



Office of the Auditor General of Canada
Bureau du vérificateur général du Canada

Office of the Auditor General of Canada

www.oag-bvg.gc.ca

[Français](#)

[Home](#)

[Contact Us](#)

[Help](#)

[Search](#)

[canada.gc.ca](#)

[Home](#) » [Environment and Sustainable Development](#) » [Environmental Petitions](#) » [Petitions Catalogue](#) » Decision not to list Cultus and Sakinaw Lake sockeye salmon under the Species at Risk Act

[About Us](#)

[Reports and Publications](#)

[Media Room](#)

[Environment and Sustainable Development](#)

[Commissioner of the Environment and Sustainable Development](#)

[Sustainable Development Strategies](#)

[Environmental Petitions](#)

[Petitions Guide](#)

[Petitions Catalogue](#)

[Site Map](#)

[Proactive Disclosure](#)

Decision not to list Cultus and Sakinaw Lake sockeye salmon under the *Species at Risk Act*

Petition: No. 149

Issue(s): Biological diversity and fisheries

Petitioner(s): Sierra Club of Canada, BC Chapter

Date Received: 10 June 2005

Status: Completed

Summary: The petitioner claims that the Minister of the Environment's decision not to accept the recommendation of the Committee on the Status of Endangered Species in Canada, and include Cultus and Sakinaw Lake sockeye salmon on the List of Wildlife Species at Risk under the *Species at Risk Act*, was based on flawed analyses. The petitioner asks whether the Minister of Fisheries and Oceans and the Minister of the Environment knew about the shortcomings in these analyses. The petitioner, having provided the ministers with critiques of the analyses in November 2004, seeks clarification on why action was not taken to reassess the decision.

Federal Departments Responsible for Reply: [Environment Canada](#), [Fisheries and Oceans Canada](#)

Petition

June 10, 2005

Office of the Auditor General of Canada
and the Commissioner of the Environment and Sustainable Development
Attention: Petitions
240 Sparks Street
Ottawa, Ontario
K1A 0G6
petitions@oag-bvg.gc.ca

Dear Ms.Gélinas,

The Sierra Club of Canada, BC Chapter is submitting the attached petition pursuant to s. 22 of the *Auditor General Act*, regarding the failure to legally list, under Schedule 1 of the *Species at Risk Act*, genetically distinct endangered populations of the Cultus and Sakinaw Lake sockeye salmon in British Columbia.

It is our contention that the economic justifications given for this decision are based on flawed analyses and are therefore in error. The supporting information*, also attached and sent separately in hardcopy, will document this assertion.

Our key request is for clarification of the reasons why, when informed of these errors in a submission from the Sierra Club of Canada, BC Chapter, on November 19, 2004, the Ministers of Environment and Fisheries & Oceans, and subsequently the Governor in Council on 21st January 2005, still declined to add Cultus and Sakinaw Lake sockeye salmon to Schedule 1 of the *Species at Risk Act*?

Particular requests for clarification are in the form of questions arising from documents commissioned or produced by Fisheries and Oceans Canada specifically to aid the department in assessing the economic costs of listing these populations under Schedule 1 of the *Species at Risk Act*.

We acknowledge the considerable utility of the petitions process to organizations like the Sierra Club, and in this case suggest that the petition be submitted to the Honourable Stéphane Dion, Minister of the Environment, and the Honourable Geoff Regan, Minister of Fisheries and Oceans.

Yours Sincerely,

[Original signed by Colin R. Campbell]

Colin R. Campbell PhD
Marine Campaign Coordinator
Sierra Club of Canada, BC Chapter
302-733 Johnson Street
Victoria, British Columbia
V8W 3C7
250386-5255 x236
colin@sierraclub.bc.ca

June 10, 2005

Office of the Auditor General of Canada
and the Commissioner of the Environment and Sustainable Development
Attention: Petitions
240 Sparks Street
Ottawa, Ontario
K1A 0G6
Fax. (613) 941-8286
petitions@oag-bvg.gc.ca

Dear Ms.Gélinas,

Introduction

The Sierra Club of Canada, BC Chapter is writing to file a petition pursuant to s. 22 of the *Auditor General Act*, regarding the failure to legally list, under Schedule 1 of the *Species at Risk Act*, genetically distinct endangered populations of the Cultus and Sakinaw Lake sockeye salmon in British Columbia.

It is our contention and confirmed discovery that the economic justifications given for this decision are based on flawed analyses and therefore in error. The accompanying submissions* will support this assertion beyond doubt. Our key request is for

clarification of the reasons why, when informed of these errors in a submission from the Sierra Club of Canada, BC Chapter, on November 19, 2004, the Ministers of Environment and Fisheries & Oceans, and subsequently the Governor in Council on 21st January 2005, still declined to add Cultus and Sakinaw Lake sockeye salmon to Schedule 1 of the *Species at Risk Act*?

