To: Chair John Jensen and Board members RC 32

From: Jeff Beaudoin

Re: Kenai king salmon large fish goal – Not Smsy or not maximum sustained yield goal range for large fish goal. Reject the large fish goal.

Escapement goal review BY SPORTFISH states "equivalent" management to existing goal ADFG shows **10,050 – 20,100** as equivalent. Mean average inriver runs from 2014, 2015, 2016 large fish returning inriver are .67 of the inriver run.

NOTE THE PRIOR GOAL OF 15,000 – 30000 ALL FISH GOAL **INCLUDED 3,000 FISH ADDED TO THE 90% MSY RANGE at the lower end. Sport Fish has 10,050 – 20,100 with 2100 fish ADDED to the lower range from prior goal and scaled to the right of 90% SMSY. .67 of 3,000 added in 2013 = 2100 fish added to the lower 10,050 range.**

- The 2013 goal 12,000 – 28,000 Smsy (all sizes). .67 (large fish) X 12,000 to 28,000 = **8,040 – 18,760** By Comparison to 90% MSY bracketed range 2013 with Overfishing Profile @ 10% probability.

- NOTE: This NEW LARGE FISH GOAL HAS INCREASED from the prior goal range BY **49% higher COMPARED TO THE PRIOR ALL FISH GOAL.** Sport Fish says its "equivalent". Note: 2012 Disaster from not counting kings properly will be repeated

- Instead Sport Fish attempts to mislead the public and board on a large fish goal. SPORT FISH STATES THE NEW RANGE IS SIMILAR AND CALCULATED THE **NEW RANGE = 90% LARGE FISH** RANGE instead of .67 AVERAGE LARGE FISH calculation. NEVER HAS THE INRIVER RETURN Comprise of 90% LARGE FISH IN THE RETURN NOR CAN IT OCCUR BIOLOGICALLY and not scientifically modeled. (See attachment "are these goals management neutral"? by Sport Fish);

- ADF&G is directed by the Sustainable Salmon Fisheries Policy and Statewide Salmon Escapement Goal Policy to establish goals for maximum sustained yields. This goal is NOT sustainable bracketed by Average Profiles (outside of MSY standards) with Probabilities of only 70% of msy at the lower range and only 40% at the upper range. Escapements from 2001 – 2008 over escaped and produced lower yields as shown in the returns over the past five years and 2009 and 2010 brood years.

- See Fishery Manuscript Series No. 10-02; Optimum Escapement Goals for Chinook salmon in the Transboundary Alsek River, Bernard and Jones 111. Page 11, 13, 18, 21, 22. Compare Goal Range to Report: Fishery Manuscript No. 14-07 titled Review of Salmon Escapement Goals in Southeast Alaska, 2014 (Heinl, Jones 111 et. al). Note: Alsek Chinook and Klukshu Stock escapement goal review and methods followed State Policy and federal policy for SMSY and Overfishing profiles. COMPARE TO KENAI GOALS.

Please see ADFG attachment BELOW by Sport Fish Division presented to Escapement Goal committee. But decided more fish allocated to the goal instead. Political escapement goals are not appropriate nor does Sport Fish have any authority to allocate fish to within an escapement goal range. The River Mile 13.6 sonar has half the sport harvest below sonar vs. the prior sonar was at 8.6 that counted fish escapement to the goal range. The sport fishery harvests below sonar at river mile 13.6 just like marine commercial or marine sport or dip net harvests and 5 percent spawn below sonar so why is Sport Fish allowed to change a goal for allocation instead of "management neutral on yield?

Are these goals "management neutral"?

Difficult to say but probably not. This depends on future size composition of Kenai Chinook, which is difficult to predict.

During 2014-2016, estimates of Chinook 75 cm or longer have averaged
55% of mixture model estimates in early run
67% of mixture model estimates in late run

If those ratios persist, then ER/LR goals of
0.55 * (3,800 - 8,500) = (2,090 - 4,675)
0.67 * (15,000 – 30,000) = (10,050 - 20,100) ←
would provide approx. equivalent management as existing goals, *on average*

In a given year, the proportion of Chinook ≥75 cm would have to be
2,748 / 3,800 = 0.72 (ER) and 13,540 / 15,000 = 0.90 (LR)
for the new goal to prompt the same management as the status quo

No matter the size comp, the new goals would result in appropriate management, because mgmt will not be influenced by small Chinook