Agenda Item E.2 Supplemental Revised Attachment 3 June 2018

Monterey Bay Regional Exempted Fishing Permit

Chilipepper Rockfish

Preliminarily Approved: November 2017 Submitted for final approval: May 2018

Applicant:

Real Good Fish, a Community Supported Fishery 7532 Sandholdt Rd., Suite 5B Moss Landing, CA 95039 **Point of Contact:** M. Alan Lovewell, M.A. <u>alovewell@realgoodfish.com</u> (831) 345-5153

Science Advisor:

Melissa Mahoney, M.Sc. Manager, Pacific Fisheries Policy Environmental Defense Fund 123 Mission St, San Francisco, CA 94105 Phone: (415) 293-6050 Fax: (415) 293-6051 mmahoney@edf.org

Purpose, Goals & Justification

Chilipepper rockfish (*Sebastes goodei*) have historically been one of the most important species for commercial and recreational fishing in central California. Chilipepper stocks are considered healthy, however commercial landings have been low since the late 1990s due to management actions to reduce mortality on co-occuring rockfish species such as bocaccio and canary rockfish. Since the early 2000s, the majority of chilipepper catch has been by trawl vessels at ~350 tons/year, well below its optimal yield (Field et al. 2016¹). Now that bocaccio and canary have been declared rebuilt, our goal is to demonstrate the ability to catch commercially viable amounts of healthy stocks, while avoiding overfished species.

By testing this gear, which was used successfully by commercial rockfish fishermen for many years before the collapse of the fishery, we hope to create an economic opportunity for young fishermen in our region, while providing healthy, sustainable seafood to our community in the Monterey Bay and beyond. This is increasingly important as the overall economic health of our

¹ <u>https://www.pcouncil.org//wp-content/uploads/2016/06/Chili_2016_final.pdf</u>

working waterfront communities continue to diminish. In addition, we see the opportunity to gradually increase availability and demand for local rockfish in our markets as a way to build a critical bridge for recovering the West Coast groundfish industry as a whole. In a time when California's salmon, crab and sardine fisheries are in a compromised state, the need for additional access to our abundant fisheries resource cannot be overstated.

This Exempted Fishing Permit (EFP) is designed to assess the feasibility of a trolled hook and line gear type that is readily accessible to existing commercial fishermen with a low barrier to entry cost, while applying electronic monitoring tools that reduce costs yet provide sufficient monitoring data equal to an observer. Several EFPs along similar lines have been approved by the Pacific Fishery Management Council (PFMC); one from the late Steve Fosmark in 2009, and another from Platt in 2015. Both were designed to establish the performance characteristics of their respective gear types while identifying areas where target species are abundant and bycatch species are not, following commercial fishing conditions. The main difference in this EFP is the gear configuration being tested (trolled rather than drift) and the monitoring tools being deployed (electronic monitoring, in addition to observer coverage).

The objectives of this EFP would be: 1) to test fishing strategy with salmon gurdies, drop lines and reels, and artificial flies, 2) determine areas that are abundant with chilipepper rockfish, and that correspond to low densities of overfished species, and 3) to test new cost effective electronic monitoring (EM) and vessel monitoring system (VMS) solutions that provide oversight and data comparable to observer coverage. The EFP that we are requesting would allow up to ten (10) vessels to fish inside the current non-trawl Rockfish Conservation Area (RCA) using otherwise legal open access fixed gear. Full retention applies to rockfish species (as defined in 50 CFR Part 660), and retention of non-rockfish species will be governed by applicable open access limits.

EFP Description

This EFP proposal is for a total of 2 years (2019-2020) following the groundfish biennial management cycle and execution of the EFP by NMFS. Fishing activity would be conducted off central California (36 to 37.5 deg. N latitude), in areas with canyon edges and walls that have historically produced good volumes of chilipepper catch, smooth hard bottom, with no rocks (example: canyon south of Año Nuevo). The target depth range (40-150 fm) is currently within the non-trawl RCA established to protect overfished rockfish species that mostly live on or near the bottom.

This EFP will be prosecuted by a minimum of 5 vessels, and not exceeding 10, fishing vessels that are home-ported in the harbors of the Monterey Bay (Monterey, Moss Landing, Santa Cruz).