The issue is clearly one of environmental concern in the context of sustainable development. The key issue is the use of economic inferences to prohibit the legal listing and ensuing protection of a biologically endangered species. The subject matter of the petition is, at a minimum, a shared responsibility of the Ministries of Fisheries and Oceans Canada and Environment Canada.

Background Information

The biological status of these two populations is in no doubt. The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated both as endangered in emergency listings in October 2002, and the status of each was re-examined and confirmed in May 2003. Each population has unique genetic and biological characteristics, and the failure of transplanted salmon to establish in both localities suggests the endemic stocks are irreplaceable. The primary agent of population collapse in each case is determined to be overexploitation, including directed and incidental catches in mixed-stock fisheries at levels above those that can be sustained. Secondary influences include a variety of ecological impacts at the home lakes related to human activities and development.¹

In a news release of October 22nd, 2004 "Minister Dion, in consultation with the Honourable Geoff Regan, Minister of Fisheries and Oceans, ... recommended that Cultus Lake and Sakinaw Lake sockeye salmon not be added to SARA." The reasoning was presented as follows:

"Listing Cultus and Sakinaw Lake sockeye salmon - which make up less than one per cent of all B.C. sockeye salmon populations - under SARA could cost the sockeye fishing industry \$125 million in lost revenue by 2008. There would also be significant impacts on First Nations Food, Social and Ceremonial fisheries, many coastal communities dependent on the fishing industry, sports fishing, tourism and other related industries."

"It is not possible for fishers to visually distinguish Cultus and Sakinaw Lake sockeye from other larger sockeye populations, and therefore the Fraser River sockeye fishery would have to be virtually shut down if these two populations were listed under SARA," said Minister Regan. "We have already launched approximately \$1 million in initiatives to protect Cultus and Sakinaw Lake sockeye salmon. We have powerful tools in place to protect these species such as the *Fisheries Act* and our fisheries management plans. We will continue to aggressively pursue our action plan to protect and rebuild Cultus and Sakinaw Lake sockeye populations."²

A review of the documents* in the submission provided here will establish that Minister Regan, and subsequently Minister Dion, were relying on a deeply flawed and wholly misleading economic analysis, one that was thoroughly discredited and dismissed by key DFO officials prior to Minister Dion's public announcement. These officials informed senior regional and national fisheries staff that the economic analyses that were to be put to the minister were fatally flawed. We can only begin to guess as to why these analyses were not corrected, and if in fact senior DFO officials informed their minister of departmental concerns.

What is beyond doubt is that the November 19th submission by the Sierra Club of Canada, BC Chapter, put this information in the hands of both the Environment and Fisheries ministers, as well as the SARA Public Registry. There was ample time to correct the mistakes made, mistakes which put the extinction of these two salmon

stocks at a higher probability than would be afforded by legal listing under SARA and the subsequent general prohibitions on taking and harming listed species.

Petition Request

The Sierra Club of Canada, BC Chapter, petitioner, requests the following questions be answered:

1. Were the Ministers aware that the authors of the Gislason Report ("*Socio-Economic Implications of the Species-at-Risk Act, Sakinaw and Cultus Sockeye, April 2004*") conceded that their economic analysis and calculation of potential financial loss focussed only on the potential short-term negative impacts, and did not take into account even short-term benefits? ("The result is a focus of the analysis on the negative short term effects when SARA, in the long term, could create additional opportunities even during the recovery process. The benefits of conservation cannot be realized in one year." page 20)

2. Were the Ministers aware that in the document entitled "*Financial Considerations Associated with Potential SARA Listing of Sakinaw and Cultus Lake Sockeye*" explicit confirmation exists that alternative fisheries-management approaches to the problem of avoiding incidental harvest of Sakinaw and Cultus sockeye were not taken into account? ("Potential policy options and adjustment mechanisms may be possible over the mid term. Examples include the possibility of changing fleet allocation targets and shifting traditional fishing patterns; opportunities could exist for new in-river fisheries subject to finding areas that would continue to provide the required protections for stocks of concern and finding markets for this much lower quality product," page 7)

Furthermore, were the Ministers aware that all the problematic fisheries could in fact be shifted away from the migratory path of Sakinaw sockeye, either to Juan de Fuca Strait, the mouth of the Fraser River, or other areas, thereby conserving the Sakinaw stock with minimal economic impact?

3. Were the Ministers aware that in the document entitled "*Cultus Sockeye Stock Assessment / Fisheries Management Working Group Review and Comments*" Minister Regan's Cultus Sockeye Recovery Team found reason to severely critique the potential economic assessments made in the document "*Financial Considerations Associated with Potential SARA Listing of Sakinaw and Cultus Lake Sockeye*" mentioned above (2)?

Furthermore, were the Ministers aware that the scientific analyses supporting the case for legally listing Cultus and Sakinaw sockeye under the Species at Risk Act were rigorously peer-reviewed, but the "economic" analyses behind the decision to not legally list Cultus and Sakinaw sockeye were not reviewed at all?

