

# Managing Fraser Sockeye with special reference to Cultus sockeye and the CSAB proposal to increase exploitation rates in 2005.

Advice to DFO/ IHPC from the Marine Conservation Caucus (MCC)

Prepared by Ken Wilson, June 16 2005

## **Background:**

Cultus lake sockeye have been assessed by COSEWIC and are endangered. The Minister of Environment decided not to provide protection for Cultus sockeye under SARA as a consequence of advice that wrongly cited significant and unavoidable costs associated with closing fisheries that might potentially harvest Cultus sockeye; nevertheless, the Minister of Fisheries promised to protect and rebuild Cultus sockeye through careful management. We disagree with the decision not to protect Cultus sockeye under SARA. However, we counted on the minister to be true to his strong commitment to protect and rebuild Cultus sockeye through the development of annual management plans consistent with the recovery plan prepared for Cultus sockeye.

The minister's commitment to protect and rebuild Cultus sockeye has become part of DFO's management obligation. Each year DFO prepares a fishing plan and makes recommendations concerning the harvest of Cultus sockeye and other late runs. For 2005, DFO has recommended that a maximum of 10 to 12% of Cultus sockeye might be harvested.

DFO's recommendation of a maximum exploitation rate of 10% to 12% for Cultus already significantly compromises the conservation and rebuilding of Cultus sockeye, in unnecessary deference to the economic interests of commercial and sport harvesters. Every fish killed from stocks facing extinction increases the extinction risk.

This year, during our discussions of the 2005 Integrated Fisheries Management Plan (IFMP) at the Integrated Harvest Planning Committee (IHPC) table, the Commercial Salmon Advisory Board (CSAB) argued that even this proposed fishing plan was too restrictive, and proposed that up to 30% of Cultus sockeye might be harvested in 2005 without significant risk to the stock. The CSAB provided a letter of support from their interim executive director, Mr. Dave Barrett, and provided copies of an analysis by their biologist, Mr. Bill Gazey. Mr Barrett and the CSAB maintain that the uncertain benefits of spending additional money to enhance and protect Cultus sockeye will more than offset the certain damage caused by increases in exploitation rate above 10%.

No clear proposal from the CSAB concerning Cultus sockeye has been provided to the IHPC or to the Marine Conservation Caucus (MCC). No specific exploitation rate ceiling for Cultus, no specific amount of funding, and no specific suite of enhancement activities to be supported with the proposed funding has been identified. Following our last discussion, and based on correspondence with Mr. Bert Ionson of DFO, the MCC understands that DFO has 'refined' the CSAB proposal to include expansion of the Cultus Lake sockeye captive brood stock program supported with about \$800,000 in

contributions from commercial harvesters, in exchange for 'modest' increases in the Cultus exploitation ceiling of up to 15%. DFO staff has undertaken some very preliminary analysis of the inherent tradeoffs between increased commercial harvest of Cultus sockeye and the potential benefits of increased enhancement funding. Given the very short time available to evaluate the CSAB position, these analyses are not only preliminary; they are incomplete and lack the benefits of rigorous peer review. By the author's own admission, the Financial Review of the proposal is not a cost benefit analysis, and does not provide an appropriate basis for decisions of this sort, since it clearly does not address the long term benefits of rebuilding, the risks associated with enhanced production, and the significant financial costs associated with the extinction of Cultus sockeye.

### **Process**

The process by which the CSAB proposal was introduced and evaluated by DFO and the IHPC is simply unacceptable. The proposal was poorly defined and insufficient time was available to assess the complex technical issues raised. The assessment models used are not yet fully developed or approved by the appropriate technical personnel both within DFO and outside of DFO. No PSARC review of this advice is possible in the short time available. In fact, neither the Cultus Working Group nor the IHPC as a whole will have an opportunity to review the final proposal and associated technical analysis prior to a decision being made by DFO and the Minister.

It causes us great concern that the CSAB can unilaterally instigate a process that leads to the Minister making a major and precedent setting decision regarding Cultus sockeye without adequate time to prepare and review the necessary technical analysis and without adequate consultation with either the affected stakeholders or First Nations.

While the process issues raised by the CSAB proposal are profound, our greatest concern is for the health of Cultus sockeye and all Fraser sockeye.

We will take these process issues up with DFO at the appropriate time, but will focus now on our concerns regarding the impacts of increasing the exploitation of Cultus sockeye beyond the 10% ceiling in 2005.

### **Management Principles, Risk, and Uncertainty**

A total of 200 Cultus sockeye are expected to return in 2005. This level of return places the stock at great risk of genetic damage and extinction over the short term, and this risk increases with every fish harvested. The MCC wishes to remind the CSAB and the Minister that at these forecast returns, the exploitation rate appropriate for a critically endangered stock of sockeye important to the Canadian public and with great cultural significance to local First Nations is no exploitation at all. Ostensibly, Cultus sockeye were not added to the SARA list in order to provide DFO with some flexibility to protect this important stock while still enabling appropriate commercial access. DFO management staff has recommended an exploitation rate ceiling for Cultus sockeye of 10 to 12% for the 2005 fishing season. This is already a very significant compromise in

view of the poor status of Cultus sockeye. DFO's recommendation to harvest no more than 10 to 12% of Cultus sockeye in 2005 already more than balances the interests of the commercial fishing sector, and the status of Cultus sockeye and other threatened and endangered Fraser sockeye runs.