We are seeking funding and intend to use electronic monitoring in combination with observer coverage. In the future we hope to demonstrate the use of electronic monitoring in lieu of full observer coverage. Pending electronic monitoring (EM) testing with the NMFS Observer Program, a Flywire device (<u>http://www.flywirecameras.com/</u>) or similar may be required to develop a robust EM program for this potential fishery. In addition, a Pelagic Data System vessel monitoring device (<u>http://www.pelagicdata.com/</u>) will be used to track fishing locations to accurately mark areas of concern, whether it's highly effective fishing grounds, or areas of higher interactions with unwanted or overfished species. Details of spatial monitoring will be described in more depth in our fishing plan.

A descending devise will be present on every boat in the instances when fish need to be released and safely lowered back to depth.

Species Allocation

Although chilipepper rockfish is the primary target species, they are often found among bocaccio. We will also target yellowtail, as these are all healthy/recovering species and of high market value. For catch of additional groundfish species not listed here, will work with NMFS on terms for those limits. Based on a minimum of five vessels averaging 10 trips/year and around 1000lbs/trip (mixed composition based on proportion of quota), we are requesting the following set aside amount:

- Chilipepper rockfish: 40 mt
- Bocaccio: 30 mt
- Widow rockfish: 9 mt
- Canary: 1 mt
- Yelloweye: 0.06 mt
- Darkblotched: 0.40 mt
- Cowcod: 0.015 mt
- Minor shelf rockfish south of 40° 10' N: 30 mt
 - Vermilion rockfish: 5 mt

We do not anticipate having salmon bycatch due to the following considerations: 1) gear would be towed at slower rate than that used for salmon, 2) other EFPs north of our area have not encountered salmon in mid-water (jig gear type), and the artificial shrimp flies used have historically not attracted salmon (Mike Ricketts, personal communication, May 10, 2018). However, we are aware of the critical status of many salmon species in our area and are willing to work with CDFW and NMFS on compliance with a bycatch rate cap, safe handling/release techniques, and/or biological sampling.

Fishing gear description

The gear will consist of the following: Hydraulic or electric powered salmon gurdies or line reels, fly-hooks, line, wire, snaps, swivels, small buoys, fish finder, fathometer or sonar.

The gear deployed for this EFP operates in the mid-water column. Fishing depth is determined by acoustic sonar. A test drop will be made to ensure the presence of target species, more on that below. Once a test set establishes the presence of target species, the gear will be deployed. Fishing will occur no less than 50 ft off the bottom. A combination of weights, buoys, weight breakaways, and floats are used to ensure the mainline doesn't encounter the bottom, see diagrams below.

The main line can be deployed by two methods. 1) With salmon gurdies on one side of the vessel lowered according to fishing depth. Attached to the wire at the fishing depth will be fly line with a maximum of 500 hooks per set; or 2) a fly-line reel, mechanically or manually powered, that deploys and retrieves the gear over the rail of the vessel. Diagrams below. Testing will start with 50 hooks per set and increase based on experience, bycatch, ease of line management. This gear will be fished at a slow speed through the fishing grounds. Gear will be lowered no closer than 50 ft off the bottom, based on soundings, to minimize the chance of encountering overfished rockfish species, while maximizing catch of target species. Ideally, three or four sets will be used per trip, occurring in the morning and afternoon, to maximize cost per unit of effort (CPUE).

Allowable hook types are J, circle and semi-circle. Sizes will be between 2/0 and 6/0.

Main line floats are made of hard plastic around 5" in diameter and will be spaced on the main line to reduce line sag and interaction with the bottom.

Vertical Test Line

Prior to setting the longline gear, a test set will be made with vertical line to ensure that the target species is present and minimize the chance of encountering any unwanted or overfished species. Using acoustic soundings will ensure that no hooks will get within 50 ft of the bottom. Similar to the fishing gear itself, the weight and leader will not extend less than 50 ft to keep hooks off the bottom. No more than 30 hooks will be used on the test drop. The weight may hit the bottom initially, then immediately be pulled up to avoid and sagging of the hooks. A break away for the weight will also keep the hooks from falling below the fishing depth in the situation where the weight is snagged on the bottom.

