

Discussion Paper: BSAI Crab eLogbooks

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1 Introduction

NMFS requires daily fishing logbooks (DFL or logbooks) for vessels 60 ft length overall (LOA) or greater that participate in the Crab Rationalization (CR) Program fisheries in the Bering Sea and Aleutian Islands (BSAI).² The DFL is meant to account for each day of the fishing year (January 1 through December 31), indicating whether the vessel was active or inactive. In addition to identification information, (e.g., ADF&G vessel number), the DFL includes a set-by-set breakdown of the catch. The vessel operator will record the starting and ending latitude and longitude for each set, which is later translated into ADF&G statistical area. Additionally, each set includes soak time, pots depth, number of lost pots, and an estimate of the number of crab and total estimated weight.

The logbooks that the crab vessel operators fill out are paper. Some fleets have an electronic logbooks (eLogbooks) requirement or option. For instance, eLogbooks are required to be filled out by the catcher processors participating in the hook-and-line Pacific cod fishery, American Fisheries Act (AFA) pollock, or Amendment 80 participants. A few trawl catcher vessels have also used eLogbooks.

In April 2018, the Council received a proposal from the Pacific Northwest Crab Industry Advisory Committee (PNCIAC),³ requesting the Council and NMFS develop and authorize eLogbooks for the BSAI king, Tanner and snow crab fisheries. The purpose of developing eLogbooks for these crab fisheries would be to help ADF&G improve catch accounting. In response the Council initiated a discussion paper.

Much of the work on this discussion paper was not able to be completed as scheduled due to the shutdown of the Federal government. What is included is a description of the problem, the authority, the use of the DFL in the BSAI crab fisheries, and a preliminary discussion on the costs and benefits of developing and implementing this system.

2 Background and Description of the Problem

PNCIAC cited two reasons for their request to develop and allow crab eLogbooks. The first reason is to create a more efficient and timely reporting system. PNCIAC's problem statement says:

“.... It is widely recognized that the paper program is cumbersome---it is labor intensive, costly and lacks timeliness, as reports have to be hand delivered in port. Once submitted, recording the

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² 50 CFR 679.5(c)(3)(i)(C)

³ PNCIAC proposal: <http://npfmc.legistar.com/gateway.aspx?M=F&ID=dca44ed3-5b69-491f-821e-6d0d51b7d539.pdf>

data requires hand entries, whereas with an electronic program reports can be electronically generated by crab boat captains from the fishing grounds. It eliminates the need for hand entries. Electronic catch reporting will greatly improve timeliness, accuracy, and efficiency and it will be cost-effective.”

The second reason they are asking for an electronic logbook system to replace paper logbooks is in hopes that it will improve catch accounting and reduce management concerns associated with a separate but related PNCIAC proposal.⁴ PNCIAC is also interested in the flexibility of being able to offload partial deliveries of crab, and then continuing to fish crab before the rest is required to be offloaded. Currently there is a prohibition on this fishing practice (50 CFR 680.7), except for in the Western Aleutian Islands golden king crab (WAG) fishery. An exemption was passed by the Council for the WAG fishery in 2015 which was implemented in 2016. Processors wished to develop a live crab market in Adak and they wanted vessels to be able to deliver smaller amounts of crab opportunistically while the jet was in town without requiring the harvester to then fully end their trip and immediately transport to a processor that could receive the remainder of their crab in their tanks.

The WAG analysis noted the reason for the original prohibition was to address concerns about unaccounted discards of undesirable crab (e.g., overages, deadloss, barnacled crab). Experience with the CR Program has shown that illegal (unreported) crab discards are believed to be unlikely for a number of reasons. For instance, there is no prohibition on sorting at the rail, and this is where highgrading often occurs. Moreover, dumping crab once it has gone into the tanks would likely be dangerous at sea. The risk of quota overages has been greatly reduced due to the cooperative structure, online quota transfers, and post-delivery quota transfers, giving the industry many options to resolve a potential overage. Additionally, the structure of the CR program means more people than just the vessel operators are at risk by this sort of illegal action.

Thus, while this regulation may no longer be needed to address enforcement concerns, the prohibition against continuing to fish for CR crab after an offload has begun and until the offload is complete has also had the effect of simplifying port sampling and catch accounting. Removing this prohibition for all CR fisheries creates some complications for State-run Dockside Sampling Program, the State Observer Program, and potentially enforcement. It was suggested that transitioning from paper to electronic logbooks for crab may expedite the State’s catch accounting process and allow for easier implementation of an amendment that removes this prohibition. Thus, PNCIAC has indicated an interest for this option.

3 Regulatory Authority for DFLs

The DFL is a Federal reporting requirement detailed at §679.5(c) and for the CR Program fisheries, cited at §680.5(a)(2)(A). In addition, a description of the operational requirements for electronic logbook (referred to as ELB in regulations) are specified at §679.28(h). The program is administered through NMFS. If the Council were going to allow or require the use of eLogbooks for the BSAI crab vessels, regulatory language would need to clarify that eLogbooks are permitted in place of a DFL in these areas of the Federal regulations. An amendment to the Fishery Management Plan (FMP) for the BSAI King and Tanner Crabs would not be necessary and State of Alaska regulations would not likely need to be amended.

