

## RECORD OF DECISION

# REGULATORY AMENDMENT AND ADDITIONAL REGULATORY ADJUSTMENTS UNDER THE FISHERY MANAGEMENT PLAN FOR THE PELAGIC FISHERIES OF THE WESTERN PACIFIC REGION

### I. Decision(s) to Be Made.

This Record of Decision (ROD) documents the decision by the Assistant Administrator, National Marine Fisheries Service (NOAA Fisheries), to revise regulations for the pelagic fisheries under the Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region (Pelagics FMP). These revisions are made under the current regulations at 50 CFR Part 660, in accordance with a regulatory amendment recommended by the Western Pacific Fishery Management Council (Council) and the requirements of applicable court orders<sup>1</sup>. Specifically, the regulatory changes will (see Section II for additional details):

(1) Restore the swordfish-directed, or shallow-set, component of the Hawaii-based longline fishery, which has been completely closed (north of the equator) since April 2001 because of its impacts on certain species of sea turtles.<sup>2</sup> In order to minimize adverse impacts on sea turtles, the shallow-set component of the Hawaii-based longline fishery will be subject to:

(A) an annual fleet-wide limit of 2,120 sets (about half of the annual average during 1994 - 1999), which will be allocated each year in equal shares -to all interested holders of Hawaii longline limited access permits (according to the number of permits held) in the form of transferable certificates;

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<sup>1</sup> By court order dated August 31, 2003 (Hawaii Longline Association v. National Marine Fisheries Service, Civ. No1:01cv00765, DDC ), a set of regulations published June 12, 2002 ("June 2002 regulations"), was vacated; the effective date of invalidation was stayed until April 1, 2004, by order dated October 6, 2003. Certain of the vacated regulations are being replaced through the regulatory amendment; others will not be replaced.

<sup>2</sup> The swordfish closure, which was made permanent by the June 2002 regulations, was preceded by several restrictive regimes including various spatial and period closures, that were implemented through emergency interim rules, extending as far back as December 23, 1999.

(B) restrictions on allowable types of hooks (only 18/0-sized circle hooks or larger, with 10-degree offset) and baits (only mackerel-type); and

(C) annual limits on the numbers of fishery interactions with leatherback (16) and loggerhead (17) sea turtles, the reaching of which will trigger closure of the shallow-set component of the fishery for the remainder of the calendar year.

2) Eliminate a seasonal (April through May) closure to longlining of a large area of ocean roughly south of the Main Hawaiian Islands - an area in which tuna-directed longlining, or deep-setting, occurs. Like the swordfish closure, this seasonal area closure was established beginning in April 2001 to reduce the number of sea turtle interactions and mortalities.

3) Require that Hawaii-based longline vessels, when engaged in shallow-setting north of 23° N. latitude, start and complete the line-setting process during the nighttime in order to minimize seabird interactions.

4) Require that vessels operating under Hawaii longline limited access permits carry and use specified de-hooking devices to disengage hooked and entangled sea turtles in order to minimize sea turtle injuries and mortalities.

This ROD further documents non-regulatory decisions by NOAA Fisheries to implement non-discretionary terms and conditions implementing reasonable and prudent measures necessary to minimize impacts as provided in a biological opinion (“2004 biological opinion”). The agency intends to ensure that the observer program aboard Hawaii-based limited access permit longline vessels continues. In particular, no vessel using shallow-set gear in the Hawaii-based fisheries shall be permitted to fish without observer coverage. Observer coverage in the deep-set longline fisheries generally shall be maintained at an annual average level of at least 20 percent.

This ROD is issued pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) NEPA regulations at 40 CFR Parts 1500 - 1508, and NOAA’s NEPA guidelines at NOAA Administrative Order 216-6 Section 6.03a (Environmental Review Procedures for Management Plans and Management Plan Amendments). This decision is based upon the analyses included within the Final Environmental Impact Statement, Pelagic Fisheries of the Western Pacific (FEIS) issued March 30, 2001, and the Final Supplemental Environmental Impact Statement included in a Regulatory Amendment to the Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region (FSEIS), dated March 5, 2004. The Notice of Availability of the Draft SEIS (DSEIS) was published by the Environmental Protection Agency (EPA) on January 23, 2004 (69 FR 3340) and the Notice of Availability of the FSEIS was published on March 19, 2004 (69 FR 13036).

## **II. Introduction and Background**

On June 12, 2002, NOAA Fisheries issued regulations governing Pelagics FMP fisheries that implemented actions to mitigate interactions between the Hawaii-based longline fishery and sea turtles as required by the Endangered Species Act (ESA) Section 7 biological opinion for this fishery issued by NOAA Fisheries on March 29, 2001. Subsequently, in Hawaii Longline Association v. National Marine Fisheries Service, Civ. No1:01cv00765, DDC ), the U.S. District Court for the district of Columbia vacated the applicable biological opinion and the associated June 2002 regulations. As immediate invalidation of the regulations was expected to have had adverse effects on the fishery and sea turtle populations, the court stayed the vacatur until April 1, 2004 (order dated October 6, 2003).

An expedited schedule for preparation of the SEIS was utilized to ensure that adequate turtle conservation regulations are in place upon the June 2002 regulations becoming ineffective on April 1, 2004, pursuant to court order. This expedited schedule was requested by NOAA on November 14, 2003, and approved by the CEQ on November 20, 2003. In accord with the alternative procedures, the EPA and CEQ granted waivers that shortened the public comment period on the DSEIS from 45 days to 30 days (69 FR 3340) and shortened the waiting period after availability of the FSEIS from 30 days to 10 days (69 FR 13036).

On February 23, 2004, between the publication dates of the DSEIS and FSEIS, NOAA Fisheries' Office of Protected Resources completed a consultation and issued the 2004 biological opinion in accord with section 7 of the ESA on the conduct of the fishery under the preferred alternative identified in the DSEIS. The consultation was conducted with the NOAA Fisheries Pacific Islands Regional Office, Division of Sustainable Fisheries, as the action agency, and with the Hawaii Longline Association, which represents participants in the Hawaii-based longline fishery, as an applicant. The FSEIS was prepared after consideration of the 2004 biological opinion.

The 2004 biological opinion concluded that conduct of the western Pacific pelagic fisheries, as managed under the preferred alternative,<sup>3</sup> is not likely to jeopardize the continued existence of sea turtles or other ESA-listed species under the jurisdiction of NOAA Fisheries.

In anticipation of this regulatory action, on February 27, 2004, NOAA Fisheries requested consultation under section 7 of the ESA with the U.S. Fish and Wildlife Service for the

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<sup>3</sup> The action considered in the consultation included three future regulatory measures that are expected to be implemented within the next year. The three measures address requirements for vessel operators to attend protected species workshops and requirements to carry and use line clippers and dip nets to facilitate the disengagement of hooked and entangled sea turtles. These measures are part of the June 12, 2002 regulations that will be vacated as of April 1, 2004. Initial action towards their implementation was taken at the Council's 122<sup>nd</sup> meeting, March 22 - 25, 2004.

ESA-listed short-tailed albatross. This consultation is not expected to conclude before the effective date of this regulatory action, but given the findings of previous biological opinions for the short-tailed albatross, NOAA Fisheries finds it reasonable to proceed with this regulatory action. A biological opinion issued in November 2000 by the U.S. Fish and Wildlife Service (revised November 18, 2002) found that the Hawaii-based longline fishery, as managed under regulations less conservative than this regulatory amendment with respect to seabirds, was not likely to jeopardize the continued existence of short-tailed albatross.