4. Finally, were the Ministers aware that numerous benefits would arise for Canada were these two small salmon stocks to be listed under the *Species at Risk Act*, including:

- ◆ Support for Canada's international obligations under the Biodiversity Convention
- ◆ Assurance for Canadians that their government is committed to protecting endangered species
- ◆ The provision of immediate fisheries benefits to harvesters upstream of the migration route of Cultus Sockeye,
- ◆ Recovery and rebuilding of several sockeye stocks that co-migrate with Cultus and Sakinaw sockeye, and
- ◆ Assistance in the B.C. Salmon Marketing Council's attempts to win certification for B.C. sockeye fisheries from the Marine Stewardship Council.

Would the Ministers care to explain why these clear and obvious benefits were foregone by deciding against listing either Cultus or Sakinaw sockeye under the *Species at Risk Act*?

5. In respect of all the above questions, if the Ministers answer yes in any instance we would appreciate an explanation of why the information concerned was ignored.

Supporting Information

- ◆ *Submission to Prime Minister Paul Martin and the Governor-In-Council regarding the protection of Sakinaw and Cultus sockeye under Canada's Species at Risk Act; Version III.* Submitted by Sierra Club of Canada, BC Chapter, November 19, 2004

This submission contains all the documents* mentioned in Questions 1-3 above and discusses the material questioned in greater depth. A hardcopy has been forwarded.

Yours Sincerely,

[Original signed by Colin R. Campbell]

Colin R. Campbell PhD
Marine Campaign Coordinator
Sierra Club of Canada, BC Chapter
302-733 Johnson Street
Victoria, British Columbia
V8W 3C7
250386-5255 x236
colin@sierraclub.bc.ca

*[attachments not posted]

¹COSEWIC Assessment and Status Report on the Sockeye Salmon *Onchorhynchus nerka* Sakinaw population in Canada.
http://www.sararegistry.gc.ca/virtual_sara/files/cosewic/sr%5Fsockeye%5Fsalmon%5Fe%2Epdf

COSEWIC Assessment and Status Report on the Sockeye Salmon *Onchorhynchus nerka* Cultus population in Canada.
http://www.sararegistry.gc.ca/virtual_sara/files/cosewic/sr%5Fcultus%5Fsockeye%5Fsalmon%5Fe%2Epdf

²Minister of the Environment Makes Recommendations on Adding New Species to the *Species at Risk Act*. Environment Canada News Release Ottawa, October 22, 2004.
http://www.ec.gc.ca/press/2004/041022_n_e.htm

[\[top of page\]](#)

Minister's Response: Environment Canada

October 20, 2005

Dr. Colin R. Campbell
Marine Campaign Coordinator
Sierra Club of Canada, BC Chapter
302 - 733 Johnson Street
Victoria BC

V8W 3C7

Dear Dr. Campbell:

I am writing in response to your Environmental Petition No. 149, to the Commissioner of the Environment and Sustainable Development, regarding the listing of Cultus and Sakinaw sockeye salmon populations, under the *Species at Risk Act*. Your petition was received by Environment Canada on June 24.

Due to the nature of the issues being raised in the petition, Environment Canada and DFO have prepared a joint response. My colleague, the Honourable Geoff Reagan, Minister of Fisheries and Oceans and competent minister for aquatic species under the Act, will be providing you with the government's response to the petition.

Please accept my best wishes.

Yours sincerely,

[Original signed by Stéphane Dion, Minister of the Environment]

Stéphane Dion

[\[top of page\]](#)

Minister's Response: Fisheries and Oceans Canada

October 20, 2005

Dr. Colin R. Campbell
Marine Campaign Coordinator
Sierra Club of Canada, British Columbia Chapter
302 - 733 Johnson Street
Victoria, British Columbia
V8W 3C7

Dear Dr. Campbell:

This is in response to your environmental petition No. 149, dated June 9, 2005, to the Auditor General and the Commissioner of the Environment and Sustainable Development of Canada regarding the listing decision for Sakinaw Lake and Cultus Lake sockeye salmon under the *Species at Risk Act* (SARA).

Fisheries and Oceans Canada has reviewed this petition and prepared the attached response in collaboration with Environment Canada. In accordance with the petition request, we have considered your questions and have responded to them in the order in which they were presented (please refer to Annex A).

Your interest in this matter is appreciated, and I trust that you will find this information useful.

Yours truly,

[Original signed by Geoff Regan, Minister of Fisheries and Oceans]

Geoff Regan

Annex A

INTRODUCTION

The Sierra Club has requested an explanation regarding the government's decision not to add Cultus and Sakinaw Lake sockeye to schedule 1 of the *Species at Risk Act* (SARA). Sierra Club has identified areas of concern related to the comprehensiveness and robustness of the socio-economic analysis and the review process.

