

HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM
REPORT FOR FISHERY MANAGEMENT PLAN AMENDMENT 2 TO THE FOR HIGHLY
MIGRATORY SPECIES

The Highly Migratory Species Management Team (HMSMT) has submitted a report describing alternatives regarding Amendment 2 to authorize a shallow-set longline (SSLL) fishery seaward of the Exclusive Economic Zone (EEZ), which reflects discussions with the Highly Migratory Species Advisory Subpanel (HMSAS) at their joint meetings held in June 2008 and September 2008. This supplemental report provides the Council with an executive summary and offers HMSMT recommendations.

Section 2 outlines alternatives with HMSMT recommendations for additions or modifications provided in *bold italics*. Primary alternatives include the status quo (Alternative 1), with no west coast shallow set longline landings permitted under the HMS Fishery Management Plan (FMP); a limited entry permit system (Alternative 2) to provide for HMS FMP permitted SSLL effort on the high seas with landings on the west coast; and an open access fishery with no new permit requirement (Alternative 3).

The limited entry system (Alternative 2) offers options for area restrictions (east of 150° W longitude or east of 140° W longitude); recent swordfish landings requirements (landings from 2005 to 2007 or landings from 2001 to 2007); and ranking applicants for limited permit eligibility.

Several options for ranking limited entry permit applicants are described, including a ranking based on west coast swordfish landings history (Option 1), a point system based on drift gillnet permit ownership history (Option 2) and a point system based on each applicant's longline participation history (Option 3). Examples of the formulas using available data and arbitrary choices of formula weights are used to illustrate how the formulas could be used to rank limited entry permit applicants for eligibility.

A potential fourth ranking option is described at the top of page 6 based on a blend of the first three, but no examples are included for this HMSMT report. This blended formula could be used to select top producers under different ranking formulas, if the first three ranking formulas each favored one gear type over another.

The Option 1 qualification criteria ranking table is shown at the bottom of page 8. The table shows the amounts of SSLL and drift gillnet (DGN) west coast swordfish landings between 1996-2006 which would be necessary to meet the cutoff for permit eligibility in case 5, 10, 15 or 20 permits were issued, depending on whether a requirement for recent landings from 2001-2007 or from 2005-2007 was used. For example, with a requirement for recent landings from 2001-2007 and 20 limited entry permits, total swordfish landings of 1,300 metric tons between 1996-2006 would be required to rank in the top 20.

The Option 2 qualification criteria ranking table is shown at the bottom of page 9. The ranking formula resulted in many ties. Since the top twenty ranked applicants had near-identical rankings under the originally proposed formula, the HMSMT added a tiebreaker rule based on total DGN swordfish landings from 2001 through 2007, expressed in the right column as a relative percent compared to the 20th ranked applicant's landings. The HMSMT notes that the resulting rankings may be quite similar to those obtained based on total swordfish landings under Option 1, particularly if DGN-only swordfish landings ranked in a similar order as total swordfish landings with both DGN and SSSL gear for top-ranked applicants.

The Option 3 qualification criteria ranking table is shown at the top of page 10. The example was only carried out in detail based on a requirement for recent west coast SSSL landings between 2001-2007, as only four potential participants had landings from 2005-2007, while 42 potential applicants had recent landings over 2001-2007. A formula weight of 0.1 was chosen for the example, to make the number of years with SSSL landings of comparable magnitude to the numbers of landings. With a requirement for recent landings from 2001-2007 and 20 limited entry permits, a ranking formula score of 10.6 would be sufficient for an applicant to qualify for a permit.

A concern has been raised about whether the ranking formulas would produce distinct rankings for potential permit applicants. The HMSMT believes that with the addition of a tiebreaking rule based on DGN landings history, all three options will produce distinct rankings of potential applicants. This could be verified with a follow-up analysis.

The HMSMT raised concerns about the open access alternative. With no limit on potential participants, there is a risk that the number of entrants to the fishery would reach a level that posed conservation concerns and jeopardized economic viability. Given effort constraints needed to meet protected species conservation mandates and limits on observer availability, the number of participants could reach a level that resulted in too little effort per participant to achieve an economically viable fishery.

Section 4 analyzes various aspects of a potential high seas SSSL fishery under Amendment 2, including potential leatherback and loggerhead turtle takes and mortalities for different levels of fishing effort, dependence of economic profits on allowable effort and number of permits, and comparison of catch per unit of effort (CPUE) for historic Hawaii and west coast based SSSL effort. The two tables at the bottom of page 10 compare historic swordfish CPUEs between 140° to 150° west longitude to CPUEs east of 140°. Though CPUEs were typically higher between 140° to 150° west compared to east of 140°, loggerhead turtle take risk is also higher, raising the issue of a possible tradeoff between economic viability and loggerhead turtle take risk if fishing were allowed in that area. The HMSMT suggests considering whether a more economically viable fishery could be achieved with no area restriction west of the EEZ, provided adequate environmental safeguards to mitigate protected species take risk are included.

HMSMT summary recommendations:

- Add a third area restriction option, Option 3: No area restriction west of the EEZ.
- Retain Alternative 3: Open Access for analysis.
- Drop recent participation requirement Option 1, 2005-07 swordfish landings.

- Adopt a uniform data window period of 1996-2007 for computing ranking formulas under Options 1-3.
- Adopt a range of options for analysis of 5, 10, 15, or 20 total limited entry permits to be issued.
- Add a tiebreaker rule based on DGN landings from 1996-2007 to ranking Option 2.
- For the purpose of analysis, identify 2007 as the year constituting “the present” and “current” for possession of a DGN permit.
- Use “pelagic longline gear outside the EEZ” instead of “SLL gear” in the qualification options.
- Consider adopting a fourth limited entry qualification option for analysis that blends the scores of the formulas under the first three proposed options.
- Consider modifying Alternative 3 into a limited entry option with a low qualification hurdle (e.g. one west coast swordfish landing from 2005-2007 with any gear).
- Consider adding a requirement that a permit holder must actively fish for a period of years before the permit can be transferred.

PFMC
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