Appendix B: Risk Table for the 2025 Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions

William T. Stockhausen Shannon Hennessey Brian Garber-Yonts

2025-09-09

Introduction

This appendix documents the risk table and ABC recommendation for the 2025 Tanner crab stock assessment (Stockhausen 2025). In October 2023, the SSC requested that a draft risk table be developed for the eastern Bering Sea Tanner crab stock. The following was used to complete the draft risk table, based on the template updated in 2023 to reflect only three levels of concern and which implements the SSC's December 2023 request regarding the labels for these levels:

	Assessment-related considerations	***Population dynamics considerations***	***Environmental/ecosystem considerations***	***Fishery Performance***
Level 1: Normal	Typical to moderately increased uncertainty/minor unresolved issues in assessment.	Stock trends are typical for the stock; recent recruitment is within normal range.	No apparent environmental/ecosystem concerns	No apparent fishery/resource-use performance and/or behavior concerns
Level 2: Increased concern	Major problems with the stock assessment; very poor fits to data; high level of uncertainty; strong retrospective bias.	Stock trends are highly unusual; very rapid changes in stock abundance, or highly atypical recruitment patterns.	Multiple indicators showing consistent adverse signals a) across the same trophic level as the stock, and/or b) up or down trophic levels (i.e., predators and prey of the stock)	Multiple indicators showing consistent adverse signals a) across different sectors, and/or b) different gear types
Level 3: Extreme concern	Severe problems with the stock assessment; severe retrospective bias. Assessment considered unreliable.	Stock trends are unprecedented; More rapid changes in stock abundance than have ever been seen previously, or a very long stretch of poor recruitment compared to previous patterns.	Extreme anomalies in multiple ecosystem indicators that are highly likely to impact the stock; Potential for cascading effects on other ecosystem components	Extreme anomalies in multiple performance indicators that are highly likely to impact the stock

The table is applied by evaluating four types of considerations that could be used to support a scientific recommendation for the buffer on the OFL used to set the ABC. These are stock assessment

considerations, population dynamics considerations, environmental/ecosystem considerations, and fishery performance considerations. Examples of the types of concerns that might be relevant in crab assessments include the following:

1. Assessment considerations—data-inputs: skipped surveys, lack of fishery-independent trend data; model fits: poor fits to fits to fishery or survey data, inability to simultaneously fit multiple data inputs; model performance: poor model convergence, multiple minima in the likelihood surface, parameters hitting bounds; estimation uncertainty: poorly-estimated but influential year classes; retrospective bias in biomass estimates.
2. Population dynamics considerations—decreasing biomass trend, poor recent recruitment, inability of the stock to rebuild, abrupt increase or decrease in stock abundance.
3. Environmental/ecosystem considerations—adverse trends in environmental/ecosystem indicators, ecosystem model results, decreases in ecosystem productivity, decreases in prey abundance or availability, increases or decreases in predator abundance or productivity.
4. Fishery performance—fishery CPUE exhibits a contrasting pattern to the stock biomass trend, unusual spatial patterns of fishing, changes in the percent of TAC taken, changes in the duration of fishery openings.

Summary and ABC Recommendation

The summarized results of the risk table for EBS Tanner crab are in the table below. All scores except that for "Assessment-related considerations" are Level 1, suggesting no need to set the ABC below the maximum permissible. "Assessment-related considerations" are considered of "increased concern", with a corresponding risk level of 2. However, this does not reflect a change in the level of concern for this category from the previous assessment. Consequently, the assessment author recommends that the overall risk level is the same as in 2024/25 and recommends using the previous (20%) ABC buffer.