The purpose of SARA is to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened. Of 79 species and populations under review in 2004 for addition to schedule 1 of SARA, 76 were added to the list.

In making any decision on species at risk, the Government must consider a multitude of factors. The analysis that contributes to advice for Ministers is comprehensive and allows for broad consultation, with the result that decisions are not made without due consideration of all the factors involved.

CONTEXT

The Government of Canada is committed to the protection and recovery of aquatic species at risk and can fulfill this commitment by implementing SARA or using other Acts of Parliament or policies. Actions underway to protect stocks of concern include: Rockfish Conservation Strategy, a proposal to integrate Groundfish fisheries to ensure better protection of stocks at risk, Integrated Groundfish Management plans, Salmon Integrated Fisheries Management Plans (IFMP) and the implementation of the WSP. The salmon IFMPs outline a range of initiatives to protect weaker stocks including Rivers and Smiths Inlet sockeye, Sakinaw and Cultus sockeye, West Coast Vancouver Island chinook, early timed Fraser and lower Strait of Georgia chinook, and south Coast coho.

With respect to Cultus and Sakinaw sockeye salmon, in 2004-2005, Fisheries and Oceans Canada (DFO) launched approximately \$1 million in initiatives to protect Cultus and Sakinaw Lake sockeye and significantly reduced exploitation rates on these populations. This included the development of recovery strategies, which fed into the development of the IFMP as well as other recovery initiatives as identified in Question 4b.

In a July 13, 2005 announcement entitled "Fishing Opportunities in 2005", Minister Regan released the 2005 Salmon IFMPs which adopts a cautious approach to harvesting opportunities where there are stocks of concern, consistent with the WSP. Minister Regan indicated that Cultus Lake and Late-Run Fraser River sockeye stocks continue to be a significant conservation concern. As such, the exploitation rate for Cultus sockeye and Late-run Fraser River sockeye would be maintained at 10-12 percent and 15 percent respectively, consistent with levels established in 2004.

As the season progressed, sockeye across British Columbia and Washington returned at or below expectations and were much later than ever observed due to unusual ocean conditions. A precautionary approach was applied continuously throughout the season in managing the salmon resources. Progress towards conservation objectives looks positive and it is anticipated that targets for sockeye returning to the spawning grounds will be met. The commitment to protecting species at risk, consistent with the 2005 IFMP and the WSP was demonstrated. In spite of very strong overall returns and significant opposition, commercial fisheries directed at Fraser sockeye in the marine areas were prohibited in 2005; some very limited harvest of Fraser sockeye occurred in fisheries directed at Fraser River pink salmon.

As well in 2005-06, DFO is continuing implementation of previously launched habitat and enhancement initiatives as further protection for these populations. These measures include captive breeding, predator removal, milfoil removal, smolt assessment, acoustic tagging and habitat assessment.

The extensive protective and recovery actions implemented in 2004, and continued in 2005, are consistent with the first theme in the Minister of Fisheries and Oceans' April 14, 2005 announcement, *A Blueprint for Pacific Fisheries Reform. The first theme is Sustaining strong salmon population by setting clear conservation objectives for each fishery based on the principles of the Wild Salmon Policy.*

On June 24 2005, Minister Regan announced the WSP and committed \$1.1 million to its implementation for related salmon science and advancement of the Government of Canada's agenda for reform of Pacific fisheries.

The WSP provides a framework to guide conservation and recovery of salmon populations. The goal of the WSP is to restore and maintain healthy and diverse salmon populations and their habitats for the benefit and enjoyment of the people of Canada in perpetuity. Decisions and activities pertaining to the conservation of wild Pacific salmon will be guided by principles of conservation; honouring obligations to First Nations; sustainable use; and an open process. To achieve the goal the following three objectives must be fulfilled:

1. Safeguard the genetic diversity of wild salmon populations
2. Maintain habitat and ecosystem integrity; and
3. Manage fisheries for sustainable benefits.

Protecting Sakinaw and Cultus through the habitat protection and restoration, stock enhancement and reductions in fishery impacts supports Government of Canada's agenda for reform of Pacific fisheries, is consistent with the goals, principles and objectives of the WSP, and is consistent with the objectives and intent of SARA.

The following addresses the questions raised by the Sierra Club with respect to the Government's decision not to add Sakinaw and Cultus Lake sockeye to Schedule 1 of SARA.

QUESTIONS AND RESPONSES

QUESTION 1: Were the Ministers aware that the authors of the Gislason Report ("Socio-Economic Implications of the Species-at-Risk Act, Sakinaw and Cultus Sockeye, April 2004") conceded that their economic analysis and calculation of potential financial loss focussed only on the potential short-term negative impacts, and did not take into account even short-term benefits?

