

Revised 12 August 2021

## Exempted Fishing Permit Application: Midwater Snap Gear

### **EXECUTIVE SUMMARY**

If awarded, this Exempted Fishing Permit (EFP) application would allow the initial testing of midwater snap gear (MWSG) as a method for small fishing vessels to target Highly Migratory Species (HMS) off the West Coast of California and Oregon (>20 nm offshore).

We aim to test the capability of MWSG as a method to supplement the regional production of Highly Migratory Species (HMS). This EFP would allow us to assess the initial performance of MWSG, at different depths and times of day, in order to identify the sweet spot between target catch and minimization of bycatch. Building on knowledge from the existing swordfish fisheries, we believe this EFP will provide an opportunity to identify the sweet spot of depth and time for a small vessel to target swordfish and HMS in an economically viable and environmentally responsible fashion.

### **STATEMENT OF PURPOSE**

The Pacific Fishery Management Council (PFMC) and the National Marine Fisheries Service have expressed interest in the development of alternative gears to target swordfish off the U.S. West Coast. In response to this call, and in the face of two decades of diminished regional landings for HMS, this EFP aims to investigate a new way for small traditional California swordfish boats to harvest HMS into the future.

The purpose of this EFP is to test the use of midwater snap gear as a method for a small fishing vessel to target HMS off the West Coast of California and Oregon to supplement regional production.

We view the collection of data as a priority. This EFP aims to collect any and all necessary performance information to allow managers to consider this gear type and its potential. We hope this will be the start of the process to establish a small boat fishery that can provide an ample, diverse and high-quality supply of HMS seafood for the U.S. market.

Specifically, the goals of this EFP are to:

1. Provide data for PFMC and NMFS to inform the development of alternative gear types for vessels to target swordfish off the U.S. West Coast that reduce bycatch;
2. Provide an opportunity for small vessels that historically targeted swordfish to supplement HMS landings;
3. Offset imports from foreign fisheries by augmenting regional production;
4. Support the resilience of working waterfronts in coastal communities by diversifying the opportunities for small vessels to target healthy stocks of HMS.

1. **Date of Application:** May 25, 2021

2. **Applicant:** Austen J Brown  
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San Diego, CA 92037  
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3. **Applicant's Commercial Fishing Experience**

Austen J. Brown has been engaged in commercial fishing since 1995, for a total of 26 years to date. His commercial fishing experience has included drift gillnetting for swordfish and shark, trolling for albacore, trawling for groundfish, hake and pollock, and crabbing for Dungeness crab off the U.S. West Coast; pelagic longlining for tuna in the Eastern Pacific; gillnetting for salmon and bottom longlining for halibut and black cod in Alaska.

As an experienced drift gillnet fisherman and federal drift gillnet permit holder with a realistic view of the reduced production capacity of that fishery, I am optimistic about the MWSG type as a method for small boats to supplement production of the Highly Migratory Species fisheries off the U.S. West Coast. This EFP will provide data to support an ecologically and economically viable fishery for Highly Migratory Species in the US EEZ off the coast of California and Oregon.

Austen J. Brown is the owner and operator of the F/V Oriana Z. If this EFP is issued, the Captain will immediately secure all necessary state and federal permits. Austen has no current or pending state or federal violations in any commercial fishery.

4. **Fishing Gear**

Midwater snap gear is a new fishing method. MWSG uses 5 nautical miles of connected sections of gear. Each section will range from 300 to 500 meters long. Buoy lines will be 25 to 75 meters long. We will deploy 5 to 15 circle hooks per section. Circle hooks (18/0) will be attached to 2mm monofilament snap lines approximately 12 meters long. The end buoys and a buoy at each nautical mile mark will have radar reflectors with a light and a flag attached. Each buoy will be lit. Gear soak time per set will range from approximately two to four hours. See Figure 1 for a visual representation of the gear configuration.

The depth of hooks set will be determined within the ranges stated above, dependent on conditions including thermocline depth, endeavoring to keep hooks below the thermocline at all times.

The applicability of strike indicator buoys for this gear type will be tested. The fishing vessel will actively monitor the gear during fishing effort to the maximum extent feasible, and therefore have the capacity to land fish and/or release any protected species immediately. No other gear types will be used concurrently during EFP fishing activity.

EcoCast will be used as a tool to determine where to allocate our fishing effort to maximize target HMS catch and minimize bycatch of protected species.

We realize this initial description of MWSG fishing gear contains ranges that allow for a conservative and a liberal scenario regarding the number of hooks in the water, and the depth at which fishing will occur. As a new gear type with no existing data, we feel the range to experiment and discover the sweet spots regarding hooks, depth, and time of day or night, are necessary for this EFP to be successful, both ecologically and economically. Without range to experiment, this EFP will fail.

