Bristol Bay red king crab stock assessment

Appendix E: History of Acceptable Biological Catch buffers and buffer justifications for the Bristol Bay red king crab stock

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Table 1: History of Acceptable Biological Catch (ABC) buffers and buffer justifications for the Bristol Bay red king crab stock. Source: Crab Stock Assessment and Fishery Evaluation (SAFE) Report Introductions, https://www.npfmc.org/library/safe-reports/.

Year	ABC buffer	Justifications
2020	25%	- increased from previous years buffer due to lack of survey data (increase from 20% to 25%)
2021	20%	- continued lack of recent recruitment - poor environmental conditions (as reflected in the ESP) - continued decline in female survey biomass in 2021 - model's lack of fit to the 2018-2021 female survey biomass
2022	20%	- continued lack of recent recruitment - poor and variable environmental conditions - NMFS female survey biomass in 2022 remains at historically low levels - lack of fit to the 2018-2022 NMFS female survey biomass - restrospective patterns exhibited by the recommended model
2023	20%	- continued lack of recent recruitment - poor and variable environmental conditions (e.g., cold pool distributional shifts) - NMFS female survey biomass in 2023 increased above historically low levels for the first time in 5 years, but this was predicated on a single exceedingly large tow (thus the accompanying uncertainty was large) - lack of fit to 2018-2023 NMFS female survey biomass - retrospective patterns exhibited by the recommended model, even though this was improved over last year's assessment model (21.1b)
2024	20%	- continued lack of recent recruitment - poor and variable environmental conditions (e.g., cold pool distributional shifts) - lack of fit to 2021 - 2024 NMFS female survey biomass - retrospective patterns exhibited by the recommended model