The FSEIS analyzes potential environmental and socioeconomic impacts of a number of alternative actions (described below) as compared to the management regime currently in place and the management regime that will exist if no other action is taken by April 1, 2004 (no action alternative). This latter alternative also depicts management measures in place prior to late 1999, when a number of turtle protection measures were implemented by court order to afford additional protections to listed species.

The NOAA Fisheries action is to continue the management regime, as adjusted by implementation of the regulatory measures included in the preferred alternative. Specifically, the action, in conjunction with the court order, will:

1. eliminate the prohibition on longline fishing by vessels registered under the Pelagics FMP for use under Hawaii longline limited access permits (“Hawaii-based longline vessels”) and vessels registered for use under longline general permits (“general longline vessels”) during April and May in an area south of the Hawaiian Islands (the area between the equator and 15° N. and between 180° and 145° W.);
2. eliminate the prohibition on Hawaii-based longline vessels and general longline vessels using longline gear to target swordfish (“shallow-setting”) north of the equator;
3. eliminate the requirement that operators of general longline vessels annually complete a protected species workshop;
4. eliminate the requirement that general longline vessels and other pelagic fishing vessels using hook-and-line gear employ certain sea turtle handling measures;
5. eliminate the requirement that certain vessels may be re-registered to Hawaii longline limited access permits only during the month of October;
6. establish an annual effort limit (2,120 shallow-sets per calendar year) on the number of shallow-sets that may be conducted north of the equator by the Hawaii-based longline fleet;
7. divide and distribute this annual effort limit each calendar year in equal portions

to interested holders of Hawaii longline limited access permits (according to the number of permits held) in the form of single-set transferable certificates;

8. prohibit Hawaii-based longline vessels from making more shallow-sets north of the equator during a trip than the number of valid shallow-set certificates on board;
9. require that operators of Hawaii-based longline vessels notify NOAA Fisheries in advance of each trip whether they intend to engage in deep-setting or shallow-setting, and require that only sets of the type declared be made;
10. require that operators of Hawaii-based longline vessels submit, with the logbook forms, to the Regional Administrator within 72 hours of each landing of pelagic management unit species one valid shallow-set certificate for every shallow-set made north of the equator during the trip;
11. require the use of circle hooks sized 18/0 or larger with a 10-degree offset and mackerel-type bait by Hawaii-based longline vessels when shallow-setting north of the equator;
12. establish annual limits on the numbers of fishery interactions with leatherback and loggerhead sea turtles and Hawaii-based longline vessels while engaged in shallow-setting (set at 16 and 17 for leatherbacks and loggerheads, respectively, based on the expected numbers of captures as indicated in the incidental take statement of the 2004 biological opinion);
13. establish a procedure for closing the shallow-setting component of the Hawaii-based longline fishery for the remainder of the calendar year when either of the two sea turtle interaction limits described in item 11, above, are reached;
14. require that operators of Hawaii-based longline vessels carry and use specific de-hooking devices and use them to disengage hooked and entangled sea turtles; and
15. require that Hawaii-based longline vessels deploy longline gear only during the nighttime when shallow-setting north of 23° N. latitude.

In addition to these regulatory measures, the Council included two non-regulatory elements in its recommendation. This ROD does not approve or make determinations respecting these non-regulatory elements. However, they are summarized here because of their contextual importance with respect to the Council's recommendation.

First, all the action alternatives included proposals to implement, or, in some instances, continue implementing, five off-site sea turtle conservation projects. These non-regulatory

projects are directed at protecting affected sea turtle populations on nesting beaches and in their nearshore foraging grounds at sites in Southeast Asia, Mexico, and Japan. These projects are not part of the fisheries managed under the Pelagics FMP and are not part of the action being approved by this ROD, but they might require funding or other support from the agency. Specific project sites include a nesting beach in Papua, coastal foraging grounds off western Papua, nesting beaches in Papua New Guinea, the fishing grounds of the halibut gillnet fishery in Baja California, Mexico, and nesting beaches in Japan. The projects are being, or would be, undertaken by non-governmental organizations under contract with the Council and/or NOAA Fisheries. These projects were considered and assessed by the Council in conjunction with the regulatory elements of its proposed action and found to be important components of sea turtle conservation in the Pacific.

Second, the Council recommended that NOAA Fisheries pursue opportunities to conduct fishing trials in the shallow-set component of the longline fishery, with the aim of testing new technologies to further reduce sea turtle interactions and mortalities, and to treat any interactions and mortalities incurred in such trials as covered by the incidental take statement of the biological opinion issued on February 23, 2004, by NOAA Fisheries for the western Pacific pelagic fisheries.

The Pelagics FMP provides for regulatory amendments under the existing Pelagics FMP. The management regime described in the Pelagics FMP is consistent with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), including its 10 National Standards.

The main element of this action is to establish a swordfish fishery of limited scale that will permit environmentally responsible shallow-set swordfish longlining while minimizing impacts on protected species of sea turtles in the Pacific Ocean. Consistent with Pelagics FMP objectives, the Magnuson-Stevens Act, and other applicable law, objectives of the action include achieving optimum yield (OY) and promoting domestic marketing of management unit species on a long-term basis, without likely jeopardizing the continued existence of any threatened or endangered species. Consistent with these objectives, one element of this action is the elimination of a seasonal area closure for the tuna-directed component of the western Pacific pelagic longline fishery.

The adjustments to the management regime are needed to achieve Pelagics FMP and Magnuson-Stevens Act objectives related to achieving OY and promoting, within the limits of managing at OY, domestic harvest and marketing of management unit species while protecting listed sea turtle species. The overarching need is to produce the highest net benefit from fisheries to the nation, while balancing environmental and social values. Target fish stocks are in good shape, so very generally, more fishing by the U.S. pelagic fishing fleets facilitates achieving OY. However, sea turtle interactions are a constraining factor on optimizing harvest. A central challenge, therefore, is to have a management regime that facilitates a beneficial fishery but that allows fishing to an extent and in a manner such that it does not impair the survival and recovery of ESA-listed sea turtles.

The lead agency for the FSEIS is NOAA Fisheries, specifically, the Pacific Islands Regional Office, Division of Sustainable Fisheries. In accordance with NEPA, the FSEIS was prepared to reduce duplication and paperwork and address regulatory requirements of NOAA Fisheries, pursuant to NEPA, the Magnuson-Stevens Act, the Regulatory Flexibility Act (RFA), Executive Order (EO) 12866, and other applicable law (40 CFR Part 1506.4). The Proposed Action requires approval from NOAA Fisheries prior to implementation.

### **III. Description of Project Alternatives and other Alternatives considered but not carried forward for Detailed Analysis**

Note: The following is a brief summary of the management alternatives considered in detail in the FSEIS and other alternatives considered but eliminated from detailed study in the FSEIS. Further detailed information on the management alternatives may be found in the FSEIS, submitted to the EPA on March 12, 2004, and the FEIS.<sup>4</sup>

#### **A. Alternatives considered in detail in the FSEIS**

Seven alternatives were considered in detail in this FSEIS. As required by NEPA, a “No Action” Alternative was identified for comparative analytical purposes (40 CFR Part 1502.14). In this instance, the “No Action” Alternative analyzed the circumstances representing actions that have been implemented since the March 2001 FEIS and the anticipated configuration of the fishery if no additional management action is taken by April 1, 2004. Under this alternative the June 12, 2002 rules are vacated and, so far as turtle conservation measures are concerned, the fishery returns to the pre - 1999 Pelagics FMP management regime.

