

**ADVISORY PANEL**  
**Motions and Rationale**  
**October 4-7, 2022 - Anchorage, AK**

**D2    BBRKC Discussion Paper**

The AP recommends the Council provide direction to agencies, managers, and industry to prioritize BSAI crab as a species of conservation concern. The AP reiterates our April 2022 short-term, narrow recommendation to help BBRKC rebuild from a level of serious conservation concern. The AP also recommends a more comprehensive longer-term action to improve BSAI crab stock management to help those stocks rebuild.

**DIRECTION**

The AP recommends the Council provide policy direction to agencies, managers, and industry to increase BSAI crab as a priority species for monitoring and bycatch avoidance. Crab should be a higher priority given its level of conservation concern and stock status. Crab should at least be ranked above halibut and herring, which are not at a level of conservation concern.

**SHORT-TERM**

For the short-term to provide more immediate benefits to the BBRKC stock, the AP recommends initiating a review of a proposed action to close the RKCSA/RKCSS to additional gears to reduce bycatch and fishing impacts on crab and crab habitat. A proposed purpose and need statement and alternatives are provided below.

**Proposed Action**

The proposed action is to apply additional gear-based closure measures to the RKCSA/RKCSS, an area that continues to be important to BBRKC, to reduce bycatch and fishing impacts on crab and crab habitat.

**Purpose and Need**

The purpose of this proposed action is to reduce fishing impacts on crab and crab habitat in an area known to be important to BBRKC. This action is needed because the BBRKC stock has declined to a level of serious conservation concern, and the number of female BBRKC has been declining for over a decade to the point where abundance levels forced the closure of the directed fishery. The intent is to restore and sustain the BBRKC stock by reducing impacts on molting and mating crab needed to improve reproduction, by providing protections to improve recruitment, by protecting habitat, and by building in resilience to changing environmental conditions, predation, and fishing pressure. In considering this action, potential fishing impacts to the stock and habitat will be examined to understand the effects of these impacts and to assess proposed closure measures.

**Alternatives**

Alternative 1 – Status Quo/No Action

Alternative 2 – Close the RKCSA/RKCSS to additional gears to reduce bycatch and fishing impacts on crab and crab habitat.

~~(2) Option A – Prohibit all gear, except pot gear during directed crab fisheries, from the RKCSA.~~

~~(2) Option B – Prohibit pelagic trawl gear from the RKCSA at any time. In years when the directed fishery is closed, prohibit pelagic trawl gear from the RKCSS. This option is consistent with existing requirements for non-pelagic trawl gear.~~

~~(2) Option C – In years when the directed crab fishery is closed, prohibit all gears except longline gear from the RKCSA/RKCSS.~~

**(2) Option A – Prohibit all groundfish pot gear.**

**(2) Option B Prohibit all gear, except crab pot gear during directed crab fisheries, from the RKCSA .**

**(2) Option C - Prohibit pelagic trawl gear from the RKCSA at any time. In years when the directed fishery is closed, prohibit pelagic trawl gear from the RKCSS. This option is consistent with existing requirements for non-pelagic trawl gear.**

**(2) Option D – In years when the directed crab fishery is closed, prohibit all gears except HAL gear from the RKCSA/RKCSS.**

**(3) Alternative 3 - Based on new survey information, analyze whether the boundaries of the red king crab savings area are appropriate or should be revised.**

#### LONGER-TERM

For the longer term, the AP recommends the Council initiate action on comprehensive management measures for all BSAI crab, with a focus on rebuilding BBRKC (1) and snow crab.

#### **Proposed Action**

The proposed action is to help rebuild BSAI crab stocks through fishery management measures such as spatial-temporal closures (static and dynamic), alignment of stock management boundaries, and improved bycatch management to reduce bycatch and fishing impacts on crab and crab habitat.

#### **Purpose and Need**

The purpose of this proposed action is to reduce fishing impacts on crab and crab habitat. This action is needed because BSAI crab stocks are at historic lows, closed, or overfished and fishing impacts may be inhibiting rebuilding and harming important crab habitat. (1) Eastern Bering Sea snow crab was declared overfished in October 2021. The rebuilding plan to be implemented by October 2023 will determine the rebuilding timelines (Tmin, Tmax, Ttarget) but does not include new management measures to rebuild the stock as fast as possible while balancing the needs of fishing communities. The BBRKC stock, while not overfished under the federal definition, has declined to a level of serious conservation concern that closes the directed fishery due to a low abundance of female BBRKC. The number of female BBRKC has been declining for over a decade. The bairdi stock while not overfished remains at low abundance levels. The intent of this action is to restore and sustain the BSAI crab stocks by reducing impacts on molting and mating crab, by providing protections to improve recruitment, by protecting habitat, and by building in resilience to changing environmental conditions, predation, and fishing pressure. In considering this

action, potential fishing impacts to the stock and habitat will be examined to understand the effects of these impacts and to assess proposed measures.

