gear, bait, effort levels, and take. 72 Fed. Reg. 46608, 46609. NMFS has reported that the incidental capture of sea turtles by the shallow-set longline fishery has declined by 89% compared to historic capture rates, presumably because of the

protective measures that have been implemented in recent years.¹ 72 Fed. Reg. 46608, 46609. This decline indicates that those measures have likely been somewhat effective in reducing the fishery's impact on imperiled turtle species.²

However, NMFS recently proposed to roll back the very same measures for the Hawaii longline fishery that have achieved much needed reductions in sea turtle bycatch and mortality. 72 Fed. Reg. 46608. Therefore, the high seas longlining proposal's promise to "parallel as closely as possible the key elements and specific regulations applicable to the Hawaii fishery" does not offer any guarantee that these species will receive anything close to adequate protection. To the contrary, the proposals currently under consideration suggest that imperiled sea turtles and other species may be subject to increased interactions with more vessels throughout more of their habitat with less protection than before. In other words, injury and death of imperiled species will increase with the establishment of a new longline fishery.

Scientific evidence indicates that neither loggerhead nor leatherback sea turtle populations can withstand such increased mortality. In response to a petition by the Center and TIRN to reclassify loggerheads in the North Pacific as a distinct population segment ("DPS") with endangered status and designate critical habitat under the ESA, NMFS agreed that the proposal may be warranted. 72 Fed. Reg. 64585 (November 16, 2007). Increasing the take of loggerheads in longline fisheries is clearly impermissible given the species' decline. Yet Attachment 1 of the Pacific Fishery Management Council Agenda Item C.3 for the March 2008 meeting estimates that a high seas Shallow Set Longline fishery could result in up to 15 annual interactions with Loggerhead turtles. This far exceeds the current Incidental Take Statement for the West Coast Drift Gillnet fishery that permits up to 5 annual loggerhead takes. Given the loggerhead's precarious population status, its likely uplisting, and the significant harm the proposed high seas longline fishery would cause, this fishery is clearly inconsistent with ESA requirements.

The leatherback sea turtle is listed as endangered under the ESA throughout its range. Numbering over 100,000 nesting females as recently as the 1980s, the species is now in rapid decline with a current estimate of only 2,000-5000 nesting females. Lewison, R. *et al.*, (2004) Quantifying the effects of fisheries on threatened species: the impact of pelagic longlines on loggerhead and leatherback sea turtles, *Ecology Letters* 7:221. In 2000, an article published in the preeminent scientific journal *Nature*, predicted extinction of leatherbacks in the Pacific within decades. Spotila *et al.* (2000), Pacific leatherback turtles face extinction, *Nature* 405:529-

¹ NMFS does not report whether there has been any change during this time period in the number of sea birds and marine mammals seriously injured or killed by the pelagic longline fishery.

² We hope the observed decline in interactions is in fact a result of the gear being more selective rather than an artifact of the simple fact that populations of leatherback and loggerhead sea turtles in the Pacific continue to decline and there are simply few turtles in the water for the fishery to interact with.

530. The primary cause of the leatherback decline, and the greatest threat to its continued existence, is entanglement and drowning in longline fishing gear. *Id.*

In its 2001 longline biological opinion, NMFS concluded that the mortality of up to 57 leatherbacks per year in the Hawaii longline fishery would

appreciably reduce the leatherback sea turtles' likelihood of surviving and recovering in the wild, particularly given the status and trend of leatherback turtle populations in the Pacific basin. Based on published estimates of nesting female abundance, leatherback populations have collapsed or have been declining at all major Pacific basin nesting beaches for the last two decades.

NMFS 2001 BiOp at 125.

In another relevant biological opinion concerning the impacts of fishing on Pacific leatherbacks, NMFS found that Pacific leatherback populations have continued their worrisome decline and concluded that

...any additional impacts to the western Pacific leatherback stocks are likely to maintain or exacerbate the decline in these populations. This would further hinder population persistence or attempts at recovery as long as mortalities exceed any possible population growth, which appears to be the current case, appreciably reducing the likelihood that western Pacific leatherback populations will persist. Additional reductions in the likelihood of persistence of western Pacific leatherback stocks are likely to affect the overall persistence of the entire Pacific Ocean leatherback population by reducing genetic diversity and viability, representation of critical life stages, total population abundance, and metapopulation resilience as small sub-populations are extirpated. These effects would be expected to appreciably reduce the likelihood of both the survival and recovery of the Pacific Ocean population of the leatherback sea turtle.

NMFS, Biological Opinion on CA-OR Drift Gillnet Fishery (2000) at 94 (emphasis added).

Given NMFS's acknowledgment that any additional mortality to Pacific leatherbacks threatens the species' very existence, and the fact that even with current protective measures the Hawaii shallow-set longline fishery continues to take leatherbacks, any expansion of longlining effort in the Pacific would be patently contrary to ESA requirements.

Finally, as discussed in the MMPA section below, current longline fisheries are known to entangle and kill ESA-listed marine mammals. Such take must be authorized under both the ESA and MMPA.

The Proposed New Longline Fishery Would Violate the Marine Mammal Protection Act.

Marine mammals are entangled and killed in the Hawaii and Atlantic longline fisheries, and would more than likely be taken in the proposed high seas longline fishery. Many of these species are also listed under the ESA. We do not believe that the necessary “negligible impact” finding under the MMPA can lawfully be made for the ESA-listed species likely to interact with pelagic longline gear deployed in the high seas. Therefore, no such permit can be issued and any take will be in violation of both the ESA and MMPA.

For non-ESA listed marine mammals, take in violation of the MMPA is also likely to occur. Both the Hawaii and Atlantic longline fisheries are categorized as Category 1 fisheries on the 2006 List of Fisheries, while the remnant California-based deep-set longline fishery is listed as a Category 2 fishery. Only the Atlantic longline fishery has a take reduction team to address marine mammal bycatch. It would be unwise and unlawful to allow an additional marine-mammal killing fishery to operate without a take reduction team prior to at least initiating the take reduction process for these other two longline fisheries. Additionally, a Category 1 or 2 fishery is by definition taking marine mammals at levels above ZMRG. Given the statutory deadline for reaching ZMRG has already passed, we do not believe that establishing a new longline fishery that would result in take of stocks of marine mammals where mortality and serious injury are already above ZMRG is consistent with the ZMRG mandate of the MMPA.

The most likely species of non-ESA listed marine mammals to be taken by the proposed high seas longline fishery are Risso’s dolphins and short-finned pilot whales. Take of even a single pilot whale by the proposed longline fishery would put mortality and serious injury to the stock over PBR. Pilot whales are the most frequent marine mammal species encountered by the Atlantic longline fishery. There is no reason to believe that they would not also be taken by a similar fishery off California. Until and unless, a take reduction plan is in place that reduces pilot whale mortality to ZMRG, NMFS cannot authorize any fishing activity through an EFP which is likely to result in additional take of the species.

The Proposed High Seas Longline Fishery Is Not Likely to Reduce Drift Gillnet Effort.

None of the limited entry options for the proposed high seas longline fishery appear to guarantee any significant reduction in drift gillnet effort. One clear obstacle to achieving a reduction in drift gillnet effort by transitioning these permit holders to longlining is that drift gillnet boats often are not equipped to venture far enough offshore to fish in the EEZ; nor are

they equipped with the requisite longline gear. This problem makes it unlikely that even the most ambitious of the limited entry options would meaningfully reduce drift gillnet effort. Moreover, the second and third options, which allow participation by those who once participated in the west coast-based shallow-set longline fishery, would result in an expansion of both longline and overall fishing effort and would likely have little effect on drift gillnet effort. In short, virtually all options set forth for the proposed new high seas longline fishery result in increased fishing effort and increased impacts to protected species.

Regulatory and Budget Constraints Make the Proposed High Seas Longline Fishery Infeasible.

The HMSMT report notes that the proposed high seas longline fishery will affect many of the same protected species as the Hawaii fishery and that the limited amount of ESA take allowed would significantly limit the size of the proposed fishery. More likely, an honest assessment of overall impacts of U.S. longline fisheries in the Pacific would prevent the proposed fishery from taking place at all.

Moreover, the HMSMT report also notes that the proposed fishery would be subject to a 100% observer coverage requirement in order to try to comply with ESA requirements. However, no budget exists to provide observer coverage for west coast-based longline trips.

In sum, the proposed high seas longline fishery is inconsistent with the requirements of federal law and impossible to implement given current regulatory and budget constraints. We therefore urge the Council to maintain or strengthen current restrictions on longline effort in Pacific. Thank you for your consideration.

Sincerely,

/s/ Andrea A. Treece

Staff Attorney, Oceans Program
Center for Biological Diversity



March 6, 2008

Distributed at March 10, 2008 Meeting

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RE: Agenda Item C.4.a: Application for Exempted Fishing Permit to Fish with Longline Gear in the West Coast Exclusive Economic Zone

Dear Mr. McIsaac, Dr. Dahl, and members of the Council:

The Center for Biological Diversity and Turtle Island Restoration Network (“TIRN”) submit these comments regarding the Pacific Fishery Management Council’s (“Council”) consideration of the renewed application for an exempted fishing permit to fish with shallow-set longline gear in the West Coast Exclusive Economic Zone (“EEZ”). As noted in the Council’s Situation Summary, this proposal is virtually identical to a proposal that the California Coastal Commission (“Commission”) rejected last summer. The Commission concluded that implementation of the proposed EFP would result in harm to a number of imperiled species, most particularly to the endangered Pacific leatherback sea turtle.

We detailed similar concerns in the attached July 13, 2007 letter to the National Marine Fisheries Service (“NMFS”). In addition to concerns regarding the impacts of the proposed EFP on leatherback sea turtles and other threatened and endangered species, we identified numerous legal deficiencies, including the failure to comply with the Endangered Species Act, Marine Mammal Protection Act, Migratory Bird Treaty Act, Magnuson-Stevens Fishery Conservation and Management Act, National Marine Sanctuaries Act, and National Environmental Policy Act. We first identified many of these deficiencies in our November 7, 2006 comment letter to the Council, which is also attached.

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The deficiencies and impacts identified in those letters apply equally to the current proposal. The current EFP proposal differs from prior proposals only in that fishing would now take place from November through March (as opposed to September through December), would take place at least 50 miles offshore (as opposed to 30 miles offshore), and would be authorized for 2009 and 2010 without further review of the proposal by the Council. None of these changes address the numerous concerns set forth by the Center, TIRN, other conservation groups, or the Commission. Rather, this proposal, like those that came before it, continues to contravene legal requirements and puts protected species at unjustified and unnecessary risk.

Given that the substantial flaws in the proposal have not been resolved and that it is no more likely to gain the necessary approvals now than it was before, it makes little sense to expend the Council's and NMFS's resources in advancing this fatally flawed EFP proposal. We therefore urge the Council to reject the applicant's request to adopt the EFP for public review.

Thank you for your consideration.

Sincerely,

/s/ Andrea A. Treece

Staff Attorney, Oceans Program
Center for Biological Diversity



CENTER FOR BIOLOGICAL DIVERSITY

BECAUSE LIFE IS GOOD.

November 7, 2006

Via Electronic Mail

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RE: Agenda Item C-3: Exempted Fishing Permits

Dear Mr. McIsaac, Mr. Hansen and members of the Council:

The Center for Biological Diversity, Turtle Island Restoration Network, and Oceana submit the following comments regarding Agenda Item C-3 of the November 2006 meeting of the Pacific Fishery Management Council ("PFMC" or "Council") concerning Exempted Fishing Permits ("EFPs"). Pursuant to PFMC policy as articulated on its website, we request that this letter be distributed to the Council at or before the onset of the November meeting.

The Agenda for the November meeting of the Council frames the issues before the Council as "Consider Drift Gillnet EFP (Status for 2006 and Guidance for 2007) and Preliminary Alternatives for 2007 Shallow Set Longline EFP." According to the "Situation Summary" contained in the Briefing Book for the November meeting, "the HMSMT is scheduled to brief the Council on the results of the drift gillnet EFP during the 2006 season." Based on numerous telephone conversations with, and written statements by officials with the National Marine Fisheries Service/NOAA Fisheries ("NMFS"), it is our understanding that the proposed Drift Gillnet EFP for 2006 has not yet been issued. Given the proposed EFP has not been issued, and the August 15 to November 15 permit season is virtually over, we do not see what "results" from the EFP could possibly be relayed to the Council for its

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consideration.¹ The only relevant information to be gleaned from the proposed 2006 EFP is that NMFS did not issue the permit because NMFS could not lawfully do so. Since the same legal obstacles to issuing such a permit would also apply to any 2007 Drift Gillnet EFP to be considered by the Council and NMFS, we do not see any reason for the Council to waste the limited resources of NMFS by again recommending that such an unwise and unlawful permit be issued. Nevertheless, given the track record of the Council and NMFS of supporting the proposed 2006 EFP, we offer the following comments regarding any Drift Gillnet EFP for 2007. Similarly, we believe the proposed 2007 longline EFP cannot lawfully be issued by NMFS, and therefore also does not warrant the further consideration of the Council. Our specific objections to both of these proposed EFPs follow.

I. THE 2007 DRIFT-GILLNET EFP MUST BE DENIED

As we have stated on numerous occasions in our comments to the Council and NMFS regarding the proposed 2006 EFP which would have allowed vessels currently permitted to participate in the California/Oregon Drift Gillnet Fishery ("Fishery") to set drift-gillnet gear in the Pacific Leatherback Conservation Area from August 15 to November 15, notwithstanding the fact that existing law and regulation prohibit the setting of such gear during this period, any request to allow harmful fishing gear in the Pacific Leatherback Conservation Area while leatherbacks are likely to be in the area must be denied. Issuing such an EFP in 2007 would be wholly incompatible with the very purpose for which the Pacific Leatherback Conservation Area was created: to protect critically endangered Pacific leatherback sea turtles from entanglement and drowning in drift-gillnet fishing gear. In addition to being utterly misguided as a matter of policy and science, issuance of the 2007 EFP would be illegal, as doing so would violate the Endangered Species Act ("ESA") (16 U.S.C. § 1531 *et seq.*), Marine Mammal Protection Act ("MMPA") (16 U.S.C. § 1361 *et seq.*), Migratory Bird Treaty Act ("MBTA") (16 U.S.C. § 706 *et seq.*), National Marine Sanctuaries Act (16 U.S.C. § 1431 *et seq.*), Coastal Zone Management Act ("CZMA") (16 U.S.C. § 1451 *et seq.*), Magnuson-Stevens Fishery Conservation and Management Act ("MSA") (16 U.S.C. § 1801 *et seq.*), and the National Environmental Policy Act ("NEPA") (42 U.S.C. § 4321 *et seq.*).

