

Range of Alternatives for the Authorization of a Deep-Set Buoy Gear Fishery for Swordfish in Federal Waters off the West Coast November 2018

1.0 Introduction

The Council has been developing a range of alternatives containing management measures for a deep-set buoy gear (DSBG) fishery since March 2016. DSBG has been under development through research by the Pflieger Institute for Environmental Research and testing under exempted fishing permits.

For reference, the Council considered the range of alternatives at these meetings:

- March 2016, Agenda Item F.3
- June 2016, Agenda Item D.5
- June 2017, Agenda Item H.3
- September 2017, Agenda Item J.6
- March 2018, Agenda Item I.2
- June 2018, Agenda Item G.5

Council motions adopted under these agenda items are attached. This report is an update of the June 2017 [HMSMT Report](#) (Agenda Item H.3.a), based on refinements to the range of alternatives the Council made since then.

2.0 Proposed Action and Purpose and Need

At its June 2017 meeting, the Council passed a motion adopting the purpose and need as described in [Agenda Item H.3.a, HMSMT Report](#) in addition to further refining the range of alternatives. The description of the proposed action and purpose and need are as follows:

The proposed action is to authorize a DSBG fishery targeting swordfish and other highly migratory species under the Fishery Management Plan for West Coast Fisheries for Highly Migratory Species (HMS FMP). DSBG would be identified as a legal commercial fishing gear in the FMP and pursuant regulations. Management measures for the fishery could be established in the FMP or in Federal regulations under the FMP's management framework.

The purpose of the proposed action is to encourage the use of a fishing gear in the West Coast commercial swordfish fishery that minimizes bycatch and bycatch mortality of finfish and protected species (including sea turtles, marine mammals, and seabirds) to the extent practicable while allowing for the fishery to remain economically viable. Research and exempted fishing trials with DSBG have demonstrated that this innovative gear type has minimal protected species interactions and finfish bycatch. Economic viability encompasses support for a swordfish fishery conducted by vessels with West Coast home ports, and increased availability of locally-caught swordfish in the market.

The proposed action is needed as a component of a West Coast swordfish fishery that effectively addresses the 10 national standards for conservation and management enumerated in the Magnuson Stevens Act, Section 301, in particular [National Standards](#) (NS) 1 (optimum yield) and 9 (minimize bycatch). DSBG is also needed as a commercially viable addition to the suite of legal swordfish gear types, to provide sustained participation in the swordfish fishery by West Coast fishing communities. In doing so, authorization of the fishery would also address NS 8.

3.0 Alternatives

The range of alternatives is described below. For the purposes of analysis, alternatives are structured as follows:

- **No Action:** No DSBG fishery is authorized
- **Alternative 1:** An “open access” fishery in all Federal waters offshore of California and Oregon. Only a General HMS Permit (per 50 CFR 660.707) would be required. General management measures related to fishing gear and its use are included under this alternative
- **Alternative 2:** A limited entry permit is required to fish in Federal waters east of 120° 28’ 18” W. longitude; all other Federal waters offshore of California and Oregon would be “open access.” All other management measures described under Alternative 1 also apply to Alternative 2.

1.1 No Action Alternative

DSBG would not be authorized as a legal gear under the HMS FMP. Swordfish are currently targeted using fishing gears authorized for use and managed under the HMS FMP, including harpoon and large-mesh drift gillnet (DGN). The Hawaii shallow-set longline fishery also lands swordfish and other HMS to West Coast ports. If DSBG is not authorized, these gears would remain as the primary fishing gears supplying swordfish to the U.S. West Coast in addition to imported swordfish.

1.2 Action Alternative 1: Authorize an Open Access Fishery

Under this alternative, the fishery would be authorized with the following management measures.

1.2.1 Gear Description

As noted in its June report, the HMSMT has adopted terminology in order to maintain consistency, prevent confusion when discussing the fishery further, and allow the Council to establish one permit for multiple gear configurations. Deep-set buoy gear (DSBG) refers to the overarching gear type in its multiple configurations. Under the umbrella of DSBG, there is currently standard buoy gear (SBG) (previously referred to as “traditional” buoy gear) and linked buoy gear (LBG). Both of these gear types would be initially authorized.