Assessment-related considerations	***Population dynamics considerations***	***Environmental/ecosystem considerations***	***Fishery Performance***
Level 2: increased concern	***Level 1: Normal***	***Level 1: Normal***	***Level 1: Normal***
Fails to achieve the dynamic range seen in survey biomass, concern regarding currency for reproductive potential, concern regarding proxies used for Fmsy and Bmsy	The majority of stock-specific ecosystem indicators related to natural mortality, growth, and recruitment suggest no additional concerns. While bitter crab disease prevalence was high, the magnitude of impact on the stock remains unknown. The abundance of Tanner/snow crab hybrids in all population categories was the largest seen in the survey time series (which starts in 1998).	Warm conditions with a reduced cold pool extent in 2024; forecast to be warm with delayed sea ice arrival in 2025. While bottom waters were warm in 2025, ecosystem concerns are minor with uncertain impacts on the stock. Corrosive bottom waters remain a concern for growth and survival. Competitive pressure may be low, while predation pressure may be increasing.	Fishery-informed indicators generally support stable stock condition relative to the most recent seasons and the post-2005 historical record. No considerations observed in the most recent fishery suggest greater than normal risk of overfishing, independent of other considerations captured in the assessment and risk table.

Details

Assessment considerations

Risk Level 2: Increased concern

The assessment model has been, and remains, a cause for moderate concern regarding this assessment. While the model fits the fishery catch and bycatch data extremely well, it fails to achieve the dynamic range seen in survey biomass: underestimating the peaks and overestimating the valleys in a time series that exhibits decadal-scale variability. This inflexibility in the model points to constraints on processes in the model that should be allowed to vary with time, with natural mortality and survey selectivity as the most obvious candidates.

Mature male biomass is currently used as the "currency" of Tanner crab spawning biomass for assessment purposes. However, its relationship to stock-level reproductive potential is unclear. Similarly, mature female biomass does not have a clear relationship to reproductive potential.

Whether F_{35} and B_{35}, developed considering fish life histories and population dynamics (not crabs), are appropriate proxies for F_{MSY} and B_{MSY} for this stock is uncertain.

These considerations are not new to the assessment, however, nor are the results for this year extreme.

Population dynamics considerations

Risk Level 1: Normal

Hennessey and Garber-Yonts (2025) have identified two predictive indicators in the Tanner crab Ecosystem and Socioeconomic Profile (ESP) that quantitatively predict recruitment using a Bayesian Adaptive Sampling importance method. These predictive indicators explain a large amount of variation in EBS Tanner crab recruitment using survey design-based estimates (R^2 = 0.46) and are emphasized below in **BOLD** (see Hennessey and Garber-Yonts 2025 for more details).

- **Juvenile Tanner crab temperature occupied**, integrating ecological effects of bottom temperature, cold pool extent, and species interactions, increased to above average (ESP: Hennessey, 2025c), suggesting opportunity for elevated growth and survival.
- Visual prevalence of bitter crab disease (BCD) doubled from the previous year to the 2nd highest value to date (ESP: Hennessey, 2025h). However, it is unclear if BCD has large and lasting effects on the stock, and increased prevalence often coincides with high recruitment of small Tanner crab.
- Male size at terminal molt estimates increased dramatically in 2025 from slightly below the time series mean to the highest value since 1997 (ESP: Richar, 2025).
- Female size at maturity increased from below average to near average sizes (ESP: Hennessey, 2024b), and mature female Tanner crab reproductive failure remains below average (ESP: Hennessey, 2025a), which may support elevated stock reproductive output.

In addition to the above considerations, it was noted that hybrid Tanner/snow crab abundance in 2025 was the highest across all population categories in the NMFS EBS bottom trawl survey (Zacher et al, 2025). While exceptional, it is unclear what effect this might have on Tanner crab stock dynamics.

