HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM REPORT ON EXEMPTED FISHING PERMITS FOR 2015

The Council solicited exempted fish fishing permits (EFP) proposals to test alternative fishing gear as a substitute in the large mesh drift gillnet (DGN) fishery, or test new approaches or methods of fishing DGN. In response to this solicitation, the Highly Migratory Species Management Team (HMSMT) received five proposals and reviewed them using criteria outlined in the Council Operating Procedure (COP 20) for EFPs. Typical EFP timeline consists of a two meeting process, with applications being considered in June for approval in September. Although the usual two meeting process has been condensed, the team finds that two of the proposals are sufficiently complete to warrant approval by the Council. The remaining three applications would benefit from additional information, detail regarding science questions, and SSC review before approval by the Council.

The HMSMT would like to thank all applicants for their effort to submit proposals for review. We especially appreciate those who made themselves available for presentations, questions, and discussion at the February team meeting in La Jolla.

The HMSMT finds the following applicable to most if not all EFP applications:

- Emphasis on the annual reporting requirement
- Applicants should consider take caps for species which are of concern to other stakeholders (i.e. blue shark, striped marlin), which will show a willingness and understanding of the bycatch reduction objective in issuing EFPs for new gear types.

Summary of HMSMT recommendation for and comments on EFP Proposals

<u>Agenda Item H.3.a, Attachment 2; Deep-Set Buoy Gear – Pfleger Institute of</u> <u>Environmental Research (PIER), Chugey A. Sepulveda</u>

- A) HMSMT Recommendation: Council Approval
- **B)** Merits:
 - Aligned with Council goals
 - Complete with regard to COP20
 - The HMSMT agrees with justification provided by applicant (see Appendix I)

C) Suggestions and Comments:

- If applicants plan to fish within state waters, they should remain outside of the boundaries of marine protected areas and other such closures.
- Proposed observer coverage target of 20 30% is sufficient in light of research effort conducted to date, which has documented minimal protected species interactions and zero mortality. The nature of the gear configuration and fishing method which employs active monitoring of all deployed gear further supports a less than 100% observer coverage exception

Agenda Item H.3.a, Attachment 4; Deep-Set Buoy Gear – Stephen R. Mintz

A) HMSMT Recommendation: Council Approval

B) Merits:

- Applicant has indicated willingness to fund 100% observer coverage if outside funding is not available, as well as utilize Electronic Monitoring
- Application is complete as per COP20
- This proposal tests deep-set buoy gear in areas beyond Southern California Bight in the west coast EEZ
- The proposed deep-set buoy gear is similar to that used in the research conducted by PIER
- This proposal would provide information on the learning curve associated with this gear type

C) Suggestions and Comments:

- The HMSMT notes that Oregon and Washington have additional permitting requirements which may be more restrictive than the NMFS issued EFP
- Need clarification of specific procedure for data collection, analysis, and reporting including the appropriate agencies to which information will be provided

Agenda Item H.3.a, Attachment 1; HMS FMP Exempted Fishery Permit – Pete Dupuy, John Gibbs, David Haworth

- A) HMSMT Recommendation: Recommend for Council approval provided applicants address concerns outlined below
- **B)** Merits:
 - Builds upon previously approved EFP for shallow-set longline
 - Although data exist for adjacent high-seas area this EFP will provide data for previously untested gear within the EEZ

C) Suggestions and Comments:

- HMSMT encourages the applicants to resubmit revised application for consideration at the a future Council meeting that addresses the following:
 - a. 100% observer coverage or electronic monitoring the HMSMT
 - b. Detail expected effort beyond first six months
 - c. Ensure that areas of sensitive habitat and high use coastal areas are considered when defining boundaries fished under this EFP (e.g. fish outside 50nm)
 - d. Consideration of striped marlin take cap comparable to 2008 SSLL EFP proposal
- If NMFS and state agencies have committed to providing data analysis, applicant should document involved parties; otherwise, alternate sources of analysis and reporting requirements should be identified
- The HMSMT notes that Oregon and Washington have additional permitting requirements which may be more restrictive than the NMFS issued EFP

