## PROPOSAL 102

## 5 AAC 21.360. Kenai River Late-Run Sockeye Salmon Management Plan.

Amend the *Kenai River Late-Run Sockeye Salmon Management Plan* to manage for the lower bound of the sustainable escapement goal and replace inriver goals with allocation ranges, as follows:

Add new sentence to 5 AAC 21.360 Kenai River Late-Run Sockeye Salmon Management Plan (b)(3) In any year when the number of spawners exceeds 1,030,000, the following year the department shall manage to the lower boundary (700,000) of the escapement goal. (c)(1)(A) remove and replace with a direct allocation of up to 100,000 or xxx,xxx (c)(2)(A) remove and replace with a direct allocation of up to 200,000 or xxx,xxx (c)(3)(A) remove and replace with a direct allocation of up to 300,000 or xxx,xxx

What is the issue you would like the board to address and why? Kenai River Late-Run Sockeye salmon escapement goals. Consecutive 1,030,000 or larger back-to-back spawners lowers the yield available in successive years for all users. Many departmental, North Pacific Management Council and independent salmon research papers indicate that when years of high (1,030,000) plus spawners should be followed by low spawning abundance. "1) high spawning abundances in current and prior brood years is associated with low productivity (log recruits-per-spawner), 2) maximum productivity appears to be associated with low spawning abundance in the brood year and spawning abundance (near 1 million in the) prior brood year, and 3) spawning abundances either above or below this level in the prior brood year are associated with reduced population productivity." Cunningham, 2019. This finding is in agreement with the Brood Interaction model by Carlson & Tarbox in 1998. Willette's escapement goal analysis, back-to-back 1,030,000 or larger spawner into the Kenai River do not achieve maximum or even near maximum yield for any user group. In any year(s) with over 1,030,000 spawners, the next year should be near the bottom of the recommended escapement range of spawners. Anytime the number of spawners exceeds 1,030,000, the next year should be at or near the bottom of the escapement (spawners) range. The current escapement (spawners) range is a 700,000 lower boundary to a 1,200,000 upper boundary with an SMSY value of 950,000 spawners. The new recommended escapement goal is a 750,000 lower boundary to a 1,300,000 upper boundary with an SMSY value of 1,025,000. To avoid these 1,030,000 plus spawners back-to-back in the late-run Kenai River Sockeye salmon, there are several regulatory changes recommended.

PROPOSED BY: United Cook Inlet Drift Association	(HQ-F19-093)
***************************************	