### **Alternatives**

Alternative 1 – Status Quo/No Action

Alternative 2 – Closed Areas (static or dynamic)

Close areas to protect crab habitat, broodstock, high density areas of female or male crab, molting and mating crab, or other key life stages at times of low abundance. Closures could be static or dynamic, such as seasonal or annual shifting closed areas, as appropriate.

Alternative 3 – Align Stock Management Boundaries

Create consistency in stock management for the crab fishery, stock assessment, and bycatch measures by aligning the crab PSC limit boundaries with the crab stock management area and stock assessment boundary.

Alternative 4 - Improve Bycatch Management

Revise bycatch management to create stronger incentives to avoid crab. At a minimum, improve prohibited species catch (PSC) limit management by removing PSC limit floors, updating limits based on current status of the stocks, and managing PSC across a stocks range. For the directed crab fishery, add a 10% carryover provision to the Crab Rationalization Program to reduce directed fishery discards and increase flexibility.

This proposed action should include an economic analysis of impacts to the directed crab fishery and fishing communities when considering the tradeoffs of moving other sectors off crab to balance net benefits to the nation.

*Amendment 1 (to remove all mention of snow crab from the motion) failed 8-8*

*Amendment 2 passed 16-0*

*Amendment 3 passed 15-1*

*Main Motion as amended passed 11-5*

### *Rationale in Opposition of Amendment 1*

- *The three major EBS crab stock (snow, bairdi, and BBRKC) would all benefit from the short and long-term actions proposed in this motion; therefore, it is appropriate and important to include them for consideration.*

### *Rationale in Favor of Amendment 1*

- *This agenda item is specific to BBRKC; therefore, it would be more appropriate for any action related to snow crab be taken up separately. Recommendations or actions related to snow/bairdi crab confuse and complicate the focus of this agenda item.*
- *A rebuilding plan is currently being developed for snow crab given its overfished status. Recommendations in this motion specific to snow crab are most likely already going to be discussed under that process. If additional actions related to snow crab need to be addressed either within or outside the rebuilding plan, they should be proposed at that time.*

Rationale in Favor of Amendment 2

- *Data in the analysis shows that groundfish pot gear, primarily targeting cod, is a significant source of BBRCK mortality. This amendment is meant to broaden the suite of original options by including specific analysis on prohibiting groundfish pot gear only in the RKCSA (similar to the option included for trawl gear).*

Rationale in Favor of Amendment 3

- *This amendment is responsive to both public comment (from a variety of sectors and gear types), recent survey data, as well as information contained in the expanded discussion paper that the current RKCSA boundaries may no longer be appropriate or effective for protecting BBRKC, especially under changing ocean conditions. It is important to re-evaluate static closure areas like the RKCSA that have been in place for many years and may no longer be serving the purpose they were originally intended for.*

Rationale in Opposition of Amendment 3

- *Taking a deeper look into boundaries of the RCKSA is an appropriate ask; however, it should be included under the long-term goals and not the short-term goals. The purpose of the short-term goals is to take quick and meaningful action to help prevent the further decline of BBRKC. An analysis of the RKCSA boundaries would likely involve a longer analytical process that would be more appropriately considered within the long-term goals in this motion.*

Rationale in Favor of Main Motion as Amended

- *This motion aligns with comments from the SSC for where there is information available for action in the short-term while also incorporating longer-term, broader actions to help the three main BSAI crab stocks recover. The SSC voiced support for the data contained in the expanded discussion paper and commented that there is enough information within it to support analysis of fishing impacts on crab and crab habitat. (the SSC noted that the Fishing Effects Model could be leveraged for this analysis).*
- *This motion is nearly verbatim of the AP's motion that passed in April 2022. The BBRKC Expanded discussion paper provides further information to support the AP's previous motion from April asking to initiate analysis of alternatives to close the RKCSA/RKCSS to additional gears in order to reduce bycatch and fishing impacts on crab and crab habitat in an area known to be important to BBRKC. The short-term action could assess adequacy of the observer coverage on the pot cod fleet as part of the analysis and different coverage levels could be considered if it is determined to be inadequate for effective crab bycatch management.*
- *The longer-term action also builds on the April 2022 AP motion and more recent information from the Expanded Discussion Paper essentially creating a meaningful, comprehensive rebuilding plan with management actions to rebuild crab stocks that are at low abundance levels across the Bering Sea, especially BBRKC and BSS. Currently, the BSS rebuilding plan in development only sets timelines to rebuild, with no meaningful management actions to protect crab and crab habitat other than turning fisheries and bycatch on or off.*
- *Under the long-term recommendations, Alternative 2 would seek to create either static or dynamic closed areas to protect crab habitat, broodstock, high density areas of female or male*

*crab, molting and mating crab, or other key life stages at times of low abundance. The analysis of this alternative should look to lessons learned from other countries, like Russia, Canada and Norway, that provide protections for molting and mating crab. An analysis of this alternative should review bottom contact and estimate crab and crab habitat impacts from all gear types. An analysis should also include an evaluation of the impacts of requiring pelagic trawl gear to limit bottom contact to no more than 10% of the time with available, enforceable technologies like bottom contact sensors.*