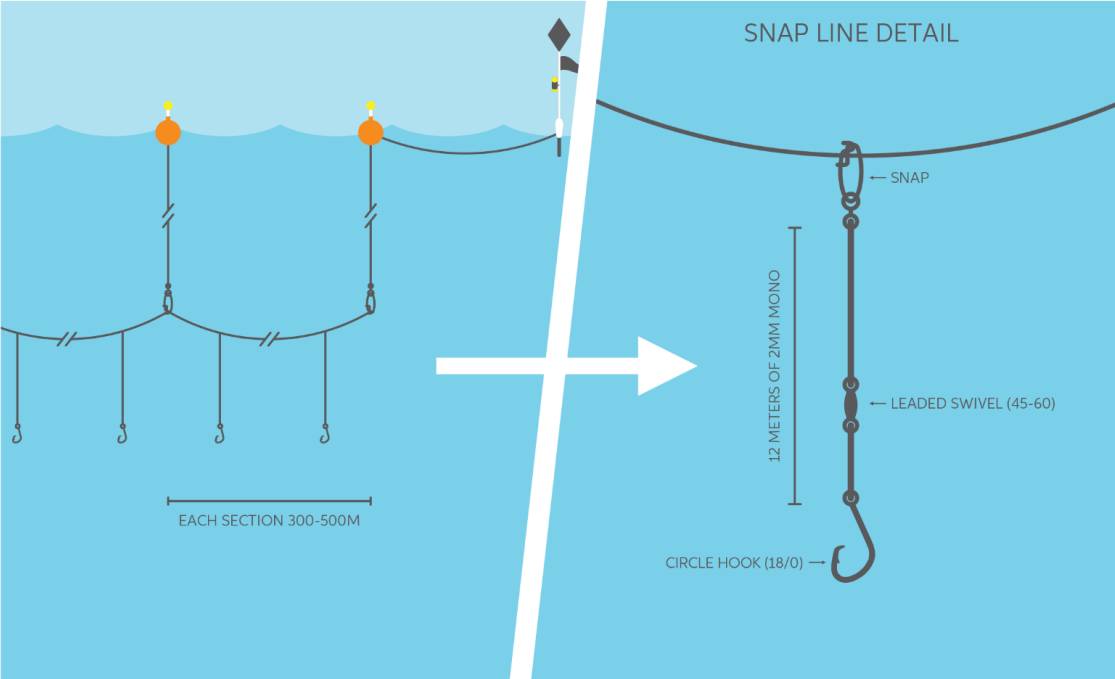
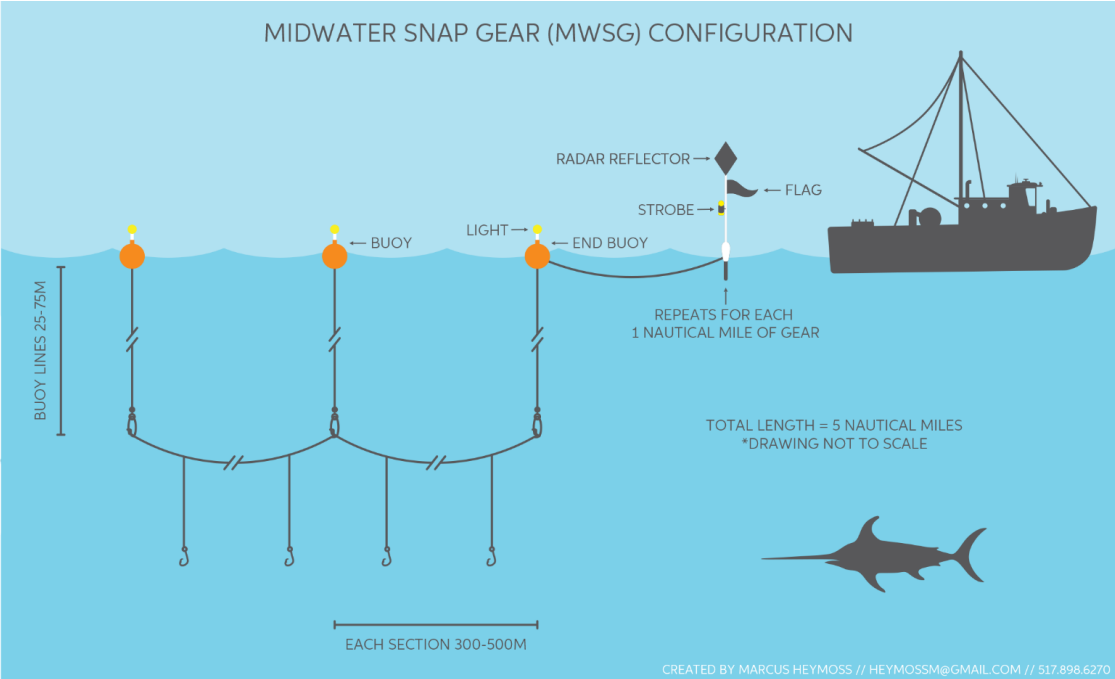
## **5. Mitigation Measures for Fishing Activity**

All effective mitigation measures currently known, available and approved in the United States will be utilized at all times during fishing effort associated with this EFP. EcoCast will be used as a proactive mitigation tool to select fishing areas with lower likelihood of protected species interactions.

