

**Supplemental NMFS Report 1: Pacific Halibut Discard Mortality Rates and
Discard Species List Changes
Prepared by NMFS West Coast Regional Office
PFMC Meeting, September 11-18, 2017**

NMFS provides this report to support the Council's consideration of preliminary preferred alternatives for electronic monitoring (EM) regulations for groundfish bottom trawl and non-whiting midwater trawl vessels.

Pacific Halibut Discard Mortality Rates (DMR)

In July, NMFS, Council, and International Pacific Halibut Commission (IPHC) staff met to discuss alternatives for estimating halibut discard mortality in the Council's [draft analytical document](#). We also reviewed draft analyses completed by the West Coast Groundfish Observer Program (WCGOP) and Pacific States Marine Fisheries Commission (PSMFC).

WCGOP examined viabilities collected by observers deployed in the EM fleet relative to viabilities observed in the non-EM fleet. Although WCGOP achieved 25-30% coverage of EM trips, there were few bottom trawl trips that encountered halibut while using EM and carrying an observer. Bottom trawl vessels have previously stated they avoid using EM in areas where they would expect to catch halibut, to avoid being charged 90% DMR against their halibut individual bycatch quota (IBQ). This results in a small sample size from which to develop a new observed DMR.

Because of the small sample size from EM trips, limited conclusions can be drawn. However, what information is available suggests that there is wide variability between vessels in the viabilities of halibut discarded on EM trips. This variability may undermine development of an average DMR from observed trips that would be representative of all trips. WCGOP's analysis also suggests that viability may be lower (mortality higher) on EM trips than non-EM trips. Therefore, it may not be appropriate to extrapolate viabilities from non-EM trips to EM trips. It is not clear exactly why EM vessels have lower viability scores. It may be that they have higher time on deck due to catch handling requirements of EM, and/or because they have little incentive to discard the halibut quickly with a standard 90% DMR.

We also discussed PSMFC's draft analysis of possible factors that could be used to generate an EM DMR. It appears that time on deck is a major driver of viability, although it is important to note that it does not entirely explain the viability scores. Previous analyses conducted by WCGOP has shown that temperature is also a driving factor in viability, and would likely need to be part of any DMR formula developed. Temperature information was not available for analysis in the PSMFC study. The viability scores from the decision tree are also highly dependent on the way the score categories are defined. The score categories could be defined more or less conservatively, and affect how well the resulting distribution of viabilities "matches" the observer estimates. It is also important to note that the data used in the PSMFC study was dependent on the information collected by the observers. It is not clear if the results would be the same if the information had been independently collected by the EM program without the help of observers.

We briefly discussed the possibility of training captains and crew to conduct the viability assessments. There is no information to show what the results would be of such a method, but IPHC staff noted that the IPHC has not been supportive of this approach when it has been proposed in the past.

IPHC staff are eager to assist us in developing a better method for estimating mortality from EM trips that would incentivize uptake of EM as a tool by the fleet, while ensuring incentives to minimize damage to Pacific halibut are maintained. Other fisheries that are looking at EM are also facing this challenge. However, NMFS cautions that any method needs to be based on the best available information and must not undermine the IPHC's management of Pacific halibut. NMFS and IPHC are interested in seeing what other methods may be proposed by the GMT, and hearing feedback from the GMT and SSC on the alternatives.

Council staff asked that NMFS provide a description of the process for evaluating the halibut DMR option selected by the Council this fall. There has been some confusion about who ultimately has the authority to set halibut DMRs – NMFS? The IPHC? The SSC? With respect to the DMRs that WCGOP uses, WCGOP meets annually with IPHC staff to determine the DMRs that will be used in the halibut mortality report generated by WCGOP each year. Although WCGOP ultimately determines the rates to use in the reports, we always consult with IPHC to ensure close alignment between the rates used in IPHC management and our management of the Area 2A allocation. In this way, the rates ultimately used by WCGOP are usually as a result of consensus between WCGOP and IPHC.

In approaching how to select rates for EM trips, IPHC staff indicated at the February 2017 GEMPAC meeting that a method reviewed and approved by the Council's SSC would likely be sufficient. The Council's SSC is not scheduled to review the proposed alternatives until November 2017. Therefore, NMFS envisions the following process for evaluating the Council's preferred alternative this fall:

- September 2017 - The GMT and GEMPAC review the alternatives, and the Council selects a preliminary preferred alternative.
- October 2017 – NMFS would work with IPHC staff to develop preliminary feedback on the Council's preferred alternative for the November meeting.
- November 2017 – The SSC reviews the Council's preferred alternative, and the Council selects a final preferred alternative.
- After November 2017 – NMFS would consult with IPHC staff again on the Council's final preferred alternative, to give them an opportunity to consider the SSC's advice.

This last step is important to ensure that the rates used by the IPHC and the Council/NMFS are consistent for effective management of Pacific halibut. NMFS is hopeful that the SSC, Council, IPHC, and NMFS will be able to come to agreement on a DMR method for EM vessels.

Changes to the List of Discard Species

At the April 2017 meeting, the Council requested that NMFS identify a process for changes to the list of species that can be discarded by EM vessels that would not require rulemaking. The Council stipulated that the process include an opportunity for the Council to consider any

adjustments prior to finalization of any changes. NMFS agrees that consideration of any changes to the discard species list must involve a public process, whether through rulemaking or notice and discussion by the Council. Therefore, NMFS developed the following options for consideration by the Council.

Option 1

Option 1 is the “status quo” option in the draft regulations reviewed by the Council at their April 2017 meeting. This language makes changes to the discard species a “routine action,” which would involve a single Council meeting followed by a proposed and final rulemaking, with the possibility of just a final rule if there is good cause to waive the notice requirement of a proposed rule.

“(q) *Changes to retention requirements.* Retention requirements have been designated as “routine,” which means that they can be changed after a single Council meeting following the procedures described at § 660.60(c).”

Option 2

Option 2 was developed by NMFS to address the Council’s request. This option would allow NMFS to make changes to retention requirements within individual Vessel Monitoring Plans (VMPs) after consultation with the Council. In addition, this option provides notice to the public through the Council process of what standard NMFS would use to evaluate any proposed changes to retention requirements – “...must be sufficient provide NMFS with the best available information to determine individual accountability for catch, including discards, of IFQ species, and compliance...” This is the same standard NMFS proposed to apply to evaluating levels of video review, EM units and software, and other flexible provisions of the EM program, and that the Council deemed in April 2016.

“(q) *Changes to retention requirements.* NMFS may specify alternate retention requirements in a NMFS-accepted VMP through the process described at § 660.604(f), after consultation with the Council and issuance of a public notice notifying the public of the changes. Alternate retention requirements must be sufficient to provide NMFS with the best available information to determine individual accountability for catch, including discards, of IFQ species and compliance with requirements of the Shorebased IFQ Program (§ 660.140) and MS Coop Program (§ 660.150).”