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Agenda Item J.2
Attachment 1
September 2016

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Mr. Tracy, Executive Director
Pacific Fishery Management Council
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Dear Mr. Tracy,

I am applying to the Pacific Fishery Management Council (PFMC) for an Exempted Fishing Permit (EFP) for an initial approximate two year term to commence in late fall 2016 (if fishing conditions are favorable) and terminate by December 31, 2018. I am currently a commercial fisherman/educator fishing primarily Southern California waters based out of San Diego. Current species which I target are Spiny Lobsters, Sea Urchins, Sea Cucumbers (dive), White Seabass, Swordfish (harpoon), and other marketable migratory species such as shark, tuna, yellowtail, dorado etc. I have two small fishing vessels (24ft. and 33ft.) which I and my sons operate. I am seeking to explore the efficiency of deep-set buoy gear (DSBG) on both of my vessels. My participation in a DSBG EFP will provide the PFMC with valuable insights on the ability of a fisherman to effectively use a new gear type and potentially demonstrate the economic efficiency of smaller vessels versus the size class of vessels currently fishing in similar DSBG EFPs.

Though the harpoon fishery is the most preferred method of fishing swordfish for overall low bycatch impact/high quality product, for most fishermen, the local harpoon fishery efforts have resulted in very low productivity and have not been profitable¹. On our vessel alone, during last three seasons 2013-2015 we have spent 55+ days on the water targeting finning swordfish, we have only seen 10 fish and landed 2.

I am seeking a supplemental fishing gear and method which would contribute to increased catch, benefiting both fisherman and consumers alike, yet be selective and thus have minimal impact on both non target and protected species. From my information gathering, Deep Set Buoy Gear is the preferred method.

Proposed Gear Configuration

My proposed method of fishing is consistent with what has already been tested in west coast DSBG trials as conducted by the Pflieger Institute of Environmental Research.

¹ "Commensurate with the decline of DGN operations off California, traditional harpoon fisheries have also dwindled, with effort and landings also reaching their lowest points in over three decades (PFMC, 2013). This decline has occurred despite the open-access nature of the harpoon fishery and the local market void produced by the reduction of DGN operations. Several factors account for the decline in the harpoon industry, including the rise in operational costs (i.e., fuel prices), inconsistent catch rates, and the lack of new entrants into the fishery. Because harpoon operations require relatively calm conditions, this fishery has historically been limited to the waters of the SCB with landings." – Sepulveda, C., Heberer, C., Aalbers, S.A. et al. 2015

Each vessel will use 10 sets of Deep-Set gear consisting of 2 hooks per set. Each vertical down line will have a minimum 3 kg weight lead weight at the bottom that minimizes slack in the line and maintains the gear in a vertical orientation. Two leaded baited hooks will be attached to the vertical line, with one hook at approximately the 200-250m depth range and the other will be in the bottom at 300-350m depth range. All hooks will be fishing below the thermocline (approximately 90 meters depth, above which many non-targeted and protected species forage). Each set of DSBG will use 16/0 or 18/0 circle hooks with squid or mackerel bait, or artificial baits, and target swordfish and other marketable highly migratory species.

Each vertical down line will have an array of floatation buoys and radar/flag markers at the water surface, including a "strike indicator" float. A strike indicator is used so that each vessel can continually monitor and identify when a set of gear is hooked to a fish (or other species) and allow for the immediate gear servicing upon a strike. This allows a quick release of non-marketable and protected species, avoiding long-term or serious injury, and allows the marketable product to be landed more quickly in a fresher and pristine condition. Quick retrieval of the gear will be facilitated by the use of a deck mounted hydraulic reel.

Proposed Area and Effort

Fishing with the DSBG is proposed to occur mostly in Federal waters of the Southern California Bight (SCB). Deployment or retrieval of DSBG will occur during the day (1 hour prior to sunrise to 1 hour after sunset) only. Fish will not be transferred to or from the vessels operating under this permit. Fish caught by other authorized HMS gears (e.g. harpoon) on the same vessel, will be kept separate and distinct for reporting and landings receipts. Each vessel will only retain fish caught on gear it has deployed, tended and retrieved. All efforts will be made to avoid gear conflicts with other commercial and recreational fishing in the SCB, but given the large area that the SCB encompasses, gear conflicts are not anticipated.