A. The Drift-Gillnet Fishery

The California/Oregon Drift Gillnet Fishery for Shark and Swordfish ("Fishery") is currently primarily a federally-managed fishery, with the majority of the fishing effort occurring in federal waters within 200 miles of the coasts of California and Oregon. The fishery is governed pursuant to the overlapping provisions of a federal Highly Migratory Species Fishery Management Plan ("FMP") under the MSA, and regulations promulgated by NMFS to implement that FMP, Biological Opinions drafted by NMFS under the ESA, regulations promulgated by NMFS pursuant to the ESA to implement the Biological Opinions, regulations promulgated by NMFS pursuant to the MMPA to implement a Take Reduction Plan developed for the Fishery, as well as several provisions of California and Oregon state law.

¹ Given the stated purpose of the 2006 EFP was "data collection," we do not see how NMFS could justify issuing the EFP at this late date, as any "data" collected would be of such limited temporal and spatial scale that any results extrapolated from it would be of little statistical significance. Issuing the EFP at this point would simply place critically endangered leatherback sea turtles and other protected species at needless risk.

The Fishery consists of approximately 100 permitted vessels of which approximately 40 are active in a given year. These vessels use nets of approximately one mile in length with mesh sizes of 16 to 22 inches. The nets are generally set in the evening and retrieved in the mornings, and theoretically allow small animals to pass through while trapping larger animals. Although termed "gillnets," the nets used in the Fishery actually entangle fish and other animals rather than trap them by the gills. The majority of fishing effort in the Fishery occurs between August and the end of January.

Although the Fishery originally targeted thresher sharks, today it also targets both swordfish and shortfin mako sharks. Other species commonly caught and kept by this Fishery include opah, louver, and various species of tuna. The majority of the targeted catch in the Fishery now consists of swordfish taken off the California coast between San Diego and Cape Mendocino. Sunfish or mola and blue sharks are the two most common unwanted fish species or "bycatch" caught by the Fishery, with over ten thousand molas and one thousand blue sharks caught and discarded by the Fishery in 2005 alone.

Historically, the Fishery has resulted in the incidental bycatch of many species of marine mammals, sea turtles and seabirds. Several of these species are listed as endangered or threatened under the ESA, including sperm whales (*Physeter macrocephalus*), humpback whales (*Megaptera novaeangliae*), fin whales (*Balaenoptera physalus*), Steller sea lions (*Eumatopias jubatus*), leatherback sea turtles (*Dermochelys coriacea*), loggerhead sea turtles (*Caretta caretta*), green sea turtles (*Chelonia mydas*), and olive ridley sea turtles (*Lepidochelys olivacea*). Moreover, the critically endangered North Pacific right whale (*Eubalaena japonica*) occurs within the range of the Fishery and is at risk from it. Similarly, the recently listed Southern Resident population of killer whales (*Orcinus orca*), a species historically entangled and killed by the Fishery, seasonally occurs in the range of the Fishery. In addition, numerous non-ESA listed marine mammals protected by the MMPA have been ensnared and killed in gillnets used by the Fishery, including, for example, pilot whales, common, Pacific white-sided, and northern right whale dolphins, and several additional species of whales, sea lions and seals.

NMFS considers the Fishery a Category I fishery under the MMPA. A Category I fishery is a fishery that has "frequent incidental mortality and serious injury of marine mammals." 16 U.S.C. § 1387(c)(1)(A); 50 C.F.R. § 229.2. Since at least 1990, NMFS has monitored the Fishery due to its high rate of bycatch. Mortality and entanglement rates are calculated based upon the number of individuals observed entangled or killed and the percentage of the fishing effort observed. Mortality and entanglement rates vary from year to year, with some species observed killed every year and others observed killed only every two or three years. Consequently, NMFS's estimates of annual mortality and entanglement rates vary based upon which years are used to calculate the average.

In response to the high level of marine mammal mortality from the Fishery, in 1997 NMFS adopted the Pacific Offshore Cetacean Take Reduction Plan and accompanying regulations pursuant to Section 118(f) of the MMPA. The Take Reduction Plan and implementing regulations became effective October 30, 1997. 62 Fed. Reg. 51805 (Oct. 3, 1997). Despite the Take Reduction Plan, the Fishery continues to kill marine mammals at rates in excess of those authorized by the MMPA.

Because implementation of the Take Reduction Plan constitutes federal agency action within the meaning of the ESA, NMFS undertook an internal Section 7 consultation in connection with adoption of the Take Reduction Plan and implementing regulations, and issued a Biological Opinion on September 30, 1997, concluding that the Fishery would not jeopardize any listed marine mammal or sea turtle

species. However, NMFS also concluded that the requirements of Section 101 of the MMPA for permit issuance could not be met and that, therefore, no incidental take of ESA-listed marine mammal species could be authorized. Nevertheless, in spite of the fact that no take of ESA-listed marine mammals was authorized by NMFS, the Fishery continued to operate and take listed marine mammals. Additionally, take of listed sea turtle species occurred at levels in excess of that authorized by the 1997 Biological Opinion's Incidental Take Statement.

In March 2000, the Center for Biological Diversity and Turtle Island Restoration Network brought suit against NMFS for violations of the ESA and MMPA related to the Fishery. In response, on October 23, 2000, NMFS issued a new Biological Opinion for the Fishery. NMFS also, at this point issued a permit under Section 101 of the MMPA authorizing the Fishery to take ESA-listed marine mammal species. 65 Fed. Reg. 64670. The new Biological Opinion concluded that the Fishery would likely jeopardize both the loggerhead and leatherback sea turtles. With regard to the leatherback sea turtles, NMFS concluded that the projected take of the species from the Fishery, would jeopardize the species because any further mortality to leatherbacks from the western Pacific nesting population equated to jeopardy:

Therefore, any additional impacts to the western Pacific leatherback stocks are likely to maintain or exacerbate the decline in these populations. This would further hinder population persistence or attempts at recovery as long as mortalities exceed any possible population growth, which appears to be the current case, appreciably reducing the likelihood that western Pacific leatherback populations will persist. Additional reductions in the likelihood of persistence of western Pacific leatherback stocks are likely to affect the overall persistence of the entire Pacific Ocean leatherback population by reducing genetic diversity and viability, representation of critical life stages, total population abundance, and metapopulation resilience as small sub-populations are extirpated. These effects would be expected to appreciably reduce the likelihood of both the survival and recovery of the Pacific Ocean population of the leatherback sea turtle.

Biological Opinion at 94. (Emphasis added).

As required by Section 7(b) of the ESA, 16 U.S.C. § 1536(b), NMFS proposed a reasonable and prudent alternative that would avoid jeopardy to the leatherback. *Id.* The reasonable and prudent alternative required that a seasonal closure of the Fishery be implemented North of Point Conception in the fall. Specifically the Biological Opinion states:

By August 1, 2001, NMFS, or the states of California and Oregon, must implement regulations to close an area to drift gillnets from Point Conception, California (34°27'N), north to 45°N, and west to 129°W, from August 15th to October 31st.

Id. at 102. While NMFS illegally delayed the implementation of this closure, on August 24, 2001, after receiving a notice of intent to sue from the Center for Biological Diversity and Turtle Island Restoration

Network, NMFS eventually implemented a modified version of the required closure through an interim final rule. 66 Fed. Reg. 44549.²

The closure ultimately implemented by NMFS runs from August 15 to November 15 each year and extends from Point Sur (364°18.5'N) in California to 45°N on the Oregon Coast.

Since the leatherback closure went into effect, no leatherback sea turtles have been observed taken in the Fishery.

In April 2004, NMFS finally promulgated regulations implementing the long overdue FMP for HMS fisheries on the West Coast. 69 Fed. Reg. 18453. Through these regulations, NMFS incorporated the existing leatherback and loggerhead closures into the FMP regulations.³ See 50 C.F.R. § 660.713(c)(1). The February 4, 2004 Biological Opinion for the FMP reached its no jeopardy conclusion for the leatherback based on the premise that the leatherback closure would remain in effect.

The February 4, 2004 Biological Opinion for the FMP contained an Incidental Take Statement estimating the likely take of listed sea turtles and marine mammals from the Fishery. However, due to the interplay of the MMPA and ESA, no take authorization for ESA-listed marine mammals was issued:

The ESA allows takings of threatened and endangered marine mammals only if authorized by section 101(a)(5) of the MMPA. Until the proposed action receives authorization for the incidental taking of marine mammals under section 101(a)(5) of the MMPA, the incidental takings of marine mammals described below are not exempt from the taking prohibition of section 9(a), pursuant to section 7(o) of the ESA.

February 4, 2004 Biological Opinion at 226. The MMPA Section 101 permit issued to the Fishery in October 2000 for the take of threatened and endangered marine mammals expired on October 24, 2003. See 65 Fed. Reg. 64670. No subsequent take authorization has been issued even though the Fishery continues to capture and kill ESA-listed marine mammals.⁴

B. The Proposed 2007 Drift-Gillnet Exempted Fishing Permit

No EFP for the 2007 fishing season has yet to be officially authorized or proposed by the Council or NMFS. Nevertheless, it is our expectation that any proposed 2007 Drift-Gillnet EFP will be substantially similar to the proposed 2006 EFP. On July 11, 2006 NMFS published a notice in the Federal Register regarding an EFP which would allow vessels currently permitted to participate in the Fishery to set drift-gillnet gear in the Pacific Leatherback Conservation Area from August 15, 2006 to November 15, 2006 notwithstanding the fact that existing law and regulation prohibit the setting of such

² The Biological Opinion also required a similar time/area closure to protect loggerhead sea turtles. NMFS failed to meet this requirement of the Opinion as well, and only implemented the closure over a year late following litigation by the Center for Biological Diversity and Turtle Island Restoration Network. See 67 Fed. Reg. 78388 (Dec. 24, 2002).

³ While the leatherback closure remained the same, the loggerhead closure was modified somewhat from the previous ESA regulation.

⁴ On July 28, 2006 NMFS published a notice of proposed issuance of a permit under Section 101(a)(5) of the MMPA for ESA-listed marine mammals taken by the Fishery. See 71 Fed. Reg. 42809. This permit has not been finalized and as such is currently of no legal effect.

gear during this period. See 71 Fed. Reg. 39055 (July 11, 2006). NMFS described the 2006 EFP as follows:

The EFP would authorize approximately 30 vessels to fish from August 15, 2006, to November 15, 2006, in an area off the U.S. West Coast of California and Oregon defined as the Pacific Leatherback Conservation Area within the Federal EEZ. The EFP would allow a maximum of 300 DGN sets, and would require 100 percent observer coverage for all fishing under the EFP. The fishery would be managed through limits on the amount of incidental take of protected species. The proposed EFP would impose a limit of two leatherback sea turtles that may be incidentally taken during the course of fishing under the EFP and limit to one the number of serious injuries or mortalities to humpback whale (*Megaptera novaeangliae*), short-finned pilot whale (*Globicephala macrorhynchus*), or sperm whale (*Physeter macrocephalus*). If any one of these limits is reached by the fishery authorized by the EFP, the EFP would be immediately revoked.

71 Fed. Reg. 39055. Our understanding is that NMFS has not issued the 2006 EFP and the intended permit duration of the proposed permit has already largely past. Given the Pacific Leatherback Conservation Area is closed to drift-gillnet gear from August 15 to November 15 each year, we anticipate the 2007 EFP would similarly run from August 15, 2007 to November 15, 2007.

C. Violations of Law

In our previous letters to NMFS and the Council we described how the current Fishery is in violation of numerous provisions of law, and how any expansion of that Fishery, including through a proposed EFP that would allow drift-gillnet fishing in the Pacific Leatherback Conservation Area when leatherbacks are present, would also violate numerous provisions of law.⁵ Unfortunately, neither the Council nor NMFS have adequately addressed these legal issues in the processing of the 2006 EFP or in the consideration of the 2007 EFP, rendering both the current operation of the Fishery and any proposed EFPs unlawful. We are confident that a reviewing court will not only set aside any EFP as arbitrary and capricious, but will also find NMFS's management of the Fishery as a whole to be legally infirm. NMFS must reject the proposed 2007 EFP and instead work towards ensuring that the current Fishery operates consistent with all existing law, or not at all.

1. Violations of the ESA

Section 2(c) of the ESA establishes that it is "...the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act." 16 U.S.C. § 1531(c)(1). The ESA defines "conservation" to mean "...the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." 16 U.S.C. § 1532(3). Similarly, Section 7(a)(1) of the ESA directs that the Secretary review "...other programs administered by him and utilize such programs in furtherance of the purposes of the Act." 16 U.S.C. § 1536(a)(1).

⁵ See our letters of August 10, 2006 (Comment letter to NMFS on proposed 2006 EFP), June 23, 2006 (60-day Notice of Intent to Sue), February 28, 2006 (Letter to Council urging rejection of EFP request), October 25, 2005 (Letter to Council regarding Fishery), and September 13, 2005 (Letter to Council regarding EFPs).

further declined.⁶ We believe, as NMFS stated in 2000, that authorization of any leatherback take in the Pacific would violate the requirement to avoid jeopardy to the species. Therefore, any proposal, such as through an EFP, to allow the Fishery into currently closed areas occupied by the critically endangered leatherback sea turtle would violate Sections 7(a)(2) of the ESA.

Section 7(d) of the ESA, 16 U.S.C. § 1536(d), provides that once a federal agency initiates consultation on an action under the ESA, the agency, as well as any applicant for a federal permit, "shall not make any irreversible or irrevocable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2) of this section." The purpose of Section 7(d) is to maintain the environmental status quo pending the completion of interagency consultation. Section 7(d) prohibitions remain in effect throughout the consultation period and until the federal agency has satisfied its obligations under Section 7(a)(2) that the action will not result in jeopardy to the species or adverse modification of its critical habitat. Our understanding is that NMFS is still engaged in consultation over the issuance of the 2006 EFP to allow the Fishery to operate in the leatherback closure area. See 71 Fed. Reg. at 39055-56 ("NMFS is engaged in formal consultation to determine if the proposed action is likely to jeopardize the continued existence and recovery of any endangered or threatened species or result in the destruction or adverse modification of critical habitat."). Continued authorization of the Fishery during this consultation constitutes a violation of this provision as well.