- *Alternative 3 under the long-term recommendations would seek to create consistency in stock management for the crab fishery, stock assessment, and bycatch measures by aligning the crab PSC limit boundaries with the crab stock management area and stock assessment boundary.*
- *Alternative 4 under the long-term recommendations would seek to revise current crab bycatch management to create stronger incentives to avoid crab. The current PSC limit management does not create incentives to avoid crab, is ineffective for pelagic trawl because of the gear configuration and large forward meshes and does not exist for fixed gear. The potential of a 10% rollover provision for the crab rationalization program could help to reduce crab DMR through the ability to retain legal size crab rather than discard all crab once the exact poundage of IFQ remaining for a vessel has been reached on their last trip of a season. Other IFQ programs in rationalized fisheries have a rollover provision and one should be considered for crab as well.*
- *Both the short-term and longer-term actions should consider the economic impacts to the directed crab fishery in balancing trade-offs between all sectors potentially affected by the proposed actions.*
- *While not a specific ask in this motion, BSAI crab should be a high priority for monitoring and bycatch avoidance given the depressed status of many of the stocks (below state conservation thresholds or overfished). To this end, minimizing and avoiding crab should be considered a higher priority than halibut and herring PSC since these species are not at a level of conservation concern.*

#### *Rationale in Opposition to Main Motion as Amended*

- *This motion was previously put forward for Council consideration and not acted upon. Instead, the Council chose to move forward with an RFI and the expanded discussion paper under review at this meeting. Given the Council's direction from April 2022, putting forward a nearly identical motion does not make progress towards the goal of addressing BBRKC especially when the majority of the alternatives and analyses requested do not logically flow from information contained within the expanded discussion paper.*
- *With two Purpose and Need Statements and two sets of alternatives for analysis, the recommended action is large and confusing. Given the conservation concern facing BBRKC, action should focus on attainable measures that are likely to achieve the greatest positive impact as quickly as possible. It is important to focus on solutions that will result in the biggest positive impacts utilizing the best available information.*
- *Based on information contained within the discussion paper, as well as public comment, focused action regarding the RKCSA (as suggested under Amendment 3 for new Alternative 3) would make more sense than the motion put forward, which, if it were to go forward, may likely collapse under its own complexity. It would be more logical to focus on understanding if*

*the current RKCSA is still achieving its original intent and goals rather than building action alternatives around an area that may no longer be accurate or effective for its intended purpose. Is the information used to establish the Savings Area still relevant, or should it be updated given advances in what we know about crab biology, distribution, and groundfish fisheries? Rather than consider closures to an old area, the RKCSA should be revisited with the best available science.*

- *Based on information contained within the discussion paper, another potential area of focus likely to have more immediate positive impact would be establishing a crab PSC limit for the pot cod fishery. This type of action would address a real, documented, known source of BBRKC mortality. The 2022 pot cod fishery has taken 131,603 animals year-to-date through September 24<sup>th</sup> (110,942 of them in September). This level of bycatch is occurring even under the development of voluntary best-practices. For 2021, pot gear (non-directed crab) took 776,998 female RKC as bycatch and with a 50% discard mortality rate that's 388,499 dead females. If a 20% discard mortality rate is applied (same as directed crab fishery), that is 155,399 dead female RKC. This is in contrast to 99 females taken as bycatch in the pelagic trawl fishery in 2021.*
- *The proposed motion lacks any action alternatives specific to the directed RKC fishery. Between 2015-2020, 7.4 million animals were discarded in the directed BBRKC fishery. With a 20% discard mortality rate, that results in over 1.5 million dead animals and the analysis states that 455,115 of these crab were female. During the same time period, the directed fishery retained 5.4 million legal size male crab, which is 2 million less animals than were discarded.*
- *Closing the RKCSA to the pelagic pollock fishery would move this fishery into an area that is known for high salmon PSC encounters. The fishing behavior of the pollock fleet is heavily based on avoiding multiple prohibited species with salmon being the top priority. The pollock fishery must consider the SCA closure area, which is next to the RKCSA, which is then next to another regulatory no trawl zone. If the pollock fishery can no longer access the RKCSA, it would be extremely difficult to find a clean fishing area to move. Pollock C/P fishing effort inside the RKCSA tends to be 10 percent or less of their annual effort and is often clean fishing. The pollock fishery uses salmon avoidance measures that are based on flexibility. Closing the RKCSA to the pollock fleet would provide less areas to move for the flexibility of salmon (and herring) avoidance. Based on historical fishing data, the tradeoff for moving the pollock fleet out of the RKCSA would be upwards of 300 additional Chinook salmon caught annually.*
- *It is unclear how the rollover provision would work to reduce directed fishery discards and increase flexibility. The rollover clause may reduce discards of legal-size males, but likely wouldn't reduce discards of undersized males or females, 20% of which are expected to die based on the discard mortality rate in the directed BBRKC fishery.*