

Requested by Board Member Gerad Godfrey

AMENDED LANGUAGE FOR PROPOSAL 1

5 AAC 58.055. Upper Cook Inlet Summer Salt Water King Salmon Management Plan.

5 AAC 58.055 is amended to read: ...

(g) if the Anchor River preseason forecast or inseason projection is less than the lower end of the sustainable escapement goal of 3,200 – 6,400 king salmon, the upper Cook Inlet salt waters north of the latitude of Bluff Point (59° 40.00' N. lat.) within a mile of shore shall be closed to the retention of king salmon from May 1 [15] to July 15; if the Kenai River is closed as specified in 5 AAC 57.160, the upper Cook Inlet salt waters north of the latitude of Bluff Point (59° 40.00' N. lat.) shall be closed to the taking of king salmon from May 1 [15] to July 15; if the Deshka River preseason forecast or inseason projection is less than the lower end of the sustainable escapement goal of 9,000 – 18,000 king salmon, the upper Cook Inlet salt waters north of the latitude of Bluff Point (59° 40.00' N. lat.) within a mile of shore shall be closed to the retention of king salmon from May 1 to July 15.

(h) if the Kenai River is closed to the taking of king salmon as specified in 5 AAC 21.359, the upper Cook Inlet salt waters north of the latitude of Bluff Point shall be closed to the taking of king salmon from June 20 through August 15.

The purpose of this amendment is to provide additionally regulatory language for Proposal 1 that would provide protection to the Northern Cook Inlet King Salmon stocks based on the preseason forecast or inseason projection of escapement to the Deshka River when these stocks are critically low.

An average of approximately half of the Cook Inlet-origin King Salmon harvested in the Upper, 46.3%, and Lower Cook Inlet, 49.3%, summer saltwater fisheries are destined to spawn in Northern Cook Inlet streams (Figure 1). However, Proposal 1, as submitted by ADF&G, does not address protecting migrating Northern Cook Inlet stocks. Therefore, we recommend the two following changes to afford some protection to these Northern Cook Inlet King Salmon stocks:

1. Change the May 15 date in paragraph (g) to May 1 to protect migrating Northern Cook Inlet King Salmon stocks because these stocks tend to migrate in the Cook Inlet earlier than more southern stocks; and
2. Add a section to paragraph (g) for management of the upper Cook Inlet salt waters north of the latitude of Bluff Point based on the preseason forecast or inseason projection of the King salmon escapement to the Deshka River. The Deshka River King Salmon weir counts is the ADF&G index stock for Susitna River drainage king salmon stocks.

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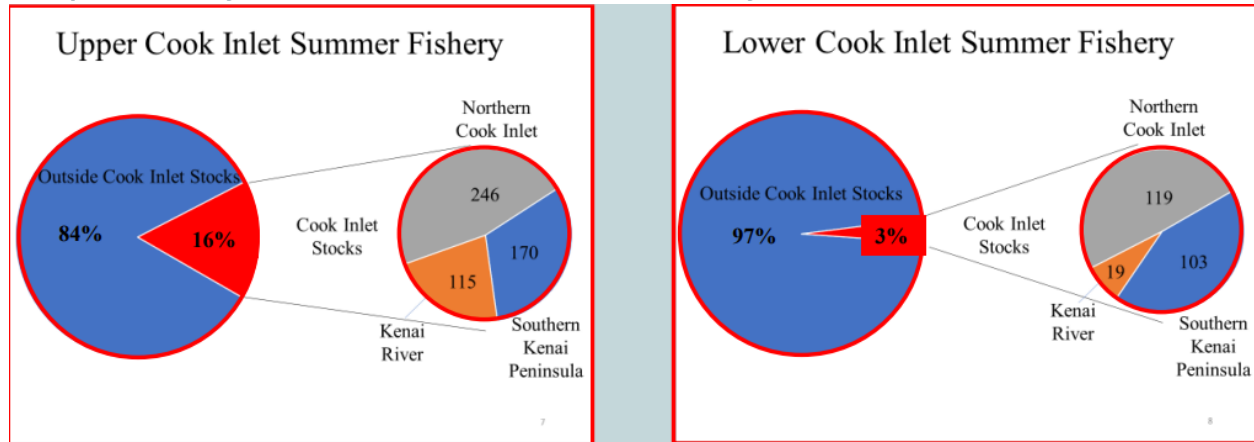


Figure 1. Estimates of Northern Cook Inlet-origin salmon in the Upper and Lower Cook Inlet Summer fishery, 2014-2018. Taken from Lower Cook Inlet Board meeting, RC 3 Tab 6, ADF&G.