An agency's duty to avoid jeopardy is continuing, and "where discretionary Federal involvement or control over the action has been retained or is authorized by law," the agency must in certain circumstances reinstate formal consultation. 50 C.F.R. § 402.16. An FMP is clearly a continuing agency action requiring reinstitution of consultation if any of the triggering circumstances occur. Among those circumstances is when the authorized take is exceeded. Id. The excessive take also constitutes "new information" triggering the reinstatement requirement.

In this case, no take of ESA-listed marine mammals is authorized by the February 2004 Biological Opinion. Nevertheless, take of humpback whales has occurred. The reinstatement requirements have been triggered. Moreover, the recent listing of the Southern Resident population of killer whales (*Orcinus orca*) as endangered also triggers the reinstatement requirement. Killer whales have historically been documented entangled and killed by the Fishery, and the newly listed population seasonally occurs in the range of the Fishery. Because NMFS has failed to reinstate consultation it is in violation of its procedural and substantive mandates to insure against jeopardy to listed species.⁷

The ESA prohibits any "person" from "taking" threatened and endangered species. 16 U.S.C. § 1538. The definition of "take", found at 16 U.S.C. § 1532(19), states,

⁶ Fortunately, the seasonal closure of portions of the Fishery for the protection of the leatherback sea turtles appears to be effective. The past three years of observer data show no bycatch of leatherback sea turtles. It would be criminal for NMFS to undo this apparently successful management measure and allow drift-gillnet vessels to set their nets in areas where they are likely to entangle and kill this critically endangered species.
⁷ NMFS's ongoing consultation on the issuance of the 2006 EFP is no substitute for reinstating consultation on the Fishery as a whole. Center v. Bauford, 848 F.2d 1441, 1453 (9th Cir. 1988) ("ESA requires the Biological Opinion to analyze the effect of the entire agency action.") (emphasis in original).

NMFS's continued authorization of the Fishery is violating Sections 2(c) and 7(a)(1) of the ESA because the agency refuses to use its authorities to further the purpose of listed species conservation. Specifically, by not closing the Fishery or taking other measures to avoid unlawful take following the unpermitted taking of a humpback whale by the Fishery during the 2004/2005 fishing season, NMFS is violating these provisions. See Sierra Club v. Babbitt, 65 F.3d 1502, 1511, fn 15 ("If Seneca violates section 9, or any other environmental standard, the BLM need not consult with the FWS before exercising its right under the environmental stipulation to terminate the offending project. Indeed, section 7(a)(1) would appear to require the BLM to utilize its authority under the stipulation to suspend an activity that would result in a taking.") (Emphasis in original). Moreover, issuing an EFP which would allow drift-gillnet vessels to fish in the Pacific Leatherback Conservation Area after previously finding that such fishing would jeopardize this critically endangered species, would run afoul of these provisions as well.

Section 7(a)(2) of the ESA requires federal agencies to "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the adverse modification of habitat of such species . . . determined . . . to be critical . . ." 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). To accomplish this goal, agencies must consult with the delegated agency of the Secretary of Commerce or Interior whenever their actions "may affect" a listed species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). Where, as here, NMFS is both the acting agency and the delegated wildlife agency for purposes of the listed species in question, different branches of NMFS must undertake internal consultation with each other.

At the completion of consultation NMFS issues a Biological Opinion that determines if the agency action is likely to jeopardize the species. If so the opinion must specify a Reasonable and Prudent Alternative ("RPA") that will avoid jeopardy and allow the agency to proceed with the action. 16 U.S.C. § 1536(b).

As described above, in the 2000 Biological Opinion, NMFS had the following to say about any further mortality to western Pacific leatherbacks:

Therefore, any additional impacts to the western Pacific leatherback stocks are likely to maintain or exacerbate the decline in these populations.... These effects would be expected to appreciably reduce the likelihood of both the survival and recovery of the Pacific Ocean population of the leatherback sea turtle.

Biological Opinion at 94. (Emphasis added). NMFS then concluded that the estimated annual mortality of leatherbacks from the Fishery would likely jeopardize the species. NMFS therefore proposed as an RPA a seasonal closure of the Fishery in the waters off the Central and Northern California and Southern Oregon Coasts. NMFS adopted a variant of this RPA via an ESA rulemaking which instituted the current closure. 66 Fed. Reg. 44549. The closure was then reaffirmed by NMFS when it adopted the HMS FMP under its authorities under the MSA. 69 Fed. Reg. 18444; 50 C.F.R. § 660.713. Since the October 2000 biological opinion for the Fishery, the status of the leatherback in the Pacific has

The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

In a case dealing with fisheries, the Court ruled "the statute not only prohibits the acts of those parties that directly exact the taking, but also bans those acts of a third party that bring about the acts exacting a taking. We believe that...a governmental third party pursuant to whose authority an actor directly exacts a taking of an endangered species may be deemed to have violated the provisions of the ESA." *Strahan v. Coxse, et al.*, 127 F.3d 155 (1st Cir. 1997).

NMFS's continued authorization of the Fishery directly authorizes fishing activities that have been documented to take humpback whales, fin whales, sperm whales, and leatherback and loggerhead sea turtles and therefore fits the statute's definition of take. Such take is ongoing. Similarly, issuance of any EFP will also cause such take. As discussed below, take of ESA-listed marine mammals by the Fishery is not authorized via either the ESA or MMPA, yet such take, as demonstrated by the entangled humpback whale in 2004/2005, is clearly occurring. NMFS is violating Section 9 of the ESA. The proposed 2007 EFP will violate this provision as well.

2. Violations of the MMPA

The Fishery entangles and kills ESA-listed marine mammals as well as numerous non-listed marine mammal species. It must therefore be operated in a manner consistent with the procedural and substantive mandates of the ESA and MMPA or not at all. The Fishery is currently operating without any take authorization for ESA-listed marine mammals. Take can be authorized via an Incidental Take Statement issued pursuant to the ESA only if such take is also authorized pursuant to Section 101 of the MMPA. On October 30, 2000, NMFS issued a three-year take authorization to the Fishery pursuant to Section 101(a)(5)(E) of the MMPA, 16 U.S.C. § 1371(a)(5)(E), allowing the take of ESA-listed marine mammals, specifically sperm, fin, and humpback whales, and the eastern stock of Steller sea lion. 65 Fed. Reg. 64670. While we believe this permit was improperly issued in the first instance, regardless of the infirmities of this permit, it is now expired and no take of any ESA-listed marine mammal is authorized for the Fishery, or for that matter any fishery under the HMS FMP. Unfortunately, the Fishery continues to entangle ESA-listed marine mammals. For example, observer data from the 2004-2005 fishing season shows the entanglement of a humpback whale. This take was not authorized under the ESA or the MMPA and therefore occurred in violation of both statutes. Continued operation of the Fishery, and certainly the proposed 2007 EFP allowing vessels into currently closed areas, violates the provisions of the ESA and MMPA prohibiting such take. Until and unless the Fishery as a whole receives a lawful Section 101 authorization pursuant to the MMPA, we believe that the Fishery must be suspended. Additionally, no EFP can be issued unless the take that will occur from the fishing pursuant to the EFP is also permitted pursuant to both the MMPA and ESA.⁸

The continued authorization of the Fishery and the proposed EFP also violate the unambiguous command of the MMPA that all fisheries "shall reduce incidental mortality and serious injury of marine mammals to insignificant levels approaching a zero mortality and serious injury rate" by April 30, 2001.

⁸ If NMFS finalizes the proposed issuance of a permit under Section 101(a)(5) of the MMPA for ESA-listed marine mammals taken by the Fishery, this permit would not authorize take of ESA-listed marine mammals by vessels fishing pursuant to the EFP. The proposed permit only covers the current Fishery, not any EFPs. See 71 Fed. Reg. 42809.

16 U.S.C. § 1387(b)(1). NMFS has defined ZMRG by regulation as ten percent of Potential Biological Removal ("PBR"). The Fishery's take of marine mammal species remains above this threshold. For example, in the 2005 Pacific Stock Assessment Reports the Fishery was estimated to kill 23 northern right whale dolphins each year, in excess of a ZMRG level of 16. Similarly, take of the short-finned pilot whale is not just above ZMRG, but almost at PBR. Take of sperm, humpback and fin whales also remains well above 10% of PBR, thereby exceeding the definition of ZMRG. Because April 30, 2001 has come and gone without the Fishery reaching ZMRG, the continued authorization, or any expansion, of the Fishery violates the MMPA.⁹

The MMPA explicitly requires NMFS to "amend the take reduction plan and implementing regulations as necessary to meet the requirements of" the MMPA to reach ZMRG, and, when necessary, to "proscribe emergency regulations that, consistent with such plan to the maximum extent practicable, reduce incidental mortality and serious injury in the fishery." 16 U.S.C. §§ 1387(f)(7)(F) & 1387(g)(1)(A). Given the Fishery continues to take marine mammals at levels in excess of ZMRG, NMFS failure to utilize this authority to amend the Take Reduction Plan violates these provisions of the MMPA as well. Issuing the proposed EFP would take NMFS further down the path away from compliance with this provision of the MMPA.

3. Violations of the MBTA

We believe that the Fishery as currently authorized is violating the MBTA. Obviously, any EFP would likewise violate the MBTA. Section 2 of the MBTA provides that "it shall be unlawful at any time, by any means or in any manner," to, among many other prohibited actions, "pursue, hunt, take, capture, [or] kill" any migratory bird included in the terms of the treaties. 16 U.S.C. § 703 (emphasis added). The term "take" is defined as to "pursue, hunt, shoot, wound, kill, trap, capture, or collect." 50 C.F.R. § 10.12 (1997). The primary species taken by the Fishery, the northern fulmar, is included in the list of migratory birds protected by the MBTA. See 50 C.F.R. § 10.13 (list of protected migratory birds). Other MBTA protected species such as the Cassin's auklet are also taken by the fishery. The MBTA imposes strict liability for killing migratory birds, without regard to whether the harm was intended. Its scope extends to harm occurring "by any means or in any manner," and is not limited to, for example, poaching. See e.g., *U.S. v. Moon Lake Electric Association*, 45 F. Supp. 2d 1070 (1999) and cases cited therein. Indeed, the federal government itself has successfully prosecuted under the MBTA's criminal provisions those who have unintentionally killed migratory birds. E.g., *U.S. v. Corbin Farm Service*, 444 F. Supp. 510, 532-534 (E. D. Cal.), affirmed, 578 F.2d 259 (9th Cir. 1978); *U.S. v. FMC Corp.*, 572 F.2d 902 (2nd Cir. 1978).

The MBTA applies to federal agencies such as NMFS as well as private persons. See *Humane Society v. Glickman*, No. 98-1510, 1999 U.S. Dist. LEXIS 19759 (D.D.C. July 6, 1999); affirmed, *Humane Society v. Glickman*, 217 F.3d 882, 885 (D.C. Cir. 2000) ("There is no exemption in § 703 for farmers, or golf course superintendents, or ornithologists, or airport officials, or state officers, or federal agencies"). Following Glickman, FWS issued Director's Order No. 131, confirming that it is FWS's position that the MBTA applies equally to federal and non-federal entities, and that "take of migratory

⁹ Even if NMFS could somehow construe the promulgation of the Pacific Offshore Cetacean Take Reduction Plan as relieving the Fishery of the April 30, 2001 ZMRG deadline, the five-year deadline contained in the MMPA for a fishery to reach ZMRG under a Take Reduction Plan has also come and gone. See 16 U.S.C. § 1387(f)(2).

birds by Federal agencies is prohibited unless authorized pursuant to regulations promulgated under the MBTA." MBTA Section 3 authorizes the Secretary of the Interior to "determine when, to what extent, if at all, and by what means, it is compatible with the terms of the conventions to allow hunting, take, capture, [or] killing . . . of any such bird." 16 U.S.C. § 704. FWS may issue a permit allowing the take of migratory birds if consistent with the treaties, statute and FWS regulations. NMFS however has not obtained, much less applied for such a permit authorizing any take by the Fishery (or any other fishery under the HMS FMP) or for fishing pursuant to the EFP.

NMFS cannot dispute that the Fishery kills birds protected under the MBTA. We believe that until such take is permitted, NMFS cannot lawfully allow any fishing, including that which would be authorized by the EFP, which is likely to result in death of such species.¹⁰

4. Violations of MSA

NMFS has promulgated regulations governing the issuance of EFPs. See 50 C.F.R. § 660.745. Under these regulations, NMFS may authorize fishing that would otherwise be prohibited by an FMP only in very limited circumstances. Specifically, NMFS may only authorize such fishing for "limited testing, public display, data collection, exploratory, health and safety, environmental cleanup, and/or hazard removal purposes." 50 C.F.R. § 660.745(b). In attempting to shoehorn into this regulatory scheme a proposed EFP that would for all practical purposes eliminate the Pacific Leatherback Conservation Area, the Council claimed the 2006 EFP was for the purposes of "collecting data on the incidental take of ESA protected leatherback sea turtles to allow for informed management decisions in determining appropriate protective measures." Such a rationale is absurd; NMFS has sufficient data on the impact of the Fishery on leatherbacks. Prior to the closure takes were occurring at a rate that NMFS determined jeopardized the species. Subsequent to the closure no takes have been documented. To kill more critically endangered leatherback sea turtles simply to "collect data" to reaffirm the well-established fact that unregulated gillnet fishing kills leatherbacks makes a mockery of any rational interpretation of the exempted fishing regulations. If the Council wishes to reopen the leatherback closure area to the Fishery, it must follow standard MSA procedures. It must not be allowed to do so under the guise of an EFP.

5. Violations of National Marine Sanctuaries Act

The proposed EFP also is in apparent violation of the National Marine Sanctuaries Act ("NMSA") (16 U.S.C. § 1431 *et seq.*). Among the purposes of the NMSA are "to maintain the natural biological communities in the national marine sanctuaries, and to protect, and, where appropriate, restore and enhance natural habitats, populations, and ecological processes." 16 U.S.C. § 1431(b)(3). To achieve these purposes, the NMSA requires that "Federal agency actions internal or external to a national marine sanctuary, including private activities authorized by licenses, leases, or permits, that are likely to destroy, cause the loss of, or injure any sanctuary resource are subject to consultation with the Secretary." 16 U.S.C. § 1434(d)(1)(A) (emphasis added). This consultation provision requires the agency proposing the action to provide a written statement describing the action and the potential effects

¹⁰ In its response to comments on the FMP, NMFS claimed that the MBTA does not apply beyond the 3 nautical mile territorial sea and therefore it need not comply. This is simply wrong. As NMFS is or should be aware, in 2001 an Interior Solicitor's Opinion concluded that the MBTA does in fact apply in the U.S. EEZ. NMFS's conclusions to the contrary will not survive legal scrutiny.

on sanctuary resources no later than 45 days before the final approval of the proposed action. 16 U.S.C. § 1434(d)(1)(B). The action agency must follow the recommendations of the Secretary to avoid injury to any sanctuary resource or otherwise act to prevent and mitigate damage to such resources. 16 U.S.C. §§ 1434(d)(2), 1434(d)(3) & 1434(d)(4).