In addition, the current fishery, conducted in accord with management measures in place under the June 12, 2002 rules (the preferred alternative in the 2001 FEIS), was identified for comparative analytical purposes. These and other alternatives carried forward for detailed analysis represented different tradeoffs between achieving the Pelagics FMP objectives and minimizing impacts on and conserving protected species of sea turtles in the Pacific Ocean. Due to the court order invalidating the June 2002 regulations, alternatives considered in detail here, other than Alternative 6 representing the current fishery, are presented assuming the June 12, 2002 rules are not in effect. A detailed description of the regulations invalidated by court order is presented at 9.1.4.1 of the FSEIS (pp. 29-33) and in the final rule.

The more recently developed alternatives are based on research conducted between 2001 and 2003 to evaluate fishing gear modifications and strategies to reduce and mitigate interactions between endangered and threatened turtle species and longline fishing gear, as well as information available since completion the 2001 FEIS and management measures considered in

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<sup>4</sup> See page 13 of the FEIS at Section 8.0 - the alternatives here supplement those described in the FEIS.

the Council process, including meetings in late 2003 by the Council's Sea Turtle Conservation Special Advisory Committee. As presented in the FSEIS, the proposed action is a combination of a preferred alternative, preferred participation option (for allocating the available shallow-set effort limit), preferred closure option (for establishing fleet-wide limit(s) on sea turtle interactions), and implementation of court-ordered adjustments. The alternatives, participation options, and closure options are summarized below.

FSEIS Alternative 1: This alternative allows, on an annual basis, 1,060 (swordfish-directed) shallow-sets, subject to a requirement that only 18/0 or larger circle hooks with 10-degree offset and mackerel-type bait be used (model swordfish fishery). This alternative does not reinstate the April-May longline closure in the area south of the Hawaiian Islands ("seasonal southern area closure"). It requires night-setting by Hawaii-based vessels shallow-setting north of 23° N., and requires that NOAA Fisheries-approved dehookers be carried and used by Hawaii-based longline vessels. This alternative also includes the pursuit of a suite of non-regulatory conservation projects<sup>5</sup>.

FSEIS Alternative 2: With the exception that it allows 1,560 swordfish shallow-sets only on a one-time-only basis, Alternative 2 is the same as Alternative 1. Following completion of this limit, analysis of the efficacy of the hook and bait requirements would be expected, along with further management action if found to be warranted.

FSEIS Alternative 3: With the exception that it allows 2,120 swordfish shallow-sets annually and reinstates the seasonal southern area closure except the EEZ waters around Palmyra, Alternative 3 is the same as Alternative 1.

FSEIS Alternative 4: With the exception that it allows 2,120 swordfish shallow-sets annually, Alternative 4 is the same as Alternative 1.

FSEIS Alternative 5: With the exception that it allows 3,179 swordfish shallow-sets annually, Alternative 5 is the same as Alternative 1.

FSEIS Alternative 6 (current fishery): This alternative does not allow any shallow-sets and reinstates the seasonal southern area closure. Unlike Alternatives 1 - 4, this alternative does not require the use of dehookers as directed by NOAA Fisheries, but does include the pursuit of a suite of conservation projects.

FSEIS Alternative 7 (No Action): As of April 1, 2004, the June 12, 2002 rules are invalid. So far as turtle and seabird conservation measures go, this alternative returns to the 1994 - 1999 management regime that allowed both swordfish-directed and tuna-directed

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<sup>5</sup> This ROD makes no determinations respecting the suite of non-regulatory conservation projects. Measures including such projects are included in the conservation recommendations of the 2004 biological opinion.



longlining with no special constraints beyond a limited entry system and maximum vessel size limits.

Participation Option 1: All Hawaii-based longline vessels are allowed to shallow-set north of the equator until the fleet-wide annual shallow-set effort limit is reached, at which point the shallow-set component of the Hawaii-based longline fishery is closed for the remainder of the year.

Participation Option 2: The annual shallow-set effort limit is distributed to permit holders based on their historical participation in the swordfish component of the fishery.

Participation Option 3: The annual shallow-set effort limit is distributed equally to all permit holders.

Participation Option 4: The annual shallow-set effort limit is distributed to permit holders based on a lottery.

Participation Option 5: The annual shallow-set effort limit is distributed each year in equal shares to all permit holders that express interest in receiving shares.

Closure Option 1: The shallow-set component of the Hawaii-based longline fishery is subject to annual limits on interactions with each ESA-listed species, with the limits set equal to the anticipated takes for each species. The shallow-set component of the fishery would close for the remainder of the calendar year once any of these limits are reached.

Closure Option 2: The shallow-set component of the Hawaii-based longline fishery is not subject to any limits on protected species interactions.

Closure Option 3: This option is identical to Closure Option 1 except that annual interaction limits would be established only for leatherback and loggerhead sea turtles, with the limits set equal to the expected number of interactions for each species, as indicated in the prevailing incidental take statement issued pursuant to section 7 of the ESA.

#### B. Other Alternatives considered but not Carried Forward for Detailed Analysis

As discussed in detail in the FSEIS at 8.0 (pp 13 - 16), the alternatives described in the FSEIS supplement those included in the March 2001 FEIS for the pelagic fisheries of the western Pacific region through the examination of an additional range of levels of swordfish fishing, in conjunction with circle hooks and mackerel-type bait. The FEIS includes details on six additional action alternatives previously considered (FEIS alternatives 3-7 and 8) but rejected by the Council for detailed consideration in the FSEIS as they did not consider the use of circle hooks with mackerel-type bait. Although circle hook gear adaptations were briefly discussed in the FEIS at p. 2-60, the impact and efficacy of circle hooks in conjunction with specific bait

types was less certain in 2001. Also not carried forward by the Council or NOAA Fisheries for detailed analysis in this document are FEIS Alternatives 1 and 9 representing, respectively, the 2001 No Action FMP Baseline and Regional Closure options. Detailed analysis of these alternatives was not warranted in the FSEIS due to changes in the regulatory structure since 2001, availability of current information on new technologies in the fishery, and failure of the closure option to meet the Pelagics FMP objective of achieving OY.

A number of additional alternatives considered by the Council following publication of the FEIS are briefly described, but not presented in detail, based on decisions to focus on alternatives recommended by the Council's Turtle Conservation Special Advisory Committee. See the FSEIS at p. 14 for additional information on as many as 18 such alternatives.

Additionally, three measures that are expected to be implemented through future rule-making within the next year (but not part of this action) were considered by the NOAA Fisheries' Office of Protected Resources in preparation of its ESA Section 7 consultation. The resulting Biological Opinion found that Alternative 4, considered in conjunction with the three future measures, is not likely to jeopardize the continued existence of sea turtles or other ESA-listed species under the jurisdiction of NOAA Fisheries. See Section 14.0 of the FSEIS and Appendix V for details.

#### **IV. Comparison of the Environmental Consequences of the Alternatives**

The environmental resources that are most relevant with respect to the consequences of the alternatives are fish stocks, sea turtles, seabirds, and marine mammals. Potential impacts on ocean and coastal habitat, biodiversity, and ecosystem function have also been assessed.

