GROUNDFISH MANAGEMENT TEAM REPORT ON ELECTRONIC MONITORING: NON-WHITING MIDWATER AND BOTTOM TRAWL EXEMPTED FISHING PERMIT UPDATE AND FINAL PREFERRED ALTERNATIVE

The Groundfish Management Team (GMT) was briefed on the status of the non-whiting midwater and bottom trawl electronic monitoring (EM) exempted fishing permits (EFP) and regulation deeming by Ms. Melissa Hooper, National Marine Fisheries Service (NMFS) West Coast Region (WCR) on the GMT's publically noticed webinar on April 4, 2017. In addition, the GMT reviewed the Analytical Document (Agenda Item F.2, Attachment 1), Agenda Item F.2.a, Supplemental NMFS Report 1 and 2, and a draft of the Groundfish Electronic Monitoring Policy Advisory Committee and Technical Advisory Committee (GEMPAC and GEMTAC) report on recommendations on the final preferred alternative (FPA) for rulemaking.

Halibut Discard Ratio

Currently, there is a 90 percent discard mortality rate (DMR) applied to any Pacific halibut discarded under EM due to the inability of video reviewers to assess the condition of the halibut. This default rate affects the feasibility of bottom trawl vessels using EM, as it forces them to use a significant amount of individual bycatch quota (IBQ) in their normal operations. Alternatively, when an observer is onboard, the condition of each halibut is assessed, and differential DMR is applied based on the level of survivability.

The GMT has worked extensively with DMR for other species (e.g. lingcod, sablefish, etc.) in the past, and if the Council chooses, they could direct the GMT to work on exploring a refined halibut DMR for use in EM. However, the GMT has some concerns with the proposed timeline and methodology (referred to as sub-option E8) in the Supplemental GEMPAC/GEMTAC Report, if the GMT is expected to participate in the DMR development.

While the GMT appreciates the proposed plan outlined in the GEMPAC/GEMTAC report, we believe that due to data scarcity, along with the other groundfish items occurring this summer (stock assessments, Council meetings, etc.) we will have limited, if any, ability to bring forward new analyses in June or September of this year. The GMT would prefer to discuss this issue at our scheduled October work session, and then provide a report in November for potential Scientific and Statistical Committee (SSC) review and Council decision making. The GMT understands that a new West Coast Groundfish Observer Program (WCGOP) draft report on Pacific halibut mortality will be available in September and will include data on the condition of halibut discarded on EM trips. Therefore, the GMT recommends that the Council task us with reviewing available data and reports and bringing back pertinent information, and potential options, for the November Council meeting. If the SSC can approve methodology in November, then the modified DMR may be available to be applied in 2018.

Furthermore, the GEMPAC/GEMTAC recommends looking at fleet-wide and vessel-specific DMR. The GMT notes that there are trade-offs with each approach, and proposes an additional alternative for consideration. One of the main objectives of the individual fishing quota (IFQ) program is individual accountability. By applying a fleet-wide DMR, this objective is inherently

not met. In addition, the GMT believes that the GEMPAC/GEMTACs proposal of a vessel-specific rate may be problematic, in that fishing activity and environmental conditions that form the basis for the vessel specific DMR, will impact the rate applied until that rate is subsequently updated. For example, if a vessel discards two halibut that were deemed "dead" in year one, then this could affect the rate (i.e. result in 90 percent) for the following year. Additionally, the GMT has some questions on how this proposed methodology would work in the long term. If EM is used for multiple years, would the vessel specific rate just continually roll forward, or would it need to be routinely updated, and if so how and when that would occur.

The GMT proposes a multivariate analysis (i.e., generalized linear model or GLM) to determine which factors recorded on EM trips affect halibut mortality based on previous observed trips (e.g., haul duration, time on deck, sea temperature). This would allow a formula to be generated that could then be used to assign mortality rates to individual hauls. For example, halibut mortality rate = "Z" x haul hours + "Y" x minutes on deck + "Z" x "Y" (interaction). If tasked by the Council, the GMT would identify the relevant factors in determining mortality, as well as scope the availability of such data to inform the IBQ debiting inseason.

The GMT recommends that the Council move forward with all three DMR proposals for further consideration.

Retention Requirement

In September 2014, the Council selected optimized retention as the Final Preferred Alternative (FPA) for both bottom trawl and non-whiting midwater trawl for EM. Optimized retention allows vessels using EM to selectively discard identifiable IFQ and non-IFQ species. The other option was maximum retention, where all catch is retained except for green sturgeon, Pacific halibut, marine mammals, seabirds, sea turtles, eulachon, and Dungeness crab in Oregon and Washington.

Initially, in 2015, all participants in the EM EFP fished under the maximized retention plan. However, in 2016, bottom trawl vessels were able to fish under optimized retention, while the non-whiting midwater trawl vessels continued to operate under the maximized plan (Table 1). Non-whiting midwater trawl participants requested to continue to operate under the maximum retention protocol because operators preferred to operate like a whiting trip and put catch directly into the hold and sort later (Agenda Item F.2.a, NMFS Report 1). Unlike declared whiting trips though, these EFP participants were not permitted to retain the aforementioned prohibited species, and were required to sort and discard such species.

Table 1. Modified summary of EFP participation in 2015 and 2016.

Delivery Year	Fishery	Vessel	Trips	Retention Plan
2015	Bottom Trawl	5	23	Maximized
2015	Non-whiting Midwater Trawl	8	26	Maximized
2016	Bottom Trawl	9	109	Optimized
2016	Non-whiting Midwater Trawl	6	33	Maximized

However, with the FPA originally being optimized retention, there were several discussions on how to allow vessels to operate under a retention policy that best aligned with their target strategy. For example, some bottom trawl vessels may want to fish midwater rockfish and sort at sea (i.e., optimized retention). Other vessels, such as those in the EFP in 2016, preferred to operate under a maximized retention plan. Therefore, there were concerns that changing the FPA from optimized retention to maximized retention (to align with EFP regulations) for non-whiting midwater trawl gear may as it may not be the best options for all vessel and vessel operations.

Therefore, the GMT recommends that the Council confirm optimized retention (sub-option D2) as the FPA. Within optimized retention, the GMT supports the language that would provide vessels the flexibility to operate under a maximized retention approach that (1) allows vessels to discard select species of identifiable IFQ and non-IFQ species, (2) requires salmon to be retained, and (3) allows vessels to discard other prohibited species depending on if they sort at sea or not. If vessels sort at sea (i.e. optimized retention), they must discard any prohibited species (excluding salmon); if they do not sort at sea (i.e. maximized retention, excluding Pacific halibut), then they must retain all prohibited species. The GMT believes that this option will provide vessels the needed flexibility to operate under EM effectively.

Video Review Rate

As noted in previous statements (Agenda Item F.4.a. Supplemental GMT Report, April 2016 and Agenda Item I.5.b. Supplemental GMT Report, November 2015), the GMT recommends developing a process for moving from 100 percent video audit to some lower rate that is performance driven. When this process is developed, the GMT would like to be involved to ensure that rare catch events and any discrepancies between EM estimates and logbooks, particularly of overfished and highly attained species, are captured.

Recommendations

The GMT recommends that the Council:

- 1. Task the GMT with reviewing the available information on Pacific halibut DMR and bring back options at the November Council meeting;
- 2. Move forward with consideration of fleet-wide, vessel-specific, and the GMT proposed analysis of haul-specific halibut DMR;
- 3. Confirm optimized retention (sub-option D2) as the FPA; and
- 4. Develop a process for moving from 100 percent video audit to some lower rate that is performance driven.

PFMC 04/08/17