<u>PROPOSAL 156</u> – 5 AAC 57.120. General provisions for seasons, bag, possession, annual, and size limits, and methods and means for the Kenai River Drainage Area. Replace slot limit for Kenai River king salmon with maximum size limit to prohibit retention of king salmon greater than 42 inches in length, as follows:

Change to "Lower Kenai River Mainstem and Skilak Lake" seasons and bag limits for King salmon; Kenai River area open to King salmon fishing January 1 – July 31: 1 per day, 1 in possession, must be less than 42 inches in length.

[KENAI RIVER MOUTH UPSTREAM TO 300 YARDS BELO SLIKOK CREEK: JANUARY 1 – JUNE 30: 1 PER DAY, 1 IN POSSESSION, MUST BE LESS THAN 42 INCHES IN LENGTH OR LONGER THAN 55 INCHES.
JULY 1 – JULY 31: 1 PER DAY, 1 IN POSSESSION.

300 YARDS BELOW SLIKOK CREEK UPSTREAM TO SKILAK LAKE: JANUARY 1 – JULY 14: 1 PER DAY, 1 IN POSSESSION, MUST BE LESS THAN 42 INCHES IN LENGTH OR LONGER THAN 55 INCHES. JULY 15 – JULY 31: 1 PER DAY, 1 IN POSSESSION.]

What is the issue you would like the board to address and why? The Kenai River has long been known throughout the world for its large trophy size Chinook salmon. In recent years we have witnessed a dramatic decrease in the size of these fish. In the Kenai river it is required that all trophy Chinook over 55in in length be sealed within 3 days of harvest. Records have been kept since 2003, and prior to 2008 there was an average of 6 of these trophy fish sealed each year, however since 2007 there has only been 1 fish over 55in in length registered and that was in 2009.

This size decrease has been noted in many Chinook stocks throughout Alaskan waters and there are varying theories on why this is happening, however, fisheries scientists agree that this phenomena can be exacerbated in intense sport fisheries where selective harvest of the largest fish occurs. Neala Warren Kendall, of the University of Washington, wrote in a 2011 paper on Alaskan Pacific salmon fisheries, "I quantified and compared commercial and recreational fishery selection on Chinook salmon. I discovered that the selection by the recreational fishery, which consistently caught larger fish, but not the commercial fishery which overall caught smaller fish, has been consistent with the size trends towards smaller fish over time." She goes on to say, "Selective harvest on wild fish populations has been associated with shifts towards smaller fish, younger age distributions, and decreased age and size maturation and is linked to changes including decreased fecundity, increased sexual dimorphism, lowered reproductive rates, loss of yield, increased variability in abundance and even fishery collapses. Numerous studies have emphasized the importance of older, larger fish for stock stability and sustainability."

The 2013 AYK Chinook Salmon Research Action Plan, agrees with these assumptions about Fishing Induced Evolution (FIE), or as we know it selective harvest. It states, "declines in Chinook salmon abundance, increasingly male-biased sex ratios, decreased size of spawners, declines in size at age and declines in the return of the largest age classes are consistent with expected patterns that would result from selected harvest of the largest individuals."

The Kenai river has one of the most intense sport fisheries on Chinook salmon in the world and the trophy size fish it produces are renowned, however, the fishery relies on selective harvest practices to produce these results. Recent returns clearly illustrate that this practice is not sustainable and unless we change our management approach of continuing to target our largest fish we will fail this valuable resource and continue to face challenges in both abundance and declines in the returns of our largest age classes. Many anglers seeking trophy size kings no longer recognize the Kenai as a trophy Chinook river.

We believe that if we change our management philosophy and protect our largest fish from harvest we can give ourselves the best chance to reverse this trend and propagate a better fishery than we have today. By incorporating a harvest restriction on keeping any fish over 42 in. in length we will protect almost all of our 1.5 age class and over 50% of our 1.4 age class for production purposes while still providing for a vibrant sport fishery. If mortality on these larger fish is limited to "catch and release" levels, then this portion of the return will be provided additional protection for spawning. Additionally, by being returned to the river they will provide additional angling opportunity for other anglers to catch a "trophy size" Kenai king. We understand more clearly now that we don't have to kill these larger fish to enjoy catching one, having a mount made or provide for photo opportunities. This type of conservation measure is widely accepted, throughout the world, as a favorable approach towards sustainability of our fishery resources for future generations to enjoy. Future demand on our fishery resources is certain to increase over time so it is incumbent on us to protect and provide sustainability for these resources in the best way we can as regulators looking out for their well-being. This management change would provide that protection along with balanced fishing and harvest opportunities.