Response

A study by G.S. Gislason was commissioned in the spring of 2004 to develop a methodology, using Cultus and Sakinaw populations as working examples to "work through" the methodology. The intent was to create a methodology that could be used to support decisions around legal listing, implementing the WSP and Marine Protected Areas, and making other resource related decisions.

Benefits were addressed in the subsequent paper, *Financial Considerations Associated with Potential Legal Listing of Sakinaw and Cultus Lake Sockeye*, which was used to form advice for the Minister of Fisheries and Oceans. In this paper and in Gazette 1 (Canada Gazette Vol 138, No. 43), benefits were taken into account, but these benefits were described qualitatively. Benefits described include maintaining genetic biodiversity of the species, increased abundance of similar migratory stocks, and improved water quality as a result of habitat enhancement activities.

The study's objectives were:

- ◆ To develop a socio-economic framework for analysis of impacts of SARA-listing and associated recovery plans.
- ◆ To illustrate the framework through worked examples for Cultus lake sockeye and Sakinaw Lake sockeye.

The consultant worked closely with representatives from key DFO branches in the development of a Multiple Account Evaluation (MAE) framework that could be used to assess SARA listing impacts. In the application of a MAE framework, one first develops a base case scenario "without" environmental program, regulation or policy changes, and then develops alternative scenarios "with" environmental program, regulation or policy changes. The economic, social and environmental activity/well-being impact a SARA listing could have is then the incremental change (i.e. difference) between the "with" and "without" scenarios.

The key focus of this work was to begin identifying a set of quantitative and qualitative indicators for each area of impact. The indicators would focus on the key changes in activity and behaviour as a result of the action taken. If it is not possible to designate in detail the differences in activity and behaviour attributable to the actions taken, it is very difficult, if not impossible, to assess impacts of the regulation, therefore, a qualitative statement was made.

This MAE framework initially identified five areas of interest and several indicators under each. It also identified four broad types of DFO actions that could assist aquatic species-at-risk to recover. These include fisheries management changes, habitat restoration activities, imposition of environmental controls and enhancement activities. These DFO actions, as well as affecting the natural environment, can also affect activity and behaviour of business, people, communities, First Nations, and government.

As described in the study objectives, a second objective was "*to illustrate the framework through worked examples using the Cultus and Sakinaw Lake sockeye populations*". These worked examples applied Cultus and Sakinaw data for one year only to illustrate how the framework worked. The focus was on developing the framework, not analyzing the impacts associated with listing of Cultus and Sakinaw sockeye populations.

In the study's conclusions, the consultant indicated that long term projections would be necessary as well as the intensive data and information requirements. Nevertheless, it was acknowledged that this work can provide the foundation for future more detailed analysis of longer term impacts.

Subsequent to receipt of the final report in April 2004 and in further developing the

MAE framework, DFO staff presented the report "Socio-economic Implications of the Species at Risk Act: Sakinaw & Cultus Sockeye" to the following committees for technical review:

- ♦ May 2004 – Integrated Harvest Planning Committee (IHPC) with broad elected representation as follows: First Nation (4), recreational (4), commercial (4), environmental (2), & Provincial (1); and
- ♦ June 2004 – Commercial Salmon Advisory Board with broad elected representation from: commercial fishers (18), processing (2), Native Brotherhood of BC (4), and union (2).

Subsequent to those presentations, DFO used the G.S. Gislason report as the methodological foundation in preparing the report called *Financial Considerations Associated with Potential Legal Listing of Sakinaw and Cultus Lake Sockeye*. For the remainder of this response, this report will be referred to as *Financial Considerations*.

QUESTION 2a: Were the Ministers aware that in the document entitled "Financial Considerations Associated with Potential SARA listing of Sakinaw and Cultus Lake Sockeye" explicit confirmation exists that alternative fisheries-management approaches to the problem of avoiding incidental harvest of Sakinaw and Cultus sockeye were not taken into account?

Response

Issues such as alternative fisheries management approaches to avoid incidental harvest of Cultus and Sakinaw sockeye were taken into account in the development of the *Financial Considerations* document. The analysis included extensive discussion regarding alternative approaches that could provide required protection for Cultus & Sakinaw Lake sockeye. The results of these discussions are summarized on page 7 of *Financial Considerations* and read:

"Potential policy options and adjustment mechanisms may be possible over the mid term. Examples include the possibility of changing fleet allocation targets and shifting traditional fishing patterns; opportunities could exist for new in-river fisheries subject to finding areas that would continue to provide the required protections for stocks of concern and finding markets for this much lower quality product. It should be noted that the potential for major conflicts among harvesters exists when considering changes to traditional fishing arrangements or allocations. Any consideration of harvest in more terminal areas would have to consider distributional issues related to treaties with First Nations and the recommendations of the recent Pearse-McRae Joint Task Group. Given these factors and that this analysis only covers the period from 2004-2007, it is unlikely that new arrangements could be put in place in the short term."