##### *Fish stocks*

Fish stocks that would be affected include tunas (bigeye, yellowfin, skipjack, albacore), billfishes (swordfish, blue marlin, striped marlin), and sharks. Fishing effort by the Hawaii-based longline fishery on these stocks and consequent fishing mortality would vary substantially among alternatives, and the differences among alternatives are relatively predictable (Table 1). However, the alternatives may also have indirect effects on these stocks because of their indirect effects on the fishing mortality caused by other longline fleets in the Pacific, as discussed in Sections 10.7 and 10.11.1 of the FSEIS. These indirect effects are difficult to predict so it is not possible to rigorously compare the impacts of the alternatives on fish stocks. Nonetheless, the differences in environmental consequences with respect to target stocks, as well as stocks of other species targeted and incidentally caught, are not expected to be substantial. This is because the differences in fishing mortality among alternatives are likely to be minor compared to total fishing mortality of the stocks (see FSEIS at 9.1.4.6) and none of the target stocks are overfished

(see FSEIS at 10.2).<sup>6</sup> One possible exception with respect to the fishery’s contribution to total fishing mortality is swordfish. Up to 1999, the Hawaii-based longline fleet caught about 20 percent of the Pacific-wide total catch of swordfish, so the alternatives could have substantial differences in terms of fishing mortality. These differences are unlikely to be substantial with respect to the condition of the stock because of its good condition. The most recent assessment of the north Pacific swordfish stock, in 2002, using data from 2001, found the stock biomass to be about 1.3 times the size of the biomass at maximum sustainable yield (16<sup>th</sup> Standing Committee on Tuna and Billfish), well above the minimum stock size threshold specified in the Pelagics FMP.

In sum, given the status of the pelagic stocks in the Pacific and the differences the alternatives would have in terms of total Pacific-wide fishing mortality of those stocks, it is unlikely that any of the action alternatives would have a significant adverse impact on fish stocks.

Table 1. Expected annual catches of target species in Hawaii-based longline fishery relative to the no-action alternative

FSEIS Alternative	Swordfish (% change relative to Alt. 7)	Bigeye (% change relative to Alt. 7)	Albacore (% change relative to Alt. 7)	Yellowfin (% change relative to Alt. 7)
1	-67	+19	+28	+18
2 <sup>7</sup>	-57	+16	+23	+15
3	-45	+11	+22	+18
4	-45	+13	+19	+12

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<sup>6</sup> Although none of the stocks are overfished, an assessment in 2003 for Pacific bigeye indicated that overfishing may be occurring (i.e., fishing mortality may have exceeded the maximum fishing mortality threshold specified in the Pelagics FMP) (Hampton et al. 2003). The assessment was found to be both uncertain and inconsistent with the assessment results from 2002, which concluded that overfishing was not occurring. The Bigeye Research Group (16<sup>th</sup> Standing Committee on Tuna and Billfish) found it unlikely that the true status of the bigeye stock had changed so dramatically, and advised that caution should be exercised in applying the 2003 assessment results until the issues of uncertainty and inconsistency can be resolved.

<sup>7</sup> It is emphasized that under FSEIS Alternative 2, shallow-setting would be allowed only until 1,560 shallow-sets have been completed, at which point shallow-setting north of the equator would be prohibited indefinitely, the management regime with respect to shallow-setting would revert to the current fishery, and fishing effort, fish catches, and interaction rates with sea turtles, seabirds, and marine mammals would change accordingly. The estimates given for FSEIS Alternative 2 throughout these tables are therefore one-time estimates rather than annual estimates.

5	-22	+6	+9	+6
6 (current fishery)	-92	0	+12	+29
7 (no action)	6.5 million lb	5.2 million lb	2.5 million lb	1.7 million lb

Source: FSEIS, Table 43.

### *Sea turtles*

Table 2 indicates the expected annual numbers of sea turtle interactions and mortalities in the Hawaii-based longline fishery under each of the FSEIS Alternatives. Since these mortality estimates were made, NOAA Fisheries adopted new categories and rates for the purpose of estimating post-hooking sea turtle mortalities (see FSEIS at 10.4.2 and Table 44). The expected numbers of mortalities under these revised rates are substantially less those indicated in this table, as indicated in Tables 64 and 65 in the FSEIS (for the preferred alternative only) and reflected in the incidental take statement of the 2004 biological opinion. The mortality estimates in Table 2 are presented only for the purpose of comparing among the alternatives, as they are no longer the best available estimates in absolute terms.

While the expected interaction and mortality rates provide comparisons of the immediate direct impacts on sea turtles of each of the alternatives, the ultimate effects of those interactions on sea turtle populations and species are less certain. Analyses of these effects are provided in the FSEIS, and for the preferred alternative only, the 2004 biological opinion provides an analysis with respect to the likelihood of jeopardizing the continued existence of affected sea turtle species. Comparable jeopardy analyses have not been conducted for the other alternatives, so it is not known whether any of the alternatives would be likely to jeopardize the continued existence of any sea turtle species (except that the No Action alternative resulted in a jeopardy conclusion with respect to sea turtles in a 2001 biological opinion that has since been vacated by court order on procedural grounds).

The alternatives may have indirect effects on sea turtle populations because of their indirect effects on the interaction and mortality rates of other longline fleets in the Pacific, as discussed in Sections 10.7 and 10.11.1 of the FSEIS. These indirect effects are difficult to predict. To the extent they occur, they would amplify the differences with respect to sea turtle impacts among some alternatives and diminish the differences among others.

Table 2. Expected annual numbers of sea turtle interactions/mortalities in the Hawaii-based longline fishery

FSEIS Alternative	Leatherback	Loggerhead	Green	Olive ridley
1	28/13	13/7	8/5	45/39
2	31/13	17/8	8/5	44/37
3	26/10	21/9	8/5	44/36
4	35/14	21/9	7/4	42/35
5	42/16	29/12	7/4	40/32
6 (current fishery)	6/2	19/8	3/3	31/29
7 (no action)	112/9	418/87	40/5	146/48

Source: FSEIS, Tables 52 and 53.

### *Seabirds*

Most seabird interactions in the Hawaii-based longline fisheries are with Laysan and black-footed albatrosses. No interactions with the ESA-listed short-tailed albatross have been observed or reported in the fishery.<sup>8</sup> Albatross interactions occur primarily in the relatively high latitudes, mostly between 25° and 40° N. latitude. Quantitative estimates of seabird interaction rates or resultant impacts on seabird populations have not been made for the alternatives. However, fishing effort is a useful indicator, and because seabird interaction rates are much greater in the swordfish-directed component of the fishery than the tuna-directed component (see Section 9.1.4.16 of the FSEIS for the magnitude of the difference and the reasons for the difference), expected levels of swordfish-directed fishing effort can be used as an indication of the relative effects of the alternatives with respect to seabirds. Another important factor is the use of seabird avoidance methods. All the action alternatives include a requirement that longline gear be deployed during the nighttime when shallow-setting north of 23° N. latitude in order to avoid interactions with seabirds. Night-setting has been found to be an effective method of avoiding interactions with black-footed albatross (a reduction of 95% has been found relative to a control using no other avoidance measures) and Laysan albatross (40% reduction). A third factor that might be relevant with respect to interactions rates and the severity of resulting

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<sup>8</sup> A 2000 biological opinion on the Hawaii-based longline fishery issued by the U.S. Fish and Wildlife Service for the short-tailed albatross concluded that the fishery as managed before the restrictive regimes imposed by the District court beginning in December 1999, plus a menu of seabird conservation measures required for all longline vessels fishing north of 25 degrees N. lat. was not likely to jeopardize the continued existence of the short-tailed albatross. None of the action alternatives considered here would be less conservative with respect to seabirds than the management regime in place at that time.

injuries is the types of hooks used. The use of the large circle hooks that would be required under all the action alternatives but FSEIS Alternative 6 may be less likely to be swallowed by seabirds, and if swallowed, may be less likely to lodge in a bird's gullet. However, no empirical evidence is available about these possible mitigative effects. Table 3 summarizes these three factors for each of the alternatives. The expected fishing effort figures for FSEIS Alternatives 1 through 6 are maximum levels based on the limits, while the figure for the no-action alternative is an estimate based on the unrestricted historical fishery.

