

Draft SSC Report February 2021



C4 and C5 BSAI Crab PSC Analysis

C4 BSAI Crab PSC – Preliminary/Initial Review

- Analysis of effects of setting PSC limits for the BSAI trawl sector to the lowest threshold when State of Alaska closes the Bristol Bay red king crab, EBS Tanner, or EBS snow crab fisheries.
- The SSC ***finds*** the document adequate to allow the Council to understand the fishery and policy impacts of the alternatives.
 - Provides a good characterization and evaluation of the action relative to the objectives described in the Council's Purpose and Need
 - Action is largely a policy decision about linking management regimes given the analysis indicates minimal impact on crab stocks under recent PSC mortality levels
- The SSC ***recommends*** the document be advanced to final action after SSC recommendations are addressed.



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- The SSC ***recommends*** the following issues be addressed:
 - Show the differences between PSC composition and MMB in Appendix 3 using density plots and tables with notation showing legal sizes
 - Better illustrate differences among State of Alaska management areas and stock assessment areas as they relate to PSC accounting
 - Add a correlation graph/evaluation of PSC use relative to abundance (used for estimating the stair-step), with the caveat that fleet response to PSC is tied to the degree it is constraining in the historical data.
 - Analysis to clarify the linkage between communities and fisheries potentially impacted by this action



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- Public testimony about concerns regarding the mortality of crab due to contact with the trawl gear
 - Analysis references best available information and is adequate
 - There is not currently an accepted method to estimate this type of mortality for the groundfish and directed fisheries.
 - Document does indicate through sensitivity analysis in Appendix 4 that increasing bycatch by 100 – 500%, and in some cases 1000%, have relatively small impacts on management quantities.
 - Ongoing source of assessed and unassessed mortality.
 - Encourage future research and consideration in the risk table.



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- The SSC discussed current PSC stairstep management, noting it may not align with assessed stock trends
 - In response to the CPT under C5, SSC **recommended** a white paper be prepared. The paper would provide information on abundance calculation methods and explore what flexibility exists under current regulations.
 - The SSC is **not requesting** the paper be prepared prior to advancing this action, and prioritization should be done in context with other staffing and research priorities.
 - SSC discussed methods to better align PSC management with the stock assessments. Could be a future topic of exploration should the Council wish to pursue the issue.



C5 BSAI CPT Report- BSAI Crab PSC

- CPT questions for the SSC:
 - Should PSC stairsteps be defined as a specific component of the crab population (e.g., mature male biomass)?
 - Should, and how should, catchability and selectivity be included in PSC calculations?
- CPT noted the inclusion of catchability for Tanner and snow crab can make large differences for interpreting stock abundance and calculating PSC stair-step
- CPT recommended that if catchability is to be used for PSC calculations, then current threshold calculations should be revisited with an analysis



C5 BSAI CPT Report- BSAI Crab PSC

- The SSC noted that multiple methods to calculate crab abundance for the PSC strairstep policy may likely exist under current regulations.
- The SSC **recommends** a white paper be prepared that provides information on historical methods used to calculate abundances, and potential options (within existing regulations), noting BBRKC is defined as mature female red king crab in regulation.
- The white paper would be a step to making PSC calculations transparent and ensure they remain consistent with regulatory intent.
- The SSC **recommends** authors continue using current methods for calculating the PSC limits until different processes are identified.
- The SSC **reiterates** its past recommendation to provide PSC values in the SAFE, and also requests a brief description of current calculation methods