Environmental/Ecosystem considerations

Risk Level 1: Normal

Ecosystem indicators are organized into several categories to capture the scope of considerations available in the ESP and ESR reports:

- Distribution: December 2023 had significant along-shelf winds that could have driven offshore Ekman transport. March to May 2024 had weaker, but more sustained winds that also favored offshore transport (ESR: Hennon, 2024). Strong summer winds in 2024 resulted in a deep mixed layer (ESR: Hennon, 2024). Mature male spatial extent declined to near average after an all-time high in 2024, and centroids of abundance are the farthest northwest in the time series (ESP: Hennessey, 2025e, 2025f).
- Environmental Processes: During winter 2024-2025, the North Pacific Index (NPI) was negative (ESR: Siddon, 2025) for the first time in 9 years, an indication of a stronger Aleutian Low Pressure System (ESR: Siddon, 2025). This means the Bering Sea was warm, stormy, and had less sea ice.
- Summer bottom trawl sea surface temeratures (SSTs) in the EBS were slightly cool, while mean bottom water temperature increased by 0.5°C from 2024 to 2025. The extent of the cold pool was below average in 2025 and a 29% decrease from 2024 (ESR: Siddon, 2025).
- Sea ice is expected to arrive in the northern Bering Sea later in winter 2025/2026 than 2024/2025 due to comparatively low sea ice extent currently in the Chukchi Sea (ESR: Siddon, 2025 forecast will be updated for final ESR).
- The North American Multi-Model Ensemble (NMME) forecasts as of August 20, 2025 show moderate warm SST anomalies over much of the SEBS (<0.5°C) into fall 2025, except Bristol Bay shows anomalies up to +2 °C. The NBS is projected to have SSTs close to the historical mean (ESR: Siddon, 2025 forecast will be updated for final ESR).
- Bottom waters remained near threshold levels in 2024 that could negatively impact growth and survival, with the most corrosive bottom waters found in slope waters and over the northwest shelf (ESR: Pilcher, 2024).
- Prey: Diatom abundance anomalies, based on the Continuous Plankton Recorder, remained positive from 2023 to 2024 (ESR: Siddon, 2025), indicating above-average feeding conditions for pelagic crab stages in 2023 and 2024.
- Competitors: Increased utilization of northern outer shelf habitats may increase competitive interactions with snow crab (ESP: Hennessey, 2025d, 2025e). Over the southern shelf, motile epifauna (e.g., sea stars, brittle stars) biomass increased from 2023 to 2024 and remains above the long term mean (ESR: Siddon, 2024). Benthic forager (i.e., small-mouthed flatfish) biomass increased from 2023 to 2024, but remains below the time series mean, suggesting competition for prey resources remains low in 2024 (ESR: Siddon, 2024).

- Predators: **Benthic predator density** in core juvenile Tanner crab habitats reached all-time lows during the 2018-2021 marine heatwave, but density has been increasing annually since 2021 to just below average (ESP: Hennessey, 2025g; Estimate for 2025 still in progress). This, coupled with increasing Pacific cod consumption on juvenile Tanner crab (ESP: Aydin, 2025; Estimate for 2025 still in progress), suggests an elevation in predator-prey interactions and the potential for reduced survival of juvenile cohorts if this trend continues.

Fishery performance

Risk Level 1: Normal

The following considerations are from updated fishery performance indicators reported in the ESP (Hennessey and Garber-Yonts, 2025):

- Fishing effort in the 2024/25 fishery, as measured by number of active vessels (20), was below the post-rationalization average of 27, but consistent with the level of 19-21 vessels during the previous four seasons (ESP: Lee, 2025). Total potlifts increased from the previous season in both the east and west components of the fishery; the 21 thousand potlifts in the eastern component was substantially less than the post-2005 average of 33 thousand, while the 29 thousand potlifts in the western component was greater than the historical average of 28 thousand (ESP: Daly, 2025d).
- Total Allowable Catch (TAC) utilization in both the eastern and western Tanner fisheries was at near-100% in the 2024/25 fishery (ESP: Daly, 2025e), consistent with limited availability of other targets for crab vessels and continued robust market demand for Tanner crab.
- Catch-per-unit-effort (CPUE) of retained crab in the 2024/25 eastern fishery declined from the previous season to 43.6, but was only slightly below the post-2005 average of 46.6; CPUE in the western fishery increased substantially from the previous season, to 57, well above the post-2005 average of 39.8 (ESP: Daly, 2025c).
- The center of distribution of fishing activity in the 2024/25 fishery generally remained well within the historical range in both the east and west components, although at 167^o W, the western component of the fishery was centered near the eastern bound of the historical range, consistent with the previous three seasons (ESP: Daly, 2025a,b).