The Pacific Leatherback Conservation Area overlaps with the boundaries of three National Marine Sanctuaries, the Monterey Bay, Gulf of Farallones, and Cordell Bank National Marine Sanctuaries. The leatherback sea turtle as well as the marine mammals, seabirds and fish that will likely be caught by vessels fishing pursuant to the EFP are all resources protected by these sanctuary designations. The proposed EFP would clearly "destroy, cause the loss, or injure" these resources. We are unaware of any action by NMFS to comply with either the consultation provision of the NMSA or its substantive requirements. Absent such compliance, the proposed EFP cannot lawfully be issued.

6. Violations of Coastal Zone Management Act

The proposed EFP also is being processed in apparent violation of the Coastal Zone Management Act ("CZMA") (16 U.S.C. § 1451 *et seq.*). CZMA requires that

[A]ny applicant for a required Federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program. At the same time, the applicant shall furnish to the state or its designated agency a copy of the certification, with all necessary information and data.

16 U.S.C. § 1456(c)(3)(A). The sea turtles, seabirds, marine mammals, and fish that will be caught and killed by vessels operating under the proposed EFP are all "natural resources" protected by California's Coastal Management Program. Entangling and killing these animals clearly "affects" these resources triggering the consistency requirement of CZMA. We are unaware of the appropriate CZMA consistency certification in the application materials for either the 2006 or 2007 EFPs. Absent such a certification and evidence of California's concurrence in that determination, the EFP applications must be rejected as violative of CZMA.

7. Violations of NEPA

While we believe that the proposed EFP is legally untenable because of the substantive requirements of the ESA, MMPA, MBTA, NMSA, CZMA and MSA, we also believe that the issuance of any such EFP would also violate the environmental review provisions of NEPA. NEPA's fundamental purposes are to guarantee that: (1) agencies take a "hard look" at the environmental consequences of their actions before these actions occur by ensuring that the agency has, and carefully considers, detailed information concerning significant environmental impacts; and (2) agencies make the relevant information available to the public so that it may also play a role in both the decisionmaking process and the implementation of that decision. See, e.g., 40 C.F.R. § 1500.1. In this instance, NMFS has apparently completely reversed this process. NMFS has decided it wishes to allow drift-gillnet fishing in the area currently closed to such fishing to protect leatherback sea turtles. Such prejudging of

the outcome conclusively taints the NEPA process and is unlawful. See *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9th Cir. 2000).

In addition to the flawed timing of the NEPA analysis, NMFS's most significant violation of NEPA is its failure to prepare a full Environmental Impact Statement ("EIS") for the EFP. Under NEPA:

an EIS must be prepared if "substantial questions are raised as to whether a project . . . may cause significant degradation of some human environmental factor." To trigger this requirement "a plaintiff need not show that significant effects will in fact occur," raising "substantial questions whether a project may have a significant effect is sufficient."

Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1149-50 (9th Cir. 1998) (citations omitted) (emphasis in original).

In its processing of the 2007 EFP, we assume NMFS will rely on the same infirm EA as the agency used in its analysis of the 2006 EFP.¹¹ This EA itself explicitly or implicitly acknowledged that several of the Council on Environmental Quality ("CEQ") "significance" factors triggering the need to prepare an EIS were met by the proposed 2006 EFP. See 40 C.F.R. § 1508. CEQ factors triggered by the 2006 EFP, included but were not limited to, whether the action involves "[u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands [and] ecologically critical areas," id. at § 1508.27(b)(3) (leatherback foraging areas); "[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial," id. at § 1508.27(b)(4) (EA at 6: "The proposed action is likely to be controversial"); "[t]he degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration," id. at § 1508.27(b)(6) (the stated purpose of the EFP is to expand the Fishery); "the degree to which the action is related to other actions with . . . cumulatively significant impacts," id. at § 1508.27(b)(7) (the related Longline EFP as well as all other impacts on the leatherback throughout its range); the "degree to which the action may adversely affect an endangered or threatened species," id. at § 1508.27(b)(8) (previously found to jeopardize the leatherback); and whether "the action threatens a violation of Federal . . . law or requirements imposed for the protection of the environment." Id. at § 1508.27(b)(10) (violates ESA, MMPA, MBTA, NMSA, CZMA and MSA). Each of these factors would also apply to the 2007 EFP now under considerations. Any of these factors, standing alone, is sufficient to require preparation of an EIS. *Ocean Advocates v. United States Army Corps of Engineers*, 402 F.3d 846, 865 (9th Cir. 2005). For the 2007 EFP, all of these factors require the preparation of an EIS.

In sum, reliance on an EA for the 2007 EFP is completely at odds with the letter and spirit of NEPA. Rather than cast aside compliance with NEPA in its rush to accommodate the gillnet industry in time for the upcoming fishing season, if NMFS wishes to consider modifications to the Fishery it must do so only in a careful manner after preparation of an EIS. We therefore believe that the only lawful course for NMFS to follow at this point is to either select the No Action Alternative in the Draft EA, or to forgo action until the completion of a full EIS that analyzes a full range of alternatives, including alternatives, such as the complete closure of the Fishery, which may be necessary to come into compliance with existing law.

¹¹ In the Federal Register notice for the 2006 EFP NMFS stated that it would rely on the draft EA prepared for the Council's consideration of drift-gillnet management measures. 71 Fed. Reg. 39855.

II. THE 2007 LONGLINE EFP MUST BE DENIED

The Council is also considering approval and recommendation of an EFP for 2007 which would allow the entry of a longline fishing vessel into the EEZ of California for the first time. As with the Drift-Gillnet EFPs, this proposed EFP is inappropriate and unwise as a matter of science and policy. Additionally, for reasons similar to those applicable to the 2006 and 2007 Drift-Gillnet EFPs, actual issuance of the Longline EFP by NMFS would violate a suite of laws, including the ESA, MMPA, MBTA, NMSA, CZMA, MSA, and NEPA. This proposed permit must also be denied.

A. The California Longline Fishery

Pelagic longline fishing involves the use of a monofilament line that stretches from 20 to upwards of 40 miles from a vessel and is set to given depth depending on the target species. Attached to the longline are additional lines to which are attached weights and baited hooks. A single longline fishing vessel may deploy several thousand hooks at one time.

In addition to the target species, usually swordfish, tunas, and sharks, longline gear catches non-target and undersized fish, sharks, sea turtles, marine mammals, and seabirds. Sea turtles, marine mammals, and seabirds all get caught on the baited hooks of longlines, or are entangled in the lines, and being air breathers, subsequently drown. Those that do not immediately drown often suffer serious injury, such as hook ingestion, condemning them to a slower death by starvation, internal bleeding, or infection.

Longlining for swordfish within the California EEZ has been prohibited since at least 1977 when the State of California promulgated regulations declaring that "Swordfish may be taken only with hand-held hook and line or handthrust harpoon," 14 C.C.R. § 107.¹² Pelagic longlining more generally was prohibited by Fish and Game Code § 9028 which banned hook and line fishing gear longer than 900 feet. However, swordfish and other longline-caught fish caught outside the EEZ could be landed in California if a declaration indicating such intent was filed with the Department of Fish and Game prior to departure. F&G Code § 8113.

In light of this regulatory scheme effectively prohibiting longlining in the EEZ off California, but allowing the landing of longline-caught fish from outside the EEZ, the California-based longline fleet has historically been rather small, with most U.S. longline fishing in the Pacific being based out of Hawaii rather than California. From the 1980s to late 1990s, the California-based longline fleet fluctuated in size from about two to a couple dozen boats.

However, in November of 1999, the Court in *Center for Marine Conservation, et al. v. National Marine Fisheries Service, et al.*, (Civ. No. 99-00152 DAE)(D. Hawaii) issued an injunction restricting longline fishing under the Hawaii FMP throughout much of the North Pacific. The injunction was designed to reduce sea turtle mortality, primarily to leatherbacks from shallow-set longlining targeting swordfish. In March 2001, NMFS issued an ESA Section 7 Biological Opinion on the Hawaii FMP and

¹² A separate provision of the Fish and Game Code, Section 8561, allowed fishing for swordfish with drift-gillnet gear, subject to numerous restrictions. These restrictions were largely carried over into federal regulations with the adoption of the HMS FMP in 2004.

concluded that continued operation of the FMP would jeopardize the continued existence of the leatherback, loggerhead, and green sea turtles. NMFS subsequently modified the Hawaii FMP, virtually eliminating for several years the Hawaii-based longline fishery for swordfish.

Subsequent to the Hawaii injunction and modification of the Hawaii FMP, numerous boats from Hawaii relocated to California, with up to 48 vessels operating out of California in 2000. Due to the fact that West Coast HMS fisheries were not subject to an FMP at that time, these vessels operated subject to virtually no federal regulation. Nevertheless, the California-based longline fishery caught and killed numerous federally protected species.

From August 1995 through 1999, California-based longline fishing vessels self-reported numerous interactions with sea turtles. Thirty-five leatherback, twenty-one loggerhead, nineteen olive ridley, and twelve green sea turtles were reported caught during this period. The self-reports of bycatch from this period also report the take of over one hundred albatross, a Hawaiian monk seal and an unidentified sea lion. From October 2001 to March 2003 NMFS placed limited observers on some of the California-based longline fishing vessels. These observers, monitoring only a fraction of the fishing effort, recorded entanglements of 23 loggerhead sea turtles, 2 leatherback sea turtles, and 1 olive ridley sea turtle. In August 2003, NMFS predicted (based on prior observer data and assuming that fishing effort remained the same as in 2002) that the California-based longline fishery was entangling 174 loggerhead sea turtles (47 killed) and 53 leatherback sea turtles (14 killed) each year.

In light of the high level of sea turtle take occurring in the California-based longline fishery, and given that NMFS was unwilling to enforce the ESA, and the Council was years behind schedule in finalizing the HMS FMP and bringing the fishery under federal management, in March 2000, the Center for Biological Diversity and Turtle Island Restoration Network filed suit under the ESA seeking to force NMFS to engage in Section 7 consultation on permits issued to California-based longline fishers pursuant to the High Seas Fishing Compliance Act of 1995 ("HSFCA") (16 U.S.C. § 5501 *et seq.*)

In August 2003, the Ninth Circuit ruled that NMFS was violating the ESA with regards to its management of the California-based longline fishery. Turtle Island Restoration Network, et al., v. National Marine Fisheries Service, 340 F.3d 969 (9th Cir. 2003).

Shortly after the court ruled that the California-based longline fishery was operating in violation of the ESA, the Council and NMFS finally issued the long-overdue HMS FMP and accompanying regulations. 69 Fed. Reg. 18444 (April 7, 2004). The FMP brought the California-based longline fishery under federal management and included a provision prohibiting shallow-set longlining west of 150° W long. 50 C.F.R. § 660.712(2). However, in its biological opinion for the FMP, NMFS concluded that allowing shallow-set longlining east of 150° W long would jeopardize the loggerhead sea turtle. NMFS therefore issued an RPA requiring the prohibition of shallow-set longlining east of 150° W long. NMFS instituted this closure pursuant to its authorities under the ESA. 69 Fed. Reg. 11540 (March 11, 2004); 50 C.F.R. § 223.206(d)(9).

Following the FMP and corresponding ESA regulations, most of the California-based longline fishers relocated to Hawaii where the formerly closed swordfish fishery was set to reopen with new management restrictions. A few vessels continued to fish intermittently from California using deep-set longlines to catch tuna outside the EEZ. However, deep-set longlining for tuna (either by California or

Hawaii-based vessels) has been suspended east of 150° W long, to address overfishing of bigeye tuna. 71 Fed. Reg. 38297 (July 6, 2006). Similarly, the Hawaii-based swordfish longline fishery has been suspended for exceeding authorized take of ESA-listed sea turtles. 71 Fed. Reg. 14416 (March 22, 2006).¹³

B. The Proposed 2007 Longline Exempted Fishing Permit

The Council is currently considering an EFP for the 2007 fishing season which would allow pelagic longlining within the EEZ off California for the first time. According to the "Situation Summary" contained in the Briefing Book for the November meeting, the Council has already effectively made its decision on the requested EFP.

The Council also preliminarily approved a second proposal for a single vessel to fish with longline gear within the West Coast Exclusive Economic Zone (EEZ), currently prohibited under the Fishery Management Plan for U.S. West Coast Fisheries for Highly Migratory Species (HMS FMP). That applicant originally proposed to start in the fall of 2006. But at the time of Council preliminary approval in March, he asked that his proposal be considered for the 2007 fishing season instead.

According to the EFP application, the "purpose of this EFP is to conduct a small scale (1 vessel) pelagic longline fishery within the West Coast EEZ to determine if longline gear is an economically viable HMS harvest substitute for drift gillnet (DGN) gear." EFP App. at 1. The application describes the scale, location and duration of the EFP as follows.

EFP fishing will not occur within 30 miles of the coastline, or within the southern California bight. Each trip will consist of about 14 sets, approximately 14,000 hooks per trip (1,000 hooks per set x 14 sets). This EFP proposes 4 trips (56,000 hooks) during the period September thru December.

EFP App. at 6.

C. Violations of Law

In our discussion of the Drift-Gillnet EFPs above, we described how both the existing Drift-Gillnet Fishery and any proposed EFP violate numerous statutory provisions. We believe that the proposed Longline EFP is similarly in firm. Rather than repeat the statutory background for each violation, below we briefly described the likely violations of law associated with the processing and issuance of the proposed Longline EFP. Given these significant and largely insurmountable legal problems with the proposed EFP, it must be denied.

¹³ While the closures of the deep-set longline fishery east of 150° W long, as well as of the Hawaii shallow-set longline fishery are both theoretically temporary measures, given the status of bigeye tuna and the dubious success of the mitigation measures for the Hawaiian fishery, we are doubtful that either of these fisheries can lawfully reopen.