The following measures will be taken to increase protection and survivability of marine mammals, sea turtles, sea birds, and other non-target species:

- a. Possess de-hooking devices (line hooker with inverted V, de-hookers with both short and long handles) on board at all times for use if needed;
- b. Endeavor to cut snap lines as close to the hook as possible, to minimize the amount of trailing line from any hooked species, and cut away as much line as possible from any hooked animal;
- c. Side-set hydraulic line shooter will be employed when setting all gear;
- d. No lazy lines will be used during fishing activity;
- e. Only monofilament (2mm diameter or greater) will be used in the construction of the snap lines (no wire);
- f. Leaded swivels (45 - 60g) will be used as close to hook as possible on each snap line;
- g. Sharks will be released alive. Sharks will only be retained if expired upon gear retrieval;
- h. Comply with all sea turtle protection measures required and pursuant to 50 CFR § 660.712(b), including the possession and use of line clippers, wire or bolt cutters, dip nets, rubber tire, PVC sea turtle mouth devices, and buoy lines (>20m) to disengage hooked or entangled animals;
- i. Comply with all seabird protection and avoidance measures required and pursuant to 50 CFR § 660.712(c), including specified handling techniques for hooked animals, proper offal disposal, proper snap line weights, and use of a Tori bird scaring line will be used during setting;
- j. Possess a valid and current Protected Resources Workshop certification pursuant to 50 CFR § 660.712(e).
- k. Gear will be clearly marked and lit. Gear will never be intentionally set in known shipping lanes, areas of high traffic, or areas where whale activity is observed;
- l. Each buoy will have a plastic breakaway link connecting buoy and buoy line in order to mitigate the potential negative effects on a whale if one were to interact with the gear.

Figure 1: Midwater Snap Gear (MWSG) Configuration Diagram



## **6. Area of Operations**

At least 20 nm seaward of Point Conception to the Oregon-Washington border. At least 20 nm seaward of the California Channel Islands. The US-Mexico border will act as the southern limit and the Oregon-Washington border as the northern limit of fishing area.

## **7. Fishing Season**

Year round, weather permitting. Up to a maximum of 120 sets annually.

## **8. Species Targets**

This EFP will target swordfish, but all other incidentally caught, legal, and marketable Highly Migratory Species will be retained. We will only retain and land species allowed by NMFS, CDFW and ODFW. No marlin or spearfish would ever be targeted, retained, or landed.

## **9. Designated Fishing Vessel**

The F/V Oriana Z (CF 1742 VE) is a 45 ft (13.7m) fiberglass offshore lobster vessel with four bunks.

We expect that NMFS will either assign observers or require electronic monitoring for 100% of our MWSG fishing trips inside the U.S. EEZ off the U.S. West Coast. We have accommodations for observers, and are willing and prepared to both accommodate and fund federal observers on all trips conducted under this EFP. As a small vessel, we are also motivated to fund and test any recommended electronic monitoring system.

If awarded, the captain/owner/operator (Austen Brown) will be certified as having completed the NMFS approved Protected Species Workshop prior to any fishing activity.

All required documents and permits will be provided upon approval of this EFP.

## **10. Requested Permit Duration**

Two (2) years initial duration. After the first two years, assuming operations are financially viable and demonstrate a low or zero incidence of protected species interactions, we request that NMFS consider re-issuing the permit for an additional five (5) years.

## **11. Reporting Requirements & Observer Coverage**

In accordance with PFMC and NMFS expectations, we propose to have all fishing activity under this EFP fully observed, and anticipate 100% observer coverage. Given the relatively small size of this vessel (13.7m) and the cost associated with each observer day (>\$500/day), we suggest electronic monitoring may be a better way to observe the fishing effort than a human fisheries observer. However, we are open to either observation method, as recommended by NMFS, and are prepared to support either observation method.

We will maintain and submit all NMFS, CDFW and ODFW approved fishing logbooks to record our catch after each fishing trip. Any and all discards or interactions with protected species or other species of interest will be noted in the logbooks. We are willing and able to work with NMFS, CDFW and ODFW scientists and managers to collect any additional data, if desired.

We are in active discussions with an Electronic Monitoring (EM) provider and are optimistic about the potential for this technology as a tool for the monitoring of pelagic fisheries along the U.S. West Coast.

We will collect data on the following during all EFP activity to inform the initial assessment of this gear type and address existing data gaps:

- Quantify all details regarding gear construction and deployment methods, including:
  - Set and haulback time
  - Depth of sets
  - Number of hooks
  - Mitigation techniques used
- Record all quantities of catch and bycatch (species, size, marketability, condition);
- Report regularly to the EcoCast team our experience using the dynamic ocean management tool;
- Document the market price of species sold during EFP fishing activity;
- Record any interactions with other commercial fishing vessels and/or sport fishing vessels.

**12. Signature of Applicant**



**Applicant:** \_\_\_\_\_

**Date:** 5/25/2021

**Revised:** 8/12/2021