The King salmon sport fishery in most Northern Cook Inlet streams was closed to all sport king salmon harvest starting on May 1 in both 2022 and 2023. This closure is anticipated to also occur in 2024. Additionally, the King Salmon escapements to the Deshka River, the most productive King Salmon stream in Northern Cook Inlet, was 5,436 salmon in 2002 and 3,741 salmon in 2023. These escapements were 40% and 58%, respectively, below the low end of the established sustainable escapement goal of 9,000 – 18,000 king salmon (Figure 1).

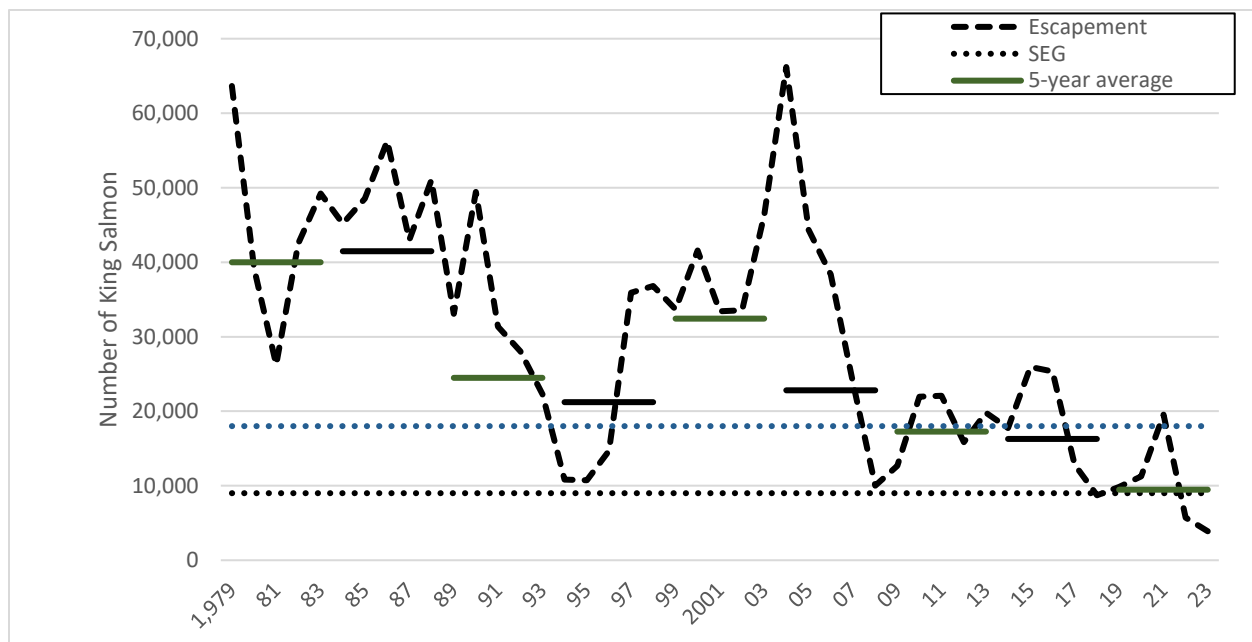


Figure 2. Deshka River king salmon escapement and the 5-year average, 1979-2023. The SEG is projected back in time for comparative purposes only.

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The Deshka River king salmon stock has not replaced itself for 12 of the last 16 brood years from 2012-2017, and it appears that the 2018 brood year will not replace itself either (Figure 2).