Definitions:

Standard Buoy Gear (SBG) - An actively tended vertical gear configuration that is designed to target west coast highly migratory species. An individual piece of SBG consists of a vertical monofilament mainline suspended from a non-compressible float (>45 lb. flotation) and strike

indicator float system that uses a minimum 3.6 kg weight to expedite sink rate and facilitate strike detection. A collective gear set includes ten individual pieces of gear that can fish up to three hooks each (30 total hooks maximum; minimum size 16/0 circle hooks with not more than 10° offset) that must be positioned below 90 meters (m) deep when fishing. Each piece of gear must also include a locator flag with a light attached, a radar reflector, and vessel/fisher identification compliant with all current state requirements and regulations.

Linked Buoy Gear (LBG): An actively tended gear type in which two or more pieces of standard buoy gear (SBG) may be linked together by means of a horizontal monofilament mainline; no more than three gangions/hooks are connected to this horizontal line per individual piece, not the vertical lines. Serviceable links between each LBG section are suspended at a minimum depth of 11m (36 feet) below a non-compressible float system (>45 lb. flotation) that allows for strike detection (based on SBG design standards). No more than 30 hooks (minimum size 16/0 circle hooks with not more than 10° offset) can be deployed simultaneously and all hooks must be fished below 90 m. No more than 10 sections of LBG may be used at one time within the footprint described below under Gear Tending. Terminal buoys must include a locator flag with a light attached, a radar reflector, and vessel/fisher identification compliant with all current state requirements and regulations.

1.2.2 *Gear Tending*

All pieces of gear must remain within a 5 nm diameter circle and the vessel may be no more than 3 nm from the nearest piece of gear. These requirements allow for active tending, which is a key regulatory requirement for the use of this gear type.

1.2.3 *Gear Deployment/Retrieval*

Gear may not be deployed prior to local sunrise and must be onboard the vessel no later than 3 hours after local sunset.

1.2.4 *Use of Multiple Gears on a Single Trip*

Gear types other than DSBG may be used on the same trip when DSBG is used, as long as the requirement to actively tend DSBG is met. This requirement will limit the gears with which fishermen could concurrently fish with DSBG and maintain maneuverability to allow for active tending of DSBG and/or staying within the active tending boundary. Other gears could be set and retrieved on the way out to and returning from sea, and DSBG fished in between, potentially at a large distance from the other gear.

All landings must be tagged or marked to identify the gear used. This would facilitate properly attributing catch to the gear type used on a trip. Additional requirements may be necessary so that catch can be accurately recorded by gear configuration on the fish ticket/landings receipt. Any such identification would distinguish between fish caught with SBG versus LBG, as is required on landing receipts.

1.2.5 *Permitting*

New gear endorsements would be added to the existing Federal General HMS permit for both SBG and LBG (see gear definitions in section 1.2.1).

1.2.6 *Geographic Area*

The fishery would be authorized in all Federal waters offshore California and Oregon.

1.2.7 *Fishery Timing*

This fishery may operate throughout the year.

1.2.8 *Species Retention*

All species may be retained and landed unless prohibited by other law or regulation.

1.2.9 *Fishery Monitoring*

Existing HMS FMP regulations governing observer coverage (50 CFR 660.719) establish a requirement that any HMS-permitted vessel must accommodate a National Marine Fisheries Service (NMFS) certified observer when required by the agency. The level of observer coverage is determined by the agency.

HMS FMP regulations also require logbooks (50 CFR 660.708). NMFS, in consultation with the Council, would need to determine how to implement logbook and data submission requirements for the DSBG fishery. In a future report the HMSMT may provide additional recommendations on logbook data fields specific to the DSBG fishery.