References

Please note that references for ESPs and ESRs use the citing convention specified in title pages of the ESP/ESR main report for individual contributions and the main report.

Hennessey, S., and Garber-Yonts, B. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://meetings.npfmc.org/Meeting/Details/3097.

Stockhausen, W.T. 2025. 2025 Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. *In* Stock Assessment and Fishery Evaluation Report for the KING AND TANNER CRAB FISHERIES of the Bering Sea and Aleutian Islands Regions 2025 Final Crab SAFE. North Pacific Fishery Management Council, Anchorage, AK. Available from https://meetings.npfmc.org/Meeting/Details/3097.

Aydin, K. 2025. Summer Pacific Cod Consumption. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Callahan, M. and J. Nielsen. 2025. Chlorophyll-a Concentration. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Daly, B. 2025a. Centroid of Fishery - Latitude. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Daly, B. 2025b. Centroid of Fishery - Longitude. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Daly, B. 2025c. Fishery CPUE. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Daly, B. 2025d. Fishery Total Potlifts. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Daly, B. 2025e. TAC Utilization. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fish-

eries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. 2025a. Female Tanner Crab Reproductive Potential. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. 2025b. Female Tanner Crab Size at Maturity. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. 2025c. Juvenile Tanner Crab Temperature of Occupancy. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. 2025d. Male Tanner Crab Area Occupied. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. 2025e. Male Tanner Crab Center of Abundance. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. 2025f. Summer Benthic Invertebrate Density. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. 2025g. Summer Benthic Predator Density. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific

Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. 2025h. Summer Juvenile Tanner Crab Disease Prevalence. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. 2025i. Summer Surface Temperature. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Hennon, T. 2024. Winds at the Shelf Break. In: Physical Environment Synthesis. In: Siddon, E. 2024. Ecosystem Status Report 2024: Eastern Bering Sea, Stock Assessment and Fishery Evaluation Report, North Pacific Fishery Management Council, 1007 West 3rd Ave., Suite 400, Anchorage, Alaska 99501.

Lee, J. 2025. Number of Active Vessels. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Pilcher, D., J. Cross, N. Monacci, E. Kennedy, E. Siddon, and W.C. Long. 2024. Ocean Acidification. In: Siddon, E. 2024. Ecosystem Status Report 2024: Eastern Bering Sea, Stock Assessment and Fishery Evaluation Report, North Pacific Fishery Management Council, 1007 West 3rd Ave., Suite 400, Anchorage, Alaska 99501.

Richar, J. 2025. Male Tanner Crab Size at Terminal Molt. In: Hennessey, S. and B. Garber-Yonts. 2025. Appendix C. Ecosystem and Socioeconomic Profile of the Tanner crab stock in the Eastern Bering Sea. In: Stockhausen, W.T. 2025. Stock Assessment and Fishery Evaluation Report for the Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage, AK. Available from https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/.

Siddon, E. 2024. Ecosystem Status Report 2024: Eastern Bering Sea, Stock Assessment and Fishery Evaluation Report, North Pacific Fishery Management Council, 1007 West 3rd Ave., Suite 400, Anchorage, Alaska 99501. Available from https://www.npfmc.org/wp-content/PDFdocuments/SAFE/2024/EBSecosys.pdf

Siddon, E. 2025 (in press). Ecosystem Status Report 2025: Eastern Bering Sea, Stock Assessment and Fishery Evaluation Report, North Pacific Fishery Management Council, 1007 West 3rd Ave., Suite 400, Anchorage, Alaska 99501.

Zacher, E. and authors. 2025. 2025 Eastern Bering Sea Crab Survey Results. Presentation to the Crab Plan Team, Sept. 2025. https://meetings.npfmc.org/Meeting/Details/3097.