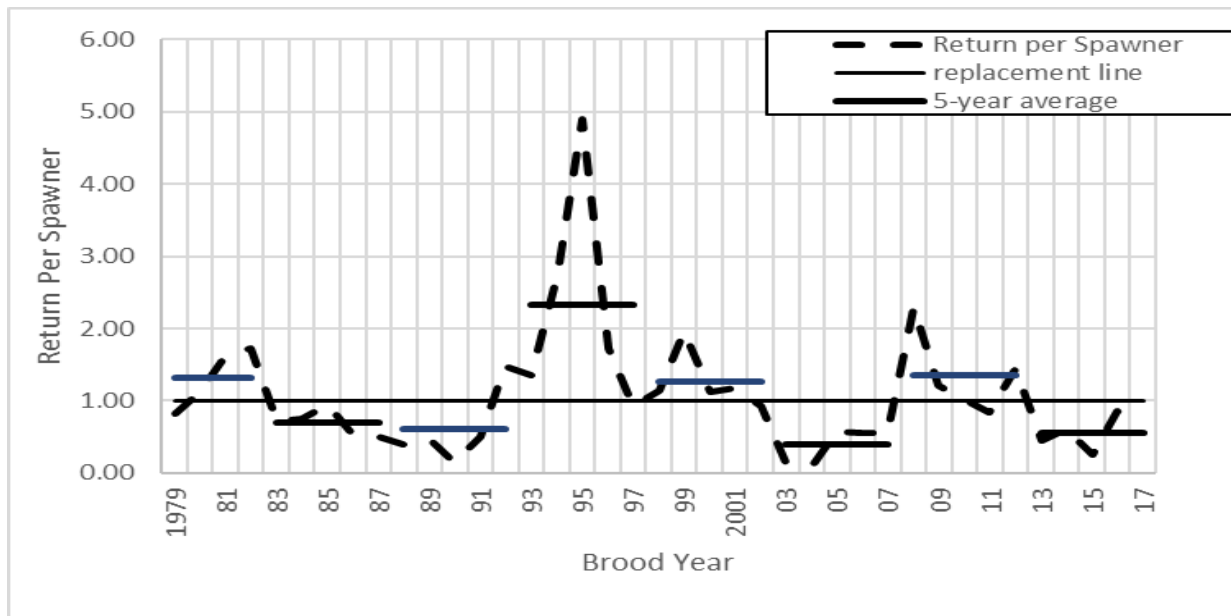


Figure 3. Brood year return per spawner for the Deshka, Early Run and Late Run Kenai, and the Canadian Yukon king salmon stocks, 1979-1-2017.

The median age-6 component in all the brood year returns from the available ADF&G data, 1979 – 2017, is 21.1%, with a range from 0.0% in the most recent brood year to 56.5% in the 1984 brood year return. However, for the last 5 brood years, 2012-2017, the estimated age-6 component has extremely low, ranging from 0.0% in the 2017 brood year return to 2.8% in the 2013 brood year return (Figure 2). I can't stress enough the importance of the age-6 component to the reproductive capacity of the king salmon stock. The female component of the brood year return is mainly provided for in the age-6 component. Additionally, younger female salmon have much lower fecundity.

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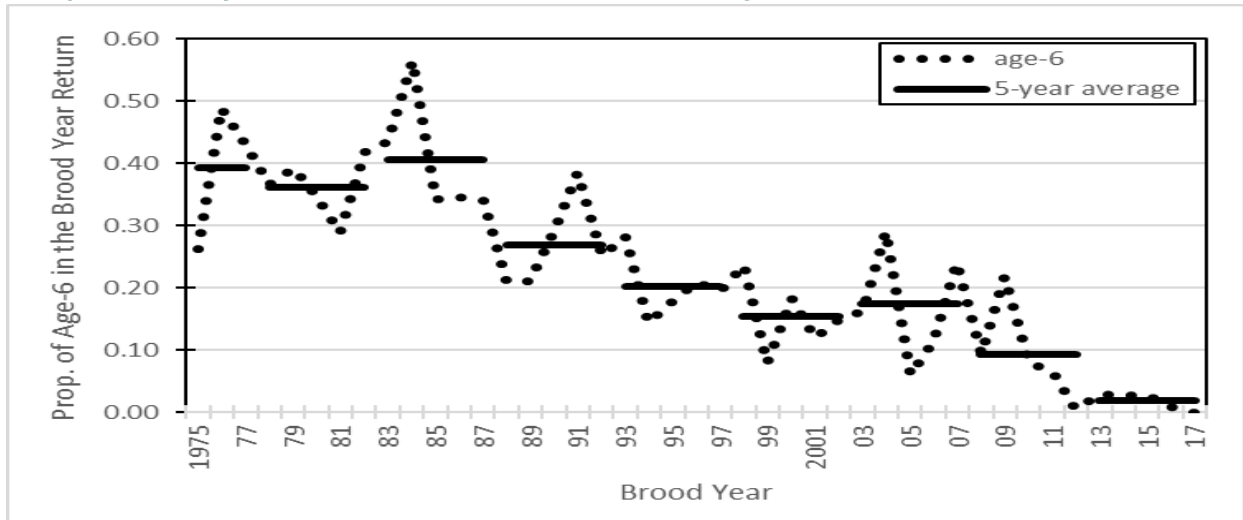


Figure 4. The proportion of age-6 king salmon in the Deshka River brood year return and the 5-year average, 1975-2017.