4 Use of DFL in the CR Program Fisheries

In the CR fisheries, the DFLs are primarily used by NOAA Office of Law Enforcement (OLE) for enforcement purposes and by ADF&G to collect catch and effort information by statistical area. The

⁴ A discussion paper on this issue is simultaneously being considered at this, February 2019 Council meeting: <https://meetings.npfmc.org/CommentReview/DownloadFile?p=8bfa6276-4223-4b31-b343-d85ef9890bd1.pdf&fileName=D1%20CR%20Partial%20Offload%20Discussion%20Paper%20.pdf>

observer or dockside sampler collects one of the carbon copy pages from the DFL. Often the DFL provides the most detailed information on catch by statistical area. If this is the case, the DFL is used as a tool to augment the State's confidential interview form (CIF) and expedite the interview process. After ADF&G staff inputs this information into their system, it is used to the edit fish ticket with updated data on catch and effort by statistical area.

5 Preliminary Discussion of Costs and Benefits of eLogbooks

Thus far, analysts have not identified a reason why electronic logbooks could not be developed and implemented for the CR Program fisheries. It appears the primary decision point will center around the cost and resources to develop and support such a system versus the benefits it will bring the fleet.

Understanding the level of resources (i.e., full-time equivalent workers, funds, and time) that may be required to develop and implement such a system is important information for the BSAI crab industry, because it is likely the funds to support this system (at least in part) would be recovered through cost recovery. Section 304(d) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) authorizes and requires the collection of cost recovery fees for limited access privilege programs (LAPP) and the Community Development Quota Program. As a LAPP, the CR Program includes a cost recovery component which authorizes the collection of actual management and enforcement costs up to three percent of ex-vessel gross revenues. Recent years have not reached the three percent threshold; thus, additional fees could be levied. Future iterations of this analysis may be able to better quantify the resources that would be required to develop and implement such a system.⁵ This draft qualifies some of these trade-offs.

Based on the gear type (single or longline pots) and the way crab fishing is conducted, the current electronic logbooks used by catcher processors participating in the hook-and-line Pacific cod fishery, American Fisheries Act (AFA) pollock, and Amendment 80 fisheries would not be appropriate for the crab fleet. A new platform would need to be developed and tested for the crab fishery to make it more specific to the information used from this fishery. NMFS is currently down several developers and is facing a backlog of technical projects, and it is unclear when there would be adequate internal staff resources to work on a new development project.

In order for this system to be an improvement over the paper DFL system for the vessel operators, rather than an inconvenience that is not used, it must be extremely user-friendly and have built-in efficiencies over the paper version. Unlike some of the larger catcher processors that may have a mate specifically tasked with completing necessary paperwork and recording information in seaLandings, crew on the crab vessels are typically already fully tasked. Generally, the DFL duties fall to the captain while they are in the middle of fishing. Thus, efficiency and simplicity would be particularly important. For instance, perhaps the eelogbook would allow the captain to click a button and duplicate all the header information of the log sheet containing information such as vessel name, operator name, ADF&G vessel number, Federal Fisheries Permit number, etc. If a more sophisticated system could time-stamp each set and later pull in the vessel's location through its Vessel Monitoring System, perhaps the captain would not need to type in the full latitude and longitude of each set.

Benefits of having this option in place could also include a more efficient and potentially more accurate transfer of information (e.g. no longer needing to transcribe handwriting). It would save ADF&G staff time currently allocated to typing in the details of their carbon copy DFL sheet. This may also help with some of the accountability referenced in the discussion paper on considering partial offloads within a trip.

⁵ For instance, Pacific States Marine Fisheries Commission could provide an estimate of hiring contractors to develop and manage an eelogbook system for the BSAI crab fleet.

However, at this point it seems unlikely that the use of eLogbooks would solve the primary data quality concern associated with that partial offloads proposed action. The issue occurs if crab from a first “round” of fishing is comingled with crab from a second “round” of fishing at the time of offload. In this case, although ADF&G would have details of the statistical areas that were fished, they would not be able to link the retained crab to a statistical area (unless crab from a first and second round of fishing were always kept in separate tanks). Thus, even with the use of eLogbooks, ADF&G would not likely be able to edit the fish ticket to reflect catch by statistical area.

In addition to the resources necessary to set up a quality eLogbook system, funds would need to be appropriated for hiring full-time technical support for the users that would operate the system. Neither the State nor NMFS currently has adequate staff in Dutch Harbor to provide the necessary technical support and ongoing training for harvesters. Based on the support required for current eLogbooks program, it is expected this may include hiring three to four support staff.

Given the learning curve that is expected with a new reporting system like eLogbooks, it is unlikely that switching to this system would be mandatory in the near future. A prototype could be developed and tested out, for instance in the Western Aleutian Island golden king crab fishery, which typically has two to three vessels. However, expenses will be incurred in just developing this prototype. Thus, costs and benefits should be further weighed prior to this action.

6 Next Steps

Public input may inform the Council process on whether there is a continued interest in pursuing the development of eLogbook for the BSAI crab fleet. If so, this analysis could continue through an expanded discussion paper. If the Council feels it is able to identify a problem statement and set of alternatives at this time, it may also choose to move an initial review draft analysis forward.