At the time of the study, many changes and studies were underway. The Pearse-McRae and First Nations Panel Reports were being consulted on and recommendations had not yet been received. As well the WSP was nearing completion and there was interest by commercial fleet in changing commercial allocations. This situation made it difficult to set up any future scenarios that would hold up to scrutiny.

QUESTION 2b: Furthermore, were the Ministers aware that all the problematic fisheries could in fact be shifted away from the migratory path of Sakinaw sockeye, either to Juan de Fuca Strait, the mouth of the Fraser River, or other areas, thereby conserving the Sakinaw stock with minimal economic impact?

Response:

The possibility of shifting the fisheries in question was reviewed; however, the

economic impact of doing so would not be minimal in all cases. While it is possible to shift some fisheries, it is not possible to shift all problematic fisheries without significant social disruption and economic impact. It would require abandonment of major policies, on which citizens make longer-term investment decisions.

For example, management flexibility in designing fishing plans for First Nations and recreational and commercial harvesters to protect stocks of concern is advised by the Allocation Policy for Pacific Salmon. This policy confirms conservation as the primary objective; provides priority access to First nations for FSC and treaty rights; followed by a priority to the recreational sector for chinook and coho. It then establishes target allocations by commercial gear subject to conservation requirements.

Consistent with this allocation policy, *Financial Considerations* considers factors such as the shifting of some fisheries known to impact on Sakinaw sockeye, where this is possible. Other factors constrain DFO's ability to move fleets into areas such as Lower Georgia Strait, Fraser River and Mouth of the Fraser River and Juan de Fuca Strait. These factors include international considerations related to the Pacific Salmon Treaty, domestic issues related to finding additional fishing days within the IFMP framework, and concerns for migrating interior coho and other late-run Fraser River populations.

The analysis does assume a number of changes to commercial fisheries and FN FSC fisheries that provide increased protection of the Cultus and Sakinaw populations. These are described in detail on page 5 of "*Financial Considerations* and read,

- ◆ "*Commercial fishery will be allowed in other areas where and when Sakinaw are not present such as Lower Georgia, Fraser River, Mouth of the Fraser River and Juan de Fuca.*"
- ◆ Harvest estimates for fisheries in these areas reflect concerns for a) International issues – increased seine fisheries in Juan de Fuca will exacerbate US complaints that US seiners are unable to harvest their share of Fraser River TAC under the Pacific Salmon Treaty; b) domestic issues – can only fish Area E gillnet fleet to a maximum of 2 days per week; c) concerns for migrating interior coho during July and August when they are present in Juan de Fuca and September and October in the Fraser River.
- ◆ "*FSC allowed in Johnstone Strait during the last week of July and later. FSC also have access to FR sockeye in other areas where Sakinaw are not present.*"

Appendix 2 (pg 9) called, "*Management Regimes Under Each Level of Exploitation Rate*" provides further evidence of consideration of shifting fisheries by providing explicit details on the assumptions with respect to the management regimes in place for each scenario. It describes the management regimes required to protect Sakinaw and Cultus at each of the three levels of exploitation (ER 20-25 percent; ER 10-12 percent and ER <5 percent). These management regimes are described separately for First Nations FSC, Commercial, and Recreational fisheries.

QUESTION 3a: Were the Ministers aware that in the document entitled "Cultus Sockeye Stock Assessment/Fisheries Management Working Group Review and Comments" Minister Regan's Cultus Sockeye Recovery Team found reason to severely critique the potential economic assessment made in the document "Financial Considerations Associated with Potential SARA Listing of Sakinaw and Cultus Lake Sockeye"?

Response

DFO staff met with the key members of the internal Cultus Stock Assessment – Fisheries Management Working Group several times to discuss their concerns. The discussions and clarifications focussed on the methodology, model applied, data used, assumptions made, limitations, and results.

A key aspect of these discussions focused upon the harvest model that was used to explore the effects of various scenarios. Catch projections which form the basis for the financial analysis were estimated using the Fraser Panel Pre-Season Model. This model was created to help develop pre-season International fishing plans for Fraser sockeye and pink salmon under the Pacific Salmon Treaty. The model is a "box-car" type that simulates the movement of Fraser River sockeye through all the fishing areas, including US waters. It is a widely used tool and has been published in the Canadian Journal of Fisheries and Aquatic Sciences (Vol. 51). At the time, the Fraser Panel Pre-Season model was the only model available. Since then a new model has been completed by DFO Stock Assessment staff which is being used for management purposes.

QUESTION 3b: Furthermore, were the Ministers aware that the scientific analyses supporting the case for legally listing Cultus and Sakinaw sockeye under the Species at Risk Act were rigorously peer-reviewed, but the "economic" analysis behind the decision to not legally list Cultus and Sakinaw sockeye were not reviewed at all?

