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June 9, 2011

Tim Timberg
Department of Justice

Dear Mr. Timberg:

**Re: Fraser River Sockeye Salmon – Commission of Inquiry – DFO
Canada's Written Re-examination for the Wild Salmon Policy (Part 2), Integrated
Planning Panel**

You have posed two questions that I am to address for my re-examination. As instructed I have not discussed the questions or my answer within anyone. I have reviewed the transcript of my reply to Mr. Harvey's question regarding Bristol Bay sockeye fishery as compared to the Fraser River sockeye fishery.

As I stated in my reply page 67, lines 25-31:

"Are you referring to this document here? I've not read this document and I'm not familiar with how they particularly have chosen to develop escapement targets for Bristol Bay Lakes, but I would say that you're comparing things that are not exactly comparable, they're quite different systems."

Technical Report Number 7: Fraser River Sockeye Fisheries and Fisheries Management and Comparison with Bristol Bay Sockeye Fisheries by English et al., (February, 2011) prepared for the Cohen Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River provides some information on what I meant by my June 3, 2011 statement on pages 162-168. In noting these pages I by no means endorse or agree with all statements in that section. I do agree with the author's statement on page 62:

"The Bristol Bay and Fraser sockeye fisheries are substantially different in the structure and complexity of the management process."

The section on Fisheries and Stocks (p. 163-165) contains the main points of why on June 3, 2011 I said the systems are not comparable from a management perspective. Namely, Bristol Bay sockeye are fish that return to nine river systems around Bristol Bay which are targeted in five fishing districts. Because of the geographical layout of Bristol Bay sockeye lake systems the fishery is managed in a very terminal nature, which as a result has few interception fisheries and few mixed stock fisheries. In contrast the entire run of Fraser sockeye is heading to a single large river with many tributaries that have 37 conservation units destined to 16 major lakes within the Fraser River watershed.

The Fraser River fishery has evolved over many years where fish are intercepted as they make their homeward migration. The harvest of Fraser River commences in Johnstone Strait and Juan de Fuca Strait and continues along the whole migration route into the upper reaches of the

Fraser River. As a result the majority of the harvest is of a mixture of stocks. While there is some separation of stocks in their return migration and as a result four groups have been identified for management purposes these four groups do overlap in their return timing.

As I understand the Bristol Bay management system with regards to setting of escapement targets the Alaska Board of Fisheries have chosen a set of fixed escapement targets as their management objectives for each of the major systems with upper and lower bounds. Additional details of the approach in Alaska approach can be found in Technical Report 7 at pages 138-143. In contrast DFO has adopted an escapement harvest rate strategy that has been extensively reviewed scientifically and adopted after considerable consultation. I refer you to my answers to Mr. Harvey's questions of March 17 and April 1, 2011 for additional details on FRSSI (in particular my answer to question 5). In addition, the 2010 Escapement Management Memo at <http://www.pac.dfo-mpo.gc.ca/consultation/fisheries-peche/smon/index-eng.htm> provides additional background information on the department's escapement strategy.

My intention is not to compare the strengths and weaknesses of the escapement strategy adopted in the respective jurisdictions, but to point out that each jurisdiction has adopted a strategy to meet their respective management objectives suited to the system they are managing. I do disagree with the concept of Technical Report 7 that somehow the Fraser escapement rules are too complex and not clearly defined. It is my view that the rules are very clearly defined and a similar approach has been used in other jurisdictions. Deroba and Bence in their 2008 paper provide a review of harvest policies and their relative performance. As these authors state: "*Harvest policies are a necessary feature of transparent fisheries management because they ensure that the rules are evident to all stakeholders Deroba and Bence, 2008, p.220.*"

As a result of the distinct differences in the geography between Bristol Bay and Fraser River and the people who harvest and care about these fish the management system has evolved very differently in the two countries. This is not to say one management system is superior over another, but is a fact there are significant differences and I think makes comparisons between the two very challenging.

My answer has really only touched on some of the differences, but there are others (e.g. First Nation rights and Treaty requirement, multi user groups and gear, International Treaty, etc.) that all add to the Fraser River sockeye management challenges.

Sincerely,



Paul Ryall
Lead, Salmon Team

Attachment 1: Deroba and Bence, 2008. A review of harvest policies: Understanding relative performance of control rules. Fisheries Research 94. pp. 210-223.