Table 3. Indicators of relative impacts on seabirds

FSEIS Alternative	Shallow-set fishing effort north of equator (sets/year)	Night-setting required when shallow-setting north of 23° N?	18/0 or larger circle hooks required when shallow-setting north of equator?
1	1,060	yes	yes
2	1,560	yes	yes
3	2,120	yes	yes
4	2,120	yes	yes
5	3,179	yes	yes
6 (current fishery)	0	n/a	n/a
7 (no action)	4,240	no	no

Source: FSEIS, Section 8.1.

### *Marine mammals*

A number of marine mammal species, some of them ESA-listed, occur in the region where the Hawaii-based longline fishery takes place. The fishery is currently classified as a Category III fishery under Section 118 of the Marine Mammal Protection Act, indicating that expected annual mortalities and serious injuries due to the fishery amount to no more than one percent of the potential biological removal level for a given marine mammal stock. That classification is currently under review and the subject of litigation.

The numbers and types of marine mammal interactions recorded by NOAA Fisheries vessel observers from 1994 through mid-2003 are summarized in the FSEIS at 9.1.4.14. Quantitative estimates of marine mammal interaction rates or of resultant impacts on marine mammal populations under each of the alternatives have not been made. However, total fishing effort is a useful indicator of the relative impacts of the alternatives. No substantial differences in total fishing effort among the alternatives are expected. As discussed in the case of seabirds, there would likely be substantial differences among the alternatives in terms of the geographical distribution of fishing effort and the types of fishing effort (e.g., shallow-set versus deep-set), but any resultant differences in marine mammal interaction rates and resultant adverse impacts are

not expected to be substantial, in part because marine mammal interactions in the fishery are relatively rare.

### *Habitat*

Given the inert nature of the gear used to longline and the deployment of the gear in the epipelagic zone well away from coastal waters, none of the alternatives are expected to significantly adversely affect coastal or ocean habitat, including essential fish habitat and habitat areas of particular concern, and there are no substantial differences among the alternatives in terms of their effects on habitat.

### *Biodiversity and ecosystem function*

Given that the Hawaii longline fishery catches a very small fraction of the biomass in the tropical and subtropical pelagic ecosystems, none of the alternatives are expected to significantly adversely affect ecosystem function, and there are no substantial differences among the alternatives in terms of their effects on ecosystem function. It is possible that one or more of the less restrictive alternatives could jeopardize the continued existence of ESA-listed sea turtles (such an analysis has been performed only for the preferred alternative), which could adversely impact biodiversity.

## **V. Environmentally Preferable Alternative**

This section of the ROD discusses the alternatives considered by NOAA Fisheries to be environmentally preferable (40 CFR Part 1505.2(b)). The environmentally preferred alternative is the alternative which potentially causes the least damage to the biological and physical environment, and which best protects, preserves, and enhances historic, cultural and natural resources. Alternative 6 (current fishery) of the FSEIS and Alternative 8 of the March 21, 2001 FEIS (Regional Longline Closure) are identified as the alternatives causing the least damage to the biological and physical environment and which best protect, preserve, and enhance historic, cultural and natural resources. These alternatives are identified as the environmentally preferred alternatives based on the fact they would likely result in the least environmental impact in comparison to any of the “action” alternatives because they are the most restrictive in terms of fishing effort by the U.S. fleets.

Although CEQ NEPA implementing regulations require the identification of an environmentally preferred alternative, the NEPA implementing regulations do not require that this alternative be chosen as the alternative to be implemented by the agency. As provided for in the CEQ implementing regulations, the agency may take other factors into consideration when arriving at a decision on which alternative to implement. NOAA Fisheries decided to approve an alternative other than the environmentally preferred alternatives identified here because the environmentally preferred alternatives would incur social, cultural, and economic costs without guaranteed commensurate increases in protections for protected species. In particular, the environmentally preferred alternatives fail to achieve the objectives of the Pelagics FMP,

including achieving OY, and fail to offer potential for exporting sea turtle conservation technology, include a risk of adverse transferred effects if market forces result in increased fishing in unregulated fisheries, and the agency preferred alternative avoids the likelihood of jeopardy to sea turtle populations. A discussion of the considerations and rationale explaining the agency's approval of the Preferred Alternative follows.

## **VI. NOAA Fisheries Decision and Factors Considered in the Decision**

In addition to identifying the environmentally preferred alternative, CEQ NEPA implementing regulations require agencies to provide the following information in the ROD: 1) state what decision was made by the federal agency; 2) identify and discuss all factors - including any essential considerations of national policy - balanced by the agency in making its decision and state how those considerations entered into the decision (preferences among alternatives based on relevant factors including economic and technical considerations and agency statutory missions may be discussed); and 3) state whether all practical means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not (40 CFR Part 1505.2(a)(b)(c)).

### **A. NOAA Fisheries Decision**

The Council and NOAA Fisheries identified FSEIS Alternative 4 in combination with Participation Option 5 and Closure Option 3 as the preferred alternative in the FSEIS (8.1 at pp. 17 - 19). After taking several technical, economic, and agency statutory mission considerations into account, NOAA Fisheries has decided to approve the Council-preferred and proposed regulatory amendment under the Pelagics FMP.

### **B. NOAA Fisheries' Authority and Relevant Factors Considered in the Decision and Balancing**

NOAA Fisheries' authority relevant to this decision extends to approval of regulations necessary and appropriate for conserving and managing fisheries under a fishery management plan approved under section 304 of the Magnuson -Stevens Act (Section 304(a) and(b)). In reaching decisions, NOAA Fisheries is required to "consider all reasonably foreseeable environmental effects of (our) proposed actions and to involve and inform the public in the decision making process" [NAO 216-6 Section 1.01].

In making its decision to approve Alternative 4 with the selected options, NOAA Fisheries considered the preferred alternatives' consistency with the Pelagics FMP and consistency with the requirements of the Magnuson-Stevens Act and other applicable law including the ESA and the Marine Mammal Protection Act in comparison to the other alternatives analyzed in the FSEIS (40 CFR Part 1505.2(b)). With the exception of the FSEIS "No Action" Alternative and the total closure alternative of the March 2001 FEIS, each of the alternatives considered was determined to be consistent with the goals and objectives of the Pelagics FMP and the National Standards and other requirements of the Magnuson-Stevens Act.



In crafting the different alternatives, the Council and NOAA Fisheries balanced the requirements and standards of the Pelagics FMP and Magnuson-Stevens Act and those of other applicable law, including the ESA. Chief among considerations was the need to balance the objectives of achieving optimum yield and promoting domestic harvest and marketing of management unit species with the need to avoid impairing the survival and recovery of threatened and endangered sea turtle species.

### Alternative 1

This Alternative is one of five variations on the amount of shallow-setting longline effort north of the equator that would be allowed by Hawaii-based vessels. The range represented runs from zero to unlimited effort. This alternative provides for 1,060 model sets annually, less than 50 percent of the historical average during 1994 - 1999. This alternative was rejected because, in comparison to alternative 4, it provides relatively low levels of model swordfish fishing. The return on investments is likely to be low, and, given the new technologies available, the restriction on fishing effort is not warranted as adverse impacts of sea turtles could be mitigated through other measures. FSEIS at p. 146.