Agenda Item H.3.a, Attachment 3; Alternative Gears and/or New Approaches or Methods for Targeting Swordfish – Tim and Laura Perguson

A) HMSMT Recommendation: Resubmission of application after revision (Consider partial approval of buoy gear components of proposal)

B) Merits:

- Suggests novel gear types that have not previously been investigated under an EFP
- Willing to accommodate observers and EM

C) Suggestions and Comments:

- The MT suggests that the applicants narrow scope of gear types, focus on a single gear type
- This proposal identifies very specific science questions which need additional elaboration to be effectively reviewed by the SSC
- In order to elaborate science components, applicants should collaborate with scientists to develop a statistically sound data collection protocol (standardizing soak time, gear configuration and deployment, units of effort, etc.)
- If the applicants wish to proceed with a single experimental gear type to test gear performance with respect to catch and bycatch, SSC review will not be necessary
- If the applicants wish to proceed with multiple gear comparisons, SSC review will be necessary
- The HMSMT is concerned that the applicants have limited or no experience with these gear types, some of which have the potential for interactions with protected species
- The HMSMT notes that Oregon has additional permitting requirements which may be more restrictive than the NMFS issued EFP
- Application should be reorganized consistent with COP20

Agenda Item H.3.a, Attachment 5; Alternative Swordfish Target Fishing Methods and Gears – Alliance of Communities for Sustainable Fisheries (ACSF), Kathy Fosmark and Frank Emerson

A) HMSMT Recommendation: Resubmission of application after revised to address concerns outlined below

B) Merits:

- Application is complete as per COP20
- Participants in the EFP have extensive experience with proposed gear types
- Well defined experimental conditions including observer coverage, gear configurations, effort, and defined area of operation.

C) Suggestions and Comments:

- The HMSMT has concerns with fishing un-modified DGN gear within the PLCA time and area closures
- While applicants have suggested current gear restrictions have not been tested in the PLCA, existing gear configurations were implemented in 1998 with minor modifications in 1999; the PLCA was established in 2001

- During March Council meeting, applicant indicated willingness to incorporate modifications to the gear configuration and/or fishing methods they use to fish DGN gear in the PLCA
- This proposal identifies very specific science questions which need additional elaboration to be effectively reviewed by the SSC
- The HMSMT notes that Oregon has additional permitting requirements which may be more restrictive than the NMFS issued EFP

APPENDIX I

Summary of information provided by applicant in EFP Proposals

<u>Agenda Item H.3.a, Attachment 2; Deep-Set Buoy Gear – Pfleger Institute of</u> <u>Environmental Research (PIER), Chugey A. Sepulveda</u>

Purpose: The goal of this EFP is to collect performance information for the consideration of transitioning this gear from research to a federally authorized gear. The applicant aims to evaluate the catch and bycatch of deep-set buoy gear (DSBG), economic viability, and stakeholder acceptance off of the California coast. An additional goal of this EFP is to improve training for fishermen unfamiliar with the gear and fishing methods.

Justification: The applicants have four seasons of research with demonstrated the ability achieve high market value for high quality landed catch with documented low occurrence of incidental catch of non-marketable finfish. Additionally, there is documented low occurrence of protected species interactions and high release survival rates for all non-marketable finfish and protected species.

Gear type is promising as a method of supplementing harpoon and DGN swordfish catch while also being profitable for fishermen.

Broader significance: Promotes sustainable domestic swordfish operations, help to revitalize the west coast ports and fishing communities, and increase gear selectivity for swordfish.

Duration: Two years

Number of vessels: Six

Take composition: Applicant outlines retained species (target and secondary-marketable species) based on prior research results, which show that non-retained catch (e.g. blue sharks) and marine mammal interactions are extremely low with zero mortality as documented via research conducted to date.

Observer coverage: Within known available funding resources, proposed observer coverage target of 20 - 30%.

Data collection, analysis, and reporting: Applicant to collect data, complete analyses and reporting requirements. Standard observer program data collection and logbooks will be utilized. Data, including biological and genetic sample collections will be shared with SWFSC, as well as data summaries being provided to CDFW and Pacific Fishery Management Council HMSMT and HMSAS

Location, time, gear configurations: PIER intends to fish DSBG south of Half Moon Bay to the Mexican border; the majority of effort likely to occur from zero to 100 nm, with the possibility of some effort out to 200nm. While the westward line from Half Moon Bay indicates the northward extent of intended effort, the applicants have made clear that there is no biological or ecological significance to this delineation.

