

HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM REPORT ON SWORDFISH
MANAGEMENT POLICY CONNECTIONS

At its November 2015 meeting, the Highly Migratory Species Management Team (HMSMT) discussed the list of *Possible West Coast Swordfish Fishery Policy Questions* in Agenda Item G.2 Supplemental Attachment 1. A summary of HMSMT discussion is provided below, with the related questions included in bold.

1. What are some actions the Council has identified for the West Coast swordfish fishery and how do they relate to any stated policy objectives?

The HMSMT reviewed the broad set of actions identified by past Council discussion and decisions, and generally concurs. The HMSMT discussed the role of innovation in developing swordfish methods which reduce bycatch while maintaining economic viability. Results from the drift gillnet (DGN) exempted fishing permit (EFP) and new monitoring techniques under development such as EcoCast may offer a possible avenue to reopen the Pacific Leatherback Conservation Area (PLCA) to DGN fishing with a prospect of lower bycatch and decreased risk of reaching protected species hard caps.

2. What mix of gear types in the West Coast swordfish fishery would best address the Council's goals and objectives, including reducing reliance on imports of foreign-caught swordfish?

The HMSMT discussed the gear types currently used in the U.S. to target swordfish, which include shallow-set longline (SLL), DGN, deep-set buoy gear (DSBG) and harpoon (HPN). It is recognized that longline fisheries provide by far the largest proportion of volume both domestically and internationally. This could be more rigorously documented with analysis of available data.

The HMSMT also discussed the commercial volume of domestic swordfish production under different methods. The Council could define a goal to increase domestic production as a substitute for current heavy reliance on imports, recognizing the difficulty in attaining this goal if the range of Council-authorized swordfish gears was limited to DSBG and HPN. The HMSMT could evaluate the effort needed from DSBG, HPN, or SLL to produce the same commercial volume as the current-sized DGN fleet typically produces. Similarly, the HMSMT could develop a comparison of the amounts of fishing effort needed to substitute for a given volume of swordfish imports.

3. Has the Council adopted a goal to end the DGN fishery at some point in the future and transition fishery participants to a different gear type or close the fishery outright?

The HMSMT acknowledges the long history of regulatory effort by the California Department of Fish and Wildlife (CDFW), the National Marine Fisheries Service (NMFS) Protected Resources Division, the Pacific Offshore Cetacean Take Reduction Team, and the Council, to manage the DGN fishery compliant with federal protected species conservation laws including the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). The HMSMT further notes that the hard caps and performance standards adopted by the Council in September 2015 manage the DGN fishery more stringently than is required by the aforementioned federal laws. The HMSMT agrees with the principle of management measures to improve performance of existing fishing methods and does not see a need to phase out DGN gear in order to meet the Council's goals and objectives.

4. What would it take to get DSBG implemented as a legal gear type on the West Coast?

The HMSMT sees value in the Council clarifying its intention with respect to authorization of DSBG in the Fishery Management Plan for U.S. West Coast Fisheries for Highly Migratory Species Fishery Management Plan (FMP). The HMSMT discussed alternative timelines for implementation, including tradeoffs between fast-track authorization versus waiting until completion of the EFPs. The HMSMT recommends the Council explore the possibility of initiating scoping before completion of the EFPs, in order to avoid a future gap in timing during which the gear cannot be used.

Another consideration when authorizing DSBG is the appropriate permitting system. The DGN and HI SSSL fisheries operate under limited entry permit systems, while the harpoon fishery is open access. The HMS FMP (section 2.0 Management Philosophy) outlines considerations for determining whether to limit the number of permits in a fishery. Allowing a larger number of participants in the fishery could help identify economically viable fishing opportunities. However, uncertainties regarding potential ecosystem impacts or gear conflicts with other fisheries may favor initially limiting the number of permits with the potential to increase this number at a later date.

5. What should the Council consider when designing a Federal permitting scheme for the West Coast swordfish fishery?

Permitting processes are complex and require consideration of many factors. In recognition of this complexity, the HMSMT focused its discussion on the pros and cons of creating a federal swordfish permit with limited entry gear endorsements versus selectively limiting the endorsements under the existing HMS permit. One question is whether the addition of a new Federal swordfish permit could increase the administrative burden without creating any regulatory advantage over the existing HMS permit. Revising the existing gear endorsement system may be

more efficient. Other possible considerations could include discussion of benefits in moving from state permitting of DGN gear to federal permitting, scale of a potential limited entry program, etc.