Response

The peer review process is intended to provide an opportunity for independent assessment of an analysis and allow others a chance to review and comment. Although the economic analysis was not put through a formal, scientific peer review process, opportunity was provided for a variety of interests and stakeholder groups to evaluate and comment prior to finalizing the analysis.

As indicated previously (question 1), the G.S. Gislason report on methodology was technically reviewed internally and by DFO's Integrated Harvest Planning Committee and Commercial Salmon Advisory Board. This report was then used as the methodological foundation in preparing Financial Considerations Associated with Potential Legal Listing of Sakinaw & Cultus Lake Sockeye. Financial Considerations was presented in the fall of 2004 to:

- ◆ Province of British Columbia (Ministry of Agriculture, Food & Fisheries and Ministry of Water, Land & Air Protection):
- ◆ Key stakeholders – represented by Sierra Club (2), commercial (13), union (1), processing (1), Province of BC (1), academic U of T (1).

A series of reports were made publicly available through Pacific Regions' SARA site at the following link – http://www.pac.dfo-mpo.gc.ca/sara/species/fish/cultuslakesalmon_e.htm

These include:

- ◆ *Socio-economic implications of the Species at Risk Act: Sakinaw & Cultus Sockeye*, prepared by G.S. Gislason & Associates Ltd. April 2004.
- ◆ *Financial Considerations Associated with Potential SARA Listing of Sakinaw and Cultus Lake Sockeye*, prepared by Policy Branch, DFO, September 2004.

DFO consulted extensively with British Columbians on listing considerations and recovery strategies for Sakinaw and Cultus Lake Sockeye. Consultations on the proposed listing were held in 14 communities during the winter of 2004 and in 16 communities on recovery strategies in October and November 2004.

The consultation summary report *Fall 2004 Consultations*, prepared by Norton Arnold, and individual meeting notes are available at: http://www-comm.pac.dfo-mpo.gc.ca/pages/consultations/consultation2004/main_e.htm

Further opportunities for public review and input occurred during the pre-publication phase. In Gazette 1 (Canada Gazette Vol 138, No. 43), GIC signaled their intent with respect to a decision and the public had a 30 day period in which to provide their views to the Minister of the Environment. The Ministers considered all submissions prior to the final recommendation.

Sierra Club provided an extensive submission in response to Gazette 1. Additionally, there were over 50 other members of the public who also presented submissions on the issue of Sakinaw and Cultus sockeye. All of these submissions were considered prior to the Minister of the Environment making his final recommendation.

QUESTION 4: Finally, were the Ministers aware that numerous benefits would arise for Canada were these two small salmon stocks to be listed under the Species at Risk Act, including:

- a. ***Support for Canada's international obligation under the Biodiversity Convention***
- b. ***Assurance for Canadians that their government is committed to protecting endangered species***
- c. ***The provision of immediate fisheries benefits to harvesters upstream of the migration route of Cultus sockeye***
- d. ***Recovery and rebuilding of several sockeye stocks that co-migrate with Cultus and Sakinaw sockeye, and***
- e. ***Assistance in the B.C. Salmon Marketing Council's attempt to win certification for B.C. sockeye fisheries from the Marine Stewardship Council.***

Would the Ministers care to explain why these clear and obvious benefits were foregone by deciding against listing either Cultus or Sakinaw sockeye under the Species at Risk Act?

The Ministers concluded that these benefits could be achieved through a protection and recovery action plan, including constraints to existing fisheries, without having to legally list the populations.

Question 4a: Support for Canada's international obligation under the Biodiversity Convention

Response

The Convention on Biological Diversity (CBD) is a multilateral agreement under the United Nations Environment Programme, which was created at the 1992 Earth Summit. The CBD was the first global treaty to address all aspects of biodiversity, at the ecosystems, species and genetic levels. Canada ratified the Convention on December 4th 1992. The Conventions goals are

- ◆ The conservation of biological diversity;
- ◆ The sustainable use of its components; and
- ◆ The fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

In terms of defining at what level biodiversity should be conserved, it advocates the conservation of genes, species and ecosystems, without providing guidance on which one should receive priority.

DFO's implementation of measures and actions to protect the Sakinaw and Cultus Lake

sockeye populations is consistent with the CBD goals.

Question 4b: Assurance for Canadians that their government is committed to protecting endangered species

Response

The extensive protective and recovery actions implemented in 2004 and continued in 2005 are consistent with the first theme in the Minister of Fisheries and Oceans' April 14, 2005 announcement, *A Blueprint for Pacific Fisheries Reform*. The first theme is *Sustaining strong salmon population by setting clear conservation objectives for each fishery based on the principles of the Wild Salmon Policy*.

Measures introduced in 2004-05 and continued in 2005-2006 focus on fishery restrictions and habitat and enhancement measures. In terms of fishery restrictions significant reduction in exploitation rates were introduced in 2004-05. These reduced rates of 15 percent for late run sockeye and 10-12 percent for Cultus Lake sockeye were also the target for this year. Due to lower than expected abundance and later returns it is likely that exploitation rates will be lower this year. An assessment of the impacts of this decision on the fishing industry is not completed yet but there have been no directed commercial fisheries on Fraser sockeye runs due to concerns for Cultus and other late run stocks of concern.

