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Subject: Kenai BFG process
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While we are awaiting DCF to formulate their position on the big fish goal range proposed by DSF, I wanted to share my thoughts about the escapement goal process we have found ourselves in.

In my experience with the escapement goal committee process, the division who has primary responsibility in data collection and management of a selected stock takes the lead on development/review of an escapement goal. This division then brings its initial work to the committee for review and discussion. The review that takes place is a review of the data and analysis to ensure the work was done properly, the data used in the analysis is correct, and that the recommended goal is scientifically defensible. Reviewers may also suggest or recommend that an alternate method of setting a goal be considered.

The division responsible for the analysis and management of the stock can either accept the reviewers alternate method, or, if it finds no compelling reason to change from the original analysis, reject the recommendation. Although there may remain a difference of opinion, deference is given to the division with primary responsibility and all members accept the decision and the department moves forward united.

This process is similar to management decisions that are made on a regular basis.

What is occurring now with the Kenai BFG is DCF not accepting a scientifically sound and defensible recommended goal range. DCF proposed a method of selecting a point on the optimum yield profile where there is an 80% probability of achieving 80% Smsy. DSF did the analysis on this suggestion and we did not find a compelling reason to switch to an alternate method as proposed by DCF. The discussion ended up with trying to find a compromise number rather than using a number that is the result of data analysis and nudged a bit for management/rounding/risk.

I suspect DCF will not agree to our recommended method and range. I'm not sure what numbers they will propose but they know DSF is firm on our recommendations. I think they believe if we are at an impasse that the decision will be kicked up to HQ to be decided. I do not believe that is a viable solution to the impasse. HQ is not a part of the escapement goal committee process for good reasons, chief among them is distancing the process from political influence. Another is the fact that HQ hasn't been fully informed on the analysis. My solution, as I described above, is the division responsible for the analysis and primary manager of the stock has the final say in the matter as long as the analysis and recommendation is sound.

DSF Recommended Ranges:

ER

Analysis = 2,835 – 6,330

Recommendation = 2,800 – 6,000

LR

Analysis = 13,673 – 27,346

Recommendation = 13,500 – 27,000

DCF Recommended Ranges:

ER

(80%/80%) Recommendation = 2,100 – 4,600

LR

(80%/80%) Recommendation = 12,500 – 23,500

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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

$$0.55 * (3,800 - 8,500) = (2,090 - 4,675)$$

$$0.67 * (15,000 - 30,000) = (10,050 - 20,100) \leftarrow$$

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

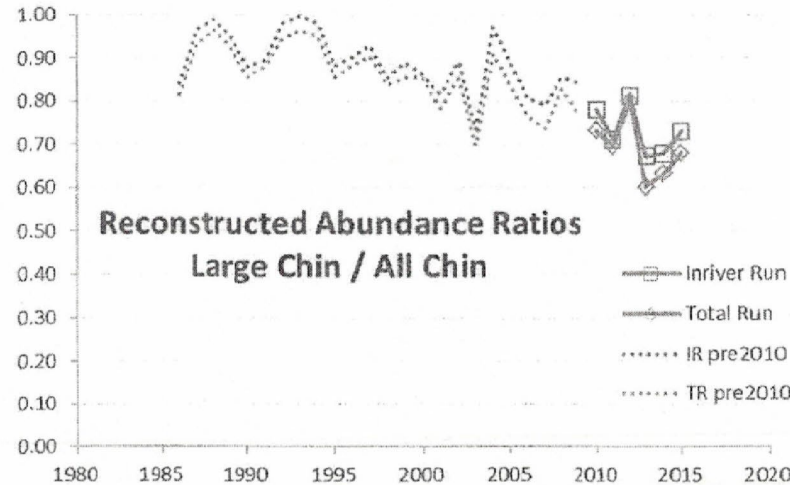
No matter the size comp, the new goals would result in appropriate management, because mgmt will not be influenced by small Chinook

What if we use only recent years?

During 2010-2015*, IR estimates of Chinook ≥ 75 cm have averaged 73% of mixture model estimates in late run

If those ratios persist, then goals of $0.73 * (15,000 - 30,000) = (10,950 - 21,900)$ would provide management similar to status quo, on average

*Reliable estimates of historical abundance of Chinook regardless of size before 2010 are not available



Kenai Chinook Length by Age, Sex