### Alternative 2

This Alternative is one of five variations on the amount of shallow-setting longline effort north of the equator that would be allowed by Hawaii-based vessels. The range represented runs from zero to unlimited. This alternative provides for 1,560 model swordfish sets on a one time basis. This alternative was rejected because in addition to the considerations attached to the relatively low levels of swordfish fishing discussed under Alternative 1, this alternative only provides for a one year model swordfish, resulting in more uncertainty in the fishery and a need for almost immediate supplementary regulatory action.

### Alternative 3

This Alternative is one of five variations on the amount of shallow-setting longline effort north of the equator that would be allowed by Hawaii-based vessels. The alternatives range from zero to unlimited and this alternative allows 2,120 sets annually, approximately 50 percent of the historical average 1994 - 1999. However, this alternative also includes retention of the April-May closure in certain waters south of the Hawaiian Islands with the exception of the EE waters around Palmyra Atoll. The alternative was rejected because, compared with Alternative 4, it would unnecessarily constrain the fishing activities and economic performance of holders of longline general permits and Hawaii-based longline limited access permits, and adverse impacts of sea turtles could be mitigated through other measures. (RIR/FRFA at 31/Appendix to the FSEIS)

#### Alternative 4 - Preferred Alternative

The preferred alternative was selected primarily because it was determined to have the greatest likelihood of achieving the objectives of the action, particularly achieving optimum yield and promoting domestic harvest and domestic fishery values of the management unit species while avoiding the likelihood of jeopardizing the continued existence of any endangered or threatened species. As the target fish stocks in the Hawaii-based longline fishery are not overfished and greater fishing effort by the U.S. fleet would generally result in greater economic returns and greater benefit to the nation, the essence of the selection was one of balancing the beneficial effects of greater fishing effort against negative impacts to ESA-listed sea turtle species. At the same time, value was given to selecting sea turtle and seabird mitigation measures possessing the promise of minimizing adverse impacts to those species without unduly restricting or compromising fishing efficiency.

Of the alternatives considered, Alternative 4, in combination with the selected allocation and closure options, best achieves the management objective to achieve the optimum yield and promote domestic marketing of pelagic species from the Hawaii-based longline fishery on a long-term basis without jeopardizing threatened or endangered sea turtles or other marine species. The selected alternatives best allows the agency the opportunity to implement new fishing technologies in a model Hawaii-based longline fishery for swordfish while maintaining protections for endangered and threatened sea turtles. The fleet-wide annual limit of 2,120 sets, about half of the annual average during the 1994 - 1999 period, provides a precautionary limit for the model fishery, avoids the likelihood of jeopardy of endangered or threatened sea turtle species, while allowing a commercially viable level of model swordfish fishing.

Although not the environmentally preferable action alternative, Alternative 4 with the selected options and implementation of the terms and conditions specified in the 2004 biological opinion allows the conduct of a limited scale commercial fishery that affords significant protections for endangered and threatened species of sea turtles while offering potential additional benefits in the form of measuring the effectiveness of improved technology and the promise of export of that technology to foreign fishers. Alternative 4 with the selected options avoids the likelihood of jeopardy to sea turtle populations while offering potential for exporting sea turtle conservation technology and minimizing risks that may be associated with any market driven forces resulting in unregulated fishing with adverse effects on sea turtle populations.

#### Alternative 5

This alternative represents one of five variations on the amount of shallow-setting longline effort north of the equator that would be allowed by Hawaii-based vessels. From the range of zero to unlimited sets, this alternative establishes a limit of 3,179 model swordfish sets annually. As this alternative allows shallow-setting at levels greater than 50 percent of the 1994-1998 average, it was rejected because it might fail to adequately minimize adverse impacts on sea turtles. It might, however, perform better than Alternative 4 at minimizing potential risks associated with actions that may result in an increase in unregulated fishing with adverse effects

on sea turtle populations.

### Alternative 6 - Current Fishery

This alternative includes retention of the April-May closure in certain waters south of the Hawaiian islands . The alternative was rejected because it would unnecessarily constrain the fishing activities and economic performance of holders of longline general permits and Hawaii-based longline limited access permits, and adverse impacts of sea turtles could be mitigated through other measures. (RIR/FRFA at 31/Appendix to the FSEIS)

### Alternative 7 - No Action

This alternative presents one of five variations on the amount of shallow-setting longline effort north of the equator that would be allowed by Hawaii-based vessels. Of the range from zero to unlimited allowed sets, this alternative represents the unlimited option. As this alternative allows shallow-setting at levels greater than 50 percent of the 1994-1998 average, it was rejected because it might fail to adequately minimize adverse impacts on sea turtles.

## **1. Implementing Options - Participation/Allocation**

Five options were considered for implementing a system for distribution of fishing effort allowable under a model swordfish fishery alternative. Assuming all options achieve the objective of successfully distributing, monitoring, and controlling allowable effort, the details of the system is not likely to significantly impact the number of sea turtle interactions or mortalities. One exception is the degree to which relocated effort could reduce overall turtle interactions with vessels belonging to holders of Hawaii longline limited access permits. The implementing details may significant affect the operations and success of fishery participants and the objective of achieving OY. Options considered identify allowable fishing effort in number of sets. A detailed discussion of the options appears in the FSEIS at pp. 17 - 19 with a discussion of effects on fishery participants in the FSEIS at section 10.1 at p. 145.

### Participation Option 1: Open to all

This option was rejected because, depending on the amount of allowable effort, this option could result in a derby-style fishery with potential adverse economic and safety impacts. Also, this option may result in undesirable market effects (if vessels offload simultaneously), and it would be relatively difficult to do the necessary monitoring and closure of the fishery.

### Participation Option 2: Individual historical participation

This option was rejected due to drawbacks associated with difficulty in establishing and administering the system on a timely basis, and because it would be an unjustified removal of a previous privilege and economic option from vessels that historically targeted tuna.

Participation Option 3: Divide allowable effort equally among all permit holders

This option was rejected because it would probably give each permit holder too few shallow sets to be able to make it worth investing and participating in the shallow-set component of the fishery, thereby constraining the economic performance of that component of the fishery.

Participation Option 4: Lottery

This option was rejected because it would impose a substantial amount of uncertainty on fishermen and might be considered inequitable by some fishermen.

Participation Option 5: Divide allowable effort equally among interested permit holders (Preferred)

This option was selected in conjunction with Alternative 4. This Option refines elements of Option 3, providing for certificates for allowable sets to be evenly divided among interested permit holders. An important consideration in the selection among participation options was the fairness of the regime used to allocate the available shallow-set effort among permit holders in the Hawaii-based longline fishery. The alternative determined to be the most fair and having the additional advantage of administrative efficiencies is Participation Option 5. Under Option 5, the certificate/permit holder may fish shares or trade, sell, or give them to other Hawaii longline limited access permit holders to use during the fishing year. The ability to transfer allowable effort is expected to result in increased efficiency as effort shares move to those believing they have a higher likelihood of shallow-setting profitably. This option was endorsed by the Hawaii Longline Association (FSEIS at p. 147).

2. Implementing Options - Closures

Three options were considered for establishing limits on sea turtle interactions in the shallow-set component of the Hawaii-based longline fishery. A detailed discussion of the options appears in the FSEIS at pp. 17 - 19 with a discussion of effects on fishery participants at 10.1 at pp. 145 - 148.

Closure Option 1: Hard limits for all sea turtle species in the swordfish fishery

This option was rejected because it would likely result in the shallow-set component of the fishery being closed more often than is needed to adequately mitigate adverse impacts on sea turtles.

### Closure Option 2: No hard limit for the swordfish fishery

This option was rejected because it would fail to provide a safeguard with respect to adverse impacts on sea turtles if the annual effort limit and required mitigative hook and bait types fail to minimize sea turtle interactions to the extent anticipated.