1. Violations of the ESA

As with the Drift-Gillnet EFP, we believe issuance of the proposed Longline EFP would violate Sections 2, 7, and 9 of the ESA. Longline fisheries are known to hook, entangle, and kill ESA-listed sea turtles, marine mammals, and seabirds. As discussed above, NMFS itself has acknowledged that any further mortality to the critically endangered Pacific leatherback sea turtles would jeopardize the species. Until and unless technology is devised that eliminates the risk of injury or mortality to leatherbacks we cannot support any pelagic longline fishing in the Pacific. Such an approach is also consistent with the call put out by over 1000 international scientists from more than 100 countries and 300 non-governmental organizations from 62 countries calling on the U.N. to institute an immediate moratorium on pelagic longline fishing in the Pacific until measures can be put in place that eliminate such bycatch. See http://www.seaturtles.org/press_release2.cfm?pressID=261

In addition to the Longline EFP's impacts on the leatherback sea turtle, fishing pursuant to such a permit also puts at risk the loggerhead sea turtle. NMFS instituted the closure of shallow-set longlining east of 150° W long, in part to protect the Pacific loggerhead sea turtles. 69 Fed. Reg. 11540 (March 11, 2004); 50 C.F.R. § 223.206(d)(9). Given the take of loggerheads increases in El Niño years, and NOAA has declared El Niño conditions will continue to develop into 2007, the odds of a vessel fishing pursuant to the Longline EFP taking loggerheads are greatly increased. See http://www.cfp.ncep.noaa.gov/products/analysis_monitoring/ens0_advisory/

The Longline EFP also puts at risk several species of ESA-listed marine mammals. Both sperm whales and humpback whales have observed entangled in identical fishing gear used by Hawaii-based pelagic longlining vessels. Killer whales are likewise known to interact with and become entangled in longline fishing gear. The Southern Resident population of killer whales (*Orcinus orca*) was recently listed as endangered, and is known to seasonally occur in the range of the proposed EFP. Additionally, Steller sea lions and Guadalupe fur seals also may overlap with the proposed EFP and are subject to entanglement. In order to issue the proposed EFP, NMFS not only needs to undergo Section 7 consultation on each of these marine mammals, but also must obtain take authorization pursuant to both the ESA and Section 101 of the MMPA. We do not believe the EFP can meet the legal standards for such take authorization under either statute.

The issuance of the Longline EFP would likely violate the ESA based on impacts to the Short-tailed albatross. Self-reports of seabird interactions with the former California-based longline fishery acknowledged take of 100 albatross of various species. Dozens of albatross were also observed taken in the handful of trips with actual observer coverage. It is therefore reasonable to assume that Short-tailed albatross are likely to be entangled and killed if pelagic longline fishing is allowed off of California. Given the perilous status of the Short-tailed albatross, we do not believe that any additional take authorization for the species can be lawfully granted.

Finally, given the closure of shallow-set longlining east of 150° W long, was promulgated pursuant to NMFS's authorities under the ESA, rather than under the MSA, we do not see how an EFP issued under the MSA could lawfully be issued in direct contravention of ESA regulations prohibiting such fishing. See 69 Fed. Reg. 11540 (March 11, 2004); 50 C.F.R. § 223.206(d)(9). If the permit applicant for the EFP wishes to fish in contravention of ESA regulations, the applicant must also apply for a permit under Section 10 of the ESA. Our understanding is that the applicant has not done so.

Moreover, we do not see how the standards of Section 10 could possibly be met by the proposed activities. The EFP must be rejected as inconsistent with the intent and letter of the ESA.¹⁴

2. Violations of the MMPA

The Longline EFP cannot be issued without also violating the MMPA. As discussed above, take of ESA-listed marine mammals must be authorized under both the ESA and MMPA if it is to lawfully occur. We do not believe that the necessary "negligible impact" finding under the MMPA can lawfully be made for the ESA-listed species likely to interact with pelagic longline gear deployed in the EEZ off California. Therefore, no such permit can be issued and any take will be in violation of both the ESA and MMPA.

For non-ESA listed marine mammals, take in violation of the MMPA is also likely to occur. Both the Hawaii and Atlantic longline fisheries are categorized as Category 1 fisheries on the 2006 List of Fisheries, while the remnant California-based deep-set longline fishery is listed as a Category 2 fishery. Only the Atlantic longline fishery has a take reduction team to address marine mammal bycatch. It would be unwise and unlawful to allow an additional marine-mammal killing fishery to operate without a take reduction team prior to at least initiating the take reduction process for these other two longline fisheries. Additionally, a Category 1 or 2 fishery is by definition taking marine mammals at levels above ZMRG. Given the statutory deadline for reaching ZMRG has already passed, we do not believe that issuing an EFP that would result in take of stocks of marine mammals where mortality and serious injury are already above ZMRG is consistent with the ZMRG mandate of the MMPA.

The most likely species of non-ESA listed marine mammals to be taken by fishing pursuant to the Longline EFP are Risso's dolphins and short-finned pilot whales. Take of pilot whales from the Drift-Gillnet fishery is already near PBR, and is of course well over ZMRG. Take of even a single pilot whale by the Longline EFP would put mortality and serious injury to the stock over PBR. Pilot whales are the most frequent marine mammal species encountered by the Atlantic longline fishery. There is no reason to believe that they would not also be taken by a similar fishery off California. Until and unless, a take reduction plan is in place that that reduces pilot whale mortality to ZMRG, NMFS cannot authorize any fishing activity through an EFP which is likely to result in additional take of the species.

3. Violations of the MBTA

As explained above with reference to Drift-gillnets, the MBTA applies to U.S. fisheries that take migratory birds. It is undisputed that longline fishing kills seabirds protected by the MBTA. Fishing pursuant to the Longline EFP runs the significant risk of hooking and killing all three species of North Pacific albatross. Each of these species is recognized by the IUCN as imperiled. The most likely species to be killed by the EFP is the Black-footed albatross, a species under petition for listing under the ESA. Absent a permit under the MBTA authorizing the take of the Black-footed albatross and other migratory birds, the EFP cannot lawfully be issued.

¹⁴ All other violations of the ESA by the Longline EFP are substantially similar to those of the Drift-Gillnet EFPs and therefore will not be repeated here.

4. Violations of MSA

The proposed EFP is requested to "determine if longline gear is an economically viable HMS harvest substitute for drift gillnet (DGN) gear." EFP App. at 1. This does not meet the regulatory criteria for issuance as it does not fall within the categories enumerated at 50 C.F.R. § 660.745. Moreover, given there is no way a longline fishery using current technology can lawfully operate in the EEZ off California, such a fishery is not "viable" by definition. NMFS cannot issue the permit.

5. Violations of National Marine Sanctuaries Act

The proposed Longline EFP states that "EFP fishing will not occur within 30 miles of the coastline, or within the southern California bight." This language is vague enough that it does not completely foreclose fishing within designated marine sanctuaries. Any EFP issued must include such geographical limitations so as to explicitly preclude its operation with any National Marine Sanctuary. To do otherwise would violate the procedural and substantive provisions of the NMSA as discussed above with reference to the Drift-Gillnet EFPs.

6. Violations of Coastal Zone Management Act

The proposed Longline EFP suffers from the same legal deficiencies under CZMA as the Drift-Gillnet EFPs discussed above. The Council and NMFS must reject the proposed EFP until and unless compliance with CZMA is assured.

7. Violations of NEPA

While we believe that the proposed Longline EFP would be legally unenforceable because of the substantive requirements of the ESA, MMPA, MBTA, NMSA, CZMA and MSA, we also believe that the issuance of any such EFP would violate the environmental review provisions of NEPA because there is no indication that the Council or NMFS has prepared a full EIS as required by law. The factors triggering the EIS requirements of NEPA are discussed in the Drift-Gillnet section above. These same factors are implicated by the Longline EFP. NMFS and the Council must prepare an EIS, and solicit public review and comment on it before taking any further action with regard to the Longline EFP.

III. CONCLUSION

As the above makes clear, we believe that issuance of either the Drift-Gillnet EFP or the Longline EFP would violate numerous statutory provisions, including the ESA, MMPA, MBTA, MSA, NMSA, CZMA, and NEPA. We therefore recommend the Council and NMFS reject each of the proposed EFPs. Thank you for your concern.

Sincerely,
/s/
Brendan Cummings
Ocean Program Director
Center for Biological Diversity

cc

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Via Facsimile and Electronic Mail

July 13, 2007

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RE: RIN 0648-XA73: Proposed Exempted Fishing Permit to allow Pelagic Longline Fishing in the EEZ off California and Oregon.

Dear Dr. Hogarth and Mr. McInnis:

The Center for Biological Diversity, the Sea Turtle Restoration Project/Turtle Island Restoration Network and Oceana submit these comments regarding the proposed issuance by the National Marine Fisheries Service/NOAA Fisheries ("NMFS") of an Exempted Fishing Permit ("EFP") which would allow a pelagic longline vessel to set longline gear for swordfish within the U.S. Exclusive Economic Zone ("EEZ") off California and Oregon from September through December, 2007, notwithstanding the fact that existing law and regulation prohibit the setting of such gear anywhere in the West Coast EEZ. See 72 Fed. Reg. 32618 (June 13, 2007). In short, our organizations believe the proposed EFP must be denied. Issuing the EFP would be wholly incompatible with the Highly Migratory Species Fishery Management Plan ("HMS FMP") governing such fisheries as well as with the purposes of the Pacific Leatherback Conservation Area, which was incorporated into the HMS FMP to provide additional protections for critically endangered Pacific leatherback sea turtles. In addition to being utterly misguided as a matter of policy and science, issuance of the EFP would be illegal, as doing so would violate the Endangered Species Act ("ESA") (16 U.S.C. § 1531 et seq.), Marine Mammal Protection Act ("MMPA") (16 U.S.C. § 1361 et seq.), Migratory Bird Treaty Act ("MBTA") (16 U.S.C. § 703 et seq.), National Marine Sanctuaries Act (16 U.S.C. § 1431 et seq.), Magnuson-Stevens Fishery Conservation and Management Act ("MSA") (16 U.S.C. § 1801 et seq.), Coastal Zone

Management Act ("CZMA") (16 U.S.C. § 1451 et seq.), and the National Environmental Policy Act ("NEPA") (42 U.S.C. § 4321 et seq.).

THE 2007 LONGLINE EFP MUST BE DENIED

I. BACKGROUND

A. The Pacific Leatherback Sea Turtle

The leatherback sea turtle (*Dermochelys coriacea*) is the largest of the sea turtles, weighing between 700 and 2,000 pounds as an adult, and ranging from 4 to 8 feet in length. While other sea turtles have hard shells, the leatherback has a rubbery shell. Sea turtles have swum the world's oceans for over 100 million years. Having outlived the dinosaurs, the leatherback is, in effect, the last survivor of the age of giant reptiles.

The species feeds primarily on jellyfish, and is capable of diving to depths greater than 3,000 feet. In the eastern Pacific the leatherback sea turtle nests along beaches in Mexico and Costa Rica. The species also nests in the western Pacific in New Guinea, Indonesia, Malaysia, the Solomon Islands, and Australia. Leatherbacks that visit the west coast of the United States are from the western Pacific population and have been tracked back to nesting beaches in Indonesia and New Guinea.

Numbering over 100,000 nesting females as recently as the 1980s, the species is in rapid decline with current estimated of only 2-5000 nesting females.¹ In 2000, an article published in the preeminent scientific journal *Nature*, predicted extinction of leatherbacks in the Pacific within decades.² The primary cause of the leatherback decline, and the greatest threat to its continued existence, is entanglement and drowning in longline fishing gear.³ The leatherback sea turtle is listed as endangered under the ESA throughout its range.

Notwithstanding the species' perilous condition, Pacific leatherbacks continue to be caught and killed in U.S. fisheries. However, as a result of advocacy and litigation, leatherback mortality has been essentially eliminated from California-based fisheries.⁴ Several of those efforts and subsequent NMFS decisions are relevant to the current longline EFP.

In March 2000, the Center for Biological Diversity and Turtle Island Restoration Network brought suit against NMFS for violations of the ESA and MMPA related to the Drift-Gillnet ("DGN") Fishery. In response, on October 23, 2000, NMFS issued a new Biological Opinion for the DGN Fishery. NMFS also at this point issued a permit under Section 101 of the

¹ Lewison, R. et al. 2004. Quantifying the effects of fisheries on threatened species: the impact of pelagic longlines on loggerhead and leatherback sea turtles. *Ecology Letters* 7:221.

² Spotila et al. 2000. Pacific leatherback turtles face extinction. *Nature* 405:529-530.

³ *Id.*

⁴ Several California gillnet fisheries that have not been subject to observer coverage are suspected of interacting with leatherbacks, but such take has not been recently documented.

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MMPA authorizing the DGN Fishery to take ESA-listed marine mammal species. 65 Fed. Reg. 64670. The new Biological Opinion concluded that the DGN Fishery would likely jeopardize both the loggerhead and leatherback sea turtles. With regard to the leatherback sea turtles, NMFS concluded that the projected take of the species from the DGN Fishery, would jeopardize the species because any further mortality to leatherbacks from the western Pacific nesting population equated to jeopardy:

Therefore, any additional impacts to the western Pacific leatherback stocks are likely to maintain or exacerbate the decline in these populations. This would further hinder population persistence or attempts at recovery as long as mortalities exceed any possible population growth, which appears to be the current case, appreciably reducing the likelihood that western Pacific leatherback populations will persist. Additional reductions in the likelihood of persistence of western Pacific leatherback stocks are likely to affect the overall persistence of the entire Pacific Ocean leatherback population by reducing genetic diversity and viability, representation of critical life stages, total population abundance, and metapopulation resilience as small sub-populations are extirpated. These effects would be expected to appreciably reduce the likelihood of both the survival and recovery of the Pacific Ocean population of the leatherback sea turtle.

Biological Opinion at 94. (Emphasis added).

As required by Section 7(b) of the ESA, 16 U.S.C. § 1536(b), NMFS proposed a reasonable and prudent alternative that would avoid jeopardy to the leatherback. *Id.* The reasonable and prudent alternative required that a seasonal closure of the DGN Fishery be implemented north of Point Conception in the fall. Specifically, the Biological Opinion states:

By August 1, 2001, NMFS, or the states of California and Oregon, must implement regulations to close an area to drift gillnets from Point Conception, California (34°27'N), north to 45°N, and west to 129°W, from August 15th to October 31st.