It is deliberately misleading and very dangerous for the CSAB to suggest that DFO's recommended harvest ceiling of 10 to 12% for 2005 does not consider the best long-term interests of the commercial sector. The very survival of the commercial salmon fishery on this coast depends on addressing conservation concerns efficiently and effectively in order to rebuild weak stocks, not on finding creative ways to sidestep harvest restrictions and the established fishery planning process.

The MCC is not averse to the idea that commercial harvesters can invest in stocks of concern in order to provide fishing opportunities in the future. However, we strongly oppose the idea that unproven and highly uncertain future benefits from enhancement or habitat improvement somehow justify or compensate for immediate increases in harvest. There is real wisdom in the old adage not to count your chickens before they hatch. If the increased harvests occur 'up-front', then the significant risks and uncertainties identified by DFO staff surrounding the enhancement of Cultus sockeye would be born by the resource, and not by the harvesters. This is totally unacceptable to the MCC, and places Cultus sockeye at greater risk.

It is absolutely essential that DFO regulate harvests of Cultus sockeye based on the status of the stock and not wishful thinking about the future benefits of enhancement. If the CSAB is correct in its assumptions, and its investment in enhancement significantly improves the status of Cultus sockeye, then commercial harvesters may be entitled to a share of those benefits when they are realized, but certainly not before.

It is also misleading and dangerous for the CSAB to suggest that the only impediment to a financially healthy commercial salmon fishery for Fraser sockeye is the restriction on the harvest of Cultus sockeye.

As we all know, DFO does not manage Cultus sockeye as a single stock, but as part of a much larger stock aggregate. This year DFO has recommended that the late aggregate stocks migrating to other areas of the Fraser be harvested at no more than 15%. The reason for this restriction is the dramatic increase in pre-spawn mortality suffered by all late stocks including Cultus over the last 10 years.

Increased spending on Cultus sockeye enhancement will do nothing to alleviate the problems facing other late sockeye populations. However, following the CSAB's advice to increase harvests without careful consideration of the status of all the stocks in the aggregate will lead to growing conservation concerns and harvest restrictions for First Nations that rely on these other late sockeye runs. Furthermore, one of the four summer runs that now support almost the entire commercial Fraser sockeye fishery is in steep decline. Late Stuart sockeye have declined by 69% in the last 12 years, and along with the Early Stuart sockeye, which have declined by 79% in the last 12 years, are now

reaching the point where they can no longer provide for the needs of First Nations in a significant area of the Fraser Watershed, much less support a commercial fishery. These two stocks easily meet the criteria for an endangered designation under COSEWIC, leaving three of the four Fraser sockeye timing aggregates with conservation concerns sufficient to close the commercial fishery entirely. This raises a number of important questions concerning how the CSAB defines 'reasonable access', their vision for sustainable commercial fishing of Fraser sockeye, and the way in which the Government of Canada respects aboriginal rights.

Finally, DFO has struggled and failed every year to stay below the exploitation ceiling set for Cultus or late aggregate sockeye. This suggests to some that while the management objective for Cultus sockeye is described by DFO as a ceiling that should rarely if ever be exceeded, the objective is considered by some DFO managers as a minimum exploitation level or floor that will usually be exceeded. In several of the last 5 years DFO has exceeded the management ceiling by a wide margin. Last year for example, the ceiling for Cultus sockeye was set at 10 to 12%, yet 24% of Cultus sockeye were harvested. Even if we accept the explanation of DFO management staff that management error and uncertainty are responsible for their inability to restrict harvest levels within the ceiling set each year, this 'management imprecision' must be remedied before any increase in the ceiling is considered.

#### **MCC Recommendations:**

DFO's own technical analysis shows that any benefits of enhancement (milfoil removal, predator control and captive brood stocks expansion) are highly uncertain and associated with significant risk. It is also clear that DFO has already undertaken significant work to improve the survival of Cultus sockeye. Additional funds, at this stage in the recovery process might not provide any benefits at all. Again, only 200 Cultus sockeye are expected to return this year. Every spawner is required to support the fragile genetic structure of this important stock.

The MCC strongly opposes any increase in the exploitation ceiling for Cultus sockeye unless the increase is sustainable and justified based on the improved status of the stock. The MCC supports DFO's general recommendation not to exceed 10 to 12% exploitation on Cultus sockeye. Any increase in exploitation rate ceilings for Cultus and late sockeye must be sustainable (and must be sustainable for other late stocks as well).

The deteriorating status of late Stuart and other important Fraser sockeye populations should inform any decision to increase the commercial harvest of Fraser sockeye in 2005.

We urge DFO and the Minister to manage Cultus sockeye fisheries to the recommended exploitation rate ceiling of 10%. It is our view that the fishing plan for Fraser sockeye, implemented in 2005, should be fully consistent with both the precautionary principle and the stated objectives of the proposed Wild Salmon Policy and lead to exploitation rates for Cultus sockeye that are below the set ceiling at least 9 years out of 10 (plan to meet the objective 90% of the time).