Figure 1: Proposed vessel operating and closure areas for the PIER EFP application. Applicants indicate the majority of fishing will likely occur within 100nm of the coastline but may extend to 200nm.



Agenda Item H.3.a, Attachment 4; Deep-Set Buoy Gear – Stephen R. Mintz

Summary of information provided by applicant:

Purpose: To reduce bycatch by testing new gear type in waters off of California, Oregon, and Washington previously unfished during research for this gear type. Evaluate the learning curve for an experienced fisherman with a new gear type.

Justification: Buoy gear research has shown that bycatch of protected species as well as bycatch mortality is low, but additional data about performance, bycatch, and economic viability is desirable, especially in areas that have yet to be tested.

Broader significance: Will allow Council to support the transition of this DSBG to an authorized gear type by further demonstrating the low amounts of bycatch. It will also allow for an understanding of the time and effort required by new fishers to adapt to fishing with this gear.

Duration: Two swordfish fishing seasons.

Number of vessels: One

Take composition: No explicit mention of anticipated protected species interaction, but indicates swordfish as the primary target, as well as opah, mako and thresher sharks, tuna species (bluefin, bigeye, yellowfin, albacore), and louvar as secondary marketable catch.

Observer coverage: 100%.

Data collection, analysis, and reporting: Logbooks, cameras, observers for data collection, reporting of market information (catch size, price, other associated costs such as transportation).

Location, time, gear configurations: Fishing a minimum of 12nm off the coast of California, Oregon, and Washington, while avoiding MPAs and other such closures. Requesting to fish one set (10 pieces of buoy gear) a minimum of 20 days and maximum of 60 days.



Figure 2: Proposed vessel operating and closure areas for the Mintz EFP application.

Agenda Item H.3.a, Attachment 1; HMS FMP Exempted Fishery Permit – Pete Dupuy, John Gibbs, David Haworth

Purpose: The goal of this EFP is to determine the economic viability and bycatch metrics of pelagic longline fishing (both deep and shallow set) within the West Coast EEZ.

Justification: Addresses Council goals and request to test alternative gears and meets specified criteria.

Broader significance: Enables the Council to make management decisions to balance HMS FMP goals of providing a stable supply of swordfish to the public.

Duration: 6 months to two years (see Observer Coverage below)

Number of vessels: Three experienced longline fishing vessels

Take composition: The participants intend to target swordfish and tuna species (bigeye, yellowfin, bluefin, and albacore), including dorado, opah, and shortfin make shark as secondary marketable species.

The application lists marine mammal species that may interact with longline gear within the EEZ but does not indicate take caps.

Observer coverage: Applicants state that funding 100% observer coverage for the EFP may not be economically viable, but offer another approach requiring NMFS to cover observer costs for an initial period of six months with two to three trips per vessel (each trip is approximately 14 sets or 14,000 hooks). If this initial trial results in bycatch levels within conservation requirements and generates revenue which would adequately support observer costs, the applicants would then be responsible for said costs for the remaining one and a half years.

Data collection and analysis: Observer reports are indicated as the main source of data collection, and NMFS identified as the party responsible for analysis. Additionally, logbooks, landing receipts are included as data sources, with the state and NMFS as responsible for analysis.

Location, time, gear configurations: The applicants propose variations in gear configuration, including but not limited to variations in hook depth (shallow and deep-set sets), hook and bait types, use of light sticks, and time of day.

Closure boundaries for longline fishing within the EEZ are considered as between 100 and 300 nm seaward, for determination by the Council with the recommendation that less restrictive closures will allow for more productive fishing, as well as no EFP fishing within the Southern California Bight (note: as the applicants did not provide boundary definitions for the SCB, the coordinates provided in the previous EFP submitted to the Council [April 2007 Agenda Item J.2] were used to create the below map).