### Closure Option 3: Hard limit for the swordfish fishery for leatherbacks and loggerheads (Preferred)

This option was selected because it is cautious in providing a safeguard in case the mitigative hook and bait types and the annual effort limit are not as effective at limiting sea turtle interactions as anticipated. It affords direct protection to leatherback and loggerhead sea turtles, and indirect protections to other sea turtle species. The NOAA Fisheries vessel observer program will facilitate timely determinations of the number of sea turtle interactions at any given time, and fishery participants will be able to make operational decisions based on near-real-time availability of those determinations. They will be given one week advance notice of the closure of the shallow-set component of the fishery in order to cope with the logistical aspects of the closure, including communication.

### C. Avoidance of or Minimization of Environmental Harm

A central objective of this action is to minimize the environmental harm to protected species caused by the western Pacific pelagic fisheries, specifically, to avoid the likelihood of jeopardizing the continued existence of any threatened or endangered species. As discussed in Section VI(B), the central challenge in selecting a preferred alternative was to select the alternative that would best meet this environmental objective while also achieving the objectives of the Pelagics FMP, including achieving optimum yield.

The western Pacific pelagic fisheries, as they would be managed under the selected alternative, have been determined in the 2004 biological opinion to be unlikely to jeopardize the continued existence of any threatened or endangered species, including the sea turtle species that interact with the fisheries.<sup>9</sup>

The conservation measures included in the selected alternative will not only mitigate the adverse effects of the western Pacific pelagic fisheries on sea turtles, but they will also serve as a model that the fishing fleets of other nations may adopt. To the extent these measures are

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<sup>9</sup> The action considered in the Endangered Species Act section 7 consultation also included several anticipated future actions, including establishment of a limited access permit system for the longline fishery in waters around American Samoa, as recommended by the Council in proposed Amendment 11 to the Pelagics FMP, and the reinstatement of two sea turtle mitigation measures that will be vacated by court order on April 1, 2004. The first measure would require operators of vessels operating under longline general permits to annually attend protected species workshops; the second would require such vessels to carry specified gear for the purpose of disengaging hooked and entangled sea turtles, including line clippers and dip nets, and to employ specified sea turtle handling, resuscitation, and release measures.

effective in reducing adverse impacts to sea turtles and are adopted by other fleets, they may have mitigative effects in the longline fisheries across the Pacific. These exportable conservation measures include the hook and bait types that will be required when shallow-setting and the dehooking equipment that will be required to be carried and used by all Hawaii-based longline vessels. The adverse effects of the shallow-set component of the Hawaii-based longline fishery will be further mitigated through the fleet-wide annual limit on shallow-set fishing effort and the fleet-wide annual limits on interactions with leatherback and loggerhead sea turtles in the shallow-set component of the fishery.

In addition to the conservation measures that are part of the selected alternative, which in themselves are anticipated to have strong mitigative effects with respect to adverse impacts on sea turtles, NOAA Fisheries intends to implement the terms and conditions of the incidental take statement in the 2004 biological opinion. NOAA Fisheries must comply or ensure compliance with these terms and conditions in order to be exempt from the prohibitions of Section 9 of the ESA, with respect to species taken incidentally by the fisheries and considered in the biological opinion. These terms and conditions implement the reasonable and prudent measures in the incidental take statement. The reasonable and prudent measures are listed below. The terms and conditions are attached to this document.

Reasonable and prudent measures in the incidental take statement of the 2004 biological opinion:

1. NOAA-Fisheries shall collect data on capture, injury and mortality of sea turtles in addition to life history information on longline fishing vessels.
2. NOAA-Fisheries shall develop a system that will enable NOAA-Fisheries to collect basic listed species bycatch data in the troll, handline, and purse seine fisheries under the Pelagics FMP and assign these interactions into the categories developed through the February 2004 post-hooking mortality guidelines (either as drafted or amended by NOAA-Fisheries).
3. Sea turtles captured alive shall be released from fishing gear in a manner that minimizes injury and the likelihood of further gear entanglement or entrapment.
4. Comatose and lethargic sea turtles shall be retained on board, handled, resuscitated, and released according to established procedures.
5. Sea turtles that are dead when brought aboard a vessel or that die while on-board shall be disposed of at sea unless NOAA-Fisheries requests retention of the carcass for sea turtle research.

NOAA Fisheries considers the terms and conditions of the incidental take statement as mitigation measures. Some of the terms and conditions are already codified in existing regulations; others will be codified through the rule that implements this action; others will require new rule-making, and NOAA Fisheries intends to implement these new rules within the next year. The non-regulatory terms and conditions are, or will be, implemented by NOAA Fisheries through its existing outreach, research, monitoring, enforcement, and reporting programs and activities. Those programs will also serve as the monitoring and enforcement program with respect to the mitigation measures identified above, as required under 40 CFR

1505.2(c).

Through the adopted mitigation measures, as well as existing regulations and non-regulatory programs, NOAA Fisheries has adopted all practical means to avoid or minimize environmental harm from the selected alternative. There may exist additional means to avoid and minimize environmental harm from the selected alternative, but NOAA Fisheries has determined that their beneficial mitigative effects would likely be outweighed by their adverse environmental or socioeconomic impacts or the risk of such impacts; in other words, they are not practical. NOAA Fisheries intends to continue to explore additional measures with the potential to mitigate the environmental harm of the selected alternative and to implement them when found to be practical.

## **VII. Public Input**

The public has participated in the decision making process for the Regulatory Amendment. Public participation opportunities are described in Section 4.2 of the FSEIS (pp 1-6). They included public scoping, public hearings, Council meetings, and public comment periods.

Since release of the FSEIS, NOAA Fisheries has received and considered the following public comments:

One commenter criticized certain portions of the analyses and findings provided in the FSEIS, Regulatory Impact Review (prepared pursuant to Executive Order 12866 and appended to the SEIS), and Regulatory Flexibility Analysis (prepared pursuant to the Regulatory Flexibility Act and appended to the SEIS), and particularly commented on the agency's responses to the commenter's comments on the DSEIS, as included in Appendix X of the FSEIS. The comments focused on the analyses and findings related to the socioeconomic effects of the alternatives, particularly with respect to the relative fairness of the alternative schemes to allocate the available shallow-set fishing effort among fishing permit holders. The commenter concluded that "... it could be argued that this [the agency's preferred] option perpetuates a significant environmental justice issue, namely a disproportionately high and adverse effect on the Vietnamese American population."

One commenter recommended that: (1) hooks constructed of rapid corrosive steel that will rust within a short period of time and fall out of hooked animals be utilized; (2) ocean tests be conducted on the efficacy of the dehookers on animals hooked with circle hooks and that the use of barbless circle hooks that can be removed with little trauma to the animal be considered; and (3) the utilization of light sticks be discontinued until such time as a biodegradable chemical light (that will not harm seabirds when ingested) is developed.


One commenter indicated agreement with and support of the FSEIS for a Regulatory Amendment, recommended immediate implementation, and provided additional comments in support. The specific comments referenced consistency with upcoming legislation (marine turtle conservation act), development of mitigation technology, hopes for dissemination and transfer of mitigative technologies and fishing practices, need for management of species throughout its range, and experience in the NED Experiment, in addition to other particulars, as basis for the views expressed.

One commenter supported FSEIS Alternative 1, which he believed to be a stronger precautionary action that would "guarantee" the survival of sea turtles and health of the Pacific islands region. Comments included a request to the agency in applying precautionary principles, achieving "sustainable yields", considering additional models on worst case scenarios, and providing analyses of unforeseen events, such as regulatory non-compliance, oil spills, and natural disasters.