Id. at 102. While NMFS illegally delayed the implementation of this closure, on August 24, 2001, after receiving a notice of intent to sue from the Center for Biological Diversity and Turtle Island Restoration Network, NMFS finally implemented a modified version of the required closure through an interim final rule. 66 Fed. Reg. 44549.⁵

The closure ultimately implemented by NMFS runs from August 15 to November 15 each year and extends from Point Sur (36°18.5'N) in California to 45°N on the Oregon Coast.

⁵ The Biological Opinion also required a similar time/area closure to protect loggerhead sea turtles. NMFS failed to meet this requirement of the Opinion as well, and only implemented the closure over a year late following litigation by the Center for Biological Diversity and Turtle Island Restoration Network. See 67 Fed. Reg. 78388 (Dec. 24, 2002).

Since the leatherback closure went into effect, no leatherback sea turtles have been observed taken in the DGN Fishery.

In April 2004, NMFS finally promulgated regulations implementing the long overdue FMP for HMS fisheries on the West Coast. 69 Fed. Reg. 18453. Through these regulations, NMFS incorporated the existing leatherback and loggerhead closures into the FMP regulations. See 50 C.F.R. § 660.713(c)(1). The February 4, 2004 Biological Opinion for the FMP reached its no jeopardy conclusion for the leatherback based on the premise that the leatherback closure would remain in effect.

The regulations implementing the HMS FMP refer to the leatherback closure area as the Pacific Leatherback Conservation Area. This area has been repeatedly recognized by scientists as one of the most important leatherback foraging areas in the Pacific. The significance of this area was summed up in a recent study:

Ultimately, successful conservation efforts for leatherback turtles must include both nesting beach protection and mitigation of at-sea threats in foraging areas and along migratory routes. **This study has demonstrated that waters off central California are a critical foraging area for one of the largest remaining Pacific nesting populations.** Fortunately, threats such as coastal gillnet and longline fisheries that may incidentally catch leatherback turtles have largely been eliminated within our nearshore study area, although pelagic driftnet and longline fisheries remain along the migratory pathways to and from the coast (e.g., Spottila et al., 1996; Carretta et al., 2005). Continued efforts to identify and characterize Pacific foraging areas are critical for mitigating at-sea threats, monitoring population trends, and, ultimately, for the successful recovery of Pacific leatherback turtle populations.

Benson et al. 2007.⁶ It is within this area that the EFP would authorize longline fishing.

B. Pelagic Longline Fishing off California

Pelagic longline fishing involves the use of a monofilament line that stretches from 20 to upwards of 60 miles from a vessel and is set to given depth depending on the target species. Attached to the longline are additional lines to which are attached weights and baited hooks. A single longline fishing vessel may deploy several thousand hooks at one time.

In addition to the target species, usually swordfish, tunas, and sharks, longline gear catches non-target and undersized fish, sharks, sea turtles, marine mammals, and seabirds. Sea turtles, marine mammals, and seabirds all get caught on the baited hooks of longlines, or are

⁶ While the leatherback closure remained the same, the loggerhead closure was modified somewhat from the previous ESA regulation. The loggerhead closure was modified yet again on June 8, 2007. 72 Fed. Reg. 31756. Benson et al. 2007. Abundance, distribution, and habitat of leatherback turtles (*Dermaochelys coriacea*) off California, 1990-2003, Fishery Bulletin, Volume 105, 2007.

entangled in the lines, and being air breathers, subsequently drown. Those that do not immediately drown often suffer serious injury, such as hook ingestion, condemning them to a slower death by starvation, internal bleeding, or infection.

Longlining for swordfish within the California EEZ has been prohibited since at least 1977 when the State of California promulgated regulations declaring that "Swordfish may be taken only with hand-held hook and line or hand-thrusted harpoon." 14 C.C.R. § 107.⁸ Pelagic longlining more generally was prohibited by Fish and Game Code § 9028 which banned hook and line fishing gear longer than 900 feet. However, swordfish and other longline-caught fish caught outside the EEZ could be landed in California if a declaration indicating such intent was filed with the Department of Fish and Game prior to departure. F&G Code § 8113.

In light of this regulatory scheme effectively prohibiting longlining in the EEZ off California, but allowing the landing of longline-caught fish from outside the EEZ, the California-based longline fleet has historically been rather small, with most U.S. longline fishing in the Pacific being based out of Hawaii rather than California. From the 1980s to late 1990s, the California-based longline fleet fluctuated in size from about two to a couple dozen boats.

However, in November of 1999, the Court in Center for Marine Conservation, et al., v. National Marine Fisheries Service, et al., (Civ. No. 99-00152 DAE)(D. Hawaii) issued an injunction restricting longline fishing under the Hawaii FMP throughout much of the North Pacific. The injunction was designed to reduce sea turtle mortality, primarily to leatherbacks from shallow-set longlining targeting swordfish. In March 2001, NMFS issued an ESA Section 7 Biological Opinion on the Hawaii FMP and concluded that continued operation of the FMP would jeopardize the continued existence of the leatherback, loggerhead, and green sea turtles. NMFS subsequently modified the Hawaii FMP, virtually eliminating for several years the Hawaii-based longline fishery for swordfish.

Subsequent to the Hawaii injunction and modification of the Hawaii FMP, numerous boats from Hawaii relocated to California, with up to 48 vessels operating out of California in 2000. Due to the fact that West Coast HMS fisheries were not subject to an FMP at that time, these vessels operated subject to virtually no federal regulation. Nevertheless, the California-based longline fishery caught and killed numerous federally protected species.

From August 1995 through 1999, California-based longline fishing vessels self-reported numerous interactions with sea turtles. Thirty-five leatherback, twenty-one loggerhead, nineteen olive ridley, and twelve green sea turtles were reported caught during this period. The self-reports of bycatch from this period also report the take of over one hundred albatross, a Hawaiian monk seal and an unidentified sea lion. From October 2001 to March 2003, NMFS placed limited observers on some of the California-based longline fishing vessels. These observers, monitoring only a fraction of the fishing effort, recorded entanglements of 23 loggerhead sea

⁸ A separate provision of the Fish and Game Code, Section 8561, allowed fishing for swordfish with drift-gillnet gear, subject to numerous restrictions. These restrictions were largely carried over into federal regulations with the adoption of the HMS FMP in 2004.

turtles, 2 leatherback sea turtles, and 1 olive ridley sea turtle. In August 2003, NMFS predicted (based on prior observer data and assuming that fishing effort remained the same as in 2002) that the California-based longline fishery was entangling 174 loggerhead sea turtles (47 killed) and 53 leatherback sea turtles (14 killed) each year.

In light of the high level of sea turtle take occurring in the California-based longline fishery, and given that NMFS was unwilling to enforce the ESA while the Council was years behind schedule in finalizing the HMS FMP and bringing the fishery under federal management, in March 2000, the Center for Biological Diversity and Turtle Island Restoration Network filed suit under the ESA seeking to force NMFS to engage in Section 7 consultation on permits issued to California-based longline fishers pursuant to the High Seas Fishing Compliance Act of 1995 ("HSFCA") (16 U.S.C. § 5501 *et seq.*).

In August 2003, the Ninth Circuit ruled that NMFS was violating the ESA with regards to its management of the California-based longline fishery. Turtle Island Restoration Network, et al., v. National Marine Fisheries Service, 340 F.3d 969 (9th Cir. 2003).

Shortly after the court ruled that the California-based longline fishery was operating in violation of the ESA, the Council and NMFS finally issued the long-overdue HMS FMP and accompanying regulations. 69 Fed. Reg. 18444 (April 7, 2004). The FMP brought the California-based longline fishery under federal management, re-affirmed the long-standing static prohibition against longlining in the EEZ, and included a provision prohibiting shallow-set longlining west of 150° W long. 50 C.F.R. § 660.712(2). However, in its biological opinion for the FMP, NMFS concluded that allowing shallow-set longlining east of 150° W long, would jeopardize the loggerhead sea turtle. NMFS therefore issued a reasonable and prudent alternative ("RPA") requiring the prohibition of shallow-set longlining east of 150° W long. NMFS instituted this closure pursuant to its authorities under the ESA. 69 Fed. Reg. 11540 (March 11, 2004); 50 C.F.R. § 223.206(d)(9).

Following the FMP and corresponding ESA regulations, most of the California-based longline fishers relocated to Hawaii where the formerly closed swordfish fishery was set to reopen with new management restrictions. A few vessels continued to fish intermittently from California using deep-set longlines to catch tuna outside the EEZ. However, deep-set longlining for tuna (either by California or Hawaii-based vessels) has been seasonally suspended east of 150° W long, to address overfishing of bigeye tuna. 71 Fed. Reg. 38297 (July 6, 2006). Similarly, the Hawaii-based swordfish longline fishery exceeded the authorized take of ESA-listed sea turtles and was closed for the remainder of 2006. 71 Fed. Reg. 14416 (March 22, 2006).

⁹ While the closures of the deep-set longline fishery east of 150° W long, as well as of the Hawaii shallow-set longline fishery, are both theoretically temporary measures, given the status of bigeye tuna and the dubious success of the mitigation measures for the Hawaiian fishery, we do not believe that the reopening of either of these fisheries is lawful.

C. The Proposed 2007 Longline Exempted Fishing Permit

On June 13, 2007 NMFS published in the Federal Register a notice regarding potential issuance of an EFP that would allow pelagic longline fishing within the EEZ off California and Oregon for the first time since the widespread adoption of this gear type.

The EFP would exempt a single vessel from following the gear and fishing restrictions at 50 CFR 660.712(a) implementing the HMS FMP that prohibit owners and operators of vessels registered for use of longline gear from using longline gear to fish for or target HMS within the U.S. EEZ.

72 Fed. Reg. 32618.

According to the EFP application, the "purpose of this EFP is to conduct a small scale (1 vessel) pelagic longline fishery within the West Coast EEZ to determine if longline gear is an economically viable HMS harvest substitute for drift gillnet (DGN) gear." EFP App. at 1. The application describes the scale, location and duration of the EFP as follows.

EFP fishing will not occur within 30 miles of the coastline, or within the southern California bight. Each trip will consist of about 14 sets, approximately 14,000 hooks per trip (1,000 hooks per set x 14 sets). This EFP proposes 4 trips (56,000 hooks) during the period September thru December.

EFP App. at 6. However, the notice by NMFS states that rather than a limit of 1000 hooks per set, "no more than 1,200 hooks can be deployed per set." 72 Fed. Reg. 32618. This equates to a total of 67,200 hooks that could be deployed under the EFP.

With regard to protected species bycatch, for most species the proposed EFP either defers the setting of caps to a later date or sets no caps at all.

The Council recommended that the applicant be subject to an interaction cap of one short-finned pilot whale and 12 striped marlin, and not fish off the state of Washington. The Council also recommended that the fishery be managed through limits on the amount of incidental take of protected species that may be exposed to and adversely affected by this action that are to be established based upon section 7 consultations under the Endangered Species Act by NMFS for marine mammals and sea turtles and by the U.S. Fish and Wildlife Service for seabirds. If any one of the limits set by these consultations is reached by the fishery authorized by the EFP, the permit would be immediately revoked.

72 Fed. Reg. 32618. Take limits for leatherback and loggerhead sea turtles, humpback, sperm and fin whales, Southern Resident killer whales, Steller sea lions, Guadalupe fur seals, and short-tailed albatross will presumably be set prior to the issuance of the EFP as a result of ESA

consultations.¹⁰ However, there are apparently no take limits for numerous species likely to be exposed to the fishery such as the black-footed albatross, which has been petitioned for and is undergoing review for ESA-listing; white sharks, which are protected by state law; bigeye, albacore and yellowfin tuna, all of which are subject to overfishing; long-beaked common dolphins, which are a strategic stock under the MMPA because take exceeds sustainable levels; northern fur seals, which are listed as depleted under the MMPA; and northern right whale dolphins which are subject to take from existing fisheries at levels above the MMPA's zero mortality rate goal ("ZMRG"). Take of any of these species would exceed important legal and/or biological thresholds.

Despite the scale of effort to be authorized under the EFP, there is no experimental design to meet the EFP's stated purpose. The permittee will simply be allowed to fish with otherwise prohibited gear in an otherwise closed area until he either completes the authorized number of sets, decides based on unstated criteria that such fishing is not "economically viable", or exceeds largely unspecified caps for protected species interactions. In short, the proposed EFP will place critically endangered leatherback sea turtles at needless risk, add additional fishing pressure on species already subject to overfishing, unlawfully take species protected by the ESA, MMPA, MBTA, and state law, yet provide no meaningful data. As detailed below, issuing the proposed EFP in not only nonsensical, it is patently illegal.

II. Violations of Law

Issuance of the proposed longline EFP by NMFS would violate, at a minimum, seven federal laws. Additionally, we believe that engaging in the fishing activities described in the EFP application, absent lawfully issued permits (some of which we understand neither the applicant has requested nor NMFS intends to issue or seek) would likely subject the applicant to civil and criminal liability for knowing violations of federal law. Each of these violations is outlined briefly below. Given these significant and largely insurmountable legal problems with the proposed EFP, it must be denied.

A. Violations of the ESA

Longline fisheries are known to hook, entangle, and kill ESA-listed sea turtles, marine mammals, and seabirds. As such, issuance of the proposed Longline EFP by NMFS would violate Sections 2, 4, 7, 9 and 10 of the ESA. Additionally, fishing under the EFP by the applicant would violate Section 9 of the ESA, subjecting the applicant to civil and criminal liability under the statute.

While our most immediate concerns regarding ESA-listed species are related to the critically endangered leatherback sea turtle, issuance of or and fishing under the EFP would also compromise the recovery of numerous other listed species, including, but not limited to, the

¹⁰ As described infra, we do not believe that any take of ESA-listed species can be authorized for this EFP. Moreover, the deferral of setting such caps until after the public process for commenting on the EFP violates both the MSA and NEPA.

loggerhead, green and olive ridley sea turtles, humpback, sperm, blue, sei, fin and North Pacific right whales, Southern Resident killer whales, Steller sea lions, Guadalupe fur seals, and short-tailed albatross.

Section 2(c) of the ESA establishes that it is "...the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act." 16 U.S.C. § 1531(c)(1). The ESA defines "conservation" to mean "...the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." 16 U.S.C. § 1532(3). Similarly, Section 7(a)(1) of the ESA directs that the Secretary review "...other programs administered by him and utilize such programs in furtherance of the purposes of the Act." 16 U.S.C. § 1536(a)(1).