Assuming the PFMC recommends that NMFS issue an EFP in response to my application in September 2016, I request a level of effort of up to 25 days per year per vessel, with a maximum of 10 sets of gear deployed simultaneously per day for the remainder of 2016. Allowing for time to purchase and install gear, and given that water conditions may not be favorable for swordfish in late fall 2016, I may not be able to make any sets in 2016, but would prefer the option to make sets if possible. For 2017 and 2018, I request a level of effort of up to 100 days per year per vessel, with a maximum of 10 sets of gear deployed simultaneously per day.

Active Tending of Gear and Data Collection

Each vessel will deploy 10 sets of gear and continually monitor the gear for strike indication while also potentially conducting traditional harpoon fishery practices on the same trip; scanning for swordfish finning on the surface. Dependent upon favorable weather and ocean conditions, having the option to search for 'finning' swordfish to harpoon while remaining within 4 nautical miles of set buoy gear, will contribute to the economic viability of the trips while not compromising active tending of the DSBG. By using only 10 sets of gear per vessel, effective tending of the gear can be conducted. Deep-set buoy gear will be deployed as quickly as possible, and upon detection of a strike, will be retrieved as quickly as possible. This will increase the chance of timely retrieval of a live catch in order for success of fresh harvest or vibrant live release of unmarketable non-targeted and protected species. Vessel crew and captain will actively tend all DSBG gear at all times, and will maintain the gear within sight (typically within 2-4 nautical miles of the gear) of the fishing vessel, while using high power binoculars to watch the strike detection buoys. From discussions with current EFP vessel captains, some have encountered multiple fish days on the buoy gear and or seen/harpooned finning fish at same time within the proximity of the gear. From my own experience of being a crew member aboard when this has happened I can attest that there was no gear conflict or ineffectiveness of fishing/monitoring the gear.

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Any potential rare interactions with protected species will be released quickly with minimal injury or harm. I intend to follow all guidelines or conditions imposed as requirements of an EFP issued by NMFS, including but not limited to, protected species handling training and applying animal resuscitation techniques.

Each time gear is set and retrieved observable data of but not limited to: time, location, surface conditions, SST, bottom depth, and depth of baits will be recorded in a computer based program/table. By continuously tending the gear, data can be analyzed and evaluated for patterns of optimal conditions for targeted species thus reducing the chance of by-catch or unmarketable species. As with all fisheries, any logbook documentation will also be recorded and submitted as per requirements of associated management agencies.

I will maintain the fishing gear catch and effort data, and associated trip cost data, in a computer based program/table and submit the preliminary and final reports to the PFMC in accordance with the schedule included in the PFMC COP 20 and any associated terms and conditions applied by NMFS.

Economic Impacts

This will be a far contrast and much more target species selective process than two of the current methods (Drift Gillnet and Longline) of fishing for swordfish and HMS pelagic species. 2 hooks per set x 10 sets = 20 fish maximum potentially, but realistically an average harvest might be one-fourth of that which will hopefully be enough to sustain both a small fishing vessel and the fishery as well due to a smaller more selective harvest. This will allow for a low environmental impact and potential economic viability for small vessel fishing operations.

According to the Pflieger Institute of Environmental Research (PIER):

“Based on trip expenses calculated in 2014, swordfish fishers using a two-person operation (captain and one crew member) had average trip expenses around \$500/day. With the capture and sale of one average sized swordfish (200-pound dressed weight) at the average market price of 2014 (\$8.75), the 2-person operation could result in a net gain of \$1,250/day. Given that PIER and cooperative fisher catch rates ranged from 0.6 to 1.75 swordfish/day in 2014, we propose that deep-set buoy gear can be profitable.”