1.3 Action Alternative 2 Authorize a Limited Entry Fishery East of 120° 28' 18" W. Longitude

This alternative would include all the management measures described above for Alternative 1 and would in addition implement a limited entry (LE) permit, which would be required to fish DSBG in Federal waters east of 120° 28' 18" W. longitude.

1.3.1 *Permit Possession*

The HMS LE DSBG permit is held by a person, as defined at 50 CFR 660.702, who must designate a vessel on the permit. The designated vessel need not be owned by the permit holder. The permit holder may change the vessel designation on the permit by written request to NMFS not more than one time per calendar year unless a *force majeure* event renders the assigned vessel incapable of operation. The vessel owner must also hold a General HMS permit. A person may hold multiple permits, multiple permits may designate the same vessel, but only one permit (10 pieces of gear) may be fished from any one vessel at a time. The permit holder would not be required to be onboard the vessel when DSBG is in use.

1.3.2 *Permit Renewal*

The HMS LE DSBG permit would be valid for one fishing year and expire if not renewed. Such permits would revert to the issuing Agency and, if a limited entry program is in place, would be made available for reissuance.

1.3.3 *Permit Transfer*

HMS LE DSBG permits would not be transferable when the fishery is initially authorized. The Council may take action at some point after the fishery is authorized and the Council determines that transfer would benefit management. The Council may consider allowing permit transfers, and any related conditions, through the biennial management process.

1.3.4 *Number of Permits to be Issued (Fishing Capacity)*

A fixed number of permits would be issued. The following options for the number of permits issued will be considered:

1. Not more than 50 permits per year, not to exceed 300 total
2. Not more than 100 permits per year, not to exceed 300 total
3. Not more than 300 permits maximum

1.3.5 *Qualifications to Obtain a Permit*

The Council will determine qualifying criteria with advice from advisory bodies and the public at the time a final preferred alternative is adopted.

PFMC
10/09/18

Council Motions, As Amended, Addressing the Range of Alternatives for Deep-Set Buoy Gear Authorization

Amended portions of the adopted motion are shown in italics/underline.

March 2016, Agenda Item F.3 Council Action: Consider Issues to be Addressed in a Fishery Management Plan Amendment to Authorize Deep-Set Buoy Gear in West Coast Highly Migratory Species Fisheries.

Move forward with developing a range of alternatives to authorize a deep-set buoy gear (DSBG) fishery concurrent with continuing to collect information through exempted fishing permits (EFPs), with the following preliminary guidance to the HMS Management Team (HMSMT):

1. In general, use the provisions included in the DSBG EFPs (i.e., two DSBG EFPs) and descriptions in the letter of acknowledgment (LOA) for the PIER research to guide development of alternatives and potential regulatory language.
2. Purpose and Need – Use the description in the draft Swordfish Fishery Management and Monitoring Plan (September 2015) relative to the purpose and goals of this proposed action.
3. Definition of Gear – Develop at least two alternatives: 1) DSBG as “traditionally” defined and referenced in two DSBG EFPs, and 2) both “traditional” DSBG and modified DSBG as described in PIER research proposal for LOA.
4. “Actively Tended” Gear – Discuss and present alternatives for: 1) requiring gear be actively tended, 2) providing incentives to actively tend gear, and 3) limiting gear (e.g., 10 buoys) to promote active tending.
5. Geographic Area – *Intent is to initially limit the gear to federal waters off California.*
6. Species Allowed – Define target species as defined in the EFPs, and prohibited species and incidental catch allowances as defined in the FMP for other HMS fisheries.
7. Address other topics not covered above that were raised by the National Marine Fisheries Service (Agenda Item F.3.a NMFS Report), California Department of Fish and Wildlife (Agenda Item F.3.a Supplemental CDFW Report), HMSMT Reports, and Enforcement Consultants (Agenda Item F.3.a Supplemental EC Report).

June 2016, Agenda Item D.5 Council Action: Provide Guidance on the Range of Alternatives for Authorizing a Federal Deep-Set Buoy Gear Fishery and Federal Permitting of West Coast Swordfish Fisheries.