### VIII. Contact Person

Further information regarding this Record of Decision may be obtained by contacting:

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for William T. Hogarth, Ph.D.  
Assistant Administrator for Fisheries  
National Marine Fisheries Service

MAR 30 2004

#### Attachments:

- 1) Terms and Conditions that implement the Reasonable and Prudent Measures contained in the Incidental Take Statement of the Biological Opinion of the National Marine Fisheries Service on the Proposed Regulatory Amendments to the Fisheries Management Plan for the Pelagic Fisheries of the Western Pacific Region, dated February 23, 2004.
- 2) Decision Memorandum of March 30, 2004.



Attachment 1. Terms and Conditions that implement the Reasonable and Prudent Measures contained in the Incidental Take Statement of the Biological Opinion of the National Marine Fisheries Service on the Proposed Regulatory Amendments to the Fisheries Management Plan for the Pelagic Fisheries of the Western Pacific Region, dated February 23, 2004 (excerpt from pp. 199-201).

## Terms and Conditions

In order to be exempt from the prohibitions of Section 9 of the ESA, NOAA-Fisheries must comply or ensure compliance with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary.

1. The following terms and conditions implement reasonable and prudent measure No. 1.
  - 1A. NOAA-Fisheries shall continue the observer program aboard Hawaii-based limited access permit longline vessels to collect data on the incidental take of marine mammals, sea turtles, and other protected species. No vessel using shallow-set gear in the Hawaii-based fisheries shall be permitted to fish without observer coverage. Observer coverage in the deep-set longline fisheries generally shall be maintained at an annual average level of at least 20 percent.
  - 1B. NOAA-Fisheries shall establish an observer program, where feasible, aboard longline vessels fishing under a Pelagics FMP general permit or a limited access permit for the American Samoa-based longline fishery, should such a permit program be established. The purpose of the observer program is to provide NOAA-Fisheries with information necessary to determine if these fisheries interact with listed species and what level of impact the fisheries might have on those species. The feasibility of establishing an observer program aboard these vessels may depend upon the space available on the vessel to house and maintain an observer to carry out their duties.
  - 1C. Observer programs shall collect information regarding the incidental capture, injury, and mortality of sea turtles by species, gear and set information in which each interaction occurred, and life history information.
  - 1D. NOAA-Fisheries shall also collect life history information on sea turtles captured by longline fisheries, including species identification; measurements, including direct measure or visual estimates of tail length; condition; skin biopsy samples; and estimated length of gear left on the turtle at release. To the extent practicable, these data should allow NOAA-Fisheries to assign these interactions into the categories developed through the February 2004 post-hooking mortality guidelines (either as drafted or amended by NOAA-Fisheries).

- 1E. NOAA-Fisheries observers shall record the presence or absence of tags on all sea turtles captured by longline fisheries.
  - 1F. Data collected by observers shall be made available on a quarterly basis. “Quarterly Status Reports” shall be sent to the Assistant Regional Directors of Protected Resources and Sustainable Fisheries in NOAA-Fisheries’ Pacific Islands Regional Office and distributed to NOAA-Fisheries’ Sea Turtle Coordinators in Honolulu, Hawaii (when established); Long Beach, California, and Silver Spring, Maryland.
2. The following terms and conditions implement reasonable and prudent measure No. 2.
    - 2A. NOAA-Fisheries shall coordinate with the Forum Fisheries Agency observer program to collect life history information on sea turtles, such as species identification, measurements, condition, skin biopsy samples, the presence or absence of tags, and the application of flipper tags if none are present.
    - 2B. NOAA-Fisheries, in collaboration with the Western Pacific Fishery Management Council, shall develop a system to collect basic listed species bycatch data associated with non-longline pelagic fishing vessels fishing with hook-and-line within EEZ waters of the western Pacific region.
3. The following term and condition implements reasonable and prudent measure No. 3.
    - 3A. NOAA-Fisheries shall continue to conduct protected species workshops for skippers of vessels registered for use with longline fishing permits issued under the Pelagics FMP to facilitate proficiency on mitigation, handling, and release techniques for turtles, as outlined in 50 CFR 223.206(d)(1).
    - 3B. NOAA-Fisheries shall include information on sea turtle biology and ways to avoid and minimize sea turtle impacts to promote sea turtle protection and conservation in the protected species workshops for skippers of longline vessels registered for use with permits issued under the Pelagics FMP.
    - 3C. NOAA-Fisheries shall continue to include sea turtle resuscitation techniques and sea turtle biology information during observer training.
    - 3D. All sea turtles shall be removed from fishing gear or brought on deck prior to continuing with gear retrieval.
    - 3E. Personnel aboard a vessel registered for use with a longline permit issued under the Pelagics FMP must remove the hook from a turtle, if feasible, as quickly and carefully as possible to avoid injuring or killing the turtle. Each vessel must carry a line clipper. If a hook cannot be removed (e.g., the hook is deeply ingested or

the animal is too large to bring aboard), the line clipper must be used to cut the line as close to the hook as practicable and remove as much line as possible prior to releasing the turtle.

- 3F. Each longline vessel registered for use with a longline permit issued for use under the Pelagics FMP must carry a sea turtle dip net to hoist a sea turtle onto the deck, if practicable, to facilitate the removal of the hook. If the vessel is too small to carry a dipnet, sea turtles must be eased onto the deck by grasping its carapace or flippers, if practicable, to facilitate the removal of the hook. Any sea turtle brought on board must not be dropped on to the deck
  - 3G. Each longline vessel registered for use with a longline permit issued under the Pelagics FMP must have a wire or bolt cutter aboard the vessel capable of cutting through a hook that may be imbedded externally, including the head/beak area of a turtle.
  - 3H. NOAA-Fisheries shall make available and disseminate information on sea turtle biology and ways to avoid and minimize sea turtle impacts for promoting sea turtle protection and conservation at appropriate Regional forums (such as the Heads of Fisheries Meetings of the Pacific Community) in the western Pacific region.
  - 3I. In the event of an interaction with a sea turtle, an operator of a vessel not using longlines but using hooks (i.e, handline, troll, and pole-and-line vessels) to target Pacific pelagic management unit species in waters of U.S. western Pacific EEZ, must handle the sea turtle in a manner to minimize injury and promote posthooking survival. If a sea turtle is too large or hooked in such a manner as to preclude safe boarding without causing further damage/injury to the turtle, the fishing line must be severed and as much line removed prior to releasing the turtle.
4. The following term and condition implements reasonable and prudent measure No. 4.
- 4A. Operators of vessels registered for use with longline permits issued under the Pelagics FMP shall bring comatose sea turtles aboard, if feasible, and perform resuscitation techniques according to the procedures described at 50 CFR 223.206 (d)(1) and 660.32(b),(c), and (d).
  - 4B. If an observer is aboard the vessel, the observer shall perform resuscitation techniques on comatose sea turtles.
  - 4C. In the event of an interaction with a sea turtle, an operator of a vessel not using longlines but using hooks (i.e, handline, troll, and pole-and-line vessels) to target Pacific pelagic management unit species in waters of U.S. western Pacific EEZ,

must handle the sea turtle in a manner to minimize injury and promote posthooking survival as outlined in 50 CFR 660.32 (c) and (d).

5. The following term and condition implements reasonable and prudent measure No. 5.
  - 5A. Dead sea turtles may not be consumed, sold, landed, offloaded, transhipped or kept below deck, but must be returned to the ocean after identification unless NOAA-Fisheries requests the turtle be kept for further study.