Local markets and processors (e.g. Catalina Offshore Products, Santa Monica Seafoods) in Southern California have shown a high interest in DSBG swordfish and other marketable HMS species. Any potential catch of Pacific bluefin tuna will be within any fishery annual catch limits established by NMFS in accordance with international and domestic obligations. I hope to have comparable catch rates to the ongoing DSBG EFPs (1-2 swordfish per day, and associated other marketable HMS species) and supply fish at similar ex-vessel price levels (\$8-12 per pound for swordfish) to local restaurants, wholesalers, and seafood processors.

I have sufficient economic reserves to outfit each vessel with a full complement of DSBG (minimum of 10 sets of gear) and a hydraulic reel. Initial costs for gear purchase for each vessel are estimated at \$8000.

Observer Coverage and Monitoring

Though the DSBG trials to date have proven to be very low impact on non-targeted and protected species, independent observer coverage can be accommodated to conduct monitoring activities of possible protected species interactions. If observer coverage is required, then daily costs could increase by upward of an estimated \$500 per day unless grant funding is available and factored in which could help offset those costs. I am aware that the National Marine Fisheries Service currently has limited funds to offset a portion of the daily observer costs, but that this funding is not guaranteed to continue. Adding observer cost to the daily expenses could lead to lower margin of potential profitability. Given the demonstrated performance of the DSBG to minimize protected species interactions, and given the potential economic costs of observer

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placement affecting overall profitability, I propose an observer coverage level of no more than 50% of the trips that use DSBG. I am requesting a 50% coverage rate based upon demonstrated performance of the DSBG that minimizes a threat to protected species and reduces bycatch as has already been reported through the fishing/catch data presented by PIER from their various vessels over the past 4 years. A reduction in observer coverage would reduce the overall cost thus helping to make a reasonable profit for cost/efforts of fishing trips. Also, I have direct experience deploying and retrieving DSBG onboard a multiday trip by the FV Gold Coast, a current DSBG EFP vessel under the PIER DSBG EFP. Additionally, one of my crew members has also made multiple trips onboard the FV Gold Coast during the past two seasons. With this direct experience with DSBG, I request the Council consider a reduced level of observer coverage. On both proposed vessels, there is adequate deck space for the observer to perform their duties safely. There is also adequate bunk space to accommodate an observer on a limited number of 1-2 day overnight trips.

Vessel and Participant Selection

My two vessels, the 33 foot length F/V Tres Mujeres (USCG # 1066033) and the F/V DEA (# CF 0012 HY) operate routinely within 100 miles of shore and are limited to no more than 5 days away from port, but normally 1-2 day trips. Both vessels are currently permitted by CDFW and NMFS and have a history free of enforcement actions. These vessels will have a 2 to 3-person crew. Crew members are experienced in a variety of commercial fishing activities, and one crew member has experience handling DSBG on the current EFP fishing vessel Gold Coast. The F/V Tres Mujeres is a bit larger and of the standard inboard propulsion non-trailerable type, while the F/V DEA is an inboard/outdrive trailerable type. By having two different types of vessels a comparison can be made as to which might be more efficient in its efforts. What is more efficient, less efficient or no significant difference from one that is slower with a greater range per trip that can stay work in an area longer to one that is faster and has the ability to move up and down the coast from one port to another on a frequent basis in order to follow shorter range migratory fish. Additionally, using small short range vessels would ensure high quality catch for local market consistency.

Summary

Please consider my application for an EFP for the following reasons:

- I want to use gear that is more efficient, cost effective, and is highly selective for targeted HMS species and reduces bycatch
- I want to increase the potential profitability of fishing effort for swordfish and other marketable HMS species
- Participate in the continued expansion of the DSBG alternative fishing method that was started by PIER
- Proven low-impact, target specific fishing method supported/endorsed by multiple conservancy and sport fishing groups.
- Given I have been previously applied, past 18 mo., for EFP and was not selected while others were I would like to be considered for the 2016 selection

Thank you for consideration of my application for a proposed EFP. If you have questions about my request, please contact me by phone at 760-207-7504 or by email at elmodave69@gmail.com.

Sincerely,



David Stephens

References

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