1. Task the HMSMT to develop a range of alternatives for Federal DGN permitting to include the following:
 - A) *As soon as possible after final action*, only fishers authorized to fish with large-mesh drift gillnet gear under state law would be entitled to a NMFS commercial HMS permit endorsed for drift gillnet B) status quo
2. *Task to the HMSMT to develop special conditions for a DSBG EFP program for council consideration at the September 2016 council meeting, focusing on three areas:*
 - a. *Agendize consideration of new buoy gear EFPs for any future Council meetings that HMS is otherwise scheduled, if EFP applications are received by the advance briefing book deadline.*

- b. Developing a list of key data gaps and research needs with regard to DSBG to inform future permit program conditions. The list should also be useful to aid prospective EFP applicants in developing applications. Many of these needs have been identified in HMSMT, HMSAS, EC and CDFW statements and public comments in March and June 2016.
 - c. Outline alternatives to incentivize EFP participation including but not limited to prioritized eligibility of EFP participants in future DSBG permit program.
3. For the September meeting, task the HMSMT with developing a list of key data gaps and research needs with regard to DSBG to aid prospective EFP applicants in developing applications. Many of these needs have been identified in HMSMT, HMSAS, EC and CDFW statements and public comments in March and June 2016.

June 2017, Agenda Item H.3 Council Action: Develop a preliminary range of alternatives for authorizing a Federal west coast deep-set buoy gear fishery including Federal permitting.

I move the Council adopt the purpose and need as described in the HMSMT report (Agenda Item H.3.a), and approve a preliminary range of alternatives for an authorized Federal west coast DSBG fishery including Federal permitting, as described in the HMSMT Report, the Supplemental HMSMT Report, the Supplemental EC Report, and the Supplemental HMSAS Reports 1 and 2, with the following modifications:

1. Under Geographic Area Considerations (p4 of the HMSMT Report), limit further analysis to Alternative 2 (All Federal waters off CA and Oregon)
2. Include voluntary trade-in alternatives that would allow DGN permittees to surrender a permit in exchange for one or more DSBG permits.
3. Regarding the Sunset Date: Request the HMSAS, EC, and HMSMT work to refine an alternative with explicit ‘gear may not be deployed before’ and ‘must be out of the water by’ language, which may be different during different times of year (e.g., summer vs winter months, or PST vs. PDT). Also include an alternative that would allow the use of a strobe light or other device to mark a fish on a single piece of gear for future retrieval after the end time.
4. Request the EC and HMSMT continue development of the Alternative to:
 - a. Establish a *shoreward* boundary for DSBG of 150 fathoms, as defined by waypoints currently used to define RCA boundaries, including further analysis regarding use of VMS to enforce this line.
 - b. Develop a definition for maximum gear footprint (per permit) to mitigate potential crowding with other DSBG or other fishing sectors and to facilitate active tending.
5. Acknowledging the desire to allow commingling of fishing activities and gears on a single trip, direct the HMSMT to consult with the GMT on the topic of species retention, transiting through RCAs, and ways to avoid overfished species.
6. Regarding Permitting Alternatives – include among the alternatives the option for a gear endorsement to the existing HMS permit (e.g., a registration requirement)
7. For the Southern California Bight only, include an Alternative to limit DSBG fishing activity to weekdays only.

September 2017, Agenda Item J.6 Council Action: Review and Adopt the Preliminary Range of Alternatives for Authorizing a Federal West Coast Swordfish Deep-Set Buoy Gear Fishery Including Federal Permitting.

