RC096

Subject: Supplemental Information Regarding Kenai Late-Run King Escapement Goals

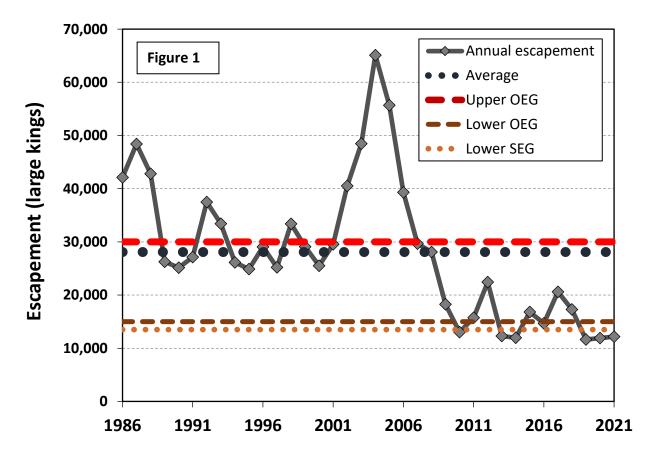
Submitted by: Kenai River Sportfishing Association

Regarding: Proposal 283 (opposed)

Escapement Reference Values (Large Kings)

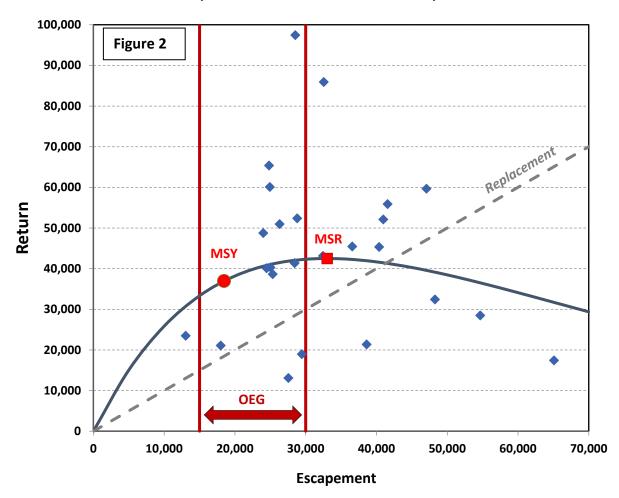
	Year	Number
SEG	2017	13,500 - 27,000
OEG	2020	15,000 - 30,000
Average	1986-2021	28,100
Maximum Sustained Yield (MSY)		18,500
Maximum Sustained Recruitment (MSR)		33,000

- Kenai late-run kings clearly meet the definition for a <u>Stock of Management Concern</u> (Figure 1).
- Neither the SEG or OEG has been achieved in three straight years and five of the last nine. Given this year's record low forecast, another escapement failure may occur in 2022.
- The OEG is the goal in regulation it is an essential management tool for addressing the problem of low king salmon numbers.



Purpose of the OEG

- The OEG provides a precautionary buffer against low escapements which produce low returns (Figure 2). These low escapements are likely to prolong management challenges associated the current low production cycle.
- The OEG recognizes problems with the SEG based on a lack of return data from low escapements in the previous analysis. More recent data indicates that the state-space model used as the basis for the current SEG, substantially overestimates productivity of low escapements under current conditions.
- With salmon escapement goals, you generally get what you manage for. The SEG is managing for king runs in the bottom of the historical range. The OEG targets higher escapements closer to the long-term average and is more consistent with maximum sustained recruitment which is the appropriate standard for a sport fishery priority stock like Kenai Kings.



Kenai Late-Run King Stock-Recruitment Data & Relationship (does not include more recent data)

Data & model from Fleischman & Reimer ADFG FMS-17-02