Specific Habitat and Enhancement Measures include:

- ◆ Captive breeding at enhancement facilities and is intended to operate through to 2007.
- ◆ Putting in place measures to monitor predators (otters and seals) leading into Sakinaw Lake and control predators (Northern Pike minnows) in Cultus Lake.
- ◆ Undertaking habitat restoration work at the two lakes, including improvements to the fishway at the outlet to Sakinaw Lake and removal of milfoil (a common yarrow plant that provides habitat for sockeye predators) in Cultus Lake. Milfoil is an invasive species and its removal will be of dual benefit.
- ◆ Assessing the status of Cultus and Sakinaw sockeye smolts (young sockeye salmon migrating to the sea for the first time) and undertaking studies on the migration and marine survival of Sakinaw Lake sockeye (these studies are currently at the proposal stage).
- ◆ Acoustic tagging to provide information on the early marine migration and distribution of sockeye juveniles.
- ◆ Spawning habitat assessment and restoration to provide a better understanding of the location and status of critical habitat.
- ◆ Monitoring fish passages at the Sakinaw fishway to ensure that sockeye successfully bypass a dam and fishway located there.
- ◆ Identifying other impacts on Cultus and Sakinaw Lake habitat from human activities, such as forestry, cottages and recreational users, and taking appropriate steps to ensure that the *Fisheries Act's* habitat requirements are being met.
- ◆ Conducting research to find solutions to water level and flow issues in Sakinaw Lake.
- ◆ Intensive monitoring of in-season sockeye returns and harvests in southern BC to determine if adjustments are required to ensure that conservation goals are met.

The protective measures in place provide the public with assurance that government is committed to protecting endangered species.

Question 4c: The provision of immediate fisheries benefits to harvesters upstream of the migration route of Cultus sockeye

Response

Provision of allocation to upstream harvesters is guided by conservation requirements and the Allocation Policy. The allocation policy confirms conservation as the primary objective; provides priority access to First Nations for FSC and treaty rights; followed by a priority to the recreational sector for chinook and coho. It then establishes target allocations by commercial gear subject to conservation requirements.

It is not the purpose of SARA to redistribute fish resources from one user to another. However, reductions in exploitation rates could result in larger returns for First Nations upstream of Cultus Lake ecosystem.

Question 4d: Recovery and rebuilding of several sockeye stocks that co-migrate with Cultus and Sakinaw sockeye

Response

Sockeye stocks that co-migrate with Cultus and Sakinaw will benefit from both habitat and enhancement measures launched in 2004-05 and continuing in 2005-06 and from the reduced exploitation rates applied to protect the Sakinaw & Cultus populations. Examples of co-migrating populations that could benefit from current initiatives underway include other late-run Fraser River sockeye.

Over time this increased protection may lead to increased abundance in populations with similar migratory timing. This could increase supply of salmon for present and future harvesters as well as increased source of jobs, income and profits in direct and indirect affected sectors.

Question 4e: Assistance in the B.C. Salmon Marketing Council's attempt to win certification for B.C. sockeye fisheries from the Marine Stewardship Council.

Response

The MSC certification process is focused on DFO's overall policies and management approaches that are in place to address MSC criteria regarding sustainability. The MSC evaluation process does not focus on a single fishery but rather on what and how the department addresses sustainability issues overall. Compliance with SARA, implementation of the WSP, and continued development and implementation of Integrated Fish Harvest Management Plans are evidence that the department has the management tools in place to manage resources consistent with the criteria laid out by the MSC.

Thus the protective measures applied to Cultus & Sakinaw Lake in 2004 and continuing again in 2005 are consistent with certification requirements and support industry's initiatives to certify BC Salmon fisheries under the MSC.

QUESTION 5: In respect to all the above questions, if the Ministers answer yes in any instance we would appreciate an explanation of why the information concerned was ignored.

Response

The Government of Canada commitment to the protection and recovery of species at risk is demonstrated through:

- ♦ the Minister of Fisheries and Oceans' adoption of a cautious 2005-06 Southern Salmon Integrated Fisheries Management Plan;
- ♦ setting the protection of Cultus Lake sockeye and other late run sockeye as a priority in managing the fisheries this season; and
- ♦ ongoing implementation of habitat and enhancement measures for Cultus and Sakinaw sockeye launched previously.

The Minister of Fisheries and Oceans must consider a number of factors in advising the Minister of the Environment when consulted about aquatic species at risk. A precautionary approach will continue to be used in managing both Cultus and Sakinaw Lake sockeye.

Date Issued: 2005-06-10


[Top of page](#)

[Important Notices](#)