February 3, 2023

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

RE: Comment on Agenda Item C4 Essential Fish Habitat 5-Year Review Summary

Dear Chairman Kinneen, Council Members, and SSC:

The Alaska Bering Sea Crabbers (ABSC) is a trade association representing independent crab harvesters who commercially fish for king, snow (opilio), and Tanner (bairdi) crab with pot gear in the Bering Sea and Aleutian Islands (BSAI) Crab Rationalization Program. As crab industry stakeholders, we appreciate the opportunity to comment on Agenda Item C4 – Essential Fish Habitat (EFH) 5-year review summary. The comments in this letter build from ABSC's comment letter in April 2021 and ABSC's comment letter in October 2022 on EFH review planning which are herein incorporated by reference.

We would first like to acknowledge all the ongoing work towards the fishing effects (FE) model and the continued efforts to update maps of EFH and species distribution across the Bering Sea for many of Alaska's fish and invertebrate stocks. We can appreciate the complexities involved in the EFH process to blend research, fishery data, and the best available science to improve our knowledge and understanding of critical habitat for multiple stocks in a diverse ecosystem. As scientists, researchers, and analysts work to enrich our knowledge of EFH and species' distributions throughout all life stages, it remains important to understand the impacts of all fishing activities on EFH across a species range, while also evaluating the fishing effects on a species by stock management area.

The opening paragraph in the EFH 5-year review summary states the following key message: *The Magnuson-Stevens Fishery Conservation and Management Act (MSA) includes provisions concerning the identification and conservation of EFH. The MSA defines EFH as "those waters and substrate necessary to fish [or invertebrates] for spawning, breeding, feeding, or growth to maturity." The National Marine Fisheries Service (NMFS) and regional fishery management councils must describe and identify EFH in fishery management plans (FMPs), minimize to the extent practicable the adverse effects of fishing on EFH, and identify other actions to encourage the conservation and enhancement of EFH. Federal agencies that authorize, fund, or undertake actions that may adversely affect EFH must consult with NMFS, and NMFS must provide conservation recommendations to federal and state agencies regarding actions that would adversely affect EFH.* The last few sentences of this assertion are important messages for managers to encourage and provide recommendations for the conservation and enhancement of EFH. A necessary step for the sustainable management of a complex ecosystem that supports a broad array of fisheries and fishing activities. Fortunately for the North Pacific, with the current fishing effects (FE) model along with the in-depth EFH review process, we believe the Council has ample information, the best available science, to take action at this meeting to provide necessary conservation recommendations towards the enhancement of EFH.

Turning to crab, it's not new information that the Bering Sea's big three crab stocks (bairdi, snow, and red king crab (RKC)) are all at concerningly low levels of abundance. The RKC directed fishery is closed

for the second time in a row due to low levels of female abundance. Snow crab is closed for the first time in the history of this domestic fishery, due to extremely low levels of abundance. While the Bairdi directed fishery is currently open, levels of abundance remain low and all three of these iconic Alaska crab fisheries have experienced fishery disaster(s) in recent years. Simply put, these stocks remain at historic low levels of abundance and it is up to this Council to adjust the few management levers available and give these crab stocks the chance to stabilize and begin rebuilding. Protecting essential habitat for crab is one of those levers the Council can adjust. This 5-year review of EFH provides the opportunity for the Council to put forward such recommendations for habitat conservation.

Table 14 of this review document highlights the stark need for more data, including EFH information by life history stages of crab to update the fishery management plans (FMP). Particularly, it's been shown more than 10% of bairdi crab habitat is adversely affected by fishing impacts, a pre-determined threshold to elevate species for mitigation and conservation actions. Bairdi has not been elevated for any mitigation measures due to a lack of data. The recent information splitting east and west state managed bairdi stocks and associated FE output (disturbance) is an important piece of new data, as is the addition of fishing impacts by gear type. These are tools that can, and should, be used to determine when a stock, like bairdi with more than 10% habitat disturbance, will be elevated. The next step needs to look at habitat by crab life stage. We remain concerned that species distribution models (SDM) and FE maps have not yet been provided for juvenile or larval crab, and we therefore continue to ask for inclusion of FE maps for all crab across all life stages. This is not a new request, as early as 2012 the Crab Plan Team (CPT) flagged the importance of understanding critical spawning and larval habitat for crab and the need for research on the effects of fishing on the habitat of all life stages of crab. Similarly, we also note that during the February 2015 5-year EFH review, the Scientific and Statistical Committee (SSC) made recommendations to update all species across all life stages and suggested incorporating seasonal distributions, including additional sources of data. These asks have come forward by Council bodies, stakeholder groups and members of the public for over a decade. While we have seen improvements in quantification of fishing impacts, we have yet to see steps forward towards protecting identified habitat that is critical for bairdi, snow, or RKC in the Bering Sea and identifying habitat by life stage.

We continue to recommend that future FE models and EFH description efforts incorporate crab maturity data collected via the Eastern Bering Sea (EBS) summer bottom trawl surveys, observer data, and any potential maturity data to come from additional (winter or other) surveys, and to run separate individual models for both immature and mature life stages of Alaska's crab stocks. We ask the Council to recommend elevating this as a priority given the status of EBS crab stocks. The next EFH 5-year review should apply these crab maturity data, regularly collected on bottom trawl surveys and include other sources, to inform life stage species-specific distribution models for the BSAI crab FMPs. Additionally, these efforts should include collaboration with scientists from the Bering Sea Fisheries Research Foundation, NOAA's Alaska Fisheries Science Center, Alaska Department of Fish and Game, and the directed fishing fleet, all of whom have crab size measurements and maturity data. These data could be used to spatially and temporally map crab catches and observations of mature and immature life stages in the EBS. Thus, providing maturity dependent spatial-temporal descriptions and maps of crab-specific critical habitat.

Lastly, we urge the Council to identify additional actions to encourage the conservation and enhancement of crab EFH. We strongly recommend the Council identify these actions, in part, by incorporating a public process to allow stakeholders to provide an opportunity to engage. This could be done by soliciting proposals from the public and use those proposals to develop a range of EFH conservation and enhancement alternatives to evaluate and consider. This process would greatly benefit

from local knowledge and traditional knowledge (LKTK), community engagement, and collaboration between fisheries managers, scientists, and stakeholders.

In closing, ABSC continues to ask the Council be proactive in helping slow the decline of Alaska's commercially important crab stocks and facilitate effective rebuilding, in part, by providing necessary habitat conservation recommendations. We suggest that the highest priority actions for BSAI crab stocks in the Council arena focus on spatial and temporal management across all life stages for crab and higher resolution of spatial and fishery-specific impacts on crab EFH. Additionally, the consideration of habitat protections and the identification of habitat areas of particular concern (HAPC) for all life stages of crab should be the highest matter of urgency given the depressed condition of Alaska's crab stocks. The designation of a HAPC does not require an area be closed to fishing, it is simply a recognition and acknowledgment of important habitat that can add value to management considerations. Finally, incorporate LKTK and open public process to develop proposals for conservation and enhancement of crab EFH. Collectively, let's help this commercially and culturally important iconic species for Alaska rebound using the tools and information we have and continue to find ways to collect and incorporate additional data.

Thank you for your consideration.

Sincerely,

Jamie Goen
Executive Director
Alaska Bering Sea Crabbers
jamie@alaskacrabbers.org