The fishing vessel, in gear or drifting, moves slowly ahead as the main line gear is deployed to ensure tension on the line and minimize tangles. The main line is release by spool or bucket over the rail. Fishing gear is attached to the vessel at all times. The main line consists of shrimp "flies" attached to gangions with swivels attached to 200-800lb test monofilament. Hooks are spaced approximately 18-30" apart on 12" – 20" monofilament gangions (approximately 25 lb

test). Floats are spaced out on the main line to reduce any chance of sagging below the 50 ft limit.

Suggested Retrieval

Gear will be retrieved while the vessel is in gear to keep the lines taught and from tangling. Wire gurdies are raised to bring up the mainline which is retrieved by hand or reel. Innovative retrieval tools and techniques may be devised to increase safety, reduce tangling, and increase ease and speed for subsequent deployments. Similar retrieval and storage techniques as described in the Fosmark 2009 EFP may be developed to manage gear (https://www.pcouncil.org/wp-content/uploads/bb_2009_11_G3a_ATT1_1109.pdf)

Fisherman Participant Selection

Fishermen selected for participating in this EFP will be chosen based on their ability and willingness to fish, ability to take an observer and/or install EM and vessel monitoring devices. In addition, they must be willing to communicate intent to fish, and report back a detailed catch log with required data. Lastly, selection will be based on their willingness to fish during months when target species are available to this fishery. Preference will be given to fishermen demonstrating the greatest willingness to test this gear type. Fishermen located in the Monterey Bay region that have expressed their willingness to participate in this EFP:

- 1. Calder Deyerle, 30 years old, [FV Sea Harvester], Moss Landing
- 2. Walter Deyerle, 29 years old, [FV Sea Harvest 4], Moss Landing
- 3. Daniel Deyerle, 58 years old, [FV Sea Harvest 5], Moss Landing
- 4. Richard Deyerle, 60 years old, [FV Sea Harvest], Moss Landing
- 5. Brian Deyerle, 35 years old, [FV White Owl], Monterey
- 6. Kevin Butler, 45 years old, [FV Lisa Marie], Santa Cruz
- 7. Brendan Pini, 29 years old, [FV Mysealium], Santa Cruz
- 8. David Toriumi, 35 years old, [FV Grinder], Moss Landing
- 9. Jerry Wetle, 46 years old, [FV Pacific Bully], Moss Landing
- 10. Ron Farquhar, 56 years old, [FV Westwind], Monterey
- 11. Carl Azevedo, 78 years old, [FV Bocci Boy], Santa Cruz
- 12. Leroy Ludahl, 80 years old, [FV Lil' CC], Moss Landing
- 13. Mike Ricketts, 82 years old, [FV Seahawk], Monterey

Research Design

The applicant, contracted video analysts, and the advising scientist will be responsible for data analysis. Data analysis will consist of statistical analysis of catch and bycatch of all species by fisherman, set, trip, and month. Catch rates will be expressed as catch per hook, per set, per day, and per trip. Value and volume of the catch will be recorded following sale. The final report will provide an estimate of fishing effort and total catch; absolute and relative species

composition summarized by set, trip, and month; size composition of catch and bycatch; and sex ratio and stage of maturity for chilipepper, and additional species as requested by the PFMC.

Data Sources

Data will be collected by the fisherman, Pelagic Data Systems, and video analysts for all fishing under this EFP. Attachment of depth recorders may be used, as available. If desired, incidental catch of certain species (e.g., canary and yelloweye) that cannot be released alive could be retained by the observer and provided to National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife (CDFW), or other researchers for biological sampling.