Figure 3: Proposed vessel operating and closure areas for the Pete Dupuy longline EFP application. Southern California closure boundaries as defined in April 2007 Agenda Item J.2.



Agenda Item H.3.a, Attachment 3; Alternative Gears and/or New Approaches or Methods for Targeting Swordfish – Tim and Laura Perguson

Purpose: The goal of this EFP is to test an array of gear types that might serve to transition away from the DGN fishery and augment the harpoon swordfish fishery with low bycatch, economically viable methods.

Justification:

Broader significance: "Prove" that there are alternatives to target HMS that are cleaner than the current DGN fishery.

Duration: Two years minimum

Number of vessels: Five

Take composition: Applicants identified swordfish as the primary target, but also include other HMS such as healthy stocks of tuna and shark species.

Observer coverage: 100%. Applicants indicate willingness to fund observer coverage with the caveat that their limited funds will restrict (determine) the number of trips that are able to be fished under the EFP.

Data collection, analysis, and reporting: Applicants will be the main biological data collectors (morph., catch composition, etc.), along with any onboard sampler.

Location, time, gear configurations: Proposal indicates deep and shallow set buoy, long, and shortline gears. Longline gears will fish 50-200nm from the Mexican border to Cape Falcon, OR. Buoy and shortline gears are to be fished 3-50 miles offshore in the Southern California Bight, focused in areas known to be highly productive for swordfish.

Figure 4: Proposed vessel operating and closure areas for the Perguson EFP application. The Southern California area (south of leatherback critical habitat and state water line to 50nm) is indicated as a closure for longline fishing, but is the proposed area for buoy and shortline gear fishing.



Agenda Item H.3.a, Attachment 5; Alternative Swordfish Target Fishing Methods and Gears – Alliance of Communities for Sustainable Fisheries (ACSF), Kathy Fosmark and Frank Emerson

Purpose: Test the performance of DGN and SSLL in time/area zones thought to be of high concentration of swordfish and low concentration of bycatch of protected species, while fishing in the PLCA, in comparison to the average performance of the existing DGN fishery.

Justification: The opportunity to obtain sufficient data under different scenarios to answer questions about fishery performance.

Broader significance: If the EFP demonstrates that superior target fishery performance can be achieved by the test vessels, results can form the basis of management objectives and regulations applicable to the existing DGN fishery. Ultimately, reliance upon foreign caught swordfish can be replaced by healthy domestically caught fish.

Duration: Two seasons (2015/16, 2016/17)

Number of vessels: Four - Two DGN and two longline

Take composition: The applicant provides tables outlining catch and bycatch amounts for the DGN and Hawaiian shallow-set longline fisheries as recorded by NMFS observer data. Description of protected species interactions with both gear types is included as well. Suggestion of a cap on striped marlin take is mentioned.

Observer coverage: 100% human observer coverage will be required.

Data collection, analysis and reporting: Applicants identify four "treatments" that will be tested between the gear types based on location of fishing. All data will be obtained through on board observers, with CPUE, catch, bycatch, and bycatch mortality statistics analyzed. No indication as to who will be performing the analysis was made.

Location, time, gear configurations: Fishing will occur between August 15 and January 31. DGN fishing will occur in the PLCA, but remain outside of other resource area closures, Leatherback critical habitat. Longline fishing will occur outside of SCB (applicant provided revised coordinates for SCB closure boundaries) and outside of 30 miles of the coast from Point Arguello to Cape Falcon, OR.

DGN gear will be fished according to current regulations, and longline with circle hooks, mackerel type bait, light sticks, and 400 - 1,200 hooks per set, with no more than 20 sets per trip.

Figure 5: Proposed vessel operating and closure areas for the Alliance of Communities for Sustainable Fisheries (ACSF) EFP application. Revised Southern California closure boundary coordinates provided by Kathy Fosmark.