6. What is the policy connection between the use of pelagic longline gear (both deep-set for tuna and shallow-set for swordfish) inside the West Coast Exclusive Economic Zone (EEZ) versus outside the EEZ?

The HMSMT concurs that the western extent of the EEZ is a political boundary which does not reflect the tradeoffs between the advantages of fishing closer to port, including reduced carbon footprint and lower delivery costs, versus gear conflicts or unacceptable conservation impacts which may arise if longline is used too near the coastal zone. While considerable historic observer data exists for longline fishing outside the EEZ, there is a lack of comparable data on longline effort inside the EEZ. The HMSMT notes that the longline EFP recently approved by the Council may increase the data needed to make a science-based determination of the efficacy of using longline gear inside the EEZ.

8. What is the connection between potential bycatch in a West Coast swordfish longline fishery based on pelagic longline fisheries in other regions of the US, and bycatch impacts in foreign fisheries?

As suggested by the figures from the Bartram, Kaneko and Kucey-Nakamura Marine Policy paper included in the Agenda Item G.2 Supplemental Attachment, reliance on foreign sources may create more bycatch impacts on transboundary stocks of sea turtles and other species of concern than for a comparable volume of swordfish caught from domestic sources. Given such linkages, the HMSMT could estimate the level of effort required to substitute for a given volume of imports with a commensurate amount of domestic product from the U.S. West Coast, as described under question 2.

9. How could the Council sequence the implementation of management measures for the West Coast swordfish fishery?

The HMSMT discussed information which could be beneficial for future HMS agenda planning. Below is a list of possible items for Council consideration.

- Gear composition in the future swordfish fishery should be evaluated based on the following considerations:
 - 1) Balance domestic production with bycatch mitigation. Two of the gears currently being considered in this fishery have relatively higher harvest and bycatch rates (DGN and LL), and two have relatively lower harvest and bycatch rates (HPN and DSBG).
 - 2) Consider a goal of supplying as much U.S. swordfish demand as possible from U.S. West Coast product harvested within Council management objectives. Many international fisheries have relatively higher rates of bycatch, particularly for high

priority protected species (HPPS); U.S. conservation goals are more likely to be achieved by supplying as much of the U.S. demand as possible from domestic production subject to regulatory measures that limit bycatch to levels which meet U.S. conservation standards. The Council could consider the performance of the fishery as related to the level of demand which is met with domestic supply (i.e., 50%, 75%, and 100%).

The Council could also direct the HMSMT to evaluate what a fishery would look like under different gear configurations. For example, what size fleet and amount of effort would be necessary to replace current DGN and HPN harvest levels with either DSBG or SSSL harvest alone? Likewise, what would the gear portfolio look like if all foreign swordfish imports were replaced by domestic supply? The approach represented in the Bren School master's degree student report that was presented at the March 2015 Council meeting ([Agenda Item H.4.c, Supplemental Public Comment 3](#)) may provide a useful starting point for developing such an analysis.

- 3) DSBG is still under evaluation and the available data for using SSSL within the EEZ is extremely limited. Adequate data collected during "normal" environmental conditions is important to explore the effectiveness of an addition to the existing suite of authorized swordfish methods over the range of potential fishery configurations. To this end the Council should consider whether to establish a timeline for authorization of DSBG that initiates steps for DSBG authorization while the gear is still under evaluation under the terms of the current EFP to minimize any time lag between completion of the EFP and final authorization. The Council could concurrently initiate consideration for authorizing SSSL outside the EEZ.
- In considering how permitting would be achieved, the Council may want to address the following questions:
 - 1) Is a global swordfish permit with gear endorsements the most effective approach to permitting the fishery? Or should the council move to add specific gear endorsements under the current HMS permit?
 - 2) Should permitting (and moving to Federal DGN permitting) wait until all gear types under consideration have been authorized?
 - In light of the Council setting hard caps on high-priority protected species and given new bycatch reduction methods under development, re-opening part or all of the PLCA could be considered. The Council would need to Ddetermine whether opening some or all of the PLCA fits within the scope of swordfish management objectives, and should be included in the Pacific Coast Swordfish Fishery Management and Monitoring Plan.