Precautionary Measures

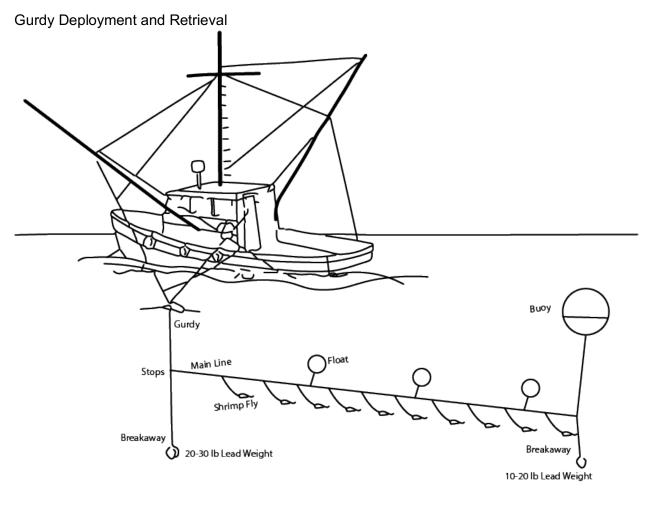
Given the potential to catch overfished species and when fishing in the RCA, the utmost caution will be taken with this experiment. The following measures are proposed and applicants are open to working with the PFMC, NMFS, and CDFW to implement others deemed necessary.

- At-sea Observers 100% coverage in the first year. Leveraging the NMFS Observer program all vessels when fishing for this EFP will have an observer on board. Contracted observers will be used when Federal observers are not available. We request a lower level of monitoring in the second year, with EM, once fishing activity is verified.
- Electronic monitoring Voluntary. With the use of Flywire we will be able to track the catch of all fishermen. We will contract the video to be reviewed at a statistically significant rate to ensure accuracy and cost effectiveness. Rate to be determined by PFMC and science advisors.
- 3. **Caps** Based on input from the PFMC and NMFS, each boat will have either a daily or trip limit/cap of canary and yelloweye. If this cap is reached, based on catch accounting reports verified by the observer, fishing will cease for that day or trip.
- 4. **Trip reports and catch accounting** On a timeline agreeable to NMFS and CDFG, trip and cumulative catch reports will be provided after each trip (e.g., within 48 hours).
- 5. Prospective Fishing Plan A fishing plan will be developed that describes in detail the areas to avoid, how to allocate quota and how it redistributes based on who is fishing and who is not, data collection, sharing of information, precautionary fishing measures, etc
- 6. **Status and evaluation call before each trip** Before each vessel departs on a trip, a cumulative catch accounting report (i.e., running total for the season) and evaluation of the trips taken thus far will be reviewed to determine if another trip can be made and to discuss lessons learned (e.g., float sizes, bait, etc.). If it is likely that the allocated harvest cap would be exceeded in the upcoming trip, then all fishing under the EFP will cease for the season. Participants on each call would include the EFP participants and

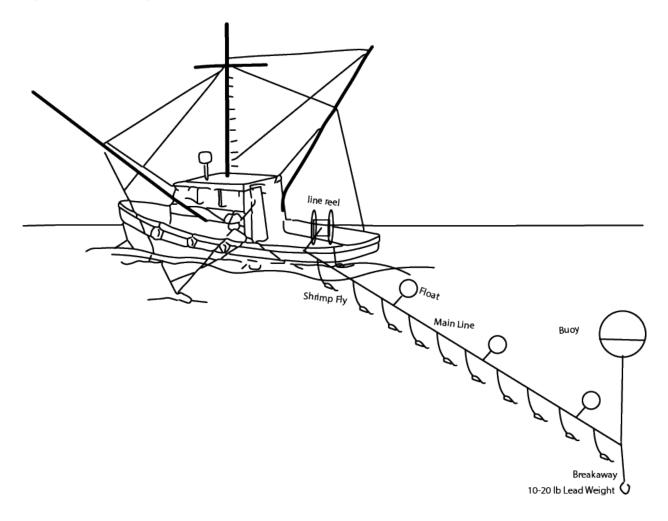
could include NMFS (SF & OLE), CDFG (Marine Region & Enforcement) and National Marine Sanctuaries Service.

7. VMS and vessel marking – Vessel required to have VMS, will call the West Coast Groundfish Declaration Line to report the trip. (This procedure should work for both the EFP and for future use of this gear type). Vessels participating in this EFP will also display a banner with "EFP Fishing" written in 2 foot high letters. Pelagic Data System VMS will also be utilized to track vessel fishing behavior and relay catch information to the fleet to flag areas of unwanted bycatch. This data will also help with spatial analysis.

Diagrams



Agenda Item E.2 Supplemental Revised Attachment 3 June 2018



Fly-line Reel Deployment and Retrieval

Signature

M. Alan Lovewell

Mark May Taranal

Melissa M. Mahoney