I move that the Council:

- 1) Define DSBG and Permits, for the purpose of analysis as follows:
 - a) Possession –
 - i) Permits will be issued to an individual entity
 - ii) Individual entities may hold multiple permits, but permits may not be stacked on a single vessel
 - iii) The permit holder will assign the permit to a specific vessel
 - iv) The permit holder will not be required to be onboard the vessel
 - b) Renewal
 - i) Permits will be valid for one fishing year and expire if not renewed.
 - c) Transfer
 - i) Transfer of permits will be prohibited until such as time as the Council feels the fishery has reached a stable state and that transfer would benefit management
 - d) Gear Description
 - i) The definition used in the HMSMT report (J.6.a HMSMT Report 1) of SBG and LBG will be used.
 - ii) Gear would be marked as described in the supplemental EC report (J.6.a Supplemental EC Report 1).
 - e) Gear Tending
 - i) Require that all gear be within a 5 nm diameter area and that the vessel be no more than 3 nm from the nearest piece of gear
 - f) Gear Deployment/Retrieval
 - i) Gear may not be deployed prior to local sunrise
 - ii) All gear must be onboard the vessel no later than 3 hours after local sunset
 - g) Multiple Gears
 - i) Multiple gears may be used on a trip. All landings must be tagged or marked to identify the gear used.
 - h) Geographic Area
 - i) All Federal waters offshore California and Oregon
 - i) Fishery Timing
 - i) No restrictions within the existing fishing season/statistical year
 - j) Species
 - i) All legal HMS are allowed
 - k) Fishery Monitoring
 - i) Logbooks will be required
 - ii) All monitoring requirements in the HMS FMP will be followed
- 2) The Range of Alternatives for consideration under NEPA will include
 - a) Permitting
 - i) Open Access

- ii) Open Access north of Point Conception and Limited Entry South of Point Conception
 - (1) Limited Entry South of Point Conception Alternatives
 - (a) Capacity
 - (i) 10 permits
 - (ii) 50 permits
 - (iii) 150 permits
 - (iv) 250 permits
 - (b) Qualifications to obtain permits
 - (i) No qualifications
 - (ii) Only HMS permittees
 - (iii) Only persons with demonstrated swordfish fishery participation to be allocated based on criteria defined by the Council

March 2018, Agenda Item I.2 Council Action: Adopt a Final Range of Alternatives for Authorization of Deep-Set Buoy Gear and, if Possible, Adopt a Preliminary Preferred Alternative for Public Review.

I move the Council:

- (1) Direct the Highly Migratory Species Management team to conduct at a minimum the following analyses:
- 2) Using available data, including historic gillnet and CPFV data, analyze the number of vessels that could operate within the Southern California Bight and the relative level of effort by fishing block. Provide these analyses to the Council at the June 2018 Council meeting.
- 3) Using data from existing EFP effort and historic PacFIN landings and swordfish imports data from the NMFS Office of Science and Technology estimate the impacts on price and profitability of DSBG fishing that may occur with larger numbers of DSBG permits. Provide these analyses to the Council at the June 2018 Council meeting.
- 4) Using data provided by EFPs, including EFPs issued in 2018, analyze the amount and type of bycatch and relative level of fishing effort by fishing block and report on any known gear conflicts. Provide these analyses to the Council at the March, 2019 Council Meeting,
 - (1) Move forward with the necessary analyses to complete DSBG authorization in a timely manner so that EFP effort does not become a de-facto authorized fishery:
- 5) During the June 2018 Council meeting, updates on analyses will be provided by the HMSMT.
- 6) During the September 2018 Council meeting the Council will receive input and advice from the advisory bodies on potential qualifying criteria and any additional updates on impact analyses as available.
- 7) During the March 2019 Council meeting adopt a final preferred alternative for NEPA analyses and qualifying criteria, if needed, for a limited entry fishery.
 - (1) To facilitate these analyses, adopt the following range of alternatives for authorization of a Deep Set Buoy Gear fishery as proposed in the September 2017 motion and modified as noted below:
- 8) Define DSBG, for the purpose of analysis as follows:
 - a) *Possession* –