Section 4 of the ESA calls for the preparation of a recovery plan for every species listed under the Act. Recovery plans establish recovery goals and objectives, describe site-specific management actions recommended to achieve those goals, and estimate the time and cost required for recovery. 16 U.S.C. § 1533(f). Section 4(f) specifically requires that NMFS both "...develop and implement plans (hereinafter...referred to as 'recovery plans') for the conservation and survival of endangered species and threatened species..." 16 U.S.C. § 1533(f) (emphasis added). Drafting a recovery plan is not sufficient to comply with this statutory mandate. Consistent with the intent that recovery plans actually be implemented, Congress required that recovery plans "...incorporate...(f) a description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species." 16 U.S.C. § 1533(f)(1)(B)(i).

In 1998, NMFS approved a final recovery plan for the Pacific leatherback.¹¹ In the recovery plan NMFS acknowledges both the importance of the west coast to leatherbacks and the threat that longline and other fisheries pose to the species.

It is clear that incidental catch poses a very great threat in pelagic foraging and transit areas and the coastal feeding grounds and migratory corridors that probably exist along the west coast of the United States and south into Mexico.

Recovery Plan at 24. In terms of required actions to protect the leatherback, NMFS acknowledges the need for closed areas such as the Pacific Leatherback Conservation Area and HMS FMP's ban on pelagic longline fishing within the EEZ.

Finally, closing areas or seasons when fisheries and turtle interactions are highest can limit impacts to turtle populations.

¹¹ NMFS and FWS. 1998. Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle (*Demochelys coriacea*).

Recovery Plan at 37.

Issuing the Longline EFP and allowing such gear into critical leatherback foraging areas would violate the recommendation of the recovery plan, as well as NMFS's affirmative conservation mandates under the ESA. As such, doing so would violate Sections 2(c), 4(f) and 7(a)(1) of the ESA.¹²

Section 7(a)(2) of the ESA requires federal agencies to "insure that any action authorized, funded, or carried out by such agency... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the adverse modification of habitat of such species... determined... to be critical..." 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). To accomplish this goal, agencies must consult with the delegated agency of the Secretary of Commerce or Interior whenever their actions "may affect" a listed species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). Where, as here, NMFS is both the acting agency and the delegated wildlife agency for purposes of the listed species in question, different branches of NMFS must undertake internal consultation with each other. For species under the jurisdiction of the U.S. Fish and Wildlife Service, such as the short-tailed albatross, NMFS must also consult with that agency as well.

At the completion of consultation NMFS issues a Biological Opinion that determines if the agency action is likely to jeopardize the species. If so the opinion must specify a Reasonable and Prudent Alternative ("RPA") that will avoid jeopardy and allow the agency to proceed with the action. 16 U.S.C. § 1536(b).

As described above, in the 2000 Biological Opinion on the DGN Fishery, NMFS had the following to say about any further mortality to western Pacific leatherbacks:

Therefore, any additional impacts to the western Pacific leatherback stocks are likely to maintain or exacerbate the decline in these populations.... These effects would be expected to appreciably reduce the likelihood of both the survival and recovery of the Pacific Ocean population of the leatherback sea turtle.

DGN Biological Opinion at 94. (Emphasis added). NMFS then concluded that the estimated annual mortality of leatherbacks from the DGN Fishery would likely jeopardize the species. NMFS therefore proposed as an RPA a seasonal closure of the DGN Fishery in the waters off the Central and Northern California and Southern Oregon Coasts. NMFS adopted a variant of this RPA via an ESA rulemaking which instituted the current closure. 66 Fed. Reg. 44549. The closure was then reaffirmed by NMFS when it adopted the HMS FMP under its authorities under the MSA. 69 Fed. Reg. 18444; 50 C.F.R. § 660.713. Since the October 2000 biological opinion for the DGN Fishery, the status of the leatherback in the Pacific has further declined.¹³ We

¹² NMFS would also be violating these provisions with regard to all other listed species potentially affected by the EFP as well.

¹³ Fortunately, the seasonal closure of portions of the DGN Fishery for the protection of the leatherback sea turtles appears to be effective. The past three years of observer data show no bycatch of leatherback sea turtles.

believe, as NMFS stated in 2000, that authorization of any leatherback take in the Pacific would violate the requirement to avoid jeopardy to the species. Therefore, any proposal, such as through the Longline EFP, to allow fishing with longline gear in areas occupied by the critically endangered leatherback sea turtle would violate Sections 7(a)(2) of the ESA.¹⁴

In addition to the Longline EFP's impacts on the leatherback sea turtle, fishing pursuant to such a permit also puts at risk the loggerhead sea turtle. NMFS instituted the closure of shallow-set longlining east of 150° W long, in part to protect the North Pacific loggerhead sea turtles. 69 Fed. Reg. 11540 (March 11, 2004); 50 C.F.R. § 223.206(d)(9). North Pacific loggerhead have also declined by upwards of 80% in recent decades, and are likely approaching the perilous state of the leatherback.¹⁵

The issuance of the Longline EFP would also likely violate the ESA based on impacts to the short-tailed albatross. Self-reports of seabird interactions with the former California-based longline fishery acknowledged take of 100 albatross of various species. Dozens of albatross were also observed taken in the handful of trips with actual observer coverage. It is therefore reasonable to assume that short-tailed albatross are likely to be entangled and killed if pelagic longline fishing is allowed off of California. Given the imperiled status of the short-tailed albatross, we do not believe that any additional take authorization for the species can be lawfully granted.

The ESA also prohibits any "person" from "taking" threatened and endangered species. 16 U.S.C. § 1538. The definition of "take", found at 16 U.S.C. § 1532(19), states,

The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

In a case dealing with fisheries, the Court ruled "the statute not only prohibits the acts of those parties that directly exact the taking, but also bans those acts of a third party that bring about the acts exacting a taking. We believe that... a governmental third party pursuant to whose authority an actor directly exacts a taking of an endangered species may be deemed to have violated the provisions of the ESA." *Sirahan v. Cons., et al.*, 127 F.3d 155 (1st Cir. 1997). As such, the take prohibition applies to NMFS as the authorizing agency, and the applicant as the person directly engaged in the activity likely to result in prohibited take.

Violations of Section 9 of the ESA are subject to civil penalties, forfeiture of fishing vessels, and criminal penalties of fines and imprisonment. 16 U.S.C. § 1540(a), (b) and (c).

¹⁴ While the leatherback currently has no critical habitat designated in the Pacific, it is clear that the area defined by the Pacific Leatherback Conservation Area meets the statutory definition of critical habitat. We believe such area must promptly be so designated and protected as such under the ESA.

¹⁵ On July 12, 2007, the Center for Biological Diversity and Turtle Island Restoration Network petitioned NMFS to uplist the North Pacific loggerheads from threatened to endangered status. See <http://www.biologicaldiversity.org/swchd/press/loggerhead-07-12-2007.html>

It is our understanding that NMFS is engaging in consultation pursuant to Section 7 of the ESA regarding issuance of the EFP. As such, at the conclusion of consultation, take will likely be authorized pursuant to Section 7(c) of the ESA for listed sea turtles and seabirds.¹⁶ However, take of ESA-listed marine mammals can only be issued in conjunction with take authorization under the MMPA. See discussion in MMPA section *infra*. It is our understanding that NMFS and the applicant have knowingly and willfully chosen to forgo seeking any such take authorization for ESA-listed marine mammals. As such, if any ESA-listed marine mammal interacts with the fishery, both NMFS and the applicant will have violated Section 9 of the ESA and be subject to the civil and criminal penalties thereunder. See also 16 U.S.C. § 1538(g) ("It is unlawful for any person subject to the jurisdiction of the United States to attempt to commit, solicit another to commit, or cause to be committed, any offence defined in this section.")

The Longline EFP directly puts at risk several species of ESA-listed marine mammals. Both sperm whales and humpback whales have been observed entangled in identical fishing gear used by Hawaii-based pelagic longlining vessels. Killer whales are likewise known to interact with and become entangled in longline fishing gear. The Southern Resident population of killer whales (*Orcinus orca*) was recently listed as endangered, and is known to seasonally occur in the range of the proposed EFP. Additionally, Steller sea lions and Guadalupe fur seals also may overlap with the proposed EFP and are subject to entanglement. Given the known and frequent interactions of longline fisheries with humpback whales, sperm whales, and killer whales we do not see why NMFS and the applicant would choose this reckless and illegal path.

Additionally, the EFP is, by its own admission, for the purposes of determining "environmental effects, including the potential impacts to protected species." 72 Fed. Reg. 32618. As such, any take occurring from the EFP cannot be considered "incidental", and authorized under Section 7(c) of the statute, but is instead part of the purpose of the action and could therefore only be authorized, if at all, under Section 10(a) of the ESA. 16 U.S.C. § 1539(a). This is not to say that the proposed EFP meets any rational definition of good science (see MSA discussion *infra*), or complies with the issuance criteria of Section 10(a), rather, it is to point out that NMFS and the applicant cannot carry out an action for the claimed purposes of "data gathering," without complying with the provisions of the ESA specifically set up to address such efforts.

Finally, given the closure of shallow-set longline east of 150° W long, was promulgated pursuant to NMFS's authorities under the ESA, rather than under the MSA, we do not see how an EFP issued under the MSA could lawfully be issued in direct contravention of ESA regulations prohibiting such fishing. See 69 Fed. Reg. 11540 (March 11, 2004); 50 C.F.R. § 223.206(d)(9). If the permit applicant for the EFP wishes to fish in contravention of ESA regulations, the applicant must also apply for a permit under Section 10 of the ESA. As mentioned above, our understanding is that the applicant has not done so. Moreover, we do not

¹⁶ While we expect NMFS and FWS to issue such take authorization, we do not believe that the underlying basis for such authorization is lawful.

see how the standards of Section 10 could possibly be met by the proposed activities. The EFP must be rejected as inconsistent with the intent and letter of the ESA.

B. Violations of the MMPA

The Longline EFP cannot be issued without also violating the MMPA. Fishing under the proposed EFP would hook, entangle and kill ESA-listed marine mammals as well as numerous non-listed marine mammal species. It must therefore be operated in a manner consistent with the procedural and substantive mandates of the ESA and MMPA or not at all. Take of such species can be authorized via an incidental take statement issued pursuant to Section 7 of the ESA only if such take is also authorized pursuant to Section 101 of the MMPA. See 16 U.S.C. §§ 1371(a)(5)(E) and 1536(b)(4)(C). As discussed above, it is our understanding that no take authorization for ESA-listed marine mammals is being sought, even though such take is highly likely to occur. Issuance of the EFP, and fishing pursuant to it, would therefore violate the MMPA. As with the ESA, engaging in a knowing violation of the MMPA carries substantial civil and criminal penalties. See 16 U.S.C. §§ 1375 (fines and imprisonment) and 1376 (forfeiture of vessels).

In short, the decision by the applicant and NMFS to forgo permitting under the MMPA constitutes a knowing violation of the statute. Absent such a permit, the EFP cannot lawfully be issued or implemented.¹⁷

The issuance of the proposed EFP would also violate the unambiguous command of the MMPA that all fisheries "shall reduce incidental mortality and serious injury of marine mammals to insignificant levels approaching a zero mortality and serious injury rate" by April 30, 2001. 16 U.S.C. § 1387(b)(1). NMFS has defined ZMRG by regulation as ten percent of Potential Biological Removal ("PBR"). The likely take of marine mammal species under the EFP would exceed this threshold.

Both the Hawaii and Atlantic pelagic longline fisheries are categorized as Category 1 fisheries on the 2007 List of Fisheries, while the remnant California-based deep-set longline fishery is listed as a Category 2 fishery. Only the Atlantic longline fishery has a take reduction team to address marine mammal bycatch. It would be unwise and unlawful to allow an additional marine-mammal killing fishery to operate without a take reduction team prior to at least initiating the take reduction process for these other two longline fisheries. Additionally, a Category 1 or 2 fishery is by definition taking marine mammals at levels above ZMRG. Given the statutory deadline for reaching ZMRG has already passed, we do not believe that issuing an EFP that would result in take of stocks of marine mammals where mortality and serious injury are already above ZMRG is consistent with the ZMRG mandate of the MMPA.

¹⁷ The decision by NMFS and the applicant to willfully disregard this provision of the MMPA is presumably due to the fact that it is highly unlikely that the necessary "negligible impact" finding prerequisite to such a permit can lawfully be made for several of the species most likely to interact with pelagic longline gear deployed pursuant to the EFP.

The most likely species of marine mammals to be taken by fishing pursuant to the Longline EFP are Risso's dolphins and short-finned pilot whales. Pilot whales are the most frequent marine mammal species encountered by the Atlantic longline fishery. There is no reason to believe that they would not also be taken by a similar fishery off California. Take of pilot whales from the DGN Fishery is already above PBR, and is of course well over ZMRG. In the draft 2007 Pacific Stock Assessment Reports, PBR for the short-finned pilot whale is 0.98. The ZMRG level for pilot whales would therefore equate to fewer than one animal taken every ten years. Take of this species from existing fisheries already exceeds PBR, yet the proposed EFP would authorize over ten years worth of take in a single fishing season by a single vessel. This is simply inconsistent with the MMPA. Similarly, take of long-beaked common dolphin is well over PBR, yet the EFP proposes no limits on bycatch of the species. Take of sperm, humpback and fin whales, as well as of northern right whale dolphins also remains well above 10% of PBR, thereby exceeding the definition of ZMRG. NMFS cannot lawfully authorize new and additional take of marine mammal for which take levels already exceed the PBR and ZMRG thresholds of the MMPA.

Rather than issue an EFP that authorizes additional take over lawful levels, NMFS should instead take action under its authorities under the MMPA to reduce marine mammal take from existing fisheries. It has not done so, and therefore cannot issue the EFP.

C. Violations of the MBTA

Issuance of the EFP, and fishing pursuant to it, would violate the MBTA. The MBTA provides that "it shall be unlawful at any time, by any means or in any manner," to, among many other prohibited actions, "pursue, hunt, take, capture, [or] kill" any migratory bird included in the terms of the treaties. 16 U.S.C. § 703 (emphasis added). The term "take" is defined as to "pursue, hunt, shoot, wound, kill, trap, capture, or collect." 50 C.F.R. § 10.12 (1997). The primary species taken by longline fisheries in the North Pacific are albatrosses and fulmars. These are included in the list of migratory birds protected by the MBTA. See 50 C.F.R. § 10.13 (list of protected migratory birds).

The MBTA imposes strict liability for killing migratory birds, without regard to whether the harm was intended. Its scope extends to harm occurring "by any means or in any manner," and is not limited to, for example, poaching. See e.g., *U.S. v. Moon Lake Electric Association*, 45 F. Supp. 2d 1070 (1999) and cases cited therein. Indeed, the federal government itself has successfully prosecuted under the MBTA's criminal provisions those who have unintentionally killed migratory birds. E.g., *U.S. v. Corbin Farm Service*, 444 F. Supp. 510, 532-534 (E. D. Cal.), *affirmed*, 578 F.2d 259 (9th Cir. 1978); *U.S. v. FMC Corp.*, 572 F.2d 902 (2nd Cir. 1978).

The MBTA applies to federal agencies such as NMFS as well as private persons. See *Humane Society v. Glickman*, No. 98-1510, 1999 U.S. Dist. LEXIS 19759 (D.D.C. July 6, 1999), *affirmed*, *Humane Society v. Glickman*, 217 F.3d 882, 885 (D.C. Cir. 2000) ("There is no exemption in § 703 for farmers, or golf course superintendents, or ornithologists, or airport

officials, or state officers, or federal agencies.”). Following Glickman, FWS issued Director’s Order No. 131, confirming that it is FWS’s position that the MBTA applies equally to federal and non-federal entities, and that “take of migratory birds by Federal agencies is prohibited unless authorized pursuant to regulations promulgated under the MBTA.” The MBTA authorizes the Secretary of the Interior to “determine when, to what extent, if at all, and by what means, it is compatible with the terms of the conventions to allow hunting, take, capture, [or] killing . . . of any such bird.” 16 U.S.C. § 704. FWS may issue a permit allowing the take of migratory birds if consistent with the treaties, statute and FWS regulations. Neither NMFS nor the applicant have obtained, much less applied for such a permit authorizing any take for longline fishing pursuant to the EFP.

NMFS cannot dispute that the longline fishing kills birds protected under the MBTA. As previously mentioned, self-reports of seabird interactions with the former California-based longline fishery acknowledged take of 100 albatross of various species. Dozens of albatross were also observed taken in the handful of trips with actual observer coverage. We believe that until such take is permitted, NMFS cannot lawfully allow any fishing, including that which would be authorized by the EFP, which is likely to result in the deaths of members of such species.¹⁸

While the short-tailed albatross is ESA-listed and take can be authorized pursuant to that statute, of equal or greater concern here is the black-footed albatross. This species has been listed as Endangered by the IUCN and is under review for ESA listing. It is regularly seen off the California coast and is almost certain to be caught and killed by longline fishing pursuant to the EFP. Absent a permit under the MBTA authorizing the take of the black-footed albatross and other migratory birds, the EFP cannot lawfully be issued.

D. Violations of MSA

Issuance of the proposed EFP would also violate the Magnuson-Stevens Fishery Conservation and Management Act (“MSA”) and its implementing regulations. NMFS has promulgated regulations governing the issuance of EFPs. See 50 C.F.R. § 660.745.¹⁹ Under these regulations, NMFS may authorize fishing that would otherwise be prohibited by a FMP only in very limited circumstances. Specifically, NMFS may only authorize such fishing for “limited testing, public display, data collection, exploratory, health and safety, environmental cleanup, and/or hazard removal purposes.” 50 C.F.R. § 660.745(b).

¹⁸ In its response to comments on the FMP, NMFS claimed that the MBTA does not apply beyond the 3 nautical mile territorial sea and therefore it need not comply. This is simply wrong. As NMFS is or should be aware, in 2001 an Interior Solicitor’s Opinion concluded that the MBTA does in fact apply in the U.S. EEZ. NMFS’s conclusions to the contrary will not survive legal scrutiny.

¹⁹ Under the 2006 amendments to the MSA, NMFS was required to promulgate new regulations governing the issuance of EFPs. NMFS has not done so within the timeframes mandated by the statute. Until and unless NMFS issues new EFP regulations to comply with this statutory mandate, we do not believe any EFP can be lawfully issued. Nevertheless, the proposed EFP violates existing regulations as well.

The proposed EFP is requested to “determine if longline gear is an economically viable HMS harvest substitute for drift gillnet (DGN) gear.” EFP App. at 1. Additionally, the EFP is for the purposes of determining “environmental effects, including the potential impacts to protected species.” 72 Fed. Reg. 32618. This does not meet the regulatory criteria for issuance as it does not fall within the categories enumerated at 50 C.F.R. § 660.745.

Even if the stated purposes of the EFP could be considered valid reasons for issuance of an EFP, the EFP as proposed simply is not designed to meet these purposes. The Scientific and Statistical Committee of the PPMC explicitly acknowledged as much in its review of the EFP

The SSC notes that the proposed EFP pertains to operation of a single vessel which would be fishing with longline gear in an area without corresponding drift gillnet fishing for comparison of finfish and prohibited species bycatch between the two gear types. Few constraints are imposed to limit where the vessel will operate, and no experimental design is proposed to test the hypothesis that longline gear would offer an improvement in bycatch rates over drift gillnet fishing gear. Average bycatch values are inadequate to evaluate bycatch impacts. Bycatch events are typically rare and spatially correlated. As such, the problem is one of estimating the statistical probability of a rare event (i.e. a longline set with large bycatch). **Data collected from a single vessel operating under an EFP would not be adequate for this purpose.**

SSC April 2007 Report (emphasis added).

NMFS’s regulations for the issuance of an EFP also require the agency to publish in the Federal Register notice of receipt of an EFP application, a brief description of the proposal, and the intent of NMFS to issue the EFP. 50 C.F.R. § 660.745(b)(3). While NMFS has published a notice of the EFP, the notice itself fails to comply with these criteria. The regulations specifically require NMFS to publish notice of “the intent of NMFS to issue an EFP.” 50 C.F.R. § 660.745(b)(3). Instead, the notice is more ambiguous:

The Regional Administrator has also made a preliminary determination that the activities authorized under the EFP would be consistent with the goals and objectives of the Fishery Management Plan for U.S. West Coast Fisheries for Highly Migratory Species (HMS FMP). However, further review and consultation is necessary before a final determination is made to issue the EFP.

72 Fed. Reg. 32618. Nowhere does the notice state that NMFS actually intends to issue the permit. If and when NMFS makes such a determination and develops such an intent, it must recirculate the notice for public comment consistent with the regulations.

E. Violations of National Marine Sanctuaries Act

The proposed EFP also is in apparent violation of the National Marine Sanctuaries Act ("NMSA") (16 U.S.C. § 1431 *et seq.*). Among the purposes of the NMSA are "to maintain the natural biological communities in the national marine sanctuaries, and to protect, and, where appropriate, restore and enhance natural habitats, populations, and ecological processes." 16 U.S.C. § 1431(b)(3). To achieve these purposes, the NMSA requires that "Federal agency actions internal or external to a national marine sanctuary, including private activities authorized by licenses, leases, or permits, that are likely to destroy, cause the loss of, or injure any sanctuary resource are subject to consultation with the Secretary." 16 U.S.C. § 1434(d)(1)(A) (emphasis added). This consultation provision requires the agency proposing the action to provide a written statement describing the action and the potential effects on sanctuary resources no later than 45 days before the final approval of the proposed action. 16 U.S.C. § 1434(d)(1)(B). The action agency must follow the recommendations of the Secretary to avoid injury to any sanctuary resource or otherwise act to prevent and mitigate damage to such resources. 16 U.S.C. §§ 1434(d)(2), 1434(d)(3) & 1434(d)(4).

Three National Marine Sanctuaries, the Monterey Bay, Gulf of Farallones, and Cordell Bank National Marine Sanctuaries are adjacent to the area subject to the EFP. The leatherback sea turtle as well as the marine mammals, seabirds and fish that will likely be caught pursuant to the EFP are all resources protected by these sanctuary designations. The proposed EFP would clearly "destroy, cause the loss, or injure" these resources. We are unaware of any action by NMFS to comply with either the consultation provision of the NMSA or its substantive requirements. Absent such compliance, the proposed EFP cannot lawfully be issued.²⁰

F. Violations of Coastal Zone Management Act

The proposed EFP also is being processed in apparent violation of the Coastal Zone Management Act ("CZMA") (16 U.S.C. § 1451 *et seq.*). CZMA requires that

[A]ny applicant for a required Federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program. At the same time, the

²⁰ The proposed Longline EFP states that "EFP fishing will not occur within 30 miles of the coastline, or within the southern California bight." This language is vague enough that it does not completely foreclose fishing within designated marine sanctuaries. Any EFP issued must include such geographical limitations so as to explicitly preclude its operation with any National Marine Sanctuary. Moreover, fishing need not occur within sanctuary boundaries to impact sanctuary resources. The leatherback and other species that regularly visit these sanctuaries would still have to run the gauntlet of the over 67,000 longline hooks set in their path under the EFP.

applicant shall furnish to the state or its designated agency a copy of the certification, with all necessary information and data.

16 U.S.C. § 1456(c)(3)(A). The sea turtles, seabirds, marine mammals, and fish that will be caught and killed by under the proposed EFP are all "natural resources" protected by California's Coastal Management Program. Hooking, entangling and killing these animals clearly "affects" these resources triggering the consistency requirement of CZMA. We are unaware of the appropriate CZMA consistency certification in the application materials for the Longline EFP. Absent such a certification and evidence of California's concurrence in that determination, the EFP application must be rejected as violative of CZMA.

G. Violations of NEPA

While we believe that the proposed EFP is legally untenable because of the substantive requirements of the ESA, MMPA, MBTA, NMSA, CZMA and MSA, we also believe that the issuance of any such EFP would also violate the environmental review provisions of NEPA. NEPA's fundamental purposes are to guarantee that: (1) agencies take a "hard look" at the environmental consequences of their actions before these actions occur by ensuring that the agency has, and carefully considers, detailed information concerning significant environmental impacts; and (2) agencies make the relevant information available to the public so that it may also play a role in both the decisionmaking process and the implementation of that decision. See, e.g., 40 C.F.R. § 1500.1. In this instance, NMFS has apparently completely reversed this process. NMFS has decided it wishes to allow pelagic longline fishing in the area currently closed to such fishing to protect numerous species. Such prejudging of the outcome completely taints the NEPA process and is unlawful. See *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9th Cir. 2000).

In addition to the flawed timing of the NEPA analysis, NMFS's most significant violation of NEPA is its failure to prepare a full Environmental Impact Statement ("EIS") for the EFP. Under NEPA:

an EIS must be prepared if "substantial questions are raised as to whether a project . . . may cause significant degradation of some human environmental factor." To trigger this requirement "a plaintiff need not show that significant effects will in fact occur," raising "substantial questions whether a project may have a significant effect is sufficient."

Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1149-50 (9th Cir. 1998) (citations omitted) (emphasis in original).

In its processing of the Longline EFP, we assume NMFS will rely on the same infirm EA as considered by the PPMC in its decision to recommend the EFP. However, NMFS's statement in this regard is, as usual, incoherent and ambiguous.

In accordance with NOAA Administrative Order 216-6, an appropriate National Environmental Policy Act document will be completed prior to the issuance of the EFP. A draft environmental assessment on the EFP was presented to the Council and public in April 2007. Further review and consultation is necessary before a final determination is made to issue the EFP.

72 Fed. Reg. 32618. So rather than inform the public as required by NEPA as to what actual NEPA document the agency will rely upon, NMFS simply mentions the existence of an EA used by the Council. If NMFS intends to rely upon this EA, it needs to explicitly state such intentions and recirculate the document for public comment.

Nevertheless, assuming NMFS adopts the EA prepared for the Council, this EA is itself highly deficient. This EA itself explicitly or implicitly acknowledges that several of the Council on Environmental Quality ("CEQ") "significance" factors triggering the need to prepare an EIS are met by the Longline EFP. See 40 C.F.R. § 1508. CEQ factors triggered by the Longline EFP, included but are not limited to, whether the action involves "[u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands [and] ecologically critical areas," *id.* at § 1508.27(b)(3) (leatherback foraging areas); "[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial," *id.* at § 1508.27(b)(4) (numerous comments in opposition); "[t]he degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration," *id.* at § 1508.27(b)(6) (the stated purpose of the EFP is to create a longline fishery); "the degree to which the action is related to other actions with . . . cumulatively significant impacts," *id.* at § 1508.27(b)(7) (the numerous impacts on the leatherback throughout its range); the "degree to which the action may adversely affect endangered or threatened species," *id.* at § 1508.27(b)(8) (longlines previously found to jeopardize the leatherback); and whether "the action threatens a violation of Federal . . . law or requirements imposed for the protection of the environment." *Id.* at § 1508.27(b)(10) (violates ESA, MMPA, MBTA, NMSA, CZMA and MSA). Any of these factors, standing alone, is sufficient to require preparation of an EIS. *Ocean Advocates v. United States Army Corps of Engineers*, 402 F.3d 846, 865 (9th Cir. 2005). For the Longline EFP, all of these factors require the preparation of an EIS.

Even if the requirement triggering an EIS were not met, the EA is inadequate in its own right. This was recognized by the Council's Scientific and Statistical Committee.

The SSC did not find adequate information in the Environmental Assessment to evaluate the biological risks of the proposed EFP.

SSC April 2007 Report. Similarly, for the reasons described above with regard to violations of other laws, the EA utterly fails to adequately analyze impacts on ESA-listed species, target and bycatch fish species, marine mammals, seabirds, marine sanctuaries, and numerous other resources affected by the proposed EFP.

In sum, reliance on an EA for the Longline EFP is completely at odds with the letter and spirit of NEPA. Rather than cast aside compliance with NEPA in its rush to accommodate the applicant in time for the upcoming fishing season, if NMFS wishes to consider pelagic longline fishing within the West Coast EEZ, it must do so only in a careful manner after preparation of an EIS. We therefore believe that the only lawful course for NMFS to follow at this point is to either select the No Action Alternative in the Draft EA, or to forgo action until the completion of a full EIS that analyzes a full range of alternatives.

III. CONCLUSION

As the above makes clear, we believe that issuance of the Longline EFP would violate numerous statutory provisions, including the ESA, MMPA, MBTA, MSA, NMSA, CZMA, and NEPA. We therefore recommend that NMFS reject the proposed EFP. Denying the EFP is also consistent with the call put out by over 1000 international scientists from more than 100 countries and 300 non-governmental organizations from 62 countries calling on the U.N. to institute an immediate moratorium on pelagic longline fishing in the Pacific until measures can be put in place that protect the leatherback.²¹ Thank you for your concern.

Sincerely,



Brendan Cummings
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²¹ See http://www.seaturbles.org/press_release2.cfm?pressID=261.