

**PROPOSAL 106 - 5 AAC 21.365. Kasilof River Salmon Management Plan.** Replace the optimum escapement goal with the sustainable escapement goal for Kasilof River sockeye salmon, as follows:

5 AAC 21365. Kasilof River Sockeye Salmon Management Plan. 5 AAC 21.365. Kasilof River Salmon Management Plan

(a) This management plan governs the harvest of Kasilof River salmon excess to spawning escapement needs of **160,000 to 340,000 sockeye**. It is the intent of the Board of Fisheries that Kasilof River salmon be harvested in the fisheries that have historically harvested them, including the methods, means, times, and locations of those fisheries. Openings in the areas historically fished must be consistent with escapement objectives for upper Cook Inlet salmon and with the Upper Cook Inlet Salmon Management Plan (5 AAC 21.363).

[(b) ACHIEVING THE LOWER END OF THE KENAI RIVER SOCKEYE SALMON ESCAPEMENT GOAL SHALL TAKE PRIORITY OVER NOT EXCEEDING THE UPPER END OF THE KASILOF RIVER OPTIMAL ESCAPEMENT GOAL RANGE OF 160,000 - 390,000 SOCKEYE SALMON.]

**What is the issue you would like the board to address and why?** Repeal the Kasilof River sockeye Optimum Escapement Goal (OEG)

The purpose of a salmon escapement goal is to both ensure sustainability and maximize the yield or harvest. State policy requires that escapement goals must be scientifically defensible.

Escapement goals should be established utilizing the best biological information and empirical data relating to production capacity and carrying capacity. Escapement goals should be periodically reviewed and adjusted to compensate for changing ecological factors. When escapement goals are exceeded or escapement goals are set too high, salmon populations are put at risk by exceeding the carrying capacity of the habitat. *"Over-escapement, in general, is not sustainable..."* ADF&G (SP No. 07-17). Repeated escapements over the top end of a BEG or SEG are not sustainable. Escapements that are too large will produce oscillating returns, low return per spawner rates and other density-dependent effects. The extreme variability of returns on large escapements puts at risk both the sustainability of future runs and the economies that are built around the harvest of these salmon stocks.

The "biological escapement goal," or "BEG," is the gold standard. This describes the escapement level that provides the greatest potential for "maximum sustained yield," or "MSY", which means the greatest average annual yield (harvest) from a salmon stock.

The most recent ADF&G escapement goal review (FMS 13-13) for Cook Inlet recommended a biological escapement goal (BEG) of 160,000-340,000 sockeye for the Kasilof River just as it had in 2001 and 2008. In 2008 the Board voted (4 to 3) not have an OEG for the Kasilof River yet the department added the OEG of 390 without the board's approval. Another recent ADF&G review (FMS14-06) of a method commonly used (140 of 300 goals) throughout Alaska to establish an SEG determined that the upper end of many escapement goal ranges were in fact, unsustainable. The report stated that *"SEGs based on the current Percentile Approach, especially the upper bounds, may actually be unsustainable in that they may specify a spawning escapement*

*that is close to or exceeds the carrying capacity of the stock where there is the expectation of no sustainable yields. "The OEG for the Kasilof River was not established by using the Percentile Approach but the report documents the risks in exceeding that level of escapement.*

The "Optimum Escapement Goal," or "OEG," for Kasilof River sockeye exceeds the BEG. The Kasilof River OEG is incompatible with the findings of both of the latest ADF&G escapement goal reviews; it was never approved by the Board and should be repealed.

**PROPOSED BY:** Earl C. Young

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