- i) Permits will be issued to any “Person” as defined at 50 CFR §660.702.
- ii) A person may hold multiple permits, but permits may not be stacked on a single vessel
- iii) The permit holder will assign the permit to a specific vessel that may be changed by written request to NMFS not more than one time per calendar year unless a force majeure event renders the assigned vessel incapable of operation.
- iv) The permit holder will not be required to be onboard
- b) *Renewal* – Permits will be valid for one fishing year and expire if not renewed. Such permits would revert to the issuing Agency and, if a limited entry program is in place, would be made available for issuance.
- c) *Transfer*
 - i) Transfer of permits will be prohibited unless the Council determines transfer would benefit management.
- d) *Gear Description*
 - i) Standard Buoy Gear (SBG) - An actively tended vertical gear configuration that is designed to target west coast highly migratory species. An individual piece of SBG consists of a vertical monofilament mainline suspended from a non-compressible float (>45 lb. flotation) and strike indicator float system that uses a minimum 3.6kg weight to expedite sink rate and facilitate strike detection. A collective gear set includes ten individual pieces of gear that can fish up to three hooks each (30 total hooks maximum; minimum size 16/0 circle hooks with not more than 10° offset) that must be positioned below 90m deep when fishing. Each piece of gear must also include a locator flag, a radar reflector and vessel/fisher identification.
 - ii) Linked Buoy Gear (LBG): An actively tended gear type in which two or more pieces of standard buoy gear (SBG) may be linked together by means of a horizontal monofilament mainline; no more than three gangions/hooks are connected to this horizontal line per individual piece, not the vertical lines. Serviceable links between each LBG section are suspended at a minimum depth of 11m meters (36 feet) below a non-compressible float system (>45 lb. flotation) that allows for strike detection (based on SBG design standards). No more than 30 hooks (minimum size 16/0 circle hooks with not more than 10° offset) can be deployed simultaneously and all hooks must be fished below >90m. No more than 10 sections of LBG may be used at one time and the overall horizontal footprint of the gear must be less than 5nm. Terminal buoys must include a locator flag, a radar reflector, and vessel/fisher identification.
- e) *Gear Tending*
 - i) Require that all gear be within a 5 nm diameter area and that the vessel be no more than 3 nm from the nearest piece of gear
- f) *Gear Deployment/Retrieval*
 - i) Gear may not be deployed prior to local sunrise
 - ii) All gear must be onboard the vessel no later than 3 hours after local sunset
- g) *Multiple Gears*
 - i) Multiple gears may be used on a trip. All landings must be tagged or marked to identify gear used.

- h) Geographic Area
 - i) All Federal waters offshore California and Oregon
- i) Fishery Timing
 - i) No restrictions within the existing fishing season/statistical year
- j) Species
 - i) All species may be retained and landed unless prohibited by other law or regulation.
- k) Fishery Monitoring
 - i) Logbooks will be required
 - ii) All monitoring requirements in the HMS FMP will be followed
- 9) The Range of Alternatives for consideration under NEPA will include
 - a) Permitting
 - i) Open Access
 - ii) Open Access “west of 120 28’ 18” W. longitude and limited access east of 120 28’ 18” W. longitude
 - (1) Limited access east of 120 28’ 18” W. longitude:
 - (a) Capacity
 - (i) Not more than 10 permits
 - (ii) Not more than 50 permits
 - (iii) Not more than 150 permits
 - (iv) Not more than 250 permits
 - (b) Qualifications to obtain permits
 - (i) The Council will determine qualifying criteria with advice from advisory bodies and the public at the time a final preferred alternative is adopted.

June 2018, Agenda Item G.5 Council Action: Confirm a Range of Alternatives, and Adopt a Preliminary Preferred Alternative for the Number of Permits to be Issued Under a Deep-Set Buoy Gear Limited Entry Program, If Possible.

I move that the Council proceed with analysis to the two sub-options for Deep Set Buoy Gear Fishing in the Southern California Bight as previously adopted with the following changes in regards to potential limited access to allow for a phased in approach:

Capacity – Implement permits with initial issuance and total issuance limited to the following:

- 4. Not more than 50 permits per year, not to exceed 300 total
- 5. Not more than 100 permits per year, not to exceed 300 total
- 6. Not more than 300 permits maximum

Also, direct the Highly Migratory Species Management Team to analyze these options along with an open access option using 500 permits as a proxy for open access.