September 30, 2022

Mr. Simon Kinneen, Chair
North Pacific Fishery Management Council
1007 West Third, Suite 400
Anchorage, AK 99501-2252

Mr. John Kurland, Regional Administrator
NOAA Fisheries, Alaska Region
709 West Ninth Street
Juneau, AK 99802-1668

Re: Agenda Item D2 BBRKC Extended Discussion Paper

Dear Mr. Kinneen, Mr. Kurland, and Council members,

The Alaska Marine Conservation Council (AMCC) is dedicated to protecting the long-term health of Alaska’s oceans and sustaining the working waterfronts of our coastal communities. Our members include fishermen, subsistence harvesters, marine scientists, small business owners, and diverse fishing families. Our ways of life, livelihoods and local economies depend on sustainable fishing practices, healthy ecosystems, and productive oceans.

Thank you for the opportunity to comment on the Bristol Bay Red King Crab Extended Discussion paper. In the North Pacific, we are at a point of shifting ecosystem health that commands our full attention and suite of tools so that we may proceed skillfully. Multiple species are in staggering decline, some on the verge of disappearance altogether from important spawning habitats. The Council needs to provide the tools that allow Bristol Bay Red King Crab (BBRKC) the chance to rebuild. **Rebuilding the BBRKC stock must include protections for the habitat critical for supporting all life stages (molting and mating season, juveniles, and large biomass hotspots), improved PCS accounting and caps, and addressing the unknown unobserved mortality.**

While there are certainly ecological factors beyond our control, we do have influence on the human aspect of all fisheries. During these unprecedented times, AMCC urges the creation of some immediate flexibility in management using the best available science we have at this time. More research and updated information is always good, but we no longer have the luxury of time to wait for studies to be completed, data analyzed, reports written, and presentations given. We request the Council make immediate and meaningful adaptations to the execution of fisheries that could hamper the rebuilding of the BBRKC stock, while preserving the integrity of the Red King Crab Savings Area (RKCSA).
Figure 1 shows the increased Groundfish basis weight (GBW) of Pelagic Trawl (PTR) consistently increasing between 2013 and 2022, while other gear types have GBW inside the BBRKCSA has decreased. During this same time period, the biomass of BBRKC has also decreased. From 2014 to 2021 alone, PTR effort in the BBRKCSA, as a percentage of their total BS effort, has risen by 325% or 500% depending on whether you use GBW (325%) or catch (500%)\(^1\), by numbers representing significant increases of effort.

Figure 1. Red King Crab Savings Area Groundfish basis weight\(^1\)(GBW) in metric tons (left axis), Bristol Bay Red King Crab Biomass Estimates\(^2\) in metric tons (right axis) for 2013-2022.

Increased protection of habitat for all life stages of BBRKC is necessary, with additional significance placed on areas with higher concentrations of molting and mating females and juvenile crab. This includes completing the Essential Fish Habitat (EFH) distribution maps across all crab life stages to achieve the best available science potential we have currently. The RKCSA has estimated EFH disturbance levels above 10% that need attention (Figure 2). The EFH model as presented currently has the potential to downplay areas of greater than 10% disturbance levels that are critical for stock health and abundance based on using the entirety of habitat distribution as the denominator for raising habitat concern. In short, we are diluting the perceived impact of habitat disturbance, but the habitat impacts themselves, area to area, are

\(^1\) BBRKC Expanded Discussion Paper October 22
\(^2\) BSIA Crab SAFE Report 2013-2021
considerable, important and exceed tolerable levels. It’s necessary and appropriate to focus on habitat impacts from trawling because trawling accounts for 97.4% of all the fisheries’ contact-adjusted footprint (i.e. hook-and-line and pots even after expanded for unobserved fishing, are estimated 2.6% of the footprint).³

![Habitat Disturbance Map]

Figure 2. Bristol Bay Red King Crab Savings Area habitat disturbance (%) from December 2020.

There is a need for accurate monitoring and accounting of unobserved mortality of crab by mobile gear types, and for clear and enforceable boundaries around habitat interactions by mobile gear. Currently, we assume an incredibly low to non-existent level of crab mortality by PTR, based on the inaccurate assumption that this gear type is not interacting with the bottom.

³ EFH FE Effects Discussion Paper Oct 2022
We have recently learned through the April 22$^{3}$ Council meeting that PTR is on the bottom much more than the definition that allows fishing time inside the RKCSA for PTR. So in reality this gear may be on the bottom as much 40 to 100% of the time, meaning the actual number of crab mortality by PTR could be astronomically higher$^2$. Unobserved mortality from PTR is not alone to blame in the declining biomass of BBRKC, but without much needed monitoring and accounting it cannot be ruled out as a contributor and should not be ignored. Additional protection for BBRKC EFH would allow greater reprieve for crab stocks to rebuild.

There is some additional scientific information that, if available, would increase the ability to manage the BBRKC more dynamically and provide the ability of stocks to recover while allowing fishing effort where sustainable. A winter trawl survey would illuminate crab migration outside of the summer snapshot time frame by which we currently manage crab stocks. Between the two surveys, the critical areas of molting, mating, juvenile crab, and hotspots would be clearly identified. Currently, the winter and spring seasons are even more problematic for mobile gear interaction with the RKC stocks due to their soft, recently molted and less active state. Additionally, it would be valuable to use current RKC tagging studies to further pinpoint areas and habitats that are fundamental to a thriving stock in the future.

We support the North Pacific Council’s mission to prevent, mitigate, or minimize any adverse effects from fishing to the extent practicable, if there is evidence that a fishing activity adversely affects a stock in a manner that is “more than minimal and not temporary in nature.” To that end, continuous review of current or future fishing impacts on stock health, and comprehensive ecological analysis to support responsible decision-making, is critical to the conservation of our marine resources and ecosystem health. With the current state of BBRKC, now is the time for immediate action based on the best available science, to be reviewed and updated as the newest best available science becomes available. The science – and at times lack of fundamental fisheries information – demands a precautionary approach to protecting critical crab habitats and populations. We appreciate the opportunity to contribute to this dialogue. Thank you for considering our comments.

Respectfully,

Marissa Wilson
Executive Director