EFP #	EFP Applicant	Purpose	Duration	Gear Types	No. of Vessels	Areas	Target Spp.
	Dupuy, Gibbs, 8 Haworth	Low bycatch in EEZ and economically viable	Up to 4 years (could be less dependent upon economic viability	Shallow-Set Longline (night set)	3	(but open to consider, > 30 nm,	Swordfish & tuna (bigeye, albacore, yellowfin & bluefin)
			& funding for observers)	Deep-Set Longline (day set, tunas)	same 3		
2	PIER (Pfleger Institute)	Collect performance info to consider transition from research to federally authorized gear; Economics/marketing, stakeholder acceptance & training	2 years	Deep-Set Buoy	6	Halfmoon Bay to Mexico (mainly July -October)	Swordfish & opah. Marketable sharks
3	Pergusons	Reduce bycatch, transition from DGN to harpoon/hook & line gears		Deep-Set Buoy	5 harpoon vessels; more in future	comparisons;	Swordfish, certain tunas & sharks (those healthy & w/o quotas)
				Shallow-Set Buoy			
				Deep-Set Shortline	1		
				Shallow-Set Shortline	1		
				Deep-Set Longline	Vessels TBD in	50-200 nm, Cape Falcon to	
				Shallow-Set Longline	future	Mexico	
4	Mintz	Reduce bycatch, test deep- set buoy gear off WA, OR & CA; test 'learning curve' of experienced fisher with new gear	2 swordfish seasons (August to February)	Deep-Set Buoy (comparable to PIER design)	1	>12 nm offshore WA, OR, & CA	Swordfish and other marketable catch
	Alliance for Sustainable Communities	Test DGN bycatch reduction in PLCA (in comparison to existing authorized DGN); evaluate SSLL bycatch in EEZ	2 fishing years (April 1-March 31); DGN in PLCA August 15 - November 15	Drift Gillnet	2 first year; maybe more in 2nd year	3-200 nm: test S vs. N of Pt. Sur, up to Cape Falcon; PLCA	Swordfish and marketable catch; recognition of Pac BFT quota limitations
				Shallow-Set Longline	different 2 first year; maybe more 2nd yr	Evaluate 30-200 nm So. vs. No. of Pt. Sur, up to Cape Falcon(No So. CA Bight)	

EFP	EFP	Expected Effort	Observers	Harvest Caps	Comments
#	Applicant				
1	Dupuy, Gibbs, & Haworth	No. trips not specified; 14 sets/trip (=14,000 hooks/trip); percentage of trip with short (6 hours) soak times	Test 2-3 trips over 6 mos. & NMFS pays; if profitable, then Applicant pays 1.5 yrs	None identified	Each longline set is 50-100 km long; deep set and shallow sets in proximity?; valued added through direct marketing in Ventura and possibly San Diego
2	PIER (Pfleger Institute)	\geq 120 days in year 1 (same in year 2?). Minimum 20 8 hr sets, with target 0f 30-40 in year 1	20-30% coverage paid by applicant and PEW	None identified	Fishing effort limited by observer funding (PIER & PEW); research activity demonstrated low protected species interaction (1 elephant seal released alive) and zero-mortality of released and tagged swordfish; vessel selection rubric and funding limits additional participant vessels
3	Pergusons	12-24buoysfishedsimultaneously## sets not stated, set =1000ftw/100 hooksSimilar to Dupuy	100%, if NMFS requires, but don't say who pays	None identified	Deep and Shallow-set buoy & Deep and Shallow Shortline gears untested; want to tag swordfish Desire to conduct LL in year 2; no vessels identified
4	Mintz	10 buoys for 20 to 60 days each; fishing like PIER	pay 100% observer, if not profitable, stop EFP	None identified	Wants to fish off Oregon first; economic viability threshold of 1 swordfish/day and other marketable catch
5	Alliance for Sustainable Communiti es	60 sets per DGN vessel per year, Aug. 15-Nov. 15, when PLCA opens 90 sets per vessel per year, Aug. 15-Jan. 31; ≤20 sets & ≤24000 hooks per trip; ≤5 trips per vessel	NMFS pay for 100% observer coverage, limited willingness for video monitoring combined with observers	For striped marlin & others; work with NMFS to specify any required; avoid "MM hotspots"	well defined areas of operation, see maps; Some side by side comparisons (within 60 mi) in year 2 but undefined vessels and effort design; recognition of Leatherback Critical Habitat as exclusion area; avoidance of marine mammal 'hot spots' via ocean condition monitoring but undefined