

Commission d'enquête sur le déclin des populations de saumon rouge du fleuve Fraser

Public Hearings

Audience publique

Commissioner

L'Honorable juge / The Honourable Justice Bruce Cohen

Commissaire

Salle 801

Cour fédérale

701, rue West Georgia

Vancouver (C.-B.)

Held at: Tenue à :

Room 801 Federal Courthouse 701 West Georgia Street Vancouver, B.C.

le mercredi 8 décembre 2010

Wednesday, December 8, 2010



Commission d'enquête sur le déclin des populations de saumon rouge du fleuve Fraser

Errata for the Transcript of Hearings on December 8, 2010

Page	Line	Error	Correction
ii		Lara Tessaro's title is incorrect	Junior Commission Counsel
iv		James Walkus is not a participant	remove from record
iv		Musgagmagw Tsawataineuk Tribal Counsel	Musgamagw Tsawataineuk Tribal Council
3	32	citing	siting
7	14 and 22	citing	siting
22	8	monetary	monitoring

Suite 2800, PO Box 11530, 650 West Georgia Street, Vancouver, BC V6B 4N7

Tel: 604 658 3600 Toll-free Tel: 1 877 658 2808 Fax: 604 658 3644 Toll-free Fax: 1 877 658 2809

www.cohencommission.ca



APPEARANCES / COMPARUTIONS

Brian J. Wallace, Q.C. Senior Commission Counsel
Lara Tessaro Associate Commission Counsel

Tim Timberg Government of Canada

Geneva Grande-McNeill

D. Clifton Prowse, Q.C. Province of British Columbia

No appearance Pacific Salmon Commission

No appearance B.C. Public Service Alliance of Canada

Union of Environment Workers B.C.

("BCPSAC")

No appearance Rio Tinto Alcan Inc. ("RTAI")

Alan Blair B.C. Salmon Farmers Association

Shane Hopkins-Utter ("B.C.SFA")

No appearