CALIFORNIA COASTAL COMMISSION
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Prepared August 9, 2007 (for August 10, 2007 hearing)

To: Coastal Commissioners and Interested Persons

From: Peter M. Douglas, Executive Director
Mark Delaplaine, Manager, Energy, Ocean Resources and Federal Consistency Division

Subject: STAFF REPORT ADDENDUM for Item F 4e
Consistency Determination CD-041-07 (National Marine Fisheries Service (NMFS)), Exempted Fishing Permit (EFP) for longline fishing in the EEZ

As noted in the staff recommendation, NMFS has responded to the questions raised on pages 8-10 of the staff recommendation. NMFS' response, dated August 6, 2007, was passed out to the Commission on August 9, 2007. In this response, NMFS:

1. Modifies the landward boundary to 40 nautical miles (n mi) from shore (previously it was 30 n mi).

2. Notes that this change means no activity would occur within any National Marine Sanctuary.

3. Notes that the final Environmental Assessment (EA), responses to comments on the draft EA, Biological Opinion, Fish and Wildlife Service coordination, have not been completed and the results of these reviews and coordination is not yet available.

4. Discusses the "caps" that NMFS will include in its final decision, and notes that caps for all listed species will not be included, but rather only for those species NMFS believes are "likely to be taken." However, no caps of species "likely to be taken" were provided. In addition, a "take" of a non-anticipated listed species would, then, trigger further consultation with NMFS for appropriate action, depending on the circumstances.

5. Indicates a concern over El Niño event is unwarranted because the loggerhead conservation area closure is seasonal and outside the time period for the proposed fishing activity.

6. Explains NMFS' position on why the activity would be allowed within the leatherback conservation area.

7. Discusses NMFS overall strategy and how this permit would fit into it.

8. Elaborates on why NMFS believes harpoon fishing could not replace drift gill net fishing for U.S. swordfish fisheries.

9. Elaborates on data comparing drift gill net and long line bycatch.

10. Discusses blue shark impacts, including that "blue sharks are not overfished, nor is overfishing occurring," according to the most recent stock assessments.

11. Lists seabird impact reduction measures.

12. Explains the cap for striped marlin.

13. Concludes with NMFS' position that, through compliance with its other federal mandates, NMFS believes the activity is consistent with Coastal Act marine resource protection policies.

The staff's initial recommendation was that the Commission object, based on the fact that it had inadequate information with which to determine whether the proposed project was consistent with the enforceable policies of the California Coastal Management Program (CCMP) (i.e., Section 30230 of the Coastal Act). NMFS' submittal in response to the recommendation contains one project modification (moving the eastern boundary north of Point Conception from 30 to 40 n mi offshore), and lists the seabird mitigation measures. Most of the discussion in the letter is an explanation, in greater detail than previously submitted, of points made in NMFS' original consistency determination. However, critical information gaps remain, most notably the caps on sensitive species, the results of consultation with the U.S. Fish and Wildlife Service, NMFS' responses to Draft EA comments, and NMFS' own analysis that will be included in its final Biological Opinion. Therefore, based on the additional information submitted by NMFS, particularly with respect to the fact the NMFS has not yet identified the mitigation and minimization measures that will be included in the final permit, the staff recommendation remains unchanged.

Also passed out on August 9, 2007, was a letter from the Office of Ocean and Coastal Resource Management granting the Commission staff's request to review this matter as a federally permitted activity.

Also passed out was correspondence in support of and in opposition to the staff recommendation, as well as copies of ex parte communication forms.

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F 4e

STAFF REPORT AND RECOMMENDATION ON CONSISTENCY DETERMINATION

Consistency Determination No.	**CD-041-07**
Staff:	MD/ST-SF
File Date:	5/30/07
60th Day:	7/29/07
75th Day:	8/13/07
Commission Meeting:	8/10/07

FEDERAL AGENCY: **National Marine Fisheries Service (NMFS)**

PROJECT LOCATION: Exclusive Economic Zone (EEZ), primarily 30 to 200 miles offshore of mainland California, (Exhibit 1), and within 3 miles of San Nicolas Island and outside the southern California Bight (as depicted on Exhibit 2)

PROJECT DESCRIPTION: Exempted Fishing Permit (EFP) to authorize a single fishing operator to conduct longline fishing from September 15, 2007, through December 2007

SUBSTANTIVE FILE DOCUMENTS: See Page 34

[**Staff Note:** The staff is anticipating additional information from the National Marine Fisheries Service in response to the questions listed on pages 8-10 of this report. Once this information is received, the staff will prepare an addendum to this staff recommendation.]

EXECUTIVE SUMMARY

The National Marine Fisheries Service (NMFS) has submitted a consistency determination for an Exempted Fishing Permit (EFP) that would authorize one vessel operator (Peter Dupuy) to conduct shallow set longline (SSLL) fishing in the exclusive economic zone (EEZ) off California (and up to central Oregon). The permit would allow up to four fishing trips, using up to 100-km long main lines, with hooks set at an approximately 40 meter depth, using 14 "sets" per trip, and with up to 1200 hooks per set, for a total of up to 67,000 hooks for the total effort. The four trips would occur from September 15, 2007 through December 2007. The use of longline gear within the west coast EEZ is currently prohibited, although drift gill net (DGN) fishing is allowed within the EEZ, subject to seasonal restrictions. The purpose of the EFP is

to assist NMFS in determining whether longline fishing, subject to gear restrictions and continuous monitoring, represents an economically and environmentally superior alternative to either DGN or harpoon gear for fishing within the West Coast EEZ.

Long line fishing creates significant amounts of bycatch, including marine mammals, and endangered sea turtles and seabirds. NMFS works to reduce bycatch and mortalities in all fisheries, and in this effort NMFS seeks information that would assist planning efforts for possible transitioning from drift gill net to long line fishing. Nevertheless significant bycatch concerns remain even for long line fishing; the only practiced fishery for swordfish that avoids significant bycatch is harpoon fishing. Long line fishing is more clearly preferable to drift gill when it comes to marine mammals; comparisons for turtles are not so clear. NMFS does believe, however, that under recent regulations in Hawaii that sea turtle mortalities can be significantly reduced (by about 90% (Exhibit 10)) through use of protective measures. The proposed EFP would include all the measures that have been implemented in Hawaii, and would include 100% observer coverage. With these measures, NMFS believes the effects from this EFP would be minimal, and that the benefits from the information gained would outweigh its adverse effects.

However, NMFS is proposing the activity where long line fishing has not historically occurred; in addition the area for the EFP includes the Pacific Leatherback Conservation Area (Exhibit 4) which was specifically set aside as a critical habitat for the leatherbacks, and in which NMFS has prohibited drift gill net fishing (during the sensitive season, August 15-November 15). NMFS found this time and area closure was necessary to avoid the likelihood of the DGN fishery jeopardizing the continued existence of leatherbacks. NMFS' Recovery Plan for the leatherback turtle further notes:

> *It has been suggested that roughly one-half the global population of adult females nests on the west coast of Mexico (Pritchard 1982a); if so, 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.*[1] [Emphasis added]

When comparing mortality rates of bycatch, SSLL may indeed, as NMFS has framed the issue, be less environmentally damaging than DGN, and the Commission supports the fundamental concept of conducting further research to transition drift gill net fishing to less damaging forms of fishing for swordfish. The primary issue, however, is whether the proposed EFP activity will further this effort, and whether it is proposed in the most appropriate location.

Since longline fishing is not allowed inside the West Coast EEZ, no leatherbacks are currently being taken by longline in the EEZ. Moreover, the Conservation Area has been so effective for the West Coast DGN that zero leatherbacks have been taken since 2001. The proposed EFP would increase the incidental take of leatherbacks from the current amount of zero to perhaps

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

four-five, with an estimated mortality of, statistically, somewhere between ½ and one, according to NMFS' estimates. Considering the status of this species, even one mortality would represent a significant impact.

Given the information currently available, the Commission does not believe NMFS has made a compelling case that to further transition from one destructive fishery to one arguably less destructive fishery, for an area which is currently seasonally off-limits to that fishery due to its destructiveness, is consistent with the goals and requirements of Section 30230 to maintain healthy populations and protect areas of special biological significance. Nor has NMFS made the case that the same information it seeks to gather in conducting this experiment cannot be accomplished by conducting the activity outside the seasonal Leatherback Conservation Area, from September 15-November 15 (and, as well, outside the Monterey Bay National Marine Sanctuary (Exhibit 3) for the entire permit period). Conducting the EFP in the same waters and period drift gill netting *is* allowed would appear to provide more useful comparisons of the two fisheries.

At a minimum, the Commission can only conclude that information is lacking that would enable the Commission to determine the project's consistency with Section 30230. To adequately consider this proposal and determine its consistency with Section 30230, the Commission is seeking responses to a number questions, including: (a) whether the activity could be restricted to be outside the Monterey Bay National Marine Sanctuary and the seasonal Leatherback Conservation Area; (b) basic project information such as the nature and effect of the caps (which, if reached, would cause the EFP to cease); (c) responses to comments NMFS received on its Draft Environmental Assessment; (d) results of further coordination with other resources agencies; (e) the effect of an unexpected but potential El Niño event during the EFP period; and (f) questions about how this EFP would fit into an overall strategy for take reductions, including alternative strategies for swordfish fishing that might result in fewer takes than long line or drift gill net fishing. Accordingly, the Commission has asked NMFS to respond to the questions listed on page 8-10.

To conclude for marine resources, absent this information the Commission is unable to determine whether the proposed project is consistent with the marine resources policy (Section 30230) of the Coastal Act, because it lacks the information necessary to make these determinations. The Commission therefore is therefore objecting to NMFS' consistency determination, based on lack of adequate information to determine the project's consistency with the enforceable policies of the California Coastal Management Program (CCMP) (i.e., Section 30230 of the Coastal Act).

With respect to Coastal Act policies protecting commercial and recreational fishing, while the Commission has a few questions about the rationale for the striped marlin cap, and about catch of non-target tunas, NMFS will be implementing two measures which appear to be included in order to avoid conflicts *between* commercial and recreational fishing. As recommended by the Pacific Fishery Management Council, the EFP area would avoid portions of the southern California Bight (as depicted in Exhibit 2), to avoid conflicts areas heavily fished by recreational fishers, and the permit would include a cap on catches of striped marlin. Although

the Commission has requested clarification of the reasons for and the size of this cap, the project is clearly intended to support commercial fishing, and the activity is not likely to adversely affect commercial or recreational fishing. The proposed activity is therefore consistent with Sections 30234 and 30234.5.

STAFF SUMMARY AND RECOMMENDATION

I. STAFF SUMMARY

A. Project Description. The proposed project is the issuance of an exempted fishing permit (EFP) which would authorize a single longline fishing vessel to conduct an otherwise prohibited fishery targeting broadbill swordfish (*Xiphias gladius*) in the exclusive economic zone (EEZ) off California (and up to central Oregon)[2]. The use of longline gear within the west coast EEZ is currently prohibited, although drift gill net (DGN) fishing is allowed within the EEZ, subject to seasonal restrictions. The purpose of the EFP is to assist NMFS in determining whether longline fishing, subject to gear restrictions and continuous monitoring, represents an economically and environmentally superior alternative to either DGN or harpoon gear for fishing within the West Coast EEZ. Based on new regulations applied to the Hawaii pelagic longline fishery, NMFS states that the improved measures have achieved significant reductions (an 89 percent reduction) in marine turtle bycatch when use of circle hooks became mandatory in 2004 (Exhibit 10)(Gilman et al. 2006d). Ultimately, NMFS states, the goal of the project is to gather information and test new methods, to support any future decisions to modify management regulations.

Typical Longline Fishing. Longline fishing gear consists of a main line strung horizontally across up to 100 km of ocean, supported at regular intervals by vertical float lines connected to surface floats (Exhibit 9). Descending from the main line are branch lines, each ending in a single, baited hook. Mainlines are rigged with 22 m branch lines at approximately 61 m intervals and buoyed every 1.6 km. Between 800 and 1,300 hooks are deployed per set. Bait is usually squid or mackerel. The mainline is deployed from 4 to 7 hours and left to drift (unattached) for 7 to 10 hours with radio beacons attached to facilitate gear recovery. Retrieval typically requires 7 to 10 hours depending on length of mainline and number of hooks deployed. Fishing occurs primarily during the night. Longline gear targeting tuna (deep set) is set at depths below 100 m. Longline gear targeting swordfish (shallow set) is set at sunset at depths less than 100 m, and hauled at sunrise. A typical longliner carries a crew of six, including the captain, although some of the smaller vessels operate with a four-man crew. Fishing trips last around three weeks. Most vessels do not have built-in refrigeration equipment, limiting their trip length.

Proposed EFP. The EFP would authorize Mr. Dupuy to operate a single longline vessel off the coasts of California and Oregon. Most of the area would be between 30 and 200 nautical miles offshore of the mainland, and the Southern California Bight would be excluded (due to

[2] The Commission is reviewing only the offshore-California portion of the activity.

conflicts with commercial and recreational fishing). However the authorized area in at least one location is directly adjacent to the coastal zone (coastal waters within the 3 mile limit around San Nicolas Island). Each trip will consist of 14 sets, with each set containing no more than 1,200 hooks. Four trips are proposed, for a total of 67,200 hooks, during the period September- December 2007 and a range of mitigation and management measures are included to reduce anticipated bycatch. The proposed EFP would include:

1. 100 percent observer coverage, paid for by NMFS
2. A single vessel participating
3. Maximum of 14 sets per trip
4. Maximum of four trips between September and December (up to 56 total sets for the entire duration of the proposed EFP)
5. No fishing within the Southern California Bight as defined by the applicant. (See Exhibit 2)
6. No fishing within 30 nmi of the mainland coastline, or within the Channel Islands National Marine Sanctuary, or within 3 miles of San Nicolas Island (see Exhibit 2)
7. Use of only shallow-set longline gear, set so hooks are at a depth of 40–45 meters below the surface, and use of the following lines and hooks:
    a. 50–100 km mainline
    b. 18 m floatline
    c. 24 m branchlines
    d. 2–8 hooks between floats
    e. 400–1,200 hooks per set
8. Use 18/0 circle hooks with a 10° offset to fish for swordfish.
9. Use mackerel or mackerel-type bait (as described at 50 CFR 665.33(g)).
10. Allow the use of light sticks.

Additional measures would be included to further minimize potential takes of protected species and bycatch of other species of concern:

1. Require use of time and depth recorders (TDR) to estimate fishing depth. (The number of TDR units deployed per set and per trip would be determined by NMFS in consultation with the applicant.)
2. Gear may not be set until one hour after local sunset and must be fully deployed before local sunrise. (This measure is based on a condition in the USFWS biological opinion for the HMS FMP with regard to the endangered short-tailed albatross and brown pelican (USFWS 2004).)
3. Prohibit the use of a line shooter for setting the gear.
4. Require use of a NMFS-approved dehooking device to maximize finfish (e.g., blue shark) bycatch survivability.
5. Establish protected species take caps for marine mammals, sea turtles, seabirds, and prohibited species, such as striped marlin, that may be exposed to and adversely affected by this action. (If a cap is reached, the EFP will be halted.)

B. Background. The Pacific Fishery Management Council (PFMC) is one of eight regional fishery management councils established by the Magnuson-Stevens Act to manage fisheries 3-200 miles offshore of the US coastline. The Pacific Council is responsible for fisheries off the coasts of California, Oregon, and Washington. One of the goals in adopting its Fishery Management Plans (FMP) is to harmonize Magnuson-Stevens Act fishery management with Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA) requirements. Before a PFMC FMP can be finalized, it is subject to review and approval by NMFS.

The applicable FMP for long line swordfish fishing is the HMS Fishery Management Plan (HMS FMP). Highly migratory species are those pelagic species with a wide geographic distribution, both inside and outside countries' 200-mile zones, and undertake migrations of significant but variable distances across oceans for feeding or reproduction. The species include:

> Tunas: north Pacific albacore, yellowfin, bigeye, skipjack, and northern bluefin
> Sharks: common thresher, pelagic thresher, bigeye thresher, shortfin mako, blue
> Billfish/swordfish: striped marlin, Pacific swordfish
> Other: dorado (also known as dolphinfish and mahi-mahi)

Gear types are used to catch highly migratory species include troll gear, drift gillnets, harpoons, longlines, and purse seines, and for recreational boats using hook-and-line gear. The FMP applies to all U.S. vessels that fish for management unit species within the EEZ off California, Oregon or Washington, as well as that fish for management unit species on the high seas (seaward of the EEZ) and that land their fish in California, Oregon or Washington.

Swordfish are targeted with shallow set longlines (SSLL), or longline gear that is set at shallow depths (relative to tuna fishing, which uses deep set long lines). According to NMFS' Draft Environmental Assessment (DEA), California state law has never allowed long line fishing for swordfish within its Exclusive Economic Zone (EEZ).[3] A varying sized fleet of California-based longline vessels historically targeted swordfish outside of the EEZ.[4] In 2004, NMFS published a Biological Opinion (BO) in which it determined that impacts to sea turtles were too great to continue this practice and prohibited the use of SSLL for West Coast vessels outside of the EEZ as well.[5] This regulation was incorporated into the HMS FMP for US West Coast

[3] NMFS Draft EA, p. 24, states: "Second, because pelagic longline fishing has never been permitted within the EEZ waters adjacent to California, there are no longline fishery dependent records to draw upon to estimate the effects of the proposed action." Note: several commenters (see page 24 below) have questioned this statement.

[4] NMFS, PFMC. 2007. Issuance of an Exempted Fishing Permit to Fish with Longline Gear in the West Coast EEZ Draft Environmental Assessment.

[5] NMFS, 2004. Biological Opinion pursuant to the Endangered Species Act ("ESA") Section 7 Consultation. In this document NMFS found that in addition to the proposed prohibition of SSLL west of 150º W longitude, it was also necessary to prohibit SSLL east of 150º W to prevent jeopardizing the continued existence of loggerhead sea turtles. NMFS asserted its use of authority under ESA to add these regulations to ensure the fishery complies with the ESA.

Fisheries in May 2004. Thus, West Coast fishermen are currently prohibited from targeting swordfish using SSLL gear both inside and outside of the West Coast EEZ.

In 2006 fisherman Peter Dupuy submitted an application to the PFMC for the subject EFP to target swordfish using SSLL gear in the West Coast EEZ, for the reasons described in the first paragraph of this project description. In April 2007 the PFMC approved the EFP and forwarded it to NMFS, which is currently reviewing it. On May 30, 2007, NMFS submitted the subject consistency determination to the Commission, requesting concurrence that the activity was consistent to the maximum extent practicable with the California Coastal Management Program (CCMP).

C. Federal Agency's Consistency Determination. The National Marine Fisheries Service has determined the project consistent to the maximum extent practicable with the California Coastal Management Program.

II. STAFF RECOMMENDATION

MOTION: **I move that the Commission concur with consistency determination CD-041-07 and determine that the project described therein is fully consistent, and thus is consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program (CCMP).**

Staff Recommendation:
Staff recommends a **NO** vote on the motion. Failure of this motion will result in an objection to the determination and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution to Object to Consistency Determination:

> *The Commission hereby **objects** to the consistency determination by the Service for the proposed project, finding that the consistency determination lacks information necessary to evaluate the project's consistency with the California Coastal Management Program.*

III. PROCEDURES

Applicable Legal Authorities. Section 307 of the Coastal Zone Management Act (16 USC § 1456) provides in part:

> *(c)(1)(A) Each Federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of the approved State management programs.*

Necessary Information. Section 930.43(b) of the federal consistency regulations (15 CFR Section 930.43(b)) requires that, if the Commission bases its objection on a lack of information, the Commission must identify the information necessary for it to assess the project's consistency with the CCMP. That section states:

> *If the State agency's objection is based upon a finding that the Federal agency has failed to supply sufficient information, the State agency's response must describe the nature of the information requested and the necessity of having such information to determine the consistency of the Federal agency activity with the enforceable policies of the management program.*

Nature of Information Requested. As described in Section IV.A of this report below (Marine Resources), the Commission finds this consistency determination lacks the information needed from NMFS to enable the Commission to determine whether the proposed project is consistent with the marine resources policy (Section 30230) of the Coastal Act. In order to determine the project's consistency with the CCMP, the Commission has requested MMS to provide it with additional information and answers to the following questions:

1. How close to Farallon Islands is the 30 mile eastern boundary from the permit area?
2. How much of the permit area is within the Monterey Bay National Marine Sanctuary? Why is NOAA not proposing to prohibit the fishing within the Sanctuary? What effect would such a prohibition in this very small area (compared to the total permit area) have on the likely success of the experiment?
3. When will the revised Environmental Assessment be available?
4. When will responses to public comments on the Draft Environmental Assessment (DEA) be available?
5. When will the Biological Opinion be available?
6. When will the results of the consultation with the U.S. Fish and Wildlife Service on effects on seabirds be available?
7. When will the results of coordination with NOAA Sanctuaries be available?
8. The Pacific Fishery Management Council (PFMC) recommended (as described in NMFS' Federal Register Notice of June 13, 2007) that: "*… the applicant be subject to a 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 [ESA] 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*." Alternative 3 analyzed in the DEA also states there will be caps for sea turtles, marine mammals, and seabirds. However, we do not know what the caps will be and how they will be determined. Also, it is unclear from our discussions with NMFS whether caps will be included for all ESA-listed species, or whether the consequence of an unexpected take of a listed species will, rather than invoke a cessation of activity, simply result in re-initiation of

consultation with NMFS. Please inform us as to what the numerical caps will be, how they will be determined, and whether caps will be set for ESA listed species that NMFS does not anticipate will be taken.

9. How will NMFS justify allowing a cap of even one short finned pilot whale, given that: (a) the Potential Biological Removal (PBR) rate, which quantifies the maximum number of animals that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimal sustainable population, for the West Coast stock (California/Oregon/Washington), is less than one animal; (b) this species' annual fishing mortality is already at one animal (i.e., it already exceeds the PBR); and (c) this species is a Strategic Stock[1]?
10. How soon before an El Niño event (which would significantly increase the likelihood of loggerhead turtles in the area) could such an event be predicted? In the event of an El Niño, would loggerhead caps be triggered and/or would the time and area closure for the Loggerhead Conservation Area be instituted?
11. If drift gill netting is currently seasonally banned (8/15 – 11/15) in the Leatherback Conservation Area, why would NMFS not impose a similar ban on longline fishing? Why not limit the permitted area to south of the conservation area, and/or to post-11/15 only within the conservation area? What effect would this type of restriction have on the likely success of the experiment?
12. What will the data generated by the EFP tell us that would be statistically useful? We note that the PFMC's Scientific and Statistical Committee (SSC) advised the PFMC that because the EFP is not taking place in an area where drift gillnet fishing occurs, it will not be possible to compare bycatch rates between the two, which is purportedly the reason for the EFP. Further, no experimental design has been included to test the hypothesis that longline gear generates less bycatch than gillnet gear. Lastly, any results obtained from the EFP will not be useful for estimating the probability of longline gear generating bycatch because it is a single vessel and would not be statistically valid for that purpose. What, then, is NMFS planning to pursue as follow-up research to build on this, even if NMFS does establish economic viability? In other words, how will the results of the proposed EFP be used to make future decisions? What criteria will be examined and what benchmarks are being set to determine success or failure? How, in fact, will economic viability be determined or defined?
13. If a cap is reached early, little or no economic information would be gathered. If this occurs, what would NMFS' 'next step' be in its strategy to replace drift gill net (DGN) fishing with shallow set long line (SSLL) fishing (or other alternatives)? If this effort is one part of an overall strategy, what is the overall strategy?
14. What alternative strategies are available to reduce demand for swordfish, educate fishermen, or develop more selective fishing techniques?
15. Does NMFS consider the only realistic alternative to be allowing the EFP to be the import of swordfish from fisheries with potentially higher levels of protected species bycatch? Why is the US harpoon fishery, which has virtually no bycatch, not a feasible

[1] Carretta, J.V., et al. 2007. Draft US Pacific Marine Mammal Stock Assessments. NOAA. NMFS. Southwest Fisheries Science Center.

less environmentally damaging alternative? Please provide data that would allow this alternatives analysis.

16. What information is available to NMFS, based on the fisheries as currently regulated, comparing adverse effects of drift gillnet fishing with longline fishing for swordfish? In other words, what data are available to support the statement that, "… longline gear is more selective than drift gillnet gear? (DEA p.2). Please provide a comparison of bycatch by species for each swordfish fishery.
17. Please define, "…excessive protected species and bycatch interactions." (DEA p.3)
18. What is the basis for the assumption that the only alternative to the EFP is to rely on imports from fisheries with potentially higher levels of protected species bycatch due to less stringent environmental regulations, given that NMFS has maintained in Federal Register Vol. 69, No. 48/ March 11, 2004, that: *"Although there is a possibility that fishing effort may shift to foreign nations, at this time, there are no data to support this claim. Moreover, there are no data that show that longline fishing by foreign vessels have higher sea turtle interaction rates*."? Are these statements mutually inconsistent, or can they be reconciled?
19. U.S. swordfish imports rose only 10.5% in the 4 years since various Pacific regulations were implemented (2001-2004) over the time period when the SSLL was closed in Hawaii, as compared to the 4 years prior to the Pacific regulations (1997-2000). What is the Hawaii SSLL percentage of total U.S. production? What does this relatively small increase during this period imply for increases in imports if U.S. DGN were replaced by harpoon fishing? Also, if the transition from the DGN to SSLL were to occur in the West Coast EEZ, what is the estimated increase in Pacific and US landings, and how would this compare to current and historical import rates?
20. Is there a way to compare catch rates and/or mortality rates of blue sharks, the primary bycatch for long-lines, with drift gill net blue shark catch/mortality rates? What is the current status of this species? What are the greatest threats to the health of this species?
21. What is the economic viability for a fishery (e.g., the Hawaii SSLL) that is routinely closed early due to meeting caps? Do not early closures of SSLL due to meeting caps trigger the same concerns that transitioning to the harpoon type of fishery would (i.e., increasing reliance on foreign (and arguably less-protective) imports)?
22. Is there a biologic basis for the area described as the southern California Bight in DEA Figure 2-1, which depicts the southern California Bight, or is this strictly a political boundary (e.g., to avoid the Channel Islands Sanctuary, state waters around San Nicolas Island, and to avoid conflicts with recreational fishing)?
23. Please list the seabird impact reduction measures that will be included.
24. Why is there a cap for striped marlin? How was it set?

Necessity for Information Requested. The need for this information is explained in the findings below; to summarize, it is needed to enable the Commission to analyze the project's consistency with the requirements of Section 30230 of the Coastal Act that marine resources be maintained, enhanced, and where feasible, restored, that special protection shall be given to areas and species of special biological or economic significance, and that uses of the marine

environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Practicability. The federal consistency regulations implementing the CZMA include the following provision:

> *Section 930.32 Consistent to the maximum extent practicable.*
>
> *(a)(1) The term ‘‘consistent to the maximum extent practicable’’ means fully consistent with the enforceable policies of management programs unless full consistency is prohibited by existing law applicable to the Federal agency.*

Since NMFS has raised no issue of practicability, as so defined, the standard before the Commission is full consistency with the policies of the California Coastal Management Program (CPRC §§ 30200-30265.5) .

Federal Agency Response to Commission Objection. Section C(a)(i) of Chapter 11 of the CCMP requires federal agencies to inform the Commission of their response to a Commission objection. This section provides:

> *If the Coastal Commission finds that the Federal activity or development project ... is not consistent with the management program, and the federal agency disagrees and decides to go forward with the action, it will be expected to (a) advise the Coastal Commission in writing that the action is consistent, to the maximum extent practicable, with the coastal management program, and (b) set forth in detail the reasons for its decision. In the event the Coastal Commission seriously disagrees with the Federal agency's consistency determination, it may request that the Secretary of Commerce seek to mediate the serious disagreement as provided by Section 307(h) of the CZMA, or it may seek judicial review of the dispute.*

The federal consistency regulations reflect a similar obligation; 15 CFR §930.43 provides:

> ***State agency objection.*** *…*
>
> *(d) In the event of an objection, Federal and State agencies should use the remaining portion of the 90-day notice period (see §930.36(b)) to attempt to resolve their differences. If resolution has not been reached at the end of the 90-day period, Federal agencies should consider using the dispute resolution mechanisms of this part and postponing final federal action until the problems have been resolved. At the end of the 90-day period the Federal agency shall not proceed with the activity over a State agency’s objection unless: (1) the Federal agency has concluded that under the ‘‘consistent to the maximum extent practicable’’ standard described in section 930.32 consistency with the enforceable policies of the management program is prohibited by existing law applicable to the Federal agency and the Federal agency has clearly described, in writing, to the State agency the legal impediments to full consistency (See*

§§930.32(a) and 930.39(a)), or (2) the Federal agency has concluded that its proposed action is fully consistent with the enforceable policies of the management program, though the State agency objects.

(e) If a Federal agency decides to proceed with a Federal agency activity that is objected to by a State agency, or to follow an alternative suggested by the State agency, the Federal agency shall notify the State agency of its decision to proceed before the project commences.

Standard of Review. The standard of review for federal consistency determinations is the enforceable policies of the CCMP, of which the substantive policy component is the Chapter 3 policies of the Coastal Act.

IV. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

A. Marine Resources. Section 30230 of the Coastal Act provides:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Overview. The major defining oceanographic characteristic of the area of the proposed EFP is the California Current, which moves colder northern waters from British Columbia southward to Baja California. Predominant northwesterly winds and the earth's spin result in mild to strong upwelling in the California Current. Upwelling causes deep, cold, nutrient-rich water to rise, cooling the water and creating conditions favorable for phytoplankton, or algae, and with photosynthesis enabling these organisms to grow and multiply by the millions. Phytoplankton provide about 50% of the oxygen on Earth and form the basis of marine food webs[6]. In the Eastern Pacific Ocean phytoplankton serve as primary food items for a wide variety of primary consumers including jellyfish, crustaceans, mollusks, and juvenile fish which are in turn consumed by higher trophic level species such as invertebrates, finfish, sea turtles, seabirds, pinnipeds, dolphins, and whales.

This complex food web supports West Coast commercial fisheries valued at more than $430 million in 2006 alone[7]. Other ecosystem goods provided (besides seafood) include

[6] http://earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=17405

[7] Voorhees, D.V., Pritchard, E.S., 2007. *Fisheries of the United States 2006*. National Marine Fisheries Service. Office of Science and Technology. Current Fishery Statistics No. 2006.

pharmaceuticals and industrial products, also valued in the millions of dollars. In addition, the Eastern Pacific Ocean provides ecosystem services providing inestimable human value, including global materials cycling (i.e., carbon, nitrogen, oxygen, phosphorus, and sulfur); transformation, detoxification, and sequestration of pollutants and societal wastes; support of coastal based recreation, tourism, and retirement industries; coastal land development and valuation; and provision of cultural and future scientific values[8].

The oceanic fronts that contain the biological productivity favored by the targeted swordfish are, for the same productivity reasons, frequented by other marine species likely to be caught as bycatch in longline fishing gear. Bycatch data for SSLL vessels has been collected and interpreted for more than a decade. It is well established that longlines incidentally capture large numbers of sea turtles, marine mammals, seabirds, and other finfish. In fact, the Draft Environmental Assessment (DEA) prepared for the proposed EFP uses observer records from both the California-based SSLL (closed in 2004) and Hawaiian SSLL fisheries to demonstrate the amount and type of species caught. These records reveal that the total observed catch for the California-based SSLL yielded 53% bycatch and the Hawaii SSLL yielded 68% bycatch. Further, records indicate that the total observed catch for non-circle hook SSLL trips (gear used in California and Hawaii prior to February 2004) yielded 76% bycatch and the new circle hook SSLL trips (new gear modifications used in Hawaii since 2004) have yielded 60% bycatch. The proposed EFP will employ the new gear modifications currently used in Hawaii. These data show that longlining, even with the new gear modifications, is not a selective gear type and indiscriminately captures more bycatch than swordfish. Nevertheless, when comparing mortality rates of bycatch, SSLL may indeed, as NMFS has framed the issue, be less environmentally damaging than DGN, and the Commission fully supports the fundamental concept of conducting further research to transition drift gill net fishing to less damaging forms of fishing for swordfish.

Purpose. NMFS has provided two analyses of the project's effects on California and other west coast states marine waters, in a Draft Environmental Assessment (DEA)[9] and, more specifically with respect to California, in "An Evaluation of the Proposed Shallow-Set Longline Exempted Fishing Permit's Consistency to the California Coast Act," submitted on July 19, 2007, attached as Exhibit 5, and otherwise referred to here as NMFS' consistency determination. These documents note that the California EEZ is, as currently regulated, and has historically been, off limits to shallow set long line (SSLL) fishing.[10] Drift gill net (DGN) fishing is currently allowed within the EEZ under the current regulatory regime (although it is not allowed within the Leatherback Conservation Area (Exhibit 4) during the period of August 15-November 15). Under the current regulatory regime, only if NMFS issues the proposed Exempted Fishing Permit (EFP) can SSLL fishing be allowed in the EEZ. NMFS is proposing this permit based on the provisions of 50 CFR 600.745(b), which allow prohibited activities for

[8] Daily, G.D., 1997. *Nature's Services: Societal Dependence on Natural Ecosystems*. Island Press. p.177-194.

[9] The draft EA can be found at this link: **http://www.pcouncil.org/bb/2007/0407/J2.pdf**

[10] See note, in footnote 3.

specified activities, including: "limited testing," "data collection," or "exploratory" purposes. NMFS' stated purpose (DEA) is "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." NMFS' consistency determination further states:

> *The EFP would authorize the harvest of management unit species using a gear type currently prohibited within the west coast EEZ, for the purpose of: (1) limited testing of a gear type with imposed measures and procedures intended to limit the incidental take of species listed under the Endangered Species Act (ESA) to a level that would not jeopardize their continued existence and, (2) determine if the resulting fishery is economically viable. Once sufficient information is gathered by means of the EFP to determine whether and how the fishery may be prosecuted, regulatory action may be proposed to effect a permanent change applicable to fishery participants as a whole, based on the measures applied as part of the EFP.*

Overall Estimated Take. NMFS notes that the level of swordfish catch would be very small compared to Eastern Pacific Ocean-wide catch levels (the proposed EFP would catch 7–18 metric tons, whereas the overall effort is in the range of of 11,000–20,000 metric tons/year). NMFS acknowledges that bycatch, or as defined by NMFS in this situation "non-target" species, would represent a high percentage of the catch (greater than 50%). However NMFS further maintains that mortalities would be low. NMFS states, for example:

> *Bycatch of non-target species (which is likely to be principally blue sharks) would also constitute a minor component of the larger Pacific-wide catches. As noted previously, approximately 95 percent of captured blue sharks were released alive in the Hawaii SSLL based on observer records for trips utilizing circle hooks, mackerel-type bait, and de-hooking pliers (162 trips, June 2005 -March, 2006). Consequently, NMFS estimates that blue shark mortality under the EFP would represent a small incremental increase in overall fishing mortality. Therefore, it is reasonable to conclude that granting the EFP for 2007 would not have significant effects on target or non-target stocks.*

To attempt to determine the take of target and non-target species, NMFS states that since baseline data are not available for the EEZ as the fishery has not existed previously, NMFS has extrapolated from other U.S. fisheries, including the Hawaii based SSLL, the California based SSLL (that operated outside the west coast EEZ) and the Atlantic SSLL (and, for presence of species and some situations, from West Coast DGN). Extrapolating from these fisheries where similar equipment was used (circle hooks, mackerel bait), and using the maximum number of hooks that would be potentially deployed (1200 hooks x 14 set x 4 trips), NMFS estimates:

> *Using the highest potential effort scenario (67,200 hooks), coupled with the observed CPUE* [Catch per Unit Effort] *estimates presented in Table 7, the proposed action would harvest in order of magnitude an estimated 1,153 target swordfish, 850 blue sharks, 235 dorado, 105 bigeye tuna, 59 shortfin mako sharks, and 57 striped marlin. U.S. longline bigeye tuna catches in the Pacific are subject to an annual quota of 500*

> *mt. The catch of bigeye tuna under this EFP would be monitored for accounting and compliance with the annual quota and would therefore be a part of conservation measures established by the Inter-Amercian Tropical Tuna Commission (http://www.iattc.org/HomeENG.htm) and implemented by NMFS. Striped marlin impacts would be capped at 12 fish as recommended by the PFMC. In addition, given that striped marlin distribution and abundance increases in the more tropical waters targeted by the Hawaii-based SSLL fishery, the actual catch of striped marlin under the proposed action should be less in the more temperate, coastal habitat that will be fished in the proposed action area. Further, Southern California Billfish Club catch records for recreationally caught striped marlin report for the most part reflect marlin captured in the SCB, which will be a closed area under the terms and conditions of the proposed action. The peak striped marlin catches in the SCB occur in September, coinciding with a series of major recreational billfish tournaments.*

Based on these estimates, the projected amount of swordfish generated by the proposed EFP would represent 40% of all species landed, and the EFP would therefore generate 60% non-target species[11]. The list below summarizes NMFS' non-target take estimates (note: any species not listed below means that NMFS predicts no individuals will be taken):

Marine Mammals	
California sea lion	Small numbers
Northern elephant seal	Small numbers
Short-beaked common dolphin	Small numbers
Risso's dolphin	Small numbers
Northern right whale dolphin	Small numbers
Cuvier's beaked whale	Small numbers
Sea Turtles	
Leatherback	Small numbers
Seabirds	
Black-footed albatross	1
Laysan's albatross	2
Finfish	
Blue shark	850
Dorado	235
Escolar	112
Bigeye tuna	105
Longnose lancetfish	85
Albacore	71
Shortfin mako shark	59

[11] NMFS. 2007. An Evaluation of the Proposed Shallow-Set Longline Exempted Fishing Permit's Consistency to the California Coastal Act.

Striped marlin	57
Remora	29
Snake mackerel	22
Oilfish	15
Blue marlin	12
Yellowfin tuna	11
Sickle Pomfret	9
Shortbill spearfish	8
Pelagic stingray	6
Opah	6
Wahoo	5
Skipjack tuna	4
Unidentified mako sharks	4
Bigeye thresher shark	2
Unidentified fish	2
Tunas and mackerels	1
Unidentified billfishes	1

Blue Sharks. NMFS notes the high bycatch rate of blue sharks **(***Prionace glauca*), which are not marketable and would therefore be discarded. The mitigation measures required under the EFP would not appear to reduce blue shark catch rates, although NMFS states they would "appear to increase survivorship." NMFS states:

> *Hawaii SSLL observer records for trips utilizing circle hooks, mackerel-type bait, and de-hooking pliers (162 trips, June 2005 -March, 2006), indicate that approximately 95 percent of captured blue sharks were released alive. Estimated blue shark mortality under the EFP, however, would represent a small incremental increase in overall fishing mortality.*

Marine Mammals. Concerning species protected under the Marine Mammal Protection Act (MMPA), NMFS' analysis begins by noting marine mammals in the area taken during **drift gill net** fishing:

Table 8. Marine mammals observed taken in the DGN fishery. (Source: NMFS CD)

Species	Number observed taken
Beaked Whale, Baird's	1
Beaked Whale, Cuviers	21
Beaked Whale, Hubbs'	5
Beaked Whale, Mesoplodont	2
Beaked Whale, Stejneger's	1
Beaked Whale, Unidentified	3
Dolphin, Bottlenose	3
Dolphin, Long-Beaked Common	14
Dolphin, Northern Right Whale	65
Dolphin, Pacific White-sided	28
Dolphin, Risso's	33
Dolphin, Short-Beaked Common	327
Dolphin, Striped	1

Dolphin, Unidentified Common	21
Porpoise Dall's	22
Sea Lion, California	153
Sea Lion, Steller	2
Seal, Northern Elephant	112
Whale, Fin	1
Whale, Gray	3
Whale, Humpback	3
Whale, Killer	1
Whale, Minke	3
Whale, Pygmy Sperm	2
Whale, Short-finned Pilot	12
Whale, Sperm	8

For **long-line** fishing, NMFS states:

> *Entanglements in gillnets is usually attributed to marine mammals being unable to detect the net and becoming entangled. By contrast, marine mammal takes in longlines are generally attributed to depredation by odontocetes, either feeding on the bait or fish caught on the hooks, although entanglements are also possible (Gilman et al. 2006a). Entanglements of large baleen whales have been recorded in the Hawaii based SSLL fishery although they are not common (Forney 2004). There have been no observed interactions in the Atlantic SSLL, where effort overlaps, spatially and temporally with marine mammals. Observer records from California, Hawaii, and the Atlantic suggest that marine mammal entanglements of most species are generally quite low in longline fisheries.*

As with the blue shark estimates above, extrapolating from other SSLL fisheries, NMFS states:

> *Based upon the available information, NMFS anticipated that small numbers of a few marine mammal species may be taken during the proposed action, these include: California sea lions, northern elephant seals, short-beaked common dolphins, Risso's dolphins, northern right whale dolphins, and Cuvier's beaked* whales.

Estimating how many of these takes are likely to be a serious injury/mortality, NMFS states:

> *In order to assess what may happen to animals that encounter the SSLL gear, observer records from other longline fisheries were reviewed. In the California SSLL fishery, outside the EEZ, three marine mammals have been observed entangled in gear (two Risso's dolphins and one unidentified dolphin) and of these, one was killed. In the Hawaii-based shallow set longline fishery since 2004 with the implementation of new gear requirements, all of the marine mammals were recorded as injured and one killed. In the Hawaii-based shallow set longline fishery targeting swordfish prior to 2004, there were 16 observed entanglements of marine mammals. The species observed taken were Risso's dolphin, short-finned pilot whale, sperm whale, spinner dolphin, bottlenose dolphin, short-beaked common dolphin. Ten of the 16 takes were considered serious injuries, one was a mortality (at time of entanglement) and five of the*

> *entanglements were not serious injuries (Forney 2004), thus over two-thirds of the entanglements resulted in serious injuries or mortalities. In the Atlantic, the mortality/serious injury rates varied among marine mammal species, but were on average around 50 percent (NMFS 2006a). This rate of serious injury/mortality may serve as the best estimate available for this proposed EFP.*

Acknowledging the uncertainties from extrapolating, NMFS concludes for marine mammals:

> *While it is not possible to quantify the number of marine mammals of each species that may be affected by the proposed fishery, based upon marine mammal take rates in other SSLL fisheries and the biology, abundance, and distribution of the species, the number of individuals taken is likely to be quite low, likely in the range of one to ten depending on the species and their responses to the gear. Based upon observed rates in other SSLL fisheries, it is likely that approximately 50 percent of marine mammals takes in the proposed fishery will result in a serious injury/mortality.*

Sea Turtles. NMFS states that four species of marine turtles may be found in the area of the proposed action: leatherback turtle (*Dermochelys* coriacea), loggerhead turtle (*Caretta caretta*), olive ridley (*Lepidochelys olivacea*), and green turtle (*Chelonia mydas*). Extrapolating as described above for other species, NMFS estimates:

> *The likelihood of sea turtle take under the proposed action is quite low. Based upon observer records from the DGN fishery, other SSLL fisheries, and the biology and distribution of the species, a small number of leatherbacks may be exposed to and affected by the proposed action.*

The sea turtle species at greatest risk from the proposed EFP is the leatherback turtle. NMFS cites significant reductions in sea turtle mortalities in Hawaii since a suite of mitigation measures was implemented in 2004 (Exhibit 10), which have been more effective for hard-shell turtles (loggerhead, olive ridley, and green) than soft-shelled (leatherback). NMFS states:

> *To evaluate the likelihood of leatherback mortalities, a review of Hawaii observer records since the implementation of mitigation measures in 2004 was reviewed and is provided in Table 9. The changes in hookings rates and interactions appear related to changes in the hook type and bait (18/0 circle hooks with a 10 degree offset and mackerel bait). Similar results were recorded in the Atlantic SSLL fishery and experiments testing alternative gear types in the Northeast Distant waters off the east coast of Canada and the U.S. While the precise reason for the change in hookings is still under investigation, the results are encouraging, particularly for hardshelled turtles (i.e., loggerhead, olive ridley, and green).*

Table 9. Changes in sea turtle hookings observed in Hawaii-based SSLL fishery, before and after implementation of bycatch mitigation measures in 2004.

Turtles observed taken	Deeply hooked	Ingested hooked	Lightly hooked	Entangled
Before regulations				
Leatherback (n=31)	0	10%	84%	6%
Hardshelled (n=180) Loggerhead (n=163)	60%	0	38%	2%
After regulations				
Leatherback (n=10)	0	0	100%	0
Loggerheads (n=27)	0	22%	63%	15%

Observer records from the SSLL fishery in the Atlantic and experiments conducted in the Northeast Distant waters were also reviewed, to aid understanding the likely impacts to turtles when using modified SSLL gear, as proposed in the SSLL EFP. In both fisheries, leatherback sea turtle take rates were low, immediate mortality was nearly zero, and calculated post-hooking mortalities (developed using the matrix in Table …[9]) was very low. Observer records from the SSLL fishery just outside the California EEZ were examined and again supported the assertion that very few leatherbacks are likely to be taken in the SSLL EFP.

As noted above, it is difficult to estimate the likely bycatch of sea turtles under this proposed action. However, based upon observer records detailed above and a review of the biology and distribution of sea turtles that may be in the proposed action area, the level of take is expected to be low with consequent very low levels of post-hooking mortalities. Leatherbacks are the species most likely to be affected by this action.

NMFS estimates that loggerheads would only be likely to be affected if an El Niño event occurs, and, further, that "… the most recent climate models suggest that an El Nino is unlikely to develop in late 2007."

Sea Birds. NMFS is currently consulting with the U.S. Fish and Wildlife Service on sea bird effects, particularly several albatross species: black-footed albatross (BFAL, *Phoebastria nigripes*), the Laysan albatross (LAAL, *P. immutabilis*) and the short-tailed albatross (STAL, *P. albatrus*), as well as the brown pelican (*Pelecanus occidentalis*) and Cassin's auklet (*Ptychoramphus aleuticus*). This consultation is not complete, although NMFS notes that its bird management reduction measures, including night time gear setting, should reduce effects to a minimum. NMFS states:

U.S.-based pelagic longline swordfish and tuna fisheries in the vicinity of the Hawaiian Islands have the potential to affect albatrosses. NMFS observer records from 1994–2000 (based on four percent observer coverage) estimate an average take of 1,380 BFAL and 1,163 LAAL per year. No takes of STAL in any U.S.-based pelagic longline fishery have been reported. When the Hawaii-based swordfish longline fishery reopened on a limited basis in 2004 with new fishing requirements (e.g., deploying sets no earlier than one hour after local sunset and ending deployment no later than one hour before local sunrise; using large 18/0 circle hooks; 100 percent observer

coverage; using thawed and blue-dyed bait) observers documented 10 BFAL and 71 LAAL captured in this fishery with 2,133,096 hooks observed. The proposed action would be expected to take one BFAL, two LAAL, and zero STAL. Neither BFAL or LAAL are listed under the ESA. The 2004 USFWS biological opinion on the HMS FMP does not expect that STAL would be taken by any of the HMS fisheries.

NMFS Marine Resource Conclusion. NMFS concludes:

The proposed action would primarily affect biodiversity and ecosystem function through the removal of target, non-target, and protected species. Fish removals under the proposed action would represent a very minor proportion of the biomass of these species and would have a remote likelihood of adversely affecting biodiversity and ecosystem function. … Bycatch of non-target species (which is likely to be principally blue sharks) would also constitute a minor component of the larger Pacific-wide catches. As noted previously, approximately 95 percent of captured blue sharks were released alive in the Hawaii SSLL based on observer records for trips utilizing circle hooks, mackerel-type bait, and de-hooking pliers (162 trips, June 2005 -March, 2006). Consequently, NMFS estimates that blue shark mortality under the EFP would represent a small incremental increase in overall fishing mortality. Therefore, it is reasonable to conclude that granting the EFP for 2007 would not have significant effects on target or non-target stocks.

Longline gear is known to incidentally catch and entangle threatened and endangered marine mammals, sea turtles and seabirds. This is true of any fishing gear that relies on hooking or entanglement to catch targeted species. There is no doubt that authorization of the EFP would increase the risk of a take of one of these protected species. Marine mammal species considered most likely to be affected by this action, California sea lion, northern elephant seal, short-beaked common dolphin, Risso's dolphin, northern right whale dolphin, and Cuvier's beaked whales are all from stocks that are not listed on the ESA nor considered depleted under the MMPA. Very low levels of take of animals from these stocks are anticipated under the proposed EFP. When combined with existing known threats to these stocks such as ship strikes, exposure to toxins, pollution, loss of habitat or prey, and underwater sound, it is not expected that the proposed action will change the status of these species or trigger concern over the stocks' status.

Leatherbacks are most likely to be affected by the proposed action and likely only a few individuals. General threats to Pacific sea turtles include poaching of eggs, killing of females at nesting beaches, human encroachment (development), beach erosion, and microclimate-related impacts at nesting sites, low hatchling success, and incidental capture in fisheries. Very low or no mortalities are anticipated, thus the proposed action is unlikely, within the context of other effects, to change the status of leatherbacks in the Pacific.

Lastly, it is known that seabirds are killed in longline fisheries. However, other longline fisheries such as the domestic longline fisheries in Alaska and Hawaii have implemented mitigation measures that have substantially reduced incidental seabird mortality. Mitigation measures from these fisheries will be incorporated into the proposed EFP, as applicable and appropriate, as part of the term and conditions of the proposed EFP.

A key question which this EFP would help address is whether longline fishing subject to gear restrictions and continuous monitoring represents an economically and environmentally superior alternative to either DGN or harpoon gear for fishing within the West Coast EEZ. The EFP is intended to gather information for assessing the viability of longline fishing as an alternative to DGN fishing. Based on what is known about the environmental impacts of the other two swordfish fisheries and what is known about longline gear in other areas, it is NMFS position that longline gear falls somewhere between the range of impacts characteristic of the harpoon and DGN fisheries. In other words, NMFS believes that the longline gear proposed for this action is less selective than harpoon gear but more selective than DGN (Figure 3). Exactly where the SSLL lies between the range of impacts is not known at this time. A key purpose of this EFP would be to begin collecting necessary information to make that determination.

Some might suggest that due to the high selectivity of harpoon gear, this should be the primary gear type used for catching swordfish. NMFS does not believe that harpoon gear offers a realistic alternative as it is a low volume fishery. Catch rates in the DGN fishery are 2-3 times higher than in the harpoon fishery (Coan et al., 1998). In addition, DGN vessels use less fuel in finding and pursing their catch, do not rely on spotter planes, and DGN vessels can supplement their swordfish catches with non-target species. (Coan et al., 1998). Even if harpoons were the preferred gear type, the number of vessels required to provide commercial quantities of swordfish would undoubtedly create serious congestion problems in the southern California Bight. User conflicts would most likely occur with recreational fishing vessels.

In terms of long range consistency with the California Coastal Act, NMFS believes that if the EFP is conducted it could provide valuable information for forming the basis for potentially converting the DGN fishery to the more selective longline fishery. To make that determination, additional information would need to be collected in future years under controlled conditions of additional EFPs until there is sufficient information to determine whether a regulatory change is justified. Any future fishing activities of this nature would be subject to additional rigorous environmental review to evaluate potential effects. However, the long term benefits of identifying and implementing a gear type that provides a more environmentally conservative way to target swordfish off California while minimizing risk to protected species cannot be overlooked and remains consistent with the objectives of the Coastal Act.

Opponents' Contentions. Project opponents (including Center for Biological Diversity) have questioned the usefulness and legality of the proposed EFP and have contended that any degree of takes of leatherbacks leads to a jeopardy finding, based on NMFS issuance of a jeopardy opinion on DGN in the Leatherback Conservation Area. The Center for Biological Diversity also contends that "Since the leatherback closure went into effect, no leatherback sea turtles have been observed taken in the DGN fishery." The Center for Biological Diversity further contends:

> *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., Spotila 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.*
>
> …
>
> *Despite the scale of effort to be authorized under the EFP, there is no experimental design to meet the EFP's stated purpose. The permitee 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.*
>
> …
>
> *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 than any additional take authorization for the species can be lawfully granted.*

…

The Longline EFP directly 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. Given the known and frequent interactions of longline fisheries with humpback whales, sperms whales, and killer whales we do not see why NMFS and the applicant would chose this reckless and illegal path.

…

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 PFMC 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.***

Opponents have also pointed out that the Pacific Leatherback Conservation Area, whose designation stemmed from the NMFS 2000 BO for the DGN fishery, has been referenced repeatedly in the scientific literature as critical foraging grounds and as an area where newly discovered migratory pathways for leatherbacks occur. The Pacific Leatherback Conservation Area is a time and area closure that coincides with peak abundance of leatherbacks who migrate annually to this area. Since the implementation of the Pacific Leatherback Conservation Area by regulation in 2001, zero leatherbacks have been taken by the DGN fishery. Opponents therefore question the logic of allowing the EFP to fish within the leatherback conservation area, especially since the DEA acknowledges leatherbacks may be taken.

Opponents have further questioned NMFS' methodology in estimating impacts based on the extrapolations discussed above, for several reasons, including: a) the areas do not precisely match; b) relying on observer data from the DGN fishery is problematic, c) the DGN observer

records likely do not reflect likely takes in the proposed EFP, and d) the different gear types likely have different catch per unit effort rates (CPUEs) and may result in different probabililites of marine mammal takes. (NMFS defends its methodology, contending it is based on the best available science, and that any underestimates of impact can be addressed through the implementation of caps.)

The Humane Society of the U.S. has questioned NMFS' estimate that there will be zero take of short-finned pilot whales, in part, because the EFP will be targeting water too cold (60º- 65º F) for short-finned pilot whales. The Humane Society contends that NMFS has not taken into account that this species is the mammal taken with the greatest frequency in the Atlantic Longline fishery, and that the Atlantic Pelagic Longline Take Reduction Team has reviewed information indicating that interactions between short-finned pilot whales and longlines begin to occur at noticeably higher rates between 62º- 66º F and peak at 70º- 80º F.

Concerns have also been expressed over the bycatch of yellowfin tuna and bigeye tuna, since both of these stocks are classified by NMFS and the Inter-American Tropical Tuna Commission ("IATTC") as subject to overfishing (i.e., the stock is being fished at a rate higher than the rate that will result in maximum sustainable yield). Last year all fisheries targeting bigeye tuna in the Eastern Pacific Ocean were closed early because the quota was met before the fishing season was over. NMFS' estimated non-target catch of 105 bigeye and 11 yellowfin tunas and could exert more pressure on these struggling fisheries.

Supporters' Contentions. Project supporters (including the Federation of Independent Seafood Harvesters (Exhibit 6)): (1) urge Commission deference to NMFS' expertise in managing fisheries; (2) express the potential benefits to the fishing industry (and the marine environment) of developing more by-catch friendly alternatives from the EFP; (3) compare the economic implications inherent in transitioning from drift gill net to long lines; (4) note that the California Fish and Game Commission has previously authorized experimental long line fishing in 1979, 1987, and 1988-1991 (thus calling into question statements that long line fishing has never occurred on the California EEZ (although this statement was contained in NMFS' DEA)); and (5) point out that where fisheries are closed or restricted, State policy directs the Department of Fish and Game to "assist and foster the development of alternative fisheries or alternative fishing gear for those commercial fishermen affected by the restrictions, closures, or resource losses…".

Commission analysis. Leatherbacks are expected to be captured as bycatch under the proposed EFP. They are listed as Endangered throughout their global range under the ESA and by the World Conservation Union (IUCN), as well as protected under various international treaties. The Commission has historically urged the fullest protection of this species (Exhibit 7). The status of leatherbacks in the Pacific Ocean is so precarious that some scientists believe they will become extinct within one or two human generations[12].

[12] Spotila, J.R., et al. 1996. Worldwide population decline of *Dermochelys coriacea*: Are leatherback turtles going extinct? Chelonian Conservation and Biology 2(2): 209-222.

Two populations of leatherbacks nest on opposite sides of the Pacific and undertake what may be the longest migration for any living reptile today as they routinely cross the entire Pacific basin. A recent tracking study,[13] as well as genetic analyses of leatherbacks tagged off the California coast and caught incidentally in drift gillnets off the West Coast, [14] reveal they come from nesting beaches in the Western Pacific in New Guinea, Indonesia, Malaysia, the Solomon Islands, and Australia.

Yet another recent study revealed that aerial line-transect surveys found leatherbacks in the highest densities in the areas around the Gulf of the Farallones and Monterey Bay from late summer through fall. These areas also support favorable habitat for leatherback prey items and clearly represent foraging grounds. Previous studies summarized above have linked these leatherback turtles off the West Coast to one of the two largest remaining Pacific breeding populations, Jamursba-Medi, Indonesia. This study demonstrated the waters off of central California are a critical foraging area for one of the largest remaining Pacific nesting populations. Successful conservation efforts for leatherbacks must include both nesting beach protection and mitigation of threats at sea in foraging areas and along migratory routes.[15]

How and why sea turtles are hooked by longline gear

Leatherbacks and loggerheads are incidentally captured by longlines at far greater rates than other species of sea turtles such as greens, olive ridleys, and Kemp's ridleys. Loggerheads tend to target the bait and wind up getting hooked in the mouth or, even worse, ingesting the hook. By contrast, leatherbacks do not target the bait (they prefer jelly fish) but instead are more frequently entangled in the longline itself. This results in a higher proportion of external hookings, primarily in their flippers which are quite long and prone to entanglement with invisible monofilament fishing line.

The traditional gear used included Japan hooks (J hooks) and squid bait. New gear types, designed to reduce the incidental take of sea turtles, were devised and tested in the Western North Atlantic from 2001-2003. These new gear modifications included the use of larger circle hooks, mackerel bait, and turtle de-hooking devices. Results of the new gear as compared to the old gear indicated major decreases in the capture rate, 88% for loggerheads and 63% for leatherbacks. This was due primarily to the increased size and different shape of the hooks (more difficult to swallow), switching from squid to mackerel bait attracted less loggerheads, and four different de-hooking devices increase the odds that one of them will successfully remove the hook. The net result is fewer internal hookings, more external hookings, and more

[13] Benson, S.R., et al. 2007. Post-Nesting Migrations of Leatherback Turtles (*Dermochelys coriacea*) from Jamursba-Medi, Bird's Head Peninsula, Indonesia. Chelonian Conservation and Biology. 6(1): 150-153.

[14] Dutton, P.H., et al. 2007. Status and Genetic Structure of Nesting Populations of Leatherback Turtles (*Dermochelys coriacea*) in the Western Pacific. Chelonian Conservation and Biology. 6(1): 47-53.

[15] Benson, S.R., et al. Abundance, distribution, and habitat of leatherback turtles (*Dermochelys coriacea*) off California, 1990-2003. In press. Fishery Bulletin, Vol. 105, 2007.

turtles released with less or no gear, which NMFS believes reduces the probability of death[16]. Long term effects are unknown; however it is reasonable to assume that a decreased capture rate implies a decreased mortality rate as well, for both loggerheads and leatherbacks.

An important distinction between the mortality rates for leatherbacks and loggerheads that were captured is that while it decreased significantly for loggerheads (by about 50%), it stayed about the same for leatherbacks (14% vs. 13%). This is because leatherbacks were already getting hooked externally more often than internally, so the effect of the new gear was less pronounced[17].

The Hawaii SSLL re-opened in 2004 and incorporated the use of this new gear as a mandatory requirement. As NMFS point out, results show *significant* reductions (Exhibit 10): 90% for loggerheads and 82% for leatherbacks. Analysis of the location of hooking has not yet been performed, but again, it is reasonable these reductions imply a decreased mortality rate as well.

Recent NMFS regulatory action taken to prevent further decline of leatherbacks
Entanglement and drowning in longline gear is a primary cause cited for the severe decline of leatherbacks.[18] NMFS has issued several Biological Opinions (BOs) for FMPs pursuant to ESA (Section 7) consultation requirements involving takes of leatherbacks in commercial fisheries of the Pacific Ocean. Twice NMFS has issued jeopardy opinions for leatherbacks.

- The 2000 BO for West Coast DGN determined that drift gillnets were jeopardizing the continued existence of leatherbacks. NMFS' opinion stated that any additional impacts to the Western Pacific leatherback stocks were likely to maintain or exacerbate the decline in these populations[19]. This opinion also led to the creation of the Pacific Leatherback Conservation Area.
- The 2001 BO for Pelagics FMP in Hawaii determined that SSLL targeting swordfish were jeopardizing the continued existence of leatherbacks. This resulted in the temporary closure of the swordfish fishery, until new less damaging gear could be developed.

More recently, in 2004, NMFS issued a BO for the West Coast HMS FMP with a jeopardy opinion for loggerhead sea turtles. In order to avoid this jeopardy finding and also to conserve leatherbacks, NMFS issued a reasonable and prudent alternative that closed the entire SSLL fishery outside of the West Coast EEZ.

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[16] Read, A.J. 2007. Do circle hooks reduce the mortality of sea turtles in pelagic longlines? A review of recent experiments. Biological Conservation 135. p 155-169.

[17] Id.

[18] Id.

[19] Id.[11]

Methodology to Assess Leatherback Takes
NMFS' methodology to calculate estimated take rates for the proposed EFP appears to rely primarily on CPUEs (Catch per Unit Effort) from Hawaii. NMFS states that the CPUEs for leatherbacks in the Hawaii SSLL since 2004 (when the new gear modifications began and which are identical to the proposed EFP gear) have been highly variable. NMFS goes on to say that if the CPUEs from the 2004 BO for the Pelagics FMP are used instead, then anticipated rate of take is very low. NMFS has not provided the actual data on which these calculations are based.

Based on discussions with NMFS the Commission infers that whichever CPUE was used, it was simply multiplied by the number of hooks that will be used in the proposed EFP (up to 67,200) to obtain the estimated take of leatherbacks. NMFS has not published a numerical estimate, but instead has characterized it as "very low." From informal discussions with NMFS it appears the "take" would be in the range of four or five leatherbacks, and with a NMFS estimate of a 15% mortality rate, a potential mortality of less than one. NMFS' BO, when published, may clarify its estimates more formally. The 15% mortality rate is based on the assumption that leatherbacks would be hooked externally, with or without entanglement, and would be released with the hook still attached, and with line that is less than half the length of the turtle's carapace.

Current leatherback takes vs. estimated takes from proposed EFP
Since longline fishing is not currently conducted inside the West Coast EEZ, no leatherbacks are currently being taken by long lines. The Pacific Leatherback Conservation Area has been so effective for the West Coast DGN that no leatherbacks have been taken by the West Coast DGN since it was created in 2001. The proposed EFP would increase the incidental take of leatherbacks from the current amount of zero to an estimated four or five per year, with an estimated mortality of somewhere between ½ and one. Despite this small number, this represents a significant increase from the current baseline.

The use of new gear modifications will hopefully reduce the catch rate of leatherbacks, as was seen in the Atlantic and Hawaii. If the catch rate of leatherbacks is significantly reduced, then mortality should reduce accordingly by virtue of the fact that fewer are captured.

The HMS FMP is accompanied by an incidental take statement (ITS) that allows up to three leatherbacks 'takes' per year by the West Coast DGN. As noted above, however, no takes have been observed in the DGN since 2001. The DEA states that due to uncertainties surrounding the probability of leatherback takes, NMFS cannot assure with certainty that the proposed EFP would result in levels of mortalities that are either consistent or inconsistent with the existing ITS.

The Commission is concerned about estimated takes by the EFP. Clearly, new gear improvements in existing fisheries such as in the Atlantic and Hawaii are highly appropriate to reduce sea turtle capture rates there. However, for California offshore waters that do not currently have a longlining fleet, and where the DGN fleet appears to currently not be taking sea turtles, the proposed EFP could increase sea turtle capture rates. The sea turtle capture rate

for the West Coast is currently 0% and the EFP would increase this. In addition, any benefits derived from the new gear modifications could be diminished (and possibly eventually reversed) with increased fishing effort if transitioning from DGN is successful.

Pacific Leatherback Conservation Area

NMFS established a seasonal gillnet ban referred to as the Pacific Leatherback Conservation Area in 2001 based on the 2000 BO for West Coast DGN. NMFS determined this time and area closure necessary to avoid the likelihood of the West Coast DGN fishery jeopardizing the continued existence of leatherbacks. From August 15- November 15 in state and federal waters from Monterey Bay, CA north to 45º N lat., intersecting the Oregon coast, fishing with drift gillnets is prohibited.

The proposed EFP would be allowed to fish anywhere within the Pacific Leatherback Conservation Area during the annual closure. The proposed EFP would begin in September and run through December, in close temporal alignment with the time frame of the annual closure.

As discussed above, the Pacific Leatherback Conservation Area encompasses a large area that functions as a migratory pathway for Western Pacific leatherbacks that are accessing foraging areas of the Eastern Pacific. Both the migratory pathways and the foraging grounds support leatherbacks known to come from one of the two largest remaining Pacific breeding populations, and hence are considered critical areas necessary for leatherback survival.

NMFS noted this same concern it its June 5, 2007, review of a previously submitted EFP for drift gillnetting. NMFS' response cited the foraging study discussed above and expressed concerns that the migratory pathways that obviously exist between the critical nearshore waters off California and Oregon and the nesting grounds of the Western Pacific may be affected if drift gillnetting is allowed in the Pacific Leatherback Conservation Area.[20] NMFS' Recovery Plan for the leatherback turtle further notes:

> *It has been suggested that roughly one-half the global population of adult females nests on the west coast of Mexico (Pritchard 1982a); if so, 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.* [21] [Emphasis added]

Caps

NMFS uses "caps" to define the maximum number of sea turtles that can be caught in a fishery; exceeding the annual cap shuts down the fishery for the remainder of the year. For example, annual caps for the Hawaii SSLL are set at 16 for leatherbacks and 17 for

[20] NMFS. 2007. Letter from Rodney McInnis to Donald Hansen denying the EFP for drift gillnetting.

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

loggerheads. These numbers represent the number of individuals that NMFS believes may be incidentally captured each year without jeopardizing the species.

Data from Hawaii for the period of May 2004-July 2, 2007 indicate a total of 61 sea turtles were captured, including 17 leatherbacks and 42 loggerheads[22]. The cap for loggerheads was met during the first quarter of 2006, which shut the fishery down for the remainder of the year. If three more loggerheads or ten more leatherbacks are captured in 2007, the fishery would again be shut down.

NMFS intends to impose a cap on leatherback takes for the proposed EFP; however it has not yet formally decided what that cap will be. Clearly, the Commission needs this information to understand the upper bounds of what the impacts would be.

Short-finned pilot whales may be affected by the proposed EFP
The status of the short-finned pilot whale stock off the West Coast is not well understood. There have been 11 observed takes in the West Coast DGN since 1990 with 20% or less observer coverage. All takes resulted in death.

NMFS has published a Potential Biological Removal ("PBR") rate which quantifies the maximum number of animals that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimal sustainable population. The PBR for the West Coast stock is less than one animal (the draft 2007 stock assessment sets it at 0.98, down from 1.2 last year)[23]. The average annual human-caused mortality from 2000-2004 is 1.0, which exceeds the anticipated (albeit draft) PBR of 0.98, and they are therefore classified as a "strategic stock".

The Hawaiian stock of short-finned pilot whales from the West Coast stock. Between 1994-2004, six short-finned pilot whales were observed to be hooked with 4-26% observer coverage. No takes have been observed since 2004 when new gear modifications and 100% observer coverage were instituted.

The List of Fisheries of 2008, which classifies all United States commercial fisheries based on the level of incidental serious injury and mortality of marine mammals as required by § 118 of the MMPA, recognizes that both the West Coast DGN and the Hawaii SSLL fisheries incidentally kill and/or injure short-finned pilot whales. Both fisheries are designated as Category I, meaning the annual mortality and serious injury of a stock in a given fishery is greater than or equal to 50% of the PBR level. The West Coast stock is driving the classification of the West Coast DGN fishery as Category I, meaning that serious injuries and mortalities of short-finned pilot whales are greater than 50% of the stock's PBR.

[22] http://www.fpir.noaa.gov/SFD/SFD_turtleint.html

[23] Carretta, J.V., et al. 2007. Draft US Pacific Marine Mammal Stock Assessments. NOAA. NMFS. Southwest Fisheries Science Center.

Methodology to Assess Short-Finned Pilot Whale Takes
While NMFS has not provided the raw data is provided or the CPUE rate used, the Commission infers that whatever CPUE was used, it was simply multiplied by the number of hooks that will be used in the proposed EFP (67,200) to obtain the estimated take of short-finned pilot whales. NMFS states that based on their low abundance, their occurrence in water generally warmer than the proposed EFP area, and the use of mackerel, it is unlikely that they would be affected by the proposed EFP.

Current short-finned pilot whale takes vs. estimated takes from proposed EFP
The current take rate, as discussed above, is at an annual average of 1 animal. When the draft 2007 stock assessment is finalized, this will put the current West Coast DGN over the PBR. NMFS' conclusion is that the proposed EFP will affect zero short-finned pilot whales. For precaution, NMFS will likely set a cap of one animal, based in part on the recommendation made by the PFMC. Thus, if the proposed EFP incidentally catches one short-finned pilot whale, the fishery will immediately cease.

While the Commission agrees that the cap should be only one short-finned pilot whale, the Commission remains uncomfortable with any potential risk to the species, given that it's PBR is at or less than one (0.98), especially when this rate has already been exceeded. With this low rate, and its classification as a strategic stock, short-finned pilot whales would certainly qualify as a species of special biological significance warranting special protection under Section 30230.

Other Marine Mammals
The same concern is extended to the following nine endangered and threatened marine mammals, one of which (humpback whale) was incidentally caught just last year in Hawaii:

Blue whale	Endangered
Fin whale	Endangered
Humpback whale	Endangered
Sei whale	Endangered
Sperm whale	Endangered
Steller sea lion	Threatened
Southern resident killer whales	Endangered
Northern right whale	Endangered
Guadalupe fur seal	Endangered

All of these species are of special biological significance and it appears doubtful that simply estimating they will not suffer takes will provide them with special protection. Just as for the short finned pilot whale, the Commission believes, at a minimum, NMFS needs to set a cap of one for each of these species. This would ensure the proposed EFP will immediately shut down if one is incidentally caught. The Commission believes that what it understands to be NMFS current approach, which is that catch of any one of these species would trigger a

supplemental Section 7 Consultation process, with to-be-determined consequences, may be inadequate, and certainly leads to uncertainty and unnecessarily complicates the Commission's analysis of the project's consistency with Section 30230.

Commission Conclusion. The Commission agrees with NMFS that, in comparing eastern-Pacific wide fishing efforts (11,000 to 20,000 annual metric tons, regionwide, versus 7-18 metric tons for the proposed EFP), the proposed project by itself would have minimal effects on total populations of most marine species. However the Commission does not agree these effects would be so minimal as to avoid conflict with the requirements of Section 30230 to maintain healthy populations and provide special protection for species of special biological significance. The Commission is particularly concerned in particular over leatherback turtles and short-finned pilot whales, species whose numbers have been so decimated that even one or two takes can result in adverse population effects. In addition, the Commission is concerned over listed marine mammal and albatross species. The Commission notes that the Leatherback Conservation Area was designated in this area precisely due to the dire consequences of multiple threats to this species, and the Commission finds that this area certainly qualifies as an "area … of special biological significance" warranting special protection under Section 30230. In addition, NMFS' published "PBR" for the short finned pilot whale (of less than one, and which has already been exceeded), establishes that this species, as well as leatherbacks, can ill afford even one take. The Commission appreciates that from an overall perspective SSLL fishing is likely less destructive to most marine resources and in most locations than DGN fishing. Nevertheless, several untested assumptions raise questions about the applicability of taking this overall concept to justify allowing SSLL in California's offshore waters, particularly in the leatherback conservation area.

NMFS' fundamental assumption underlying the EFP is that longline gear is more selective than drift gillnet gear. While there appears to be a general consensus on this question, scientific studies testing the assumption have not been performed. As NMFS has acknowledged, and noted above in the comments the PFMC's Scientific and Statistical Advisory Committee, the proposed EFP would not generate sufficient data to compare the two fisheries. Clearly, both generate significant amounts of bycatch. Total estimated mortalities of protected species from 1996-2002 within the West Coast DGN indicates about 97% were marine mammals, 3% were sea turtles, and less than 1% were seabirds[24]. Total observed interactions of protected species from 2004 (partial year)-March 31, 2007 within the Hawaii SSLL indicates about 62% were seabirds, 32% were sea turtles, and 6% were marine mammals[25]. Direct comparisons are difficult to make, because the first are estimated mortalities while the second are observed interactions that may or may not have resulted in death. What is clear is that different species groups are affected at different rates by the two fisheries. The most obvious example of this is that marine mammals who make up the bulk of deaths by gillnet, but represent the fewest interactions by longline. This implies the suggested replacement of drift gillnets with longlines

[24] Carretta, J.V., et al. Estimates of Marine Mammal, Sea Turtle, and Seabird Mortality in the California Drift Gillnet Fishery for Swordfish and Thresher Shark, 1996-2002.

[25] http://www.fpir.noaa.gov/SFD/SFD_turtleint.html

would involve a trade-off of increasing or decreasing bycatch by species group, rather than a uniform decrease across all species groups. With this data, marine mammals would benefit most, seabirds the least, and conclusions for sea turtles are difficult to draw without further analysis. Effort would be a primary consideration as well. For example, at some point the anticipated benefits for marine mammals would plateau and additional effort would begin to become a detriment. Ideally, what would appear to be most useful would be conducting a statistically valid experiment designed to test bycatch rates by species during the same during the same season and in the same geographic area. It is harder to understand the usefulness in terms of furthering knowledge of NMFS' assumption by conducting the proposed experiment in an area that is off limits to drift gillnet fishing.

The first peer-reviewed scientific paper comparing the results of three different longline gear modification experiments that have taken place around the world was recently published[26]. It contains eight considerations for fisheries managers, researchers, and fishermen who are interested in conducting similar experimental trials. As the proposed EFP is characterized as be an experimental fishery, two of these considerations appear especially pertinent:

- Conduct a power analysis prior to field work to ensure that a statistically significant outcome is feasible given the observed variation in capture rates and levels of effort.
- Consider the ethical implications of any experiment beforehand. In some cases, for example, it may not be appropriate to test a potential conservation measure on a gravely endangered population. In such cases, proxy populations or fisheries may be available.

The Commission questions whether the proposed EFP meets either one of these considerations, and believes it is arguably inconsistent with them, by not performing the necessary statistical research prior to experimental design, and by proposing to fish with gear known to incidentally capture leatherbacks in the only Pacific Leatherback Conservation Area in the United States, and which was designed to avoid the serious threats to their existence.

Given the information currently available, the Commission does not believe NMFS has made a compelling case that to further transition from one destructive fishery to one arguably less destructive fishery, for an area which is currently seasonally off-limits to that fishery due to its destructiveness, is consistent with the goals and requirements of Section 30230 to maintain healthy populations and protect areas of special biological significance. Nor has NMFS made the case that the same information it seeks to gather in conducting this experiment cannot be accomplished by conducting the activity outside the seasonal Leatherback Conservation Area, from September 15 to November 15 (and, as well, outside the Monterey Bay National Marine Sanctuary for the entire permit period). At a minimum, the Commission can only conclude that information is lacking that would enable the Commission to determine the project's consistency with Section 30230.

[26] Id.[18]

To adequately consider this proposal and determine its consistency with Section 30230, the Commission is seeking responses to a number questions, including: (a) whether the activity could be restricted to be outside the Monterey Bay National Marine Sanctuary and the seasonal Leatherback Conservation Area; (b) basic project information such as the nature and effect of the caps; (c) responses to comments NMFS received on its Draft Environmental Assessment; (d) results of further coordination with other resources agencies; (e) the effect of an unexpected but potential El Niño event during the EFP period; and (f) questions about how this EFP would fit into an overall strategy for take reductions, including alternative strategies for swordfish fishing that might result in fewer takes than long line or drift gill net fishing. Accordingly, the Commission has asked NMFS to respond to the questions listed on pages 8-10.

Without this information, the Commission is unable to determine whether the proposed project is consistent with the marine resources policy (Section 30230) of the Coastal Act. The Commission therefore objects to NMFS' consistency determination, based on lack of adequate information to determine the project's consistency with the enforceable policies of the CCMP/Coastal Act.

B. <u>Commercial and Recreational Fishing</u>. Aside from the commercial fishing protection afforded under Section 30230, quoted above on page 12, Sections 30234 and 30234.5 provide for the need to protect commercial and recreational fishing opportunities, as follows:

> ***30234:*** *Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.*
>
> ***30234.5:*** *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

NMFS contends that the proposed EFP would support commercial fishing for the following reasons:

> *The vessel that would participate in the EFP currently works out of a southern California harbor. The continued success of his fishing operations including the development of a longline fishery for highly migratory species increases the likelihood of maintaining the demand commercial fishing infrastructure at his home port as well as any California port he chooses to land his catch. As was shown in Figures 1 and 2, the number of commercial fishing vessels in both the harpoon and DGN fisheries continues to decline as economic practicalities and management actions restrict their success. An opportunity to identify a new fishery that may be more selective for targeting swordfish could maintain and may even increase the current demand for commercial boating facilities.*

> *The proposed action would likely have a long-term beneficial socioeconomic impact, if it demonstrates that longline fishing conducted under restricted conditions to mitigate adverse impacts to protected species is an economically viable activity. In the short term, prosecution of the EFP could generate revenue for the applicant, some of which would have community income impacts in terms of purchase of fuel, supplies and other inputs. In the long term, it may provide an alternative to the current DGN fleet for converting to an alternate, more conservative fishing style. If sufficient information is gathered by means of the proposed EFP to determine whether and how the fishery may be prosecuted, regulatory action may be proposed to effect a permanent change applicable to fishery participants as a whole, based on the measures applied as part of the EFP. NMFS does not see this swordfish fishery actually expanding, but rather, converting from one gear type to another. Consequently, the economic and commercial importance of the swordfish fishery would remain intact and may even resurge to more moderate levels of fishing activity.*

In addition to supporting commercial fishing efforts, NMFS will be implementing two measures which appear to be included in order to avoid conflicts *between* commercial and recreational fishing. As recommended by the Pacific Fishery Management Council, the permitted area would avoid portions of the southern California Bight (as shown in Exhibit 2) to avoid conflicts areas heavily fished by recreational fishers, and the permit would include a cap on catches of striped marlin. Although the Commission has requested clarification of the reasons for and the size of this cap, it would appear that the activity would not adversely affect commercial or recreational fishing, and the Commission therefore finds the proposed activity consistent with Sections 30234 and 30234.5.

V. SUBSTANTIVE FILE DOCUMENTS:

1. "An Evaluation of the Proposed Shallow-Set Longline Exempted Fishing Permit's Consistency to the California Coast Act," NMFS, July 19, 2007.
2. Draft Environmental Assessment, Issuance of an Exempted Permit To Fish With Longline West Coast EEZ, NMFS/PFMC, April 2007.
3. NMFS Biological Opinions for West Coast FMPs.
4. June 13, 2007, Federal Register Notice, NMFS, Magnuson-Stevens Act Provisions; General Provisions for Domestic Fisheries; Application for Exempted Fishing Permit

Exhibits:
1. EFP area Pacific coast-wide
2. EFP area in southern california bight
3. Intersection of 30 mile limit and Monterey Bay NM Sanctuary boundary
4. Pacific Leatherback Conservation Area
5. NMFS Consistency Determination
6. Letter, Federation of Independent Seafood Harvesters, July 20, 2007

7. December 2002 CCC Resolution Supporting the Conservation of Sea Turtles
8. Letter to NMFS/PFMC, Assemblyman Jared Huffman, March 15, 2007
9. Typical Long Line Gear
10. Pre- and Post-Hawaii Regulations, Sea Turtle Interactions (CPUE)
11. Letter, Center for Biological Diversity, July 27, 2007
12. Letter, Turtle Island Restoration Network, July 27, 2007

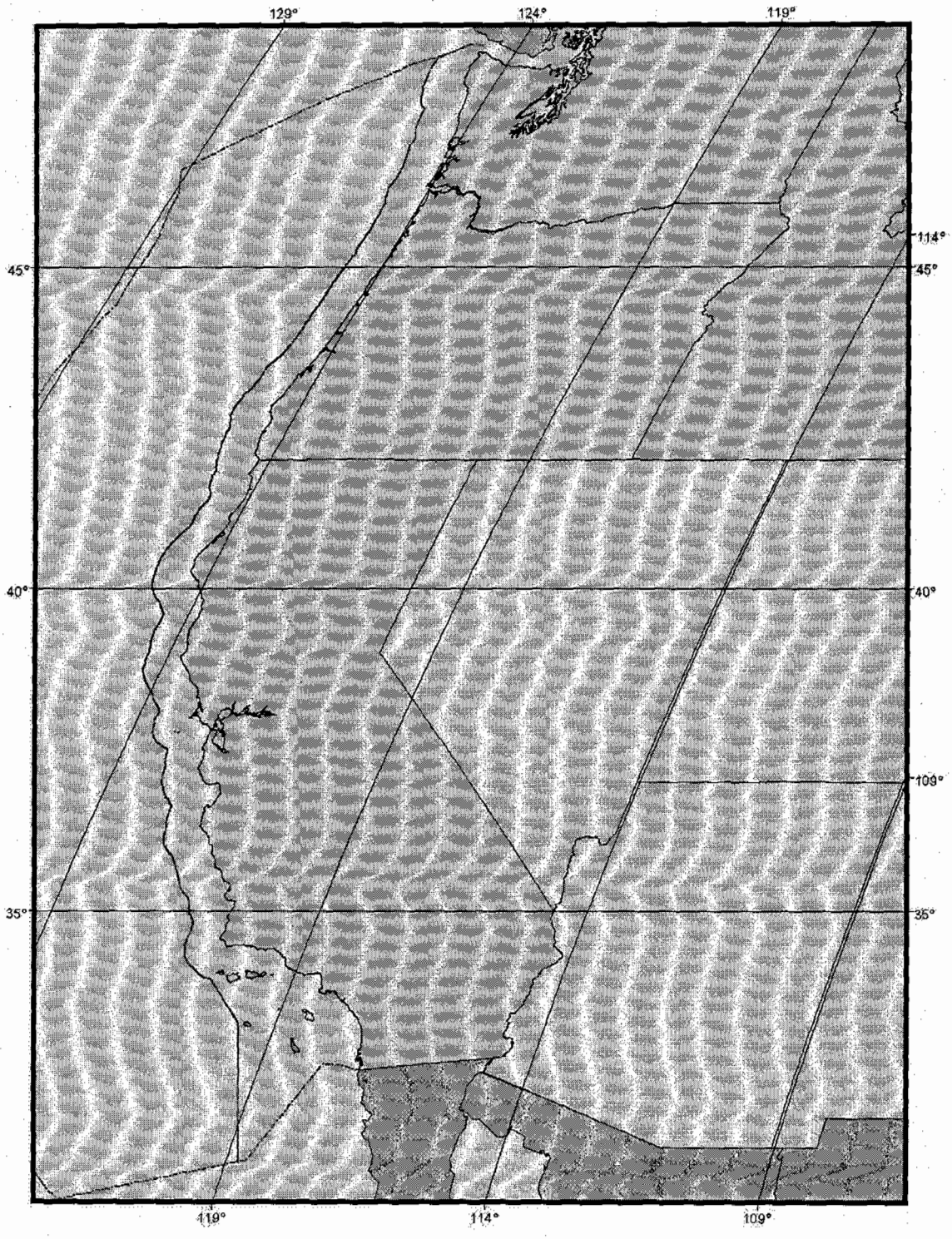


Figure 2–2. Offshore fishing boundary shown coastwide.

EXHIBIT NO. 1
APPLICATION NO.
CD-41-07

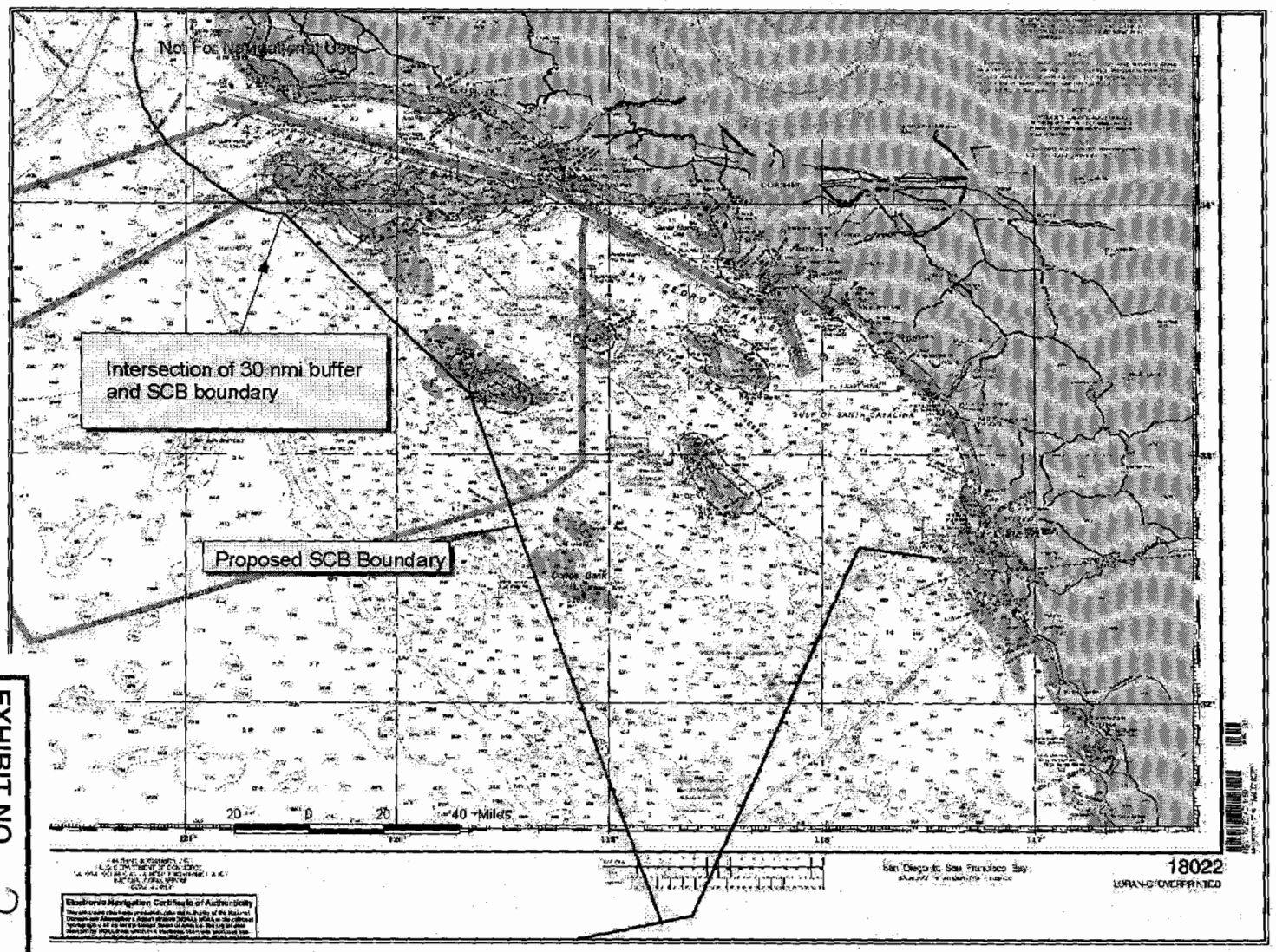
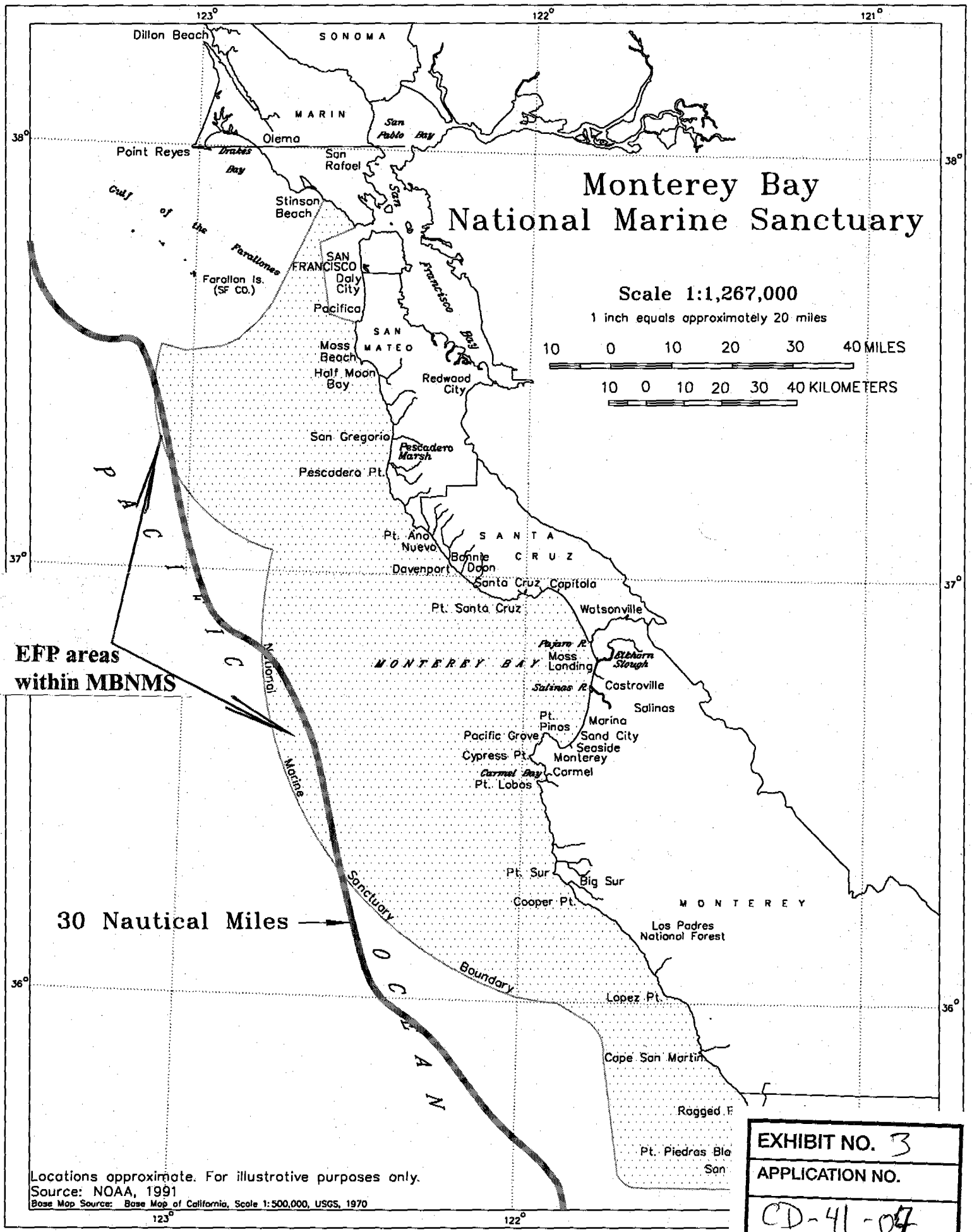


EXHIBIT NO. 2
APPLICATION NO. A-0-41-07

2–1. Boundary line for the Southern California Bight. North of the indicated intersection fishing is prohibited within 30 nmi of the mainland shore.



California Coastal Commission
Technical Services Division

EXHIBIT NO. 3
APPLICATION NO.
CD-41-07

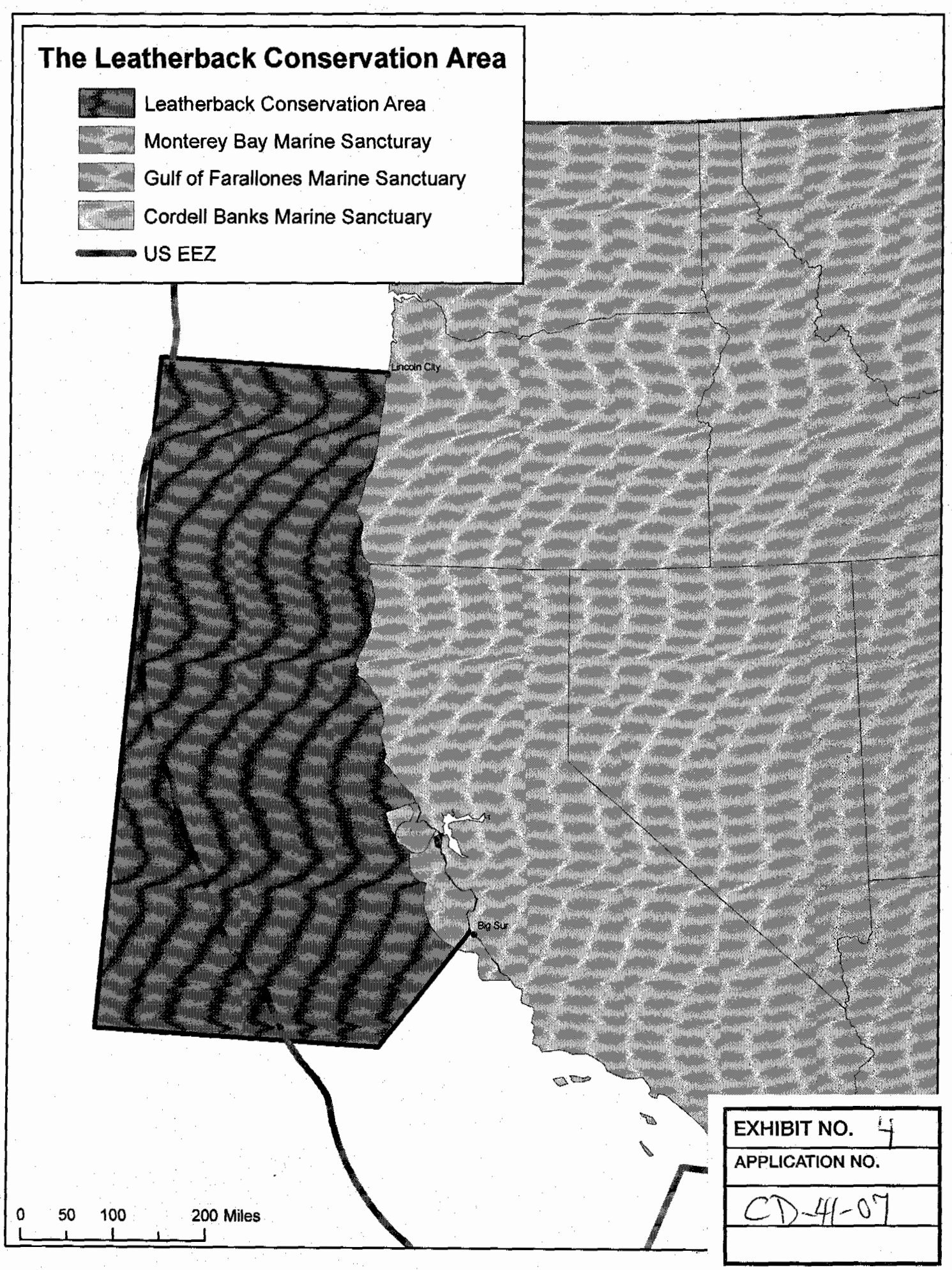


EXHIBIT NO. 4

APPLICATION NO.

CD-41-07

An Evaluation of the Proposed Shallow-Set Longline Exempted Fishing Permit's Consistency to the California Coast Act.

National Oceanic and Atmospheric Administration (NOAA)
National Marine Fisheries Service
Southwest Region
Long Beach, California 90802

I. INTRODUCTION

Staff from the California Coastal Commission requested NOAA's National Marine Fisheries Service (NMFS) prepare an analysis that examines the consistency of a proposal for an exempted fishing permit (EFP) to policies of the California Coastal Act (CCA). The EFP would allow a single longline fishing vessel to conduct an exempted fishery targeting broadbill swordfish (*Xiphias gladius*) in the exclusive economic zone (EEZ) off California and up to central Oregon. The use of longline gear within the west coast EEZ is currently prohibited. The Commission's request asks that the analysis focus particularly on Sections 30230, 30234, and 30234.5 of the CCA.

This document responds to the first section, "marine resource: maintenance" (Section 30230), by demonstrating that the shallow-set longline (SSLL) gear identified in the proposed EFP will maintain the marine environment to a degree that falls within the range of impacts affected by the harpoon and drift gillnet (DGN) fisheries authorized by the State of California to commercially fish for swordfish. The analysis will also address the other sections identified by staff, "commercial fishing and recreational boating facilities" (Section 30234) and the "economic, commercial, and recreational importance of fishing" (Section 30234.5).

The document begins by providing background information on the proposed action as well as the environmental effects of the California swordfish fisheries. The intent of this section is to provide the reader a context for the swordfish fishery and the demand for this product in the United States. The analysis then describes the current methods allowed to commercially fish for swordfish by the State of California as well as the proposed action in terms of impacts to living marine resources.

II. BACKGROUND

According to Federal regulations, a NMFS Regional Administrator may authorize, "for limited testing, public display, data collection, exploratory, health and PFMCty, environmental cleanup, and/or hazard removal purposes, the target or incidental harvest of species managed under an FMP or fishery regulations that would otherwise be prohibited" (50 CFR 600.745(b)). The EFP would authorize the harvest of management unit species using a gear type currently prohibited within the west coast EEZ, for the purpose of: (1) limited testing of a gear type with imposed measures and procedures intended to limit the incidental take of species listed under the Endangered Species Act (ESA) to a level that would not jeopardize their continued existence and, (2) determine if

the resulting fishery is economically viable. Once sufficient information is gathered by means of the EFP to determine whether and how the fishery may be prosecuted, regulatory action may be proposed to effect a permanent change applicable to fishery participants as a whole, based on the measures applied as part of the EFP.

Proposed Action: The proposed action would issue an EFP to allow one vessel to SSLL fish in the EEZ off of Oregon, and California from September to December in 2007. Under terms and conditions of the EFP, the vessel would target swordfish using SSLL gear. Fishing with longline gear is currently prohibited in the West Coast EEZ under the HMS FMP and Federal regulation at 50 CFR 660.712(a). To target swordfish, longline gear is set at a shallower depth (<100 m) than for tunas. For this reason it is termed "shallow set" as opposed to "deep set" when targeting tunas, where the gear is set in the deeper thermocline zone (~300–400 m). Furthermore, the FMP prohibits targeting swordfish with longline gear (shallow setting) west of 150° W. longitude (see 50 CFR 660.712(b)). Regulations under the Endangered Species Act (ESA) (50 CFR 223.206(d)(9)) prohibit targeting swordfish with longline gear on the high seas east of 150° W. longitude in order to avoid jeopardizing the continued existence of ESA listed sea turtles.

Swordfish occur throughout the Pacific Ocean between about 50° N latitude and 50° S latitude. They are caught mostly by the longline fisheries of Far East and Western Hemisphere nations. Lesser amounts are caught by gillnet and harpoon fisheries and are caught infrequently by recreational fishermen. The stock structure of swordfish is not well known in the Pacific. There are indications that there is only a limited exchange of swordfish between the Eastern Pacific Ocean (EPO) and the central and western Pacific Ocean. Hinton (2003) concluded that there are northern and southern stocks of swordfish in the EPO, with the boundary between the stock distributions occurring at 5° S latitude, and there may at times be some mixing of stocks from the central Pacific with the northeastern stock. The northeastern stock appears to be centered off California and Baja California, Mexico, recognizing that there may be movement of a northwestern Pacific stock of swordfish into the EPO at various times.

The lack of contrast in the standardized catch and effort series in the northern and southern regions of the EPO suggests that the fisheries that have been taking swordfish in these regions have not been of a magnitude sufficient to cause significant responses in the populations. In addition, catches in the region have been fairly stable since 1989, averaging about 3,700 mt in the northern region and 8,400 mt in the southern region annually. Based on these considerations, it appears that swordfish are not overfished in the northern and southern regions of the EPO (Hinton, *et al.* 2004). Swordfish stocks have not been declared overfished or undergoing overfishing nor are there currently quotas or harvest guidelines in place under the HMS FMP.

Recent International Scientific Committee (http://isc.ac.affrc.go.jp/) analyses of swordfish stocks in the North Pacific (north of 10° N latitude and west of 130° W longitude), based on CPUE indices from Japanese longline vessels, show declining trends (ISC, 2004). These trends are mainly driven by declines in the northwest portion

of the study area (north of 10° N latitude and west of 170° E longitude), and their proximate cause is not known at present (e.g., changes in stock abundance, environmental variability, and/or fishing practices).

III. THE SWORDFISH FISHERIES

Swordfish is a highly esteemed seafood recognized worldwide for its white meat and mild taste and is the focus of many commercial fisheries (Vojkovich and Barsky, 1998). Between 1989 and 2005, the U.S. annual demand for swordfish (i.e., U.S. landings plus imports) ranged from 10,948 metric tons (mt) to 23,114 mt, averaging 16,556 mt. During this period, U.S. landings averaged 6,444 mt (about 39 percent of demand), and imports averaged 10,111 mt (61 percent). Landings of swordfish in the United States has shown a general pattern of decline from the early 1990s through the early 2000s, with landings in 2005 of 3,039 mt at only 28 percent of the record landings of 10,851 recorded in 1993. In contrast, the share of U.S. swordfish demand supplied by imports increased from 35 percent in 1993 to 77 percent of the total in 2005. In 2005, U.S. imports of swordfish were 10,187 mt, valued at about $77 million. Singapore, Panama, Canada, and Chile are the dominant suppliers of imports. Over the entire period from 1989 through 2005, imports increased from rough parity with U.S. landings to over three times domestic landings in recent years.

1. Harpoon

California's harpoon fishery for swordfish developed in the early 1900s. Prior to 1980, harpoon and hook-and-line gears were the only methods of take authorized to commercially harvest swordfish. At that time, harpoon gear accounted for the majority of swordfish landings in California ports. In the early 1980s, a limited entry DGN fishery was authorized by the State Legislature and soon afterward drift gillnets replaced harpoons as the primary method for catching swordfish, and the number of harpoon permits decreased from a high of 246 in 1982 to a low of 23 in 2001 (Table 1).

A. Effort: Harpoon fishing effort typically occurs in the SCB from May to December, peaking in August, depending on weather conditions and the availability of fish in coastal waters. Some vessel operators work in conjunction with a spotter airplane to increase the search area and to locate swordfish difficult to see from the vessel. This practice tends to increase the catch-per-unit-effort (CPUE) compared to vessels that do not use spotter planes.

For the period 1981-2004, swordfish landings in California have ranged from 267 mt in 1981 to 16 mt in 1991. Since 1990, landings have averaged 86 mt (Figure 1 and Table 2). The ex-vessel revenue ranged from $1.5 million in 1986 to $148,029 in 1991 (PFMC, 2005). In 2005, 24 harpoon vessels landed 74 mt of swordfish compared to 28 vessels that landed 69 mt in 2004 (Figure 1 and Table 2) (PFMC, 2006). Fishing effort was concentrated in coastal waters off San Diego and Orange Counties in the southern California Bight and landings occurred May through December, peaking in August.

Harpoon vessel fishing trips vary according to fishing success, fish carrying capacity, and preservation capability, and are largely confined to a relatively small area, the Southern California Bight (Coan et al. 1998). Fish are sighted either finning or jumping at the surface or swimming just beneath the surface. Since sightings are of fish on or near the surface, good weather conditions and calm seas favor fishing (Coan et al., 1998). Because the harpoon fishery is highly dependent on suitable environmental conditions to be able to locate and harpoon swordfish on the surface, the fishery cannot be readily transported to other locations lacking these conditions. Consequently, due to the low catch rates in the fishery, and the greater efficiency of the DGN fishery, increases in the fleet size or catch do not seem feasible.

Ex-vessel value: The ex-vessel revenue for 2005 was $782,920 compared to $669,955 in 2004 (see Table 1). Because harpoon vessels spend less time on the water and are a low-volume fishery, their catch is often fresher than drift-gillnet-caught fish, so markets tend to pay more for harpooned fish. The average ex-vessel price-per-pound for harpooned fish was $7.84 compared to $3.41 for DGN caught fish in 2005 (PFMC, 2006). Harpooned swordfish support domestic seafood restaurant businesses and is advertised as a bycatch-free fishery.

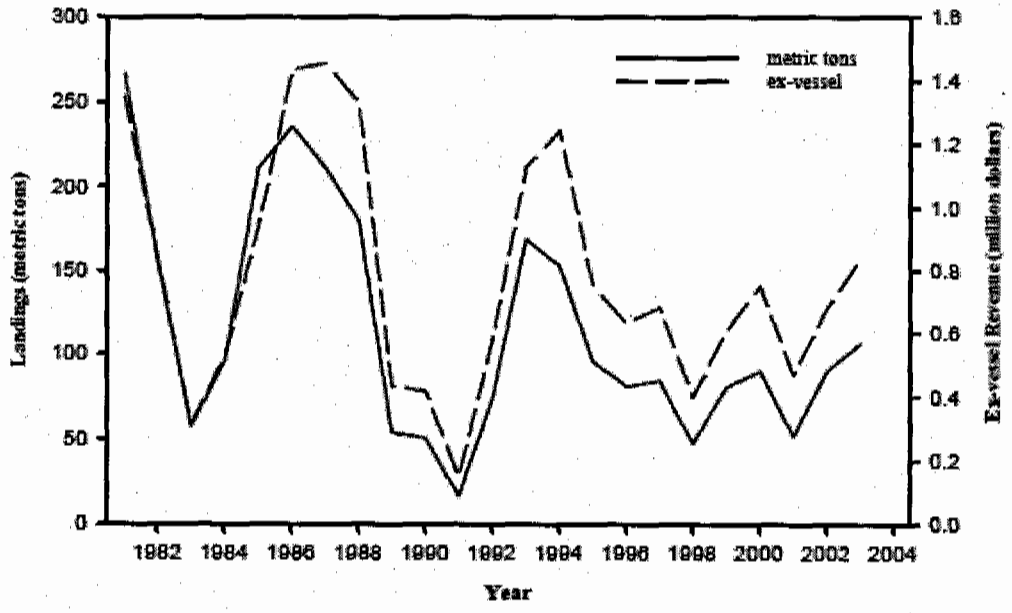


Figure 1. California commercial landing of swordfish by harpoon fishery, 1981-2004.

Table 1. Annual number of vessels, landing (round mt), and ex-vessel revenue for swordfish in California by the harpoon fishery, 1981-2004.

Year	Vessel (number)	Landing (mt)	Ex-vessel[1] (dollar)	Year	Vessel (number)	Landing (mt)	Ex-vessel[1] (dollar)
1981	187	287	1,350,973	1993	42	169	1,129,601
1982	246	158	841,766	1994	49	153	1,242,991
1983	88	59	313,735	1995	38	98	752,189
1984	110	96	524,872	1996	30	81	633,027
1985	96	211	935,845	1997	31	84	693,866
1986	112	238	1,434,837	1998	28	48	398,933
1987	97	211	1,455,414	1999	30	81	607,877
1988	82	180	1,328,332	2000	28	98	750,533
1989	44	54	432,232	2001	23	52	468,289
1990	49	51	416,969	2002	29	90	676,934
1991	32	16	148,029	2003	34	107	838,754
1992	47	74	581,146	2004	28	89	669,060

[1]Ex-vessel revenues are nominal values (not adjusted for inflation). Source: PacFin, extracted August 2005.

B. Environmental Impacts:

a. Bycatch Reduction and the Magnuson-Stevens Act: The deliberate fishing nature of harpoon gear is such that bycatch is expected to be low. Neither the California Department of Fish and Game (CDFG) nor NMFS have an observer program for this fishery. Logbook data from harpoon vessels is collected but only record effort and number of swordfish is reported. Based on reports from harpoon fishers, there are some economic discards associated with shark or sea lion damage to harpooned fish. The overall total is not known, but based on the comments of harpoon fishermen, it is assumed to be probably less than one fish per vessel during the season.

b. Protected Species Interactions: There are no records or observations of interactions with any endangered marine mammal or sea turtle species. Similarly, there are no records or observations nor any evidence to suggest there would be any interactions between harpoon gear and sea birds.

2. Drift Gillnet Fishery

The harpoon fishery was the only legal swordfish gear until the late 1970s when incidental catches of pelagic sharks in the set net fishery prompted a small number of fishing vessel owners to experiment with large-mesh nets targeting thresher shark off southern California (Hanan et al., 1993). The fishery evolved rapidly as fishing techniques and gear improved and the market demand for sharks increased. Soon it was discovered that the drift gillnets were more cost effective in terms of fuel economy and yielded greater catches of swordfish than with harpoon gear. Swordfish was also worth nearly four times the dockside value of sharks (Bedford 1987; Holts 1988) and by the early 1980s, swordfish became the primary target species for the fleet.

The California Legislature enacted legislation in 1980 that established a non-transferable, limited entry permit system that required logbooks and observers as well as imposed gear restrictions. When the fishery was folded into the federal HMS FMP in 2004, all federal conservation and management measures in place under the MMPA and ESA and all state regulations for the fishery were adopted with the exception of the existing limited entry program which still remains today under the State of California's authority. The Council concluded at the time the FMP was being prepared that it was premature to federalize the

states' limited entry programs which at that time avoided an increase in federal costs and administrative burdens.

A. Effort: For the period 1981-2004, the number of DGN vessels landing swordfish declined from 228 in 1985 to 43 in 2004 (PFMC, 2005). Since 1984, annual landings and ex-vessel revenues have been declining in general, averaging 354 mt and $2.5 million, respectively (Figure 2 and Table 2). Most swordfish landed supports domestic seafood restaurant businesses. Since 1984, the number of permits has declined from a high of 251 in 1986 to a low of 90 in 2005; however, only 38 vessels participated in the swordfish fishery in 2005 (PFMC, 2006) (Table 2). Annual fishing effort has also decreased from a high of 11,243 sets in the 1986 fishing season to 1,043 sets in 2005. Industry representatives attribute the decline in vessel participation and annual effort to regulations implemented to protect threatened and endangered marine mammals and sea turtles.

Ex-vessel value: In 2005, 38 DGN vessels landed 220 mt of swordfish compared to 43 vessels that landed 175 mt in 2004 (Table 2–9). Landings occurred at ports from San Diego to Monterey and the majority occurred from October to December. Over 85 percent of the reported effort occurred in the SCB. The ex-vessel revenue was $1.2 million in 2005 compared to $1.0 million in 2004 (Table 2). Most of the swordfish landed in California supports domestic seafood restaurant businesses.

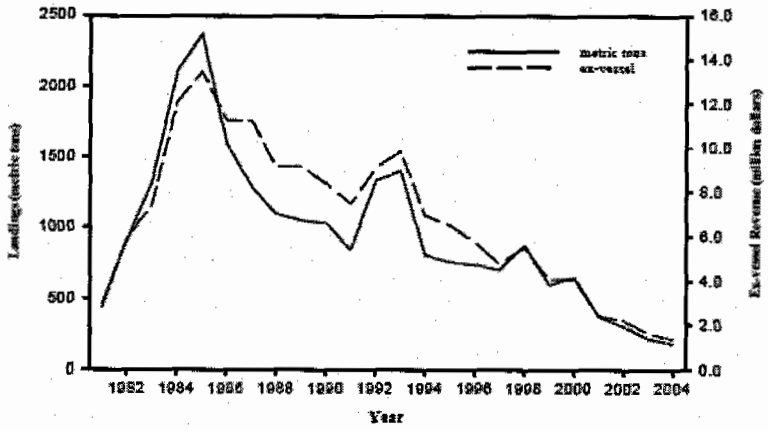


Figure 2. California commercial landings of swordfish by DGN fishery, 1981-2004 (from PFMC, 2005).

Table 2. Annual number of vessels, limited entry permits, landings (round mt), and ex-vessel value for swordfish and common thresher shark landed in California by the DGN fishery, 1981-2004 (from PFMC, 2005).

			Swordfish		Common Thresher	
Year	Vessel (number)	Permit (number)	Landing (mt)	Ex-vessel[1] (dollar)	Landing (mt)	Ex-vessel[1] (dollar)
1981	118	-	270	1,609,959	917	1,302,515
1982	166	-	208	1,450,243	650	1,147,990
1983	193	-	242	1,381,237	421	283,782
1984	214	226	286	1,590,026	915	245,463
1985	228	229	197	1,150,726	1,095	304,391
1986	204	251	78	546,727	451	105,229
1987	185	218	6	53,901	393	9,245
1988	154	207	1	4,620	393	444
1989	144	189			460	1,430
1990	134	183			335	
1991	114	165	51	524,282	569	20,214
1992	119	149	60	349,626	285	4,672
1993	123	117	162	1,331,728	245	42,645
1994	138	182	760	6,568,631	272	831,132
1995	117	185	682	5,889,173	207	586,845
1996	111	167	708	5,495,901	241	760,720
1997	108	120	655	4,511,924	249	744,913
1998	98	148	847	5,322,810	281	811,912
1999	84	136	585	3,954,968	152	470,793
2000	78	127	631	3,957,374	155	486,827
2001	69	114	351	2,234,670	273	764,804
2002	50	106	298	2,173,786	218	626,306
2003	43	99	198	1,483,695	241	664,460
2004	43	96	175	1,300,805	66	186,256

[1]Ex-vessel revenues are nominal values (not adjusted for inflation). Source: PacFin, extracted August 2005.
Additional processing information: significant swordfish and shark landings by drift gillnet gear prior to 1994 have been mis-assigned to California entangling net, trammel net, several trawl, encircling net, set gillnet, and unknown gears, and therefore are not reported here.

B. Environmental Impacts:

a. Non-Target Catch: NMFS has operated an at-sea observer program in the DGN fishery since July 1990,[1] which has enabled reliable estimates of non-target interactions and catch rates because the observers normally monitor 100 percent of the gear retrieval and catch. For the time period 1990–96, the annual DGN set coverage by observers ranged from 8–11 percent while the coverage has averaged roughly 20 percent for the period of 1996-present. The observer programs have also provided data on bycatch.

NMFS defines non-target catch as both DGN incidental catch retained for personal use and/or sale, and DGN catch that is discarded, whether it's dead or alive. These discards, sometimes referred to as bycatch, include both economic discards (e.g., blue sharks) and/or regulatory discards (e.g., protected species). The definitions currently in use for terms such as bycatch, discards, and incidental catch are not standardized for the most part across fisheries, hence NFMS uses the general term "non-target catch" to avoid confusion.

As shown in Tables 3 and 4 for total catch and disposition of the DGN fishery south and north of Point Conception, respectively, a good proportion of non-target catch is kept.

[1] CDFG operated an observer program in the DGN fishery from 1980-1990 as required under state legislation.

Conversely, for bycatch, the common mola and blue shark compose the majority of this catch with most molas returned alive but with much less success for blue sharks.

Table 3. Total catch and disposition of DGN major non-target species south of Pt. Conception for the years 1997-2005. (Source: NMFS Observer Program records.)

	All Years South Pt Conception						
Common Name	Total Catch	Kept	% Kept	Returned Alive	Returned Dead	% Returned Dead	Returned Unknown
Bonito, Pacific	734	330	45.0	21	367	50.0	16
Fish, Unidentified	224	8	3.6	7	195	87.1	14
Hake, Pacific	30	1	3.3	12	17	56.7	0
Louvar	306	267	87.3	1	38	12.4	0
Mackerel, Bullet	2,870	883	30.8	6	1,830	63.8	101
Mackerel, Pacific	3589	1,053	29.3	71	2,443	68.1	22
Marlin, Blue	49	2	4.1	0	46	93.9	1
Marlin, Striped	356	58	16.3	4	282	79.2	12
Mola, Common	28,856	95	0.3	26,949	1,146	4.0	666
Opah	2,820	2,711	96.1	4	103	3.7	2
Pomfret Pacific	42	26	61.9	1	15	35.7	0
Remora	39	0	0.0	36	1	2.6	2
Shark, Bigeye Thresher	263	228	86.7	1	34	12.9	0
Shark, Blue	7,672	85	1.1	2491	4,613	60.1	483
Shark, Common Thresher	3,671	3,654	99.5	10	5	0.1	2
Shark, Pelagic Thresher	77	75	97.4	0	2	2.6	0
Shark, Shortfin Mako	5,254	5,001	95.2	99	152	2.9	2
Stingray, Pelagic	272	2	0.7	207	49	18.0	14
Swordfish, Broadbill	6,188	6,013	97.2	0	174	2.8	1
Tuna, Albacore	2,152	1,716	79.7	0	435	20.2	1
Tuna, Bigeye	12	12	100.0	0	0	0.0	0
Tuna, Bluefin	1,270	1,111	87.5	0	157	12.4	2
Tuna, Skipjack	5,301	2,478	46.7	29	2,791	52.7	3
Tuna, Yellowfin	433	370	85.5	0	62	14.3	1
Yellowtail	71	69	97.2	0	1	1.4	1
Total	72,551	26,248		29,949	14,958		1346
Percent		36.2		41.3	20.6		1.9

Table 4. Total catch and disposition of DGN major non-target species north of Pt. Conception for the years 1997-2005. (Source: NMFS Observer Program records.)

	All Years North Pt Conception						
	Total Catch	Kept	% Kept	Returned Alive	Returned Dead	% Returned Dead	Returned Unknown
Bonito, Pacific	13	7	53.8	0	5	38.5	1
Fish, Unidentified	206	9	4.4	6	184	89.3	7
Hake, Pacific	227	8	3.5	6	212	93.4	1

Louvar	407	343	84.3	1	60	14.7	3
Mackerel, Bullet	51	1	2.0	0	46	90.2	4
Mackerel, Pacific	1707	536	31.4	17	1,149	67.3	5
Marlin, Blue	1	0	0.0	0	1	100.0	0
Marlin, Striped	17	2	11.8	0	15	88.2	0
Mola, Common	12,989	22	0.2	11,851	293	2.3	823
Opah	1,051	1,018	96.9	3	29	2.8	1
Pomfret Pacific	436	280	64.2	3	149	34.2	4
Remora	70	1	1.4	66	1	1.4	2
Shark, Bigeye Thresher	202	177	87.6	1	22	10.9	2
Shark, Blue	13,205	44	0.3	4,163	8,384	63.5	614
Shark, Common Thresher	1,519	1,509	99.3	1	9	0.6	0
Shark, Pelagic Thresher	0	0	0.0	0	0	0.0	0
Shark, Shortfin Mako	1,218	1,192	97.9	8	14	1.1	4
Stingray, Pelagic	44	0	0.0	30	10	22.7	4
Swordfish, Broadbill	8,357	8,308	99.4	0	35	0.4	14
Tuna, Albacore	13,955	11,778	84.4	13	2,147	15.4	17
Tuna, Bigeye	8	8	100.0	0	0	0.0	0
Tuna, Bluefin	2,394	2,248	93.9	0	135	5.6	11
Tuna, Skipjack	3,487	1,203	34.5	0	2,284	65.5	0
Tuna, Yellowfin	35	33	94.3	0	2	5.7	0
Yellowtail	1	1	100.0	0	0	0.0	0
Total	**61,600**	**28,728**		**16,169**	**15,186**		**1,517**
Percent		**46.6**		**26.2**	**24.7**		**2.5**

b. Protected Species Interactions:

i. Marine Mammals: All marine mammals in the waters of the United States are protected under the Marine Mammal Protection Act (MMPA). The MMPA and its implementing regulations set out strict guidance for monitoring marine mammal stocks and estimating human impacts on these stocks. All of the marine mammal species listed in Table 5 are known to have been encountered in the DGN fishery, although takes have generally declined since implementation of the Pacific Ocean Take Reduction Plan (TRP) in 1997. Since the implementation of the TRP (62FR 51805), overall cetacean entanglements have dropped considerably (77 percent) (Barlow and Cameron 2003), and the recommendation to lower the net within the water column was based on proven bycatch reduction of marine mammals in other gillnet fisheries. Significant changes in the water temperature regimes off the West Coast were also observed over this time frame with waters generally colder since 1999. This shift in the ocean temperature regime almost coincides with the implementation of the TRP and it is not well understood if the reduction in levels of mortality and serious injury are due to the effectiveness of TRP measures, a change in the "normal" distribution of protected species, or a combination of the two. In addition, the effectiveness of pingers on certain marine mammals is unknown.

Three marine mammal species are of particular concern related to the DGN fishery: humpback whales, short-finned pilot whales, and sperm whales.

Table 5. Observed takes of marine mammal species in the DGN fishery, with and without pingers, 1990 through 2005.

Species	Number of individual animals observed taken in the DGN fishery		
	All observed sets 1990-2004	Nets without pingers	Nets with pingers
	7,221 observed sets	3,831 observed sets	3,390 observed sets
Dolphins			
bottlenose	3	3	0
long-beaked common	14	8	6
short-beaked common	327	215	112
northern right whale	65	43	22
pacific white-sided	28	21	7
Risso's (Grampus)	33	24	9
striped	1	1	0
Porpoise			
Dall's	22	21	1
Whales			
killer whale	1	1	0
short-finned pilot whale	12	11	1
pygmy sperm whale	2	2	0
sperm whale	8	6	2
Beaked whales			
Baird's	1	1	0
Cuviers	21	21	0
Hubb's	5	5	0
Mesoplodont	2	2	0
Stejneger's	1	1	0
humpback	3	1	2
fin	1	0	1
gray	3	0	3
minke	3	2	1
Pinnipeds			
Steller sea lion	2	2	0
northern elephant seal	112	95	17
California sea lion	153	69	84

ESA listed species are in italics

ii. Sea Turtles: A number of marine turtle species are found off Oregon and California: leatherback, loggerhead, green, and olive ridley sea turtles. Of these, leatherbacks are most commonly taken in the DGN fishery north of Point Conception based upon observer

records from NMFS's observer program since 1990 (Table 6). Loggerhead sea turtles have not been observed incidentally taken in the DGN fishery north of Point Conception. Juvenile loggerheads generally remain in the warmer waters off the coast of Baja California, Mexico, where their primary prey species, the pelagic red crab, occur in high concentrations. All but one observed takes of loggerheads in the DGN fishery occurred south of Point Conception during El Niño years. There has been only one observed take of a green turtle and one observed take of an olive ridley in the DGN fishery since 1990. Generally, both greens and olive ridleys are found in warm waters, greater than 18° C and the only observed takes of these species both occurred during a period of increased sea surface temperature south of Point Conception, in November 1999. The higher SST likely attracted these species and others into the area to feed. The only observed takes of a fin whale and minke whale also occurred in the same area in November 1999.

Table 6. Number of observed takes of sea turtles in the DGN fishery, 1990-2005.

Species	Number Taken
Turtle, Green/Black	1
Turtle, Leatherback	23
Turtle, Loggerhead	15*
Turtle, Olive Ridley	1

*All but one of the takes occurred during El Niño years.

iii. Birds: Take of seabirds is extremely rare in the DGN fishery. Only northern fulmars and Cassin's auklets have been observed taken. Some of the smaller alcids that dive to depths where DGNs may be set are quite small (7 to 9 inches) and therefore unlikely to be entangled in the 14-inch or greater mesh size of the DGN fishery. Northern fulmars have been encountered in this fishery, however very rarely.

In 7,208 observed sets in the DGN fishery, 31 northern fulmars have been observed taken, 20 south of Point Conception and 11 north of Point Conception. Of the 31 observed takes, only five were observed mortalities or injuries, the remaining 26 birds were recorded as released alive. Only one Cassin's auklet was observed taken, it was a mortal take by a DGN vessel fishing south of Point Conception.

In 2005, five northern fulmars were entangled in a DGN net set. All of the fulmars were released alive and unharmed. These results are considered consistent with the previous fifteen years of observer data, suggesting that the likelihood of mortality or injury of northern fulmars in the DGN fishery is very low.

C. Longline Fishery

Commercial pelagic longline fishing has never been permitted within the California EEZ and as such there are no longline fishery dependent records to draw upon to predict potential impacts to protected species. There is, however, a number of existing U.S. domestic pelagic SSLL fishery that can be used to approximate impacts. These include the Hawaii based SSLL, the California based SSLL (that operated outside the west coast

EEZ) and the Atlantic SSLL. All relevant fisheries were reviewed to analyze and predict the suite of potential species and magnitude of interactions that may occur under the proposed action.

2. Environmental Impacts:

a. Non-target Catch:

Impacts to target, non-target, and prohibited finfish species are anticipated to be reflected in increased catches of these species, which are a function of the estimates of change in effort in the EEZ off California for this proposed EFP.

Projected catches of target, non-target, and prohibited finfish species are presented in Table 7 utilizing the Hawaii-based SSLL observer records as a proxy for longline vessels utilizing circle hooks and mackerel-type bait outside the EEZ. As mentioned previously, it is uncertain if the proposed EFP catches will be similar to the catch rates observed in the Hawaii-based SSLL fishery given the disparate areas fished and the dissimilar oceanographic features between the more coastal, temperate California Current System and the more tropical off-shore waters near Hawaii.

Catch estimates are provided for the low (400 hooks) and high (1,200 hooks) effort estimates that the applicant supplied in the EFP application. These estimates are then multiplied across the maximum number of sets per trip (14) and total trips (4) to come up with projected maximum take in numbers of animals. An additional column, providing catch estimates for 1,000 hooks per set, is included based on the applicant's best guess of probable average hooks-per-set of effort once he gains experience in the fishing method and area. The projected EFP catch does suggest that, similar to the DGN fishery, the incidental catch of non-target species that could be retained for personal use and/or sale of economically valuable species will occur.

Table 7. Projected EFP catch in numbers of animals using Hawaii-based SSLL observer records for trips utilizing circle hooks and mackerel-type bait outside the EEZ.[2]

Species	Projected EFP catch (no.) for trips utilizing circle hooks (h) and mackerel-type bait			
	CPUE	22,400 h	56,000 h	67,200 h
	(catch/1000 h)	400 h X 14 sets X 4 trips	1000 h X 14 sets X 4 trips	1200 h X 14 sets X 4 trips
Swordfish	17.16	384.3	960.7	1152.9
Albacore	1.06	23.7	59.2	71.0
Bigeye tuna	1.57	35.1	87.7	105.3
Yellowfin tuna	0.16	3.7	9.1	11.0
Pacific Bluefin	0.00	0.0	0.0	0.0
Skipjack tuna	0.07	1.5	3.7	4.4
Tunas and mackerels	0.02	0.3	0.8	1.0
Blue shark	12.64	283.2	707.9	849.5
Shortfin mako shark	0.88	19.6	49.0	58.8

[2] Based on 161 trips and 2,133,096 hooks of observed effort.

Unid mako sharks	0.05	1.2	3.0	3.6
Unid sharks	0.00	0.0	0.0	0.0
Bigeye thresher shark	0.02	0.5	1.4	1.6
Pelagic thresher shark	0.00	0.0	0.1	0.1
Unid thresher sharks	0.01	0.1	0.3	0.4
Striped marlin	0.85	19.0	47.5	57.0
Blue Marlin	0.18	4.1	10.2	12.3
Black Marlin	0.00	0.0	0.0	0.0
Shortbill spearfish	0.11	2.6	6.4	7.7
Unid billfishes	0.02	0.4	1.0	1.2
Pelagic stingray	0.09	2.1	5.3	6.4
Remora	0.43	9.7	24.2	29.0
Longnose Lancetfish	1.27	28.4	70.9	85.1
Snake mackerel	0.32	7.2	18.0	21.6
Unid. fish	0.02	0.5	1.3	1.5
Escolar	1.66	37.2	92.9	111.5
Dorado	3.50	78.4	196.0	235.2
Oilfish	0.23	5.1	12.8	15.4
Wahoo	0.07	1.7	4.2	5.0
Sickle Pomfret	0.13	3.0	7.5	9.0
Pacific Pomfret	0.00	0.0	0.0	0.0
Common Mola	0.01	0.2	0.6	0.7
Opah	0.08	1.8	4.6	5.5

Using the highest potential effort scenario (67,200 hooks), coupled with the observed CPUE estimates presented in Table 7, the proposed action would harvest in order of magnitude an estimated 1,153 target swordfish, 850 blue sharks, 235 dorado, 105 bigeye tuna, 59 shortfin mako sharks, and 57 striped marlin. U.S. longline bigeye tuna catches in the Pacific are subject to an annual quota of 500 mt. The catch of bigeye tuna under this EFP would be monitored for accounting and compliance with the annual quota and would therefore be a part of conservation measures established by the Inter-Amercian Tropical Tuna Commission (http://www.iattc.org/HomeENG.htm) and implemented by NMFS. Striped marlin impacts would be capped at 12 fish as recommended by the PFMC. In addition, given that striped marlin distribution and abundance increases in the more tropical waters targeted by the Hawaii-based SSLL fishery, the actual catch of striped marlin under the proposed action should be less in the more temperate, coastal habitat that will be fished in the proposed action area. Further, Southern California Billfish Club catch records for recreationally caught striped marlin report for the most part reflect marlin captured in the SCB, which will be a closed area under the terms and conditions of the proposed action. The peak striped marlin catches in the SCB occur in September, coinciding with a series of major recreational billfish tournaments.

There are high catch rates of blue shark in HMS fisheries targeting swordfish, including the West Coast DGN fishery and SSLL fisheries prosecuted by Hawaii-based and (in the past) California-based vessels. The use of circle hooks and other mitigation measures, as would be required under the EFP, does not appear to reduce blue shark catch rates but does appear to increase survivorship. Hawaii SSLL observer records for trips utilizing

circle hooks, mackerel-type bait, and de-hooking pliers (162 trips, June 2005 -March, 2006), indicate that approximately 95 percent of captured blue sharks were released alive. Estimated blue shark mortality under the EFP, however, would represent a small incremental increase in overall fishing mortality.

b. Protected Species Interactions:

i. Marine Mammals: All marine mammals that may be found in the action area are listed in Table 8. As previously described, there has not been a longline fishery in the West Coast EEZ so there are no observer records or logbooks from which to draw conclusions on which marine mammals may be affected by the proposed action. However, observer records dating back to 1990 in the DGN fishery are available and they were reviewed as a first step in understanding marine mammal exposure to the proposed fishery. In both the historic DGN and proposed longline fishery, gear is set at night and allowed to soak overnight and both gears are fished to target primarily swordfish. The two fisheries overlap temporally, with most DGN activity occurring from September 1 though December 31, the same time period as the proposed longline EFP fishery.

There are however, two key differences between the two. First, fishing under the longline EFP would occur at least 30 miles offshore of California in waters north of Point Conception and west of the southern California Bight south of Point Conception whereas the DGN fishery does occur within 30 nm of shore.

The second difference is that the DGN observer records likely do not reflect likely takes in the proposed longline EFP (Table 8). Entanglements in gillnets is usually attributed to marine mammals being unable to detect the net and becoming entangled. By contrast, marine mammal takes in longlines are generally attributed to depredation by odontocetes, either feeding on the bait or fish caught on the hooks, although entanglements are also possible (Gilman *et al.* 2006a). Entanglements of large baleen whales have been recorded in the Hawaii based SSLL fishery although they are not common (Forney 2004). There have been no observed interactions in the Atlantic SSLL, where effort overlaps, spatially and temporally with marine mammals. Observer records from California, Hawaii, and the Atlantic suggest that marine mammal entanglements of most species are generally quite low in longline fisheries.

Table 8. Marine mammals observed taken in the DGN fishery.

Species	Number observed taken
Beaked Whale, Baird's	1
Beaked Whale, Cuviers	21
Beaked Whale, Hubbs'	5
Beaked Whale, Mesoplodont	2
Beaked Whale, Stejneger's	1
Beaked Whale, Unidentified	3
Dolphin, Bottlenose	3
Dolphin, Long-Beaked Common	14
Dolphin, Northern Right Whale	65
Dolphin, Pacific White-sided	28
Dolphin, Risso's	33

Dolphin, Short-Beaked Common	327
Dolphin, Striped	1
Dolphin, Unidentified Common	21
Porpoise Dall's	22
Sea Lion, California	153
Sea Lion, Steller	2
Seal, Northern Elephant	112
Whale, Fin	1
Whale, Gray	3
Whale, Humpback	3
Whale, Killer	1
Whale, Minke	3
Whale, Pygmy Sperm	2
Whale, Short-finned Pilot	12
Whale, Sperm	8

Based upon the available information, NMFS anticipated that small numbers of a few marine mammal species may be taken during the proposed action, these include: California sea lions, northern elephant seals, short-beaked common dolphins, Risso's dolphins, northern right whale dolphins, and Cuvier's beaked whales.

In order to assess what may happen to animals that encounter the SSLL gear, observer records from other longline fisheries were reviewed. In the California SSLL fishery, outside the EEZ, three marine mammals have been observed entangled in gear (two Risso's dolphins and one unidentified dolphin) and of these, one was killed. In the Hawaii-based shallow set longline fishery since 2004 with the implementation of new gear requirements, all of the marine mammals were recorded as injured and one killed. In the Hawaii-based shallow set longline fishery targeting swordfish prior to 2004, there were 16 observed entanglements of marine mammals. The species observed taken were Risso's dolphin, short-finned pilot whale, sperm whale, spinner dolphin, bottlenose dolphin, short-beaked common dolphin. Ten of the 16 takes were considered serious injuries, one was a mortality (at time of entanglement) and five of the entanglements were not serious injuries (Forney 2004), thus over two-thirds of the entanglements resulted in serious injuries or mortalities. In the Atlantic, the mortality/serious injury rates varied among marine mammal species, but were on average around 50 percent (NMFS 2006a). This rate of serious injury/mortality may serve as the best estimate available for this proposed EFP.

While it is not possible to quantify the number of marine mammals of each species that may be affected by the proposed fishery, based upon marine mammal take rates in other SSLL fisheries and the biology, abundance, and distribution of the species, the number of individuals taken is likely to be quite low, likely in the range of one to ten depending on the species and their responses to the gear. Based upon observed rates in other SSLL fisheries, it is likely that approximately 50 percent of marine mammals takes in the proposed fishery will result in a serious injury/mortality.

ii. Sea Turtles: Four species of marine turtles may be found in the area of the proposed action: leatherback turtle (*Dermochelys* coriacea), loggerhead turtle (*Caretta caretta*), olive ridley (*Lepidochelys olivacea*), and green turtle (*Chelonia mydas*).

The likelihood of sea turtle take under the proposed action is quite low. Based upon observer records from the DGN fishery, other SSLL fisheries, and the biology and distribution of the species, a small number of leatherbacks may be exposed to and affected by the proposed action. To evaluate the likelihood of leatherback mortalities, a review of Hawaii observer records since the implementation of mitigation measures in 2004 was reviewed and is provided in Table 9. The changes in hookings rates and interactions appear related to changes in the hook type and bait (18/0 circle hooks with a 10 degree offset and mackerel bait). Similar results were recorded in the Atlantic SSLL fishery and experiments testing alternative gear types in the Northeast Distant waters off the east coast of Canada and the U.S. While the precise reason for the change in hookings is still under investigation, the results are encouraging, particularly for hardshelled turtles (i.e., loggerhead, olive ridley, and green).

Table 9. Changes in sea turtle hookings observed in Hawaii-based SSLL fishery, before and after implementation of bycatch mitigation measures in 2004.

Turtles observed taken	Deeply hooked	Ingested hook	Lightly hooked	Entangled
Before regulations				
Leatherback (n=31)	0	10%	84%	6%
Hardshelled (n=180) Loggerhead (n=163)	60%	0	38%	2%
After regulations				
Leatherback (n=10)	0	0	100%	0
Loggerheads (n=27)	0	22%	63%	15%

Observer records from the SSLL fishery in the Atlantic and experiments conducted in the Northeast Distant waters were also reviewed, to aid understanding the likely impacts to turtles when using modified SSLL gear, as proposed in the SSLL EFP. In both fisheries, leatherback sea turtle take rates were low, immediate mortality was nearly zero, and calculated post-hooking mortalities (developed using the matrix in Table 10) was very low. Observer records from the SSLL fishery just outside the California EEZ were examined and again supported the assertion that very few leatherbacks are likely to be taken in the SSLL EFP.

As noted above, it is difficult to estimate the likely bycatch of sea turtles under this proposed action. However, based upon observer records detailed above and a review of the biology and distribution of sea turtles that may be in the proposed action area, the level of take is expected to be low with consequent very low levels of post-hooking mortalities. Leatherbacks are the species most likely to be affected by this action. Loggerheads are unlikely to be affected. The all but one of the observed takes of loggerheads in the DGN occurred during El Niño events or periods of unusually warm

water (NMFS 2001) and all occurred outside of the area of the proposed EFP fishery. It is not possible at this time to know whether an El Niño may occur during the fall of 2007 or whether warm water conditions observed over the past two years in the West Coast EEZ will occur in 2007, although the most recent climate models suggest that an El Nino is unlikely to develop in late 2007.

There has been only one observed take of a green turtle and one observed take of an olive ridley in the DGN fishery since 1990. Generally, both greens and olive ridleys are found in warm waters, greater than 18° C, which is warmer than the targeted SST identified by the applicant. Further, the only observed takes of these species both occurred in southern California during a period of a warm water intrusion from Baja, California, Mexico, is believed to have brought individual sea turtles into the SCB. Take of these two sea turtles species in fisheries in the west coast EEZ is extremely low, particularly in the areas of the proposed action, outside the SCB, where SSTs are generally lower than the preferred temperatures for greens and olive ridleys. It is unlikely that greens or olive ridleys will be affected by the proposed action.

iii. Sea Birds

Due to the nature of pelagic longline operations and the fishing area under consideration for the proposed action, the only seabirds potentially impacted by this proposed fishery are the black-footed albatross (BFAL, *Phoebastria nigripes*), the Laysan albatross (LAAL, *P. immutabilis*) and the short-tailed albatross (STAL, *P. albatrus*). The brown pelican (*Pelecanus occidentalis*) and Cassin's auklet (*Ptychoramphus aleuticus*) also occur in the proposed action area, but are not likely to be affected, as these species are not known to interact with pelagic longline fishing gear and nighttime setting will reduce the chance these species will interact with the gear.

U.S.-based pelagic longline swordfish and tuna fisheries in the vicinity of the Hawaiian Islands have the potential to affect albatrosses. NMFS observer records from 1994–2000 (based on four percent observer coverage) estimate an average take of 1,380 BFAL and 1,163 LAAL per year. No takes of STAL in any U.S.-based pelagic longline fishery have been reported. When the Hawaii-based swordfish longline fishery reopened on a limited basis in 2004 with new fishing requirements (e.g., deploying sets no earlier than one hour after local sunset and ending deployment no later than one hour before local sunrise; using large 18/0 circle hooks; 100 percent observer coverage; using thawed and blue-dyed bait) observers documented 10 BFAL and 71 LAAL captured in this fishery with 2,133,096 hooks observed. The proposed action would be expected to take one BFAL, two LAAL, and zero STAL. Neither BFAL or LAAL are listed under the ESA. The 2004 USFWS biological opinion on the HMS FMP does not expect that STAL would be taken by any of the HMS fisheries.

IV. CONSISTENCY TO COASTAL ACT

a. Section 30230 Marine resources; maintenance

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

The proposed action would primarily affect biodiversity and ecosystem function through the removal of target, non-target, and protected species. Fish removals under the proposed action would represent a very minor proportion of the biomass of these species and would have a remote likelihood of adversely affecting biodiversity and ecosystem function. Fishing mortality by the single vessel that would be authorized to fish in 2007 represents a very minor proportion of total fishing mortality on target and non-target finfish species. Swordfish catches by all vessels in the Eastern Pacific Ocean are in the range of 11,000–20,000 mt annually (PFMC 2006, IATTC 2006) while, according to the EFP application, catches under this EFP would be 7–18 mt (15,000–40,000 lbs).[3] Bycatch of non-target species (which is likely to be principally blue sharks) would also constitute a minor component of the larger Pacific-wide catches. As noted previously, approximately 95 percent of captured blue sharks were released alive in the Hawaii SSLL based on observer records for trips utilizing circle hooks, mackerel-type bait, and de-hooking pliers (162 trips, June 2005 -March, 2006). Consequently, NMFS estimates that blue shark mortality under the EFP would represent a small incremental increase in overall fishing mortality. Therefore, it is reasonable to conclude that granting the EFP for 2007 would not have significant effects on target or non-target stocks.

Longline gear is known to incidentally catch and entangle threatened and endangered marine mammals, sea turtles and seabirds. This is true of any fishing gear that relies on hooking or entanglement to catch targeted species. There is no doubt that authorization of the EFP would increase the risk of a take of one of these protected species. Marine mammal species considered most likely to be affected by this action, California sea lion, northern elephant seal, short-beaked common dolphin, Risso's dolphin, northern right whale dolphin, and Cuvier's beaked whales are all from stocks that are not listed on the ESA nor considered depleted under the MMPA. Very low levels of take of animals from these stocks are anticipated under the proposed EFP. When combined with existing known threats to these stocks such as ship strikes, exposure to toxins, pollution, loss of habitat or prey, and underwater sound, it is not expected that the proposed action will change the status of these species or trigger concern over the stocks' status.

Leatherbacks are most likely to be affected by the proposed action and likely only a few individuals. General threats to Pacific sea turtles include poaching of eggs, killing of females at nesting beaches, human encroachment (development), beach erosion, and microclimate-related impacts at nesting sites, low hatchling success, and incidental capture in fisheries. Very low or no mortalities are anticipated, thus the proposed action

[3] However, distinct stocks are recognized south and north of the equator in the EPO. Catches north of the equator account for somewhat less than half of the EPO total.

is unlikely, within the context of other effects, to change the status of leatherbacks in the Pacific.

Lastly, it is known that seabirds are killed in longline fisheries. However, other longline fisheries such as the domestic longline fisheries in Alaska and Hawaii have implemented mitigation measures that have substantially reduced incidental seabird mortality. Mitigation measures from these fisheries will be incorporated into the proposed EFP, as applicable and appropriate, as part of the term and conditions of the proposed EFP.

A key question which this EFP would help address is whether longline fishing subject to gear restrictions and continuous monitoring represents an economically and environmentally superior alternative to either DGN or harpoon gear for fishing within the West Coast EEZ. The EFP is intended to gather information for assessing the viability of longline fishing as an alternative to DGN fishing. Based on what is known about the environmental impacts of the other two swordfish fisheries and what is known about longline gear in other areas, it is NMFS position that longline gear falls somewhere between the range of impacts characteristic of the harpoon and DGN fisheries. In other words, NMFS believes that the longline gear proposed for this action is less selective than harpoon gear but more selective than DGN (Figure 3). Exactly where the SSLL lies between the range of impacts is not known at this time. A key purpose of this EFP would be to begin collecting necessary information to make that determination.

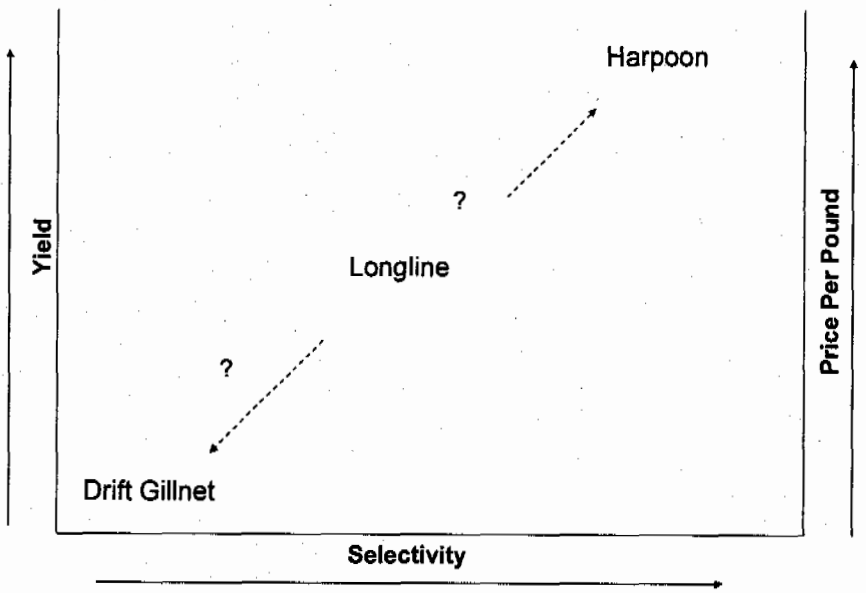


Figure 3. Conceptual model of where longline fishing occurs relative to the DGN and harpoon fisheries in terms of selectivity (e.g., environmental impacts), catch per unit effort, and price per pound.

Some might suggest that due to the high selectivity of harpoon gear, this should be the primary gear type used for catching swordfish. NMFS does not believe that harpoon gear offers a realistic alternative as it is a low volume fishery. Catch rates in the DGN fishery are 2-3 times higher than in the harpoon fishery (Coan et al., 1998). In addition, DGN vessels use less fuel in finding and pursing their catch, do not rely on spotter planes, and DGN vessels can supplement their swordfish catches with non-target species. (Coan et al., 1998). Even if harpoons were the preferred gear type, the number of vessels required to provide commercial quantities of swordfish would undoubtedly create serious congestion problems in the southern California Bight. User conflicts would most likely occur with recreational fishing vessels.

It is known that harpoon caught swordfish do provide a premium ex-vessel price with the average price-per-pound, more than double that of DGN caught swordfish (PFMC, 2006). However, local processors in the Los Angeles area note that longline caught swordfish can also command a price closer to that of harpoon caught swordfish (Chris Fanning, pers. comm. with local San Pedro and Terminal Island fish buyers on July 12, 2007). Harpoon caught swordfish average $6-8 per lb, with highs of $11 per lb for best quality and first of the season. This fishery commands the highest quality and best price. Trips are relatively short and fish handled well and come in with best color, thus highest demand from discriminating seafood restaurants. For the DGN fishery, swordfish average $3-4 per lb and also obtain a lower demand from retailers and restaurants and poorest quality despite relatively shorter trip duration. Net marks and long overnight soaks in net resulting in lower quality once brought on board. Based on past experience, local fish buyers pay around $3-5 per lb for longline caught swordfish with the higher price going to the most recently caught fish from the top of the fish hold and around $3 per lb for the older, lower quality fish caught further away from coast and from the beginning of month long or more trips. These fish buyers also noted that a proportion of longline fish come up alive, and thus better quality to begin with.

In terms of long range consistency with the California Coastal Act, NMFS believes that if the EFP is conducted it could provide valuable information for forming the basis for potentially converting the DGN fishery to the more selective longline fishery. To make that determination, additional information would need to be collected in future years under controlled conditions of additional EFPs until there is sufficient information to determine whether a regulatory change is justified. Any future fishing activities of this nature would be subject to additional rigorous environmental review to evaluate potential effects. However, the long term benefits of identifying and implementing a gear type that provides a more environmentally conservative way to target swordfish off California while minimizing risk to protected species cannot be overlooked and remains consistent with the objectives of the Coastal Act.

Section 30234 Commercial fishing and recreational boating facilities: *Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists*

or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

The vessel that would participate in the EFP currently works out of a southern California harbor. The continued success of his fishing operations including the development of a longline fishery for highly migratory species increases the likelihood of maintaining the demand commercial fishing infrastructure at his home port as well as any California port he chooses to land his catch. As was shown in Figures 1 and 2, the number of commercial fishing vessels in both the harpoon and DGN fisheries continues to decline as economic practicalities and management actions restrict their success. An opportunity to identify a new fishery that may be more selective for targeting swordfish could maintain and may even increase the current demand for commercial boating facilities.

Section 30234.5 Economic, commercial, and recreational importance of fishing: *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

The proposed action would likely have a long-term beneficial socioeconomic impact, if it demonstrates that longline fishing conducted under restricted conditions to mitigate adverse impacts to protected species is an economically viable activity. In the short term, prosecution of the EFP could generate revenue for the applicant, some of which would have community income impacts in terms of purchase of fuel, supplies and other inputs. In the long term, it may provide an alternative to the current DGN fleet for converting to an alternate, more conservative fishing style. If sufficient information is gathered by means of the proposed EFP to determine whether and how the fishery may be prosecuted, regulatory action may be proposed to effect a permanent change applicable to fishery participants as a whole, based on the measures applied as part of the EFP. NMFS does not see this swordfish fishery actually expanding, but rather, converting from one gear type to another. Consequently, the economic and commercial importance of the swordfish fishery would remain intact and may even resurge to more moderate levels of fishing activity.

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Federation of Independent Seafood Harvesters

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July 20, 2007

Peter M. Douglas,
Executive Director
California Costal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

Subject: Exempted Fishing Permit application for longline fishing in the U.S. Exclusive Economic Zone off the California coast by Pete Dupuy

Dear Mr. Douglas:

The Federation of Independent Seafood Harvesters (FISH) is a non-profit association of California commercial fishermen primarily engaged in the drift gillnet (DGN) swordfish fishery. FISH advocates for sound, science-based fishery management policy and practice through its long-time participant in domestic and international highly migratory species (HMS) fishery management forums. Also, FISH continually strives to mitigate unintentional impacts to untargeted finfish, marine mammals, sea turtles, and sea birds. FISH is a member of the Pacific Offshore Cetacean Take Reduction Team (POCTRT), and the Pacific Scientific Review Group, and has donated over $30,000 to help fund the work of the *Asociacion Sudcaliforniana de Protecion al Medio Ambiente y a la Tortuga Marina*, a Mexican conservation organization developing leatherback sea turtle incubation methods and providing protection for nesting females returning to *Aguas Blancas* beach in Baja. It is in regard to exploring new strategies to mitigate unintentional marine resource impacts that FISH supports the above referenced Exempted Fisheries Permit (EFP), submitted by FISH member Pete Dupuy to the Pacific Fishery Management Council (PFMC) at their November, 2005 meeting.

The California Costal Act planning and management polices require the protection of marine resources (§30230), while recognizing the commercial importance of fishing activities (§30234.5). Striking this balance is also consistent with federal management policies and protections: the PFMC's HMS Fishery Management Plan's (FMP) goals and objectives; the ongoing work of the POCTRT under section 118 of the Marine Mammal Protection Act (MMPA) to reduce incidental serious injury or mortality to marine mammals, and compliance with the stringent provisions of the Endangered Species Act (ESA). The National Marine Fisheries Service (NMFS) is the federal agency charged with ensuring such protections are adhered to, and they possess the resources and

EXHIBIT NO. 6
APPLICATION NO.
CD-47-01

expertise required to make such determinations. As such, a Coastal Zone Management Act consistency determination by the NMFS regarding this issue should be accorded maximum deference.

The DGN fishery has been in decline since the 1997 implementation of regulatory measures to protect marine mammals, including some listed under the ESA as endangered or threatened species. That decline has been exacerbated since the 2000 closure of nearly half of the DGN fishery's traditional fishing grounds to protect leatherback sea turtles. The potential loss of the DGN fishery due to these regulatory measures is a matter of grave concern under California's continuing policy and responsibility to foster and promote growth in employment, productivity and income using all practical means within its power consistent with its needs and obligations and other essential considerations of state policy, and seek the assistance and cooperation of industry, labor, and the federal and local government for the purpose of creating and maintaining the general conditions under which there will be afforded useful employment opportunities, including self-employment, for all those qualified persons willing and seeking work (Government Code §15900).

This HMS fishery faces serious conservation challenges, with the potential to put everybody out of business, unless this fishery is adaptable to a more bycatch friendly alternative. The longline EFP proposing the use of single vessel for a four-month period to test the economic feasibility of pelagic longline as a substitute for DGN gear as a first step in determining if there is an alternative to DGN for the harvest of HMS that reduces bycatch impacts on finfish, marine mammals, and sea turtles explores such an alternative. Switching from DGN to longline may be the solution to this problem. Longline is proven to be more bycatch friendly than DGN. 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. Unlike fish caught in drift gill nets, most of the longline bycatch can be released alive." (O'Brien, Sunada 1994[1])

There is no doubt that longline is an economically viable HMS fishing gear. Longline is the predominant gear type used to harvest HMS worldwide, including a U.S. high-seas fishery based in Hawaii. As a practical and safety matter, high-seas fishing (beyond the 200 mile limit of the Exclusive Economic Zone) require a vessel of 70 to 100 feet in length. Vessels in the DGN fishery range from 40 to 60 feet in length. Because this EFP explores the possibility of converting existing DGN vessels to longline, such fishing must take place in the area where the DGN fishery has historically operated. However, unless longline gear produces at a level comparable to DGN production, the bycatch advantage is moot. This EFP explores whether longline gear produces at a level comparable to DGN. This comparison addresses the fact that the out-of-pocket cost of deploying longline gear is much greater that the equivalent cost of deploying DGN gear. For

[1] 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.

longline, the deployment cost of bait, lightsticks, and gear loss averages $1.00 a hook, $1,000.00 for a 1,000 hook set, or $14,000.00 for a 14 set trip. Therefore, production levels must be high enough to offset the added overhead. There is no equivalent deployment cost for DGN gear. Also, unlike DGN gear, once a longline hook loses its bait, or catches an unmarketable fish, that hook is no longer productive. The DGN fishery has historically had high levels of blue shark bycatch, although bycatch mortality of blue shark is greatly reduced with longline gear, the fact that a blue shark occupies a hook precludes that hook from catching a swordfish. These are the economic viability considerations this EFP seeks to answer.

The use of pelagic longline gear, although not a specifically authorized commercial gear under California law, is not new to California. As early as 1955 and 1956, the California Department of Fish and Game conducted research cruises to fish for tuna with longline gear. In 1968, and again in 1981, the NMFS conducted similar research. The Fish and Game Commission has previously authorized experimental longline fishing in 1979, 1987, and 1988-91.

It is California Fish and Game Commission policy to protect and preserve marine mammals, and sea turtles threatened with extinction or significant decline, including a directive for the Department of Fish and Game to work with all interested persons, agencies and organizations to protect and preserve these resources; as well as a policy to cooperate with local, state, and federal agencies and with all interested persons, groups or organizations in every way to further the aims and purposes of fish and game conservation, preservation, propagation, protection, management and administration. Both of these policies exemplify the purpose and intent of the EFP at issue.

The Marine Life Management Act (MLMA) sets California's policy on marine living resources—to ensure the conservation, sustainable use, and restoration of California's marine living resources (§7050), and California's policy on marine fisheries (§7055) with the primary goal of sustainability (§7056). Unlike some natural resource laws that call for balancing various objectives without indicating any priority, the MLMA places sustainability above other objectives of the act. In this regard, the purpose and intent of the EFP in balancing the HMS Fishery Management Plan's 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 HMS are not achieved at the expense of sustainability. On the contrary, the purpose and intent of the EFP is to increase sustainability by seeking to develop alternative fishing methods to reduce adverse impacts to finfish, marine mammals, and sea turtles so as to promote the conservation, preservation, propagation, and protection of these living marine resources. MLMA policy also exemplifies the purpose and intent of the proposed EFP.

Policy under the California Endangered Species Act—to conserve, restore, and enhance any endangered species or any threatened species (§2052)—also exemplifies the purpose and intent of the proposed EFP. The EFP seeks to test alternative fishing methods and/or gear to eliminate or reduce the incidental mortality of sperm whales, humpback whales,

fin whales, loggerhead sea turtles and leatherback sea turtles, all listed as endangered or threatened species. Further, under this act, it is California policy that all state agencies, boards, and commissions shall utilize their authority in seeking to conserve endangered or threatened species (§2055).

Directly on point, we find that under California law, where a fishery is closed or restricted due to the need to protect a fishery resource, it shall be the policy of the Department and the Commission to assist and foster the development of alternative fisheries or alternative fishing gear for those commercial fishermen affected by the restrictions, closures, or resource losses (§7712). As previously stated, the DGN fishery has been in decline since the 1997 implementation of regulatory measures to protect marine mammals. That decline has been exacerbated since the 2000 implementation of closures to protect sea turtles. These restrictions and closures are the exact reason this EFP—seeking to develop alternative fishing methods and/or gear—is proposed.

Accordingly, the proposed EFP is not only consistent with California's Costal Act planning and management polices, California's Government and Fish and Game codes, California's Endangered Species Act, California's Marine Life Management Act, and California's Fish and Game Commission policies; it is also consistent with federal management law and policies under the HMS FMP, the MMPA and the ESA.

I hope that this information is helpful.

Respectfully,

Chuck Janisse,
On behalf of the Federation of Independent Seafood Harvesters

cc: Rod McInnis, NMFS
Pete Dupuy

STATE OF CALIFORNIA—THE RESOURCES AGENCY

CALIFORNIA COASTAL COMMISSION

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Tu 3

DATE: December 10, 2002

TO: Coastal Commissioners and Interested Public

FROM: Peter M. Douglas, Executive Director
Sarah Christie, Legislative Coordinator

SUBJECT: RESOLUTION SUPPORTING THE CONSERVATION OF SEA TURTLES

Note: This information can be accessed through the Commission's World Wide Web Homepage at www.coastal.ca.gov

I. BACKGROUND

At the Coastal Commission's November, 2002 meeting, members of the international non-profit organization Wildcoast asked the Commission to adopt a resolution in support of efforts to protect California's sea turtles, and provided staff with a draft resolution. Wildcoast is conducting a public education campaign to raise awareness of the fact that California's coastal waters support four different species of endangered sea turtles, and highlight some of the human-induced threats to species survival. The Commission directed staff to prepare a resolution reflecting those concerns for the December meeting.

II. NATURAL HISTORY

Four of the world's seven species of sea turtles frequent the California Coast and are listed as endangered or threatened pursuant to the US Endangered Species Act. These include the Olive Ridley (Lepidochelys olivacea), Loggerhead (Caretta caretta), Leatherback (Dermochelys coriacea) and the Green (Chelonia mydas). These species migrate between California and Central America, Japan, Indonesia and Mexico, respectively. Leatherback turtles are the largest living reptile on earth, and the most critically endangered.

EXHIBIT NO. 7
APPLICATION NO.
CD-41-07

Sea turtles are among the longest lived of all reptiles, with some species living up to 100 years. They reach reproductive maturity between 15-30 years of age, and require remote, sandy beaches for digging shallow nests and laying their eggs. It is estimated that 1 in 3,000 eggs will produce an individual that will mature to reproductive age.

Sea turtles are nomadic, and regularly traverse the world's oceans, routinely traveling thousands of miles between feeding and nesting grounds. Sea turtles feed on a variety of jellyfish, crustaceans, mollusks, plankton, algae, urchins, starfish, sponges and fish, depending on the species.

III. ENVIRONMENTAL CONCERNS

According to a report by the National Academy of Sciences, shrimp trawling kills an average of 150,000 sea turtles per year. Long line fishing kills another 40,000. Ingestion of plastic debris, brine discharge, ocean pollution, commercial harvesting of turtle eggs and loss of beach nesting habitat due to development also contribute to accelerating population decline worldwide.

Of these various factors, shrimp trawling is by far the most detrimental to turtle populations. By-catch of sea turtles can be reduced by 97% by the installation of a Turtle Exluder Device (TED), a simple grate placed at the mouth of the net that allows shrimp, but not turtles, to pass into the net. All US shrimpers are required to use shrimp nets outfitted with TEDs.

In 1995, the US Endangered Species Act was amended to require all nations that export shrimp to the US to have laws requiring similar devices on shrimp nets. As a result, 16 countries followed suit, in order to comply with the "Turtle-Shrimp Law" and gain access to the US market. However, four nations challenged the law before the World Trade Organization as an unfair barrier to free trade. A WTO panel concluded that within the WTO charter, environmental protection provisions cannot be invoked if they interfere with the overall goal of increasing free trade. The State Department responded to this ruling by revising the Turtle-Shrimp law to weaken its provisions.

Although all seven species of sea turtles are listed as endangered, threatened or vulnerable pursuant to the Endangered Species Act or international conservation treaties, scientists project that the leatherback could go extinct within the next decade, followed by others if immediate steps are not taken to protect existing populations and critical habitat. Because of their global migratory patterns, sea turtle conservation will depend on international cooperation.

IV. RECOMMENDED ACTION

Staff recommends that the Commission adopt the attached resolution supporting the conservation of sea turtles and urging members of the public and responsible agencies to take appropriate actions that contribute to conservation goals.

STATE OF CALIFORNIA—THE RESOURCES AGENCY

CALIFORNIA COASTAL COMMISSION

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RESOLUTION BY THE

CALIFORNIA COASTAL COMMISSION

IN SUPPORT OF THE CONSERVATION OF ENDANGERED SEA TURTLES

Whereas: The California Coastal Commission was established by the People of California through initiative statute in 1972 and made permanent in 1976 by the California Legislature as the State's principal coastal management agency with diverse responsibilities, including but not limited to, "...ensur(ing) conformity with the provisions of...(the California Coastal Act),...to protect regional, state and national interests in assuring the maintenance of the long-term productivity and economic vitality of coastal resources necessary for the well-being of the people of the state...;"

Whereas: The California Coastal Act also provides that in order "...to avoid long-term costs to the public and a diminished quality of life resulting from the misuse of coastal resources, to coordinate and integrate the activities of the many agencies whose activities impact the coastal zone, and to supplement their activities in matters not properly within the jurisdiction of any existing agency, it is necessary to provide for continued state coastal planning and management through a state coastal commission;"

Whereas: California's coastal waters provide critical habitat for four of the seven species of sea turtles, including leatherback, loggerhead, olive ridley and green sea turtles;

Whereas: All of the world's sea turtle species are listed as endangered, threatened or vulnerable pursuant to the US endangered Species Act or international treaties;

Whereas: Sea turtles are part of California's natural heritage and marine biodiversity, are valued and appreciated by people of all cultural backgrounds, and as such possess inestimable intrinsic value to current and future generations;

Whereas: All species of sea turtles migrate through the world's oceans and are sensitive to pollution, thermal discharge, industrial fishing techniques, and habitat loss on a global scale;

Whereas: Longline fishing and shrimp trawling without Turtle Excluder Devices (TED) kills approximately 190,000 turtles every year;

Whereas: The illegal trade in turtle meat, particularly in Southern California, violates both United States and Mexican law and is contributing to the decline of Pacific sea turtle species;

Whereas: The World Trade Organization's rejection of the United States' requirement that all shrimp exported to the U.S. must be "turtle-safe" has perpetuated the needless slaughter of sea turtles world wide by removing the economic incentives for international shrimp trawlers to install TEDs in their nets;

Whereas: Consumer habits, government actions and human activities along the California coast affect the integrity of coastal ecosystems upon which sea turtles depend for life;

Therefore be it Resolved: That the California Coastal Commission hereby expresses its commitment to conserve these magnificent and long-lived creatures by ensuring to the maximum extent possible that California's coastal waters shall remain biologically productive and healthy enough to support viable populations of sea turtles;

Be it Further Resolved: That the California Coastal Commission urges the United States Fish and Wildlife Service to work closely with Mexican law enforcement and resource agencies to halt the illegal trade in endangered sea turtle meat and byproducts;

Be it Further Resolved: That the California Coastal Commission urges consumers and retailers to follow sustainable seafood guidelines such as those published by the Audubon Society and the Monterey Bay Aquarium. These guidelines identify seafood choices that are harvested in sustainable numbers and in a manner that does not result in turtle by-catch;

Be it Further Resolved: That the California Coastal Commission urges the public and responsible government agencies to reduce the discharge of trash into ocean waters and marine debris that contributes to sea turtle mortality through accidental ingestion and entrapment;

Be it Further Resolved: That the California Coastal Commission commends and encourages lawful efforts by non-governmental organizations to challenge the World Trade Organization's interpretation of the international TED policies that are contributing to global declines in sea turtle populations.

Sara Wan, Chair
California Coastal Commission

Dave Potter, Vice-Chair
California Coastal Commission

Date

Date

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Assembly California Legislature

JARED HUFFMAN
ASSEMBLYMEMBER, SIXTH DISTRICT

COMMITTEES
CHAIR, ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
APPROPRIATIONS
UTILITIES AND COMMERCE
WATER, PARKS AND WILDLIFE

March 15, 2007

Dr. William Hogarth, Director
NOAA Fisheries Service
1315 East West Highway, SSMC3
Silver Spring, MD 20910

Mr. Donald McIsaac, Executive Director
Mr. Donald K. Hansen, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220

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

As the state Assemblymember for the 6th District in California, my district includes hundreds of miles of coastline. It is my duty to safeguard and protect the natural beauty of the Northern California coastline and the creatures that live there. I'm writing to you today because I'm concerned about the proposed exempted fishing permits (EFP) to expand the swordfish/thresher shark drift-gillnet fishery into current time/area closures and to develop a pelagic swordfish longline fishery within the Exclusive Economic Zone (EEZ). I urge you to deny both EFPs.

There is ample evidence that issuing these EFPs could have a significant impact on the endangered leatherback sea turtle and other marine wildlife. As you know, the California coast has been closed to swordfish pelagic longlining for 30 years and portions of the California and Oregon coastline have been closed to drift-gillnet fishing since 2001 to protect leatherback sea turtles which seasonally inhabit the waters off our coast. The Pacific leatherback sea turtle population has already plummeted from 91,000 in 1980 to currently fewer than 2,300 annual nesting females. If you allow pelagic longline sword fishing and drift-gillnet fishing back into these protected areas, it will place the critically endangered leatherback at greater risk of extinction, and place other protected and endangered marine species at risk.

EXHIBIT NO. 8
APPLICATION NO.
CD-41-07

Before we allow an animal species to be lost forever, I hope you'll continue to enforce the important conservation measures that have been hard-fought and are effective in protecting highly vulnerable species. The existing closures comply with domestic and international conservation mandates and are consistent with the best available scientific information. Both drift-gillnet fishing and longline sword fishing are highly indiscriminate fishing methods that have devastating effects on the marine environment. For this reason, the United Nations banned drift-gillnet fishing on the high seas in 1991, and California has had a ban on swordfish pelagic longlining for 30 years. We should do nothing less than honor these protections.

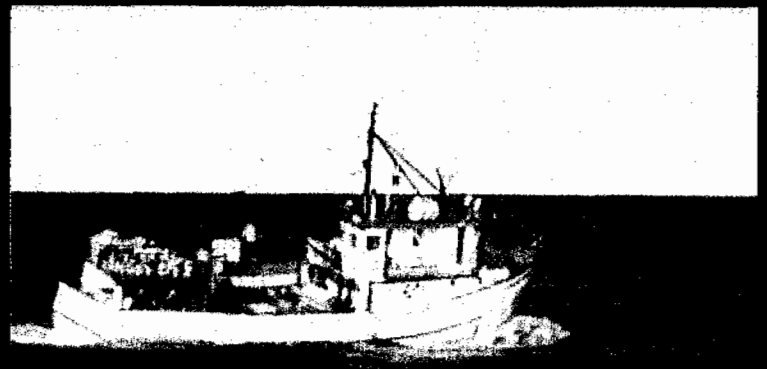
Please do your part to protect our coastline and deny these EFPs. Thank you for your consideration, and please do not hesitate to contact me with any questions.

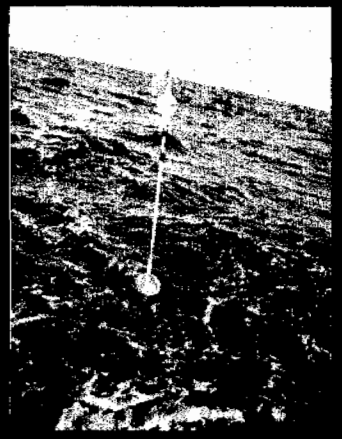
Sincerely,

Jared Huffman, Assemblymember
6th District

JH/dmg

Typical Longline Gear





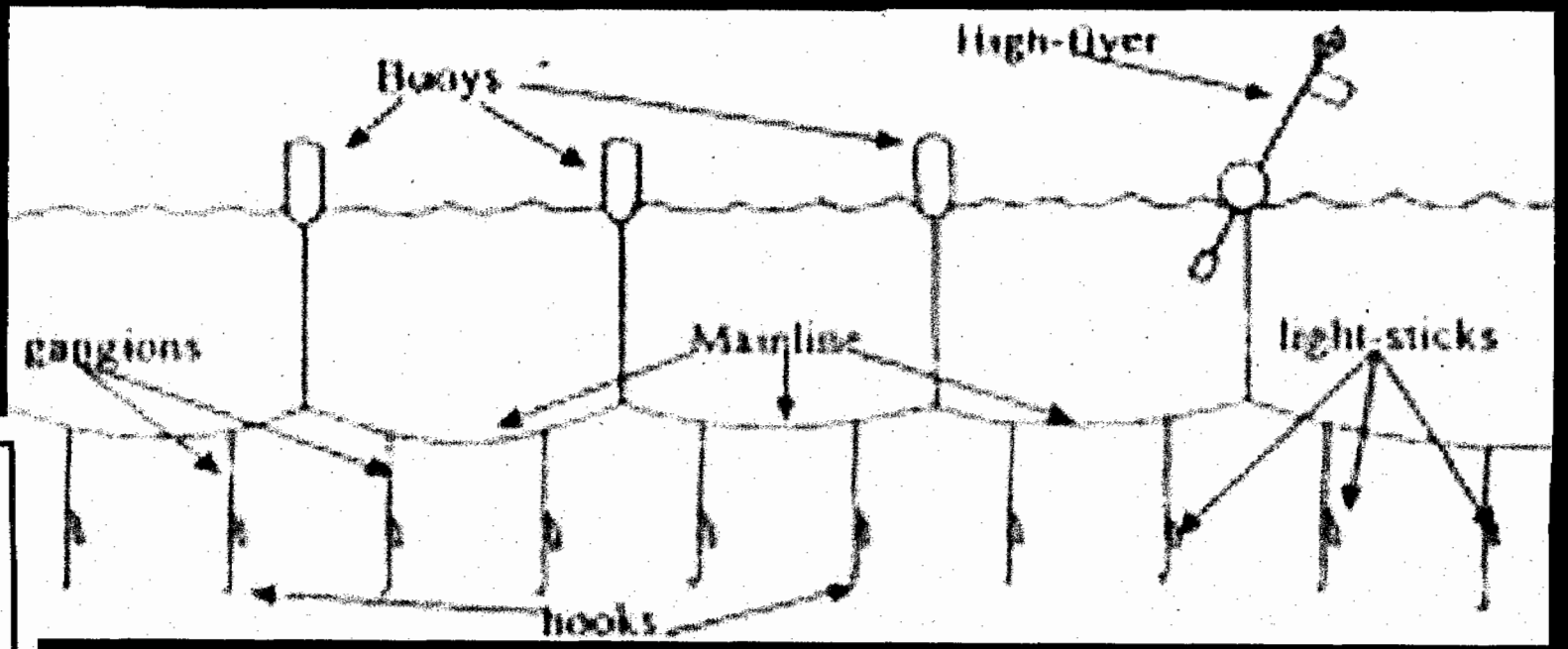
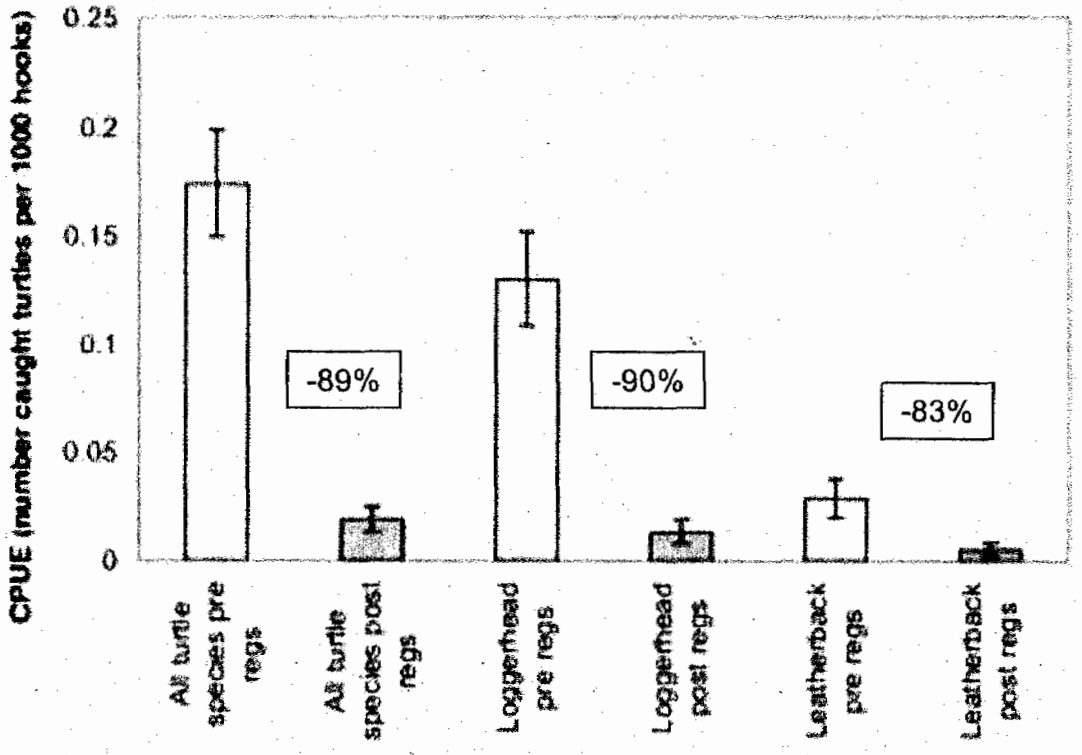


EXHIBIT NO. 9
APPLICATION NO. CD41-07

Sea Turtle Interactions (CPUE)
Pre- and Post- Hawaii Regulations



Gilman et al. 2006

EXHIBIT NO. 10
APPLICATION NO. 2-07-47

August, 2007, Agenda Item F 4e: CD-041-07

CENTER *for* BIOLOGICAL DIVERSITY *Because life is good.*

Via Electronic Mail

July 25, 2007

Peter Douglas, Executive Director
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219
Ph:(415) 904-5200
Fax: (415) 904-5400

RE: CD-041-07 (National Marine Fisheries Service). Consistency Determination Regarding a Proposed Exempted Fishing Permit to allow Pelagic Longline Fishing in the Ocean Waters off California.

Dear Mr. Douglas and Members of the Commission:

Thank you for the opportunity to comment on the pending consistency determination, currently calendared for the August, 2007 meeting of the California Coastal Commission (Agenda Item F 4e: CD-041-07), regarding a proposal by the National Marine Fisheries Service/NOAA Fisheries ("NMFS") to issue an Exempted Fishing Permit ("EFP") which would allow a pelagic longline vessel to set longline gear targeting swordfish within the U.S. Exclusive Economic Zone ("EEZ") off California from September through December, 2007, notwithstanding the fact that existing state and federal law prohibit the setting of such gear in the California EEZ. In short, the Center for Biological Diversity, among many others,[1] believes that the proposed EFP, which would place the critically endangered Pacific leatherback sea turtle and other imperiled species at risk, must be rejected as inconsistent with the Marine Resource Policies of the California Coastal Management Program ("CCMP") and Chapter 3 of the California Coastal Act.

[1] The proposed EFP has been percolating through the approval process of the Pacific Fisheries Management Council ("PFMC") and NMFS for approximately two years. Over the course of that time, the overwhelming majority of individuals and organizations participating in the process have come out strongly in opposition to issuance of the permit. Comment letters in opposition to the permit were submitted to NMFS and/or the PFMC from over a dozen conservation organizations including the Sea Turtle Restoration Project, Oceana, Ocean Conservancy, Natural Resources Defense Council, Defenders of Wildlife, Humane Society, and numerous others. Recreational fishing organizations, including the Billfish Foundation, the Recreational Fishing Alliance, International Gamefish Association, and the International Big Fish Network also commented in opposition to the proposal. Several California public officials including State Senator Carole Migden, State Assemblymember Jared Huffman, United States Senator Barbara Boxer and Congresswoman Lynn Woolsey wrote letters in opposition. Additional opposition came from independent seabird and sea turtle scientists as well as over 5000 members of the public. Finally, as longline fishing in California state waters, as well as landing longline-caught fish from within the EEZ, is prohibited under state law, the California representative from the Department of Fish and Game who sits on the PFMC has also consistently voted against the EFP. Other than the permit applicant and NMFS, there is a near consensus that the EFP should not be issued.

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P.O. Box 549 · Joshua Tree, CA 92252-0549 *tel:* (760) 366.2232 *fax:* (760) 366.2669 *www.*

EXHIBIT NO. 11
APPLICATION NO.
CD-41-07

The specifics of the EFP, the regulatory context in which it is proposed, and the significant adverse consequences to the various species likely to be of hooked, entangled and killed pursuant to it are described in detail in our recent letter to NMFS commenting on the proposed EFP. That letter, which is appended to the end this letter, also describes the numerous legal short-comings of the EFP under various federal laws. As such, in this letter we will limit our discussion to the EFP as it relates to the relevant provisions of the CCMP and Coastal Act.

The proposed EFP is inconsistent with, at a minimum, Sections 30230, 30240, 30220 and 30234.5 of the Coastal Act. Section 30230 of the Coastal Act provides:

> Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Similarly, Section 30240 provides:

> (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

Numerous marine resources and "species of special biological or economic significance" and "environmentally sensitive habitat values" protected by the Coastal Act are threatened by the proposed permit. These include Endangered Species Act ("ESA") protected marine mammals, sea turtles and seabirds, and rare and declining fish such as sharks and billfish.

While potential impacts to each these species are significant, of greatest concern to our organization is the Pacific leatherback sea turtle and its foraging grounds off California. As described in our attached letter to NMFS, Pacific leatherbacks have declined from over 100,000 nesting females in the 1980s to fewer that 5000 today. The primary cause of the Pacific leatherback decline, and the greatest threat to the species' continued existence, is entanglement and drowning in longline fishing gear. The IUCN considers leatherback sea turtles to be Critically Endangered, the most imperiled category for any species. The species is listed as Endangered under the federal ESA.

While leatherback sea turtles do not nest in California, the waters off the central and northern California coasts are critically important foraging grounds for the species. Each year, from late summer through fall, an average of over one hundred female leatherback turtles journey from nesting beaches in Indonesia to feed on jellyfish and related species in the waters off California. Satellite-tagged turtles have been tracked to the Jamursba-Medi population in Indonesia, which is considered the most important remaining population of leatherbacks in the Pacific. Recognizing the importance of California waters to leatherbacks, in 2001 NMFS designated the Pacific Leatherback Conservation Area and banned drift-gillnet fishing in the area when turtles were likely to occupy it. See 66 Fed. Reg 44549 (August 24, 2001). It is in this

same area, at the very time when leatherbacks are most likely to be in the region, that the proposed longline fishing under the EFP will occur.

Recently, NMFS scientists published a study reinforcing the importance of California waters to leatherbacks and the pressing need to protect the species within these waters.

> 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.[2]

The status of the Pacific leatherback is so precarious, that NMFS itself has repeatedly acknowledged that the death of a single adult turtle is significant and that any additional mortalities are not sustainable. See, e.g., 2000 Drift-Gillnet Biological Opinion at 94 and 100 ("any additional impacts to the western Pacific leatherback stocks are likely to maintain or exacerbate the decline in these populations" and "given the total mortality from other human activities, and assuming such mortality rates persist, additional leatherback mortalities caused by the CA/OR drift gillnet fishery are probably not sustainable."). Even if leatherback takes from the proposed EFP are "few" as NMFS wishfully projects, until and unless overall mortality to leatherbacks is drastically reduced, any impacts from the EFP are simply not sustainable.[3]

In December 2002, the California Coastal Commission approved a resolution "in Support of the Conservation of Endangered Sea Turtles." In the resolution the Commission noted the importance of sea turtles to California:

> Sea turtles are part of California's natural heritage and marine biodiversity, are valued and appreciated by people of all cultural backgrounds, and as such possess inestimable intrinsic value to current and future generations.

After noting the threat that longline fishing poses so sea turtles, the Commission asserted a commitment to conserve these imperiled species:

> That the California Coastal Commission hereby expresses its commitment to conserve these magnificent and long-lived creatures by ensuring to the maximum extent possible that California's coastal waters shall remain biologically productive and healthy enough to support viable populations of sea turtles.

Given their status as Endangered under the ESA, Critically Endangered under IUCN criteria, and their explicit recognition by the Commission in the 2002 resolution, there can be no

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[2] Benson et al., *Abundance, Distribution, and Habitat of Leatherback Turtles (Dermochelys coriacea) off California, 1990-2003*, 105 Fish. Bull. 2007. [in press].

[3] The precise number of leatherback sea turtles that will be hooked, entangled, and/or killed by the EFP are difficult to discern as NMFS has not provided actual estimates in any of its readily available materials accompanying the EFP proposal. However, given fishing under the EFP will be in waters that NMFS itself acknowledges are critically important for the species, take is likely to be significantly higher than extrapolations based on Hawaiian or Atlantic longline fishing efforts.

reasonable dispute that Pacific leatherback sea turtles are a "species of special biological or economic significance" protected under Section 30230 of the Coastal Act, and that their foraging waters off California, as delineated by the Pacific Leatherback Conservation Area, constitute an area with "environmentally sensitive habitat values" protected under Sections 30240.

Moreover, given it is undisputed that fishing under the proposed longline EFP would likely hook and/or entangle leatherback sea turtles in the Pacific Leatherback Conservation Area, and that any such take is not sustainable, we do not see how the proposed EFP can be considered consistent with the marine resources policies of the CCMP and Coastal Act.

While the proposed EFP's impacts on the Pacific leatherback sea turtle standing alone provide more than sufficient grounds for determining the proposal is inconsistent with the policies of the Coastal Act, longline fishing under the EFP will also affect many more species than just the leatherback. For example, loggerhead sea turtles, which in the North Pacific are nearly as endangered as leatherbacks, also are at risk from longline fishing under the EFP. While leatherbacks are primarily found in central and northern California waters, loggerheads are more closely linked to the warmer waters of southern California. Nevertheless, loggerheads were frequently caught in the former high seas California-based longline fishery, and have also been taken by the drift-gillnet fishery outside of southern California waters. Impacts to this species could be significant as well.

Although the short-tailed albatross is the only currently ESA-listed seabird put at direct risk by the EFP, both the black-footed and Laysan albatross are expected to be caught and killed by fishing under the EFP. The black-footed albatross is listed as Endangered on the IUCN RedList and is the subject of a pending ESA listing petition by our organization. The Laysan albatross is considered Vulnerable by the IUCN. Each of these species is a "species of special biological or economic significance" protected under Section 30230 of the Coastal Act, and their foraging waters off California constitute an area with "environmentally sensitive habitat values" protected under Sections 30240.[4]

The short-finned pilot whale is another special status species likely to be harmed by the EFP. Under the Marine Mammal Protection Act, sustainable levels of injury and mortality are defined in terms of Potential Biological Removal ("PBR"). In short, annual take above PBR is biologically unsustainable (not to mention unlawful). PBR for the short-finned pilot whale is currently calculated at 0.98 animals per year.[5] Annual take from existing fisheries is estimated at 1, which already exceeds PBR. The proposal for additional take from the EFP would exceed sustainable levels and therefore violate not just the MMPA but also Section 30240 of the Coastal Act.[6]

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[4] See, e.g. Hyrenbach et al. 2005. *Use of marine sanctuaries by far-ranging predators: commuting flights to the California Current System by breeding Hawaiian albatrosses.* Fish. Oceanogr. 15:2, 95–103.

[5] NMFS's most recent estimates of PBR and fisheries-related mortality are contained in the draft 2007 Stock Assessment Reports, available at http://www.nmfs.noaa.gov/pr/sars/draft.htm.

[6] In its recent *An Evaluation of the Proposed Shallow-Set Longline Exempted Fishing Permit's Consistency to the California Coast Act*, on page 14 NMFS states regarding marine mammal bycatch that "There have been no observed interactions in the Atlantic SSLL, where effort overlaps, spatially and temporally with marine mammals." This is simply not the case. The Atlantic longline fishery is currently estimated to kill an average of 86 short-finned

In addition to its unacceptable impacts on sea turtles, seabirds and marine mammals, the EFP will also adversely impact fish protected by the Coastal Act. Both Section 30220 and 30234 of the Act protect recreational fishing. Specifically, Section 30234.5 provides that:

> The economic, commercial, and *recreational* importance of fishing activities shall be recognized and protected.

Longline fishing is a non-selective fishing method that catches and kills numerous non-target species. Many of these species, such as striped marlin, bluefin tuna and various sharks, are of importance to California's recreational fishing industry. The negative impact of longline fishing on recreational fishing resources is one of the primary reasons that longlining has to date been prohibited in California state waters and the EEZ, having been banned under state law for 30 years, and prohibited under the federal regulations adopting the 2004 Fishery Management Plan for Highly Migratory Species. See 67 Fed. Reg. 18444 (April 7, 2004). Recreational fishing interests have consistently opposed the proposed EFP. See footnote 1, supra. The proposed EFP therefore runs afoul of these provisions of the Coastal Act as well.[7]

In sum, the proposed EFP is inconsistent with multiple provisions of the Coastal Act. It is a poorly conceived end run around existing law and regulation that would provide no useable data and would put numerous protected species at unnecessary risk. The California Coastal Commission should reject it as inconsistent with the policies and principles of the Coastal Act.

Thank you for your concern.

Sincerely,

Brendan Cummings
Center for Biological Diversity
P.O. Box 549
Joshua Tree, CA 92252

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pilot whales each year. See http://www.nmfs.noaa.gov/pr/sars/draft.htm. Of any marine mammal, the short-finned pilot whale is the species most likely to be harmed, both individually, and at a population level, from the EFP.

[7] Even though the EFP is for the purported purpose of stimulating a new commercial fishery, it is still inconsistent with the provisions Section 30234.5 addressing commercial fisheries, as it would compete with, and adversely impact, the sustainable zero-bycatch harpoon fishery for swordfish. Additionally, because some of the unavoidable bycatch species from the EFP are already overfished or undergoing overfishing (e.g. bigeye, albacore and yellowfin tuna), catch of the species under the EFP might result in additional restrictions on existing commercial fisheries targeting these species.

CENTER for BIOLOGICAL DIVERSITY Because life is good.

Via Facsimile and Electronic Mail

July 13, 2007

Dr. William Hogarth
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NMFS, 501 West Ocean Blvd., Suite
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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

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[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.

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 (364°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.[6] 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., Spotila 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[7]. 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.

[7] Benson et al 2007, Abundance, distribution, and habitat of leatherback turtles (*Dermochelys 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 handthrusted 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 state 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]

[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 a 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 permitee 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 deferment 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...(i) 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.

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[11] NMFS and FWS. 1998. Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle (*Dermochelys 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 than 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" Strahan v. Coxe, 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 (e).

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[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/swcbd/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(o) 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 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, sperms whales, and killer whales we do not see why NMFS and the applicant would chose 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(o) 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 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. 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 pursing to it, would therefore violate the MMPA. As with the ESA, engaging in a knowing violation of the MMPA caries 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 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).

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[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 purposed. The Scientific and Statistical Committee of the PFMC 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 specie 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 PFMC 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 an 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
Center for Biological Diversity
P.O. Box 549
Joshua Tree, CA 92252

[21] See http://www.seaturtles.org/press_release2.cfm?pressID=261.

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July 25, 2007

Mark Delaplaine
Federal Consistency Manager
California Coastal Commission
45 Fremont Street
Suite 2000
San Francisco, CA 94105-2219

Dear Mr. Delaplaine,

RE: Agenda Item CD-041-07 – Consistency determination for Longline EFP

The Turtle Island Restoration Network (TIRN) submits the following comments regarding the California Coastal Commission's scheduled consistency determination for the National Marine Fisheries Service regarding an Exempted Fishing Permit application for longline fishing in the U.S. Exclusive Economic Zone (EEZ) off the California coast by Mr. Peter Dupuy.

TIRN commends the California Coastal Commission on their decision to undertake a federal consistency determination on the abovementioned permit. Our organization has consistently opposed the issuance of this permit due to the threat pelagic swordfish longline fishing in the EEZ along the U.S. west coast would have on protected and endangered species including marine mammals, seabirds and the Pacific leatherback and loggerhead populations.

Of particular concern is the proposal that the EFP applicant be allowed to undertake pelagic longline fishing within the Leatherback Conservation Area, a critical habitat area for the critically endangered Pacific leatherback sea turtle that extends from Point Sur, California to the mid-Oregon coast, and up to 300 miles offshore[1]. Pacific leatherbacks are listed by the World Conservation Union (IUCN) as "Critically Endangered" on the Red List of Threatened species, having declined by 95% in just over the last two decades[2]. Scientists have predicted they could go extinct within the next few decades if immediate efforts are not taken to decrease impacts on this population, in particular from the incidental capture by drift gillnet and pelagic longline fishing gear[3,4].

[1]NMFS 2006, *Endangered Species Act Section 7 Consultation Biological Opinion. Issuance of an exempted fishing permit to allow the use of drift gillnet gear in an area and time closure that is currently prohibited under the Fishery Management Plan for the U.S. West Coast Highly Migratory Species,* Long Beach, CA: NMFS Southwest Region, 2006, 67.
[2]Spotila, J. R. et al, "Pacific leatherback turtles face extinction," *Nature* 405 (2000): 529-530.
[3]Crowder, L, "Leatherback's survival will depend on international effort," *Nature* 405 (2000): 881.
[4]Spotila, J. R. et al, " Worldwide population decline of Dermochelys Coriacea," *Chelion Conservation and Biology* 2:2 (1996): 209-222.

Pelagic longline fishing for swordfish within the California EEZ has been prohibited since at least 1977 by the State of California, with this ban extended in 1991 to include all pelagic longline fishing gear longer than 900 feet in length. In 2004 the National Marine Fisheries Service incorporated this historical state ban into their Highly Migratory Species Fishery Management Plan, which currently prohibits any pelagic longline fishing within the EEZ off the U.S. west coast, and includes a provision prohibiting shallow-set longlining fishing west of 150° W long. 50 C.F.R. § 660.712(2). NMFS extended these protections to also prohibit shallow-set swordfish longlining east of 150° W long. These extensive bans by NMFS, primarily to protect endangered sea turtles, demonstrates the vulnerability of these species to the impacts of longline fishing.

As a result of advocacy and litigation, and the subsequent implementation of protections, including but not limited to those mentioned above for pelagic longline fishing, leatherback mortality has effectively been decreased to at or near zero in California-based fisheries.

The National Marine Fisheries Service and Pacific Fishery Management Council have received overwhelming opposition from various sectors to the issuance of the EFP to allow longline fishing within California and Oregon's EEZ. A summary of this response is outlined below and highlights the desire by the public, legislators, scientific and NGO community to keep the current prohibitions in place on longline fishing within California's EEZ to protect its coastal resources and endangered and protected species:

- 6,000 + letters from the public to NMFS and the PFMC opposing the longline EFP;
- 120+ scientists submitting a coalition letter opposing the longline EFP
- Letters of opposition from the following California State and U.S. legislators:
    - Senator Barbara Boxer
    - Congresswoman Lyn Woolsey
    - California State Senator Carole Migden
    - California State Assembly Member Jared Huffman
- Letters of opposition from over 20 environmental and recreational fishing NGO's including:
    - Turtle Island Restoration Network
    - Center for Biological Diversity
    - The Ocean Conservancy
    - Oceana
    - Greenpeace
    - Natural Resources Defense Council
    - Defenders of Wildlife
    - Humane Society of the United States
    - The Leatherback Trust
    - International Big Fish Network, Inc.
    - International Game Fish Association
    - Animal Protection Institute
    - Animal Welfare Institute
    - The Billfish Foundation

- The Recreation Fishing Alliance
- United Anglers of Southern California
- Heal the Bay
- Snorkel Bob Foundation
- Brown & Associates
- Save Our Leatherbacks Operation

Thank you for your time and efforts once again for implementing a federal consistency review on the proposed longline EFP. The sea turtles, seabirds, marine mammals, and fish that will be caught 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.

Please find following copies of the comment letters submitted by California's legislators to the NMFS and PFMC opposing this EFP. I would be happy to forward you copies of any of the other comment letters listed above if you would like to request these.

The commitment of the California Coastal Commission to the protection of California's rich and diverse coastal resources is greatly appreciated.

Sincerely,

Karen Steele
Campaign Coordinator

BARBARA BOXER
CALIFORNIA

COMMERCE, ...
AND TRANSP...

United States Senate
HART SENATE OFFICE BUILDING
SUITE 112
WASHINGTON, DC 20510-0505
(202) 224-3553
http://boxer.senate.gov/contact

April 2, 200...

Dr. William Hogarth, Director
NOAA National Marine Fisheries Service
1315 East West Highway, SSMC3
Silver Spring, MD 20910

Mr. Donald Mclsaac, Executive Director
Mr. Donald K. Hansen, Chair
Pacific Fisheries Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220

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

I am writing to express my strong concerns about two proposed exempted fishing permits (EFP) before you. One EFP is for an expansion of the current drift-gillnet fishery into the Leatherback Conservation Area. The second EFP is for a new long line fishery for swordfish within the Exclusive Economic Zone (EEZ). I urge you to deny both of these EFP proposals in their current form.

Only six years ago, the Leatherback Conservation Area was established off portions of the California and Oregon coasts to protect critical feeding grounds for the endangered Pacific leatherback sea turtle. There were 91,000 nesting females in 1980. Fewer than 2,300 nesting female Pacific leatherback sea turtles remain. Drift-gillnet fishing was determined to have a significant impact on this sea turtle population. Although drift gillnet technology has recently improved in reducing marine mammal deaths, there still remains a problem in bycatch of the endangered sea turtle. Before the drift gillnet fishery is allowed to expand into the Leatherback Conservation Area, I recommend the fishery be required to undergo a legitimate experiment to prove sea turtle bycatch is no longer a problem. I oppose expansion of the drift-gillnet fishery until such a solution can be demonstrated.

California has historically never had a long line swordfish fishery -- I do not see the need to open a long line fishery now. Long line fishing creates significant bycatch and overfishing problems.

Approving the EFP proposals before you would put the endangered Pacific leatherback sea turtle at grave risk of extinction and place other threatened and endangered marine species in serious jeopardy. I urge you to deny these EFPs and continue the important marine protections in place today. Current conservation measures have been very effective at protecting threatened and endangered marine species. It is crucial that we honor these protections and sustain our coastline's rich biodiversity.

Thank you for your attention to this important matter. I look forward to hearing from you regarding your decisions.

Sincerely,

Barbara Boxer
Barbara Boxer
United States Senator

1700 MONTGOMERY STREET
SUITE 240
SAN FRANCISCO, CA 94111
(415) 403-0100

312 NORTH SPRING STREET
SUITE 1748
LOS ANGELES, CA 90012
(213) 894-5000

501 I STREET
SUITE 7-600
SACRAMENTO, CA 95814
(916) 448-2787

1500 TULARE STREET
SUITE 5000
FRESNO, CA 93721
(559) 497-5109

600 B STREET
SUITE 2240
SAN DIEGO, CA 92101
(619) 239-3884

[illegible]

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FAX (916) 319-2106

DISTRICT OFFICE
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SAN RAFAEL, CA 94903
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FAX (415) 479-2123

Assembly
California Legislature

JARED HUFFMAN
ASSEMBLYMEMBER, SIXTH DISTRICT

COMMITTEES
CHAIR, ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
APPROPRIATIONS
UTILITIES AND COMMERCE
WATER, PARKS AND WILDLIFE

RECEIVED
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PFMC

March 15, 2007

Dr. William Hogarth, Director
NOAA Fisheries Service
1315 East West Highway, SSMC3
Silver Spring, MD 20910

Mr. Donald McIsaac, Executive Director
Mr. Donald K. Hansen, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220

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

As the state Assemblymember for the 6th District in California, my district includes hundreds of miles of coastline. It is my duty to safeguard and protect the natural beauty of the Northern California coastline and the creatures that live there. I'm writing to you today because I'm concerned about the proposed exempted fishing permits (EFP) to expand the swordfish/thresher shark drift-gillnet fishery into current time/area closures and to develop a pelagic swordfish longline fishery within the Exclusive Economic Zone (EEZ). I urge you to deny both EFPs.

There is ample evidence that issuing these EFPs could have a significant impact on the endangered leatherback sea turtle and other marine wildlife. As you know, the California coast has been closed to swordfish pelagic longlining for 30 years and portions of the California and Oregon coastline have been closed to drift-gillnet fishing since 2001 to protect leatherback sea turtles which seasonally inhabit the waters off our coast. The Pacific leatherback sea turtle population has already plummeted from 91,000 in 1980 to currently fewer than 2,300 annual nesting females. If you allow pelagic longline sword fishing and drift-gillnet fishing back into these protected areas, it will place the critically endangered leatherback at greater risk of extinction, and place other protected and endangered marine species at risk.

Before we allow an animal species to be lost forever, I hope you'll continue to enforce the important conservation measures that have been hard-fought and are effective in protecting highly vulnerable species. The existing closures comply with domestic and international conservation mandates and are consistent with the best available scientific information. Both drift-gillnet fishing and longline sword fishing are highly indiscriminate fishing methods that have devastating effects on the marine environment. For this reason, the United Nations banned drift-gillnet fishing on the high seas in 1991, and California has had a ban on swordfish pelagic longlining for 30 years. We should do nothing less than honor these protections.

Please do your part to protect our coastline and deny these EFPs. Thank you for your consideration, and please do not hesitate to contact me with any questions.

Sincerely,

Jared Huffman, Assemblymember
8th District

JH/dmg

CAPITOL OFFICE
STATE CAPITOL
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SACRAMENTO, CA 95814
(916) 651-4003

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MARIN / SONOMA
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ROOM 425
SAN RAFAEL, CA 94903
(415) 479-4912

senator.migden@sen.ca.gov

California State Senate

SENATOR
CAROLE MIGDEN
THIRD SENATE DISTRICT

MAJORITY WHIP

COMMITTEES
PUBLIC SAFETY
CHAIR
NATURAL RESOURCES AND WATER
JOINT COMMITTEE ON LEGISLATIVE BUDGET
SELECT COMMITTEE ON CALIFORNIA'S WINE INDUSTRY
SELECT COMMITTEE ON CALIFORNIA'S HORSE RACING
SELECT COMMITTEE ON CALIFORNIA INFRASTRUCTURE

March 5, 2007

Dr. William Hogarth, Director
NOAA Fisheries Service
1315 East West Highway, SSMC3
Silver Spring, MD 20910

RECEIVED
MAR 12 2007
PFMC

Mr. Donald Mclsaac, Executive Director
Mr. Donald K. Hansen, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220

Dear Dr. Hogarth, Mr. Mclsaac, Mr. Hansen, and members of the Council:

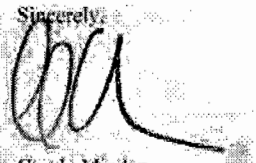
As the state Senator for the 3rd District in California, my district includes the Pacific coastline from just south of Bodega Bay to the Golden Gate. It is my duty to safeguard and protect the natural beauty of the Northern California coastline and the creatures that live there. I'm writing to you today because I'm concerned about the proposed exempted fishing permits (EFP) to expand the swordfish/thresher shark drift-gillnet fishery into current time/area closures and to develop a pelagic swordfish longline fishery within the Exclusive Economic Zone (EEZ). I urge you to deny both EFPs.

There is ample evidence that issuing these EFPs could have a huge impact on the endangered leatherback sea turtle and other marine wildlife. As you know, the California coast has been closed to swordfish pelagic longlining for 30 years and portions of the California and Oregon coastline have been closed to drift-gillnet fishing since 2001 to protect leatherback sea turtles which seasonally inhabit the waters off our coast. The Pacific leatherback sea turtle population has already plummeted from 91,000 in 1980 to currently fewer than 2,300 annual nesting females. If you allow pelagic longline swordfishing and drift-gillnet fishing back into these protected areas, it will place the critically endangered leatherback at greater risk of extinction and other protected and endangered marine species at risk.

Before we allow an animal species to be lost forever, I hope you'll continue to enforce the important conservation measures that have been hard-fought and are effective in protecting highly vulnerable species. The existing closures comply with domestic and international conservation mandates and are consistent with the best available scientific information. Both drift-gillnet fishing and longline swordfishing are highly indiscriminate fishing methods that have devastating effects on the marine environment. For this reason, the United Nations banned drift-gillnet fishing on the high seas in 1991, and California has had a ban on swordfish pelagic longlining for 30 years. We should do nothing less than honor these protections.

Please do your part to protect our coastline and deny these EFPs. Thank you for your consideration, and please do not hesitate to contact me with any questions.

Sincerely,



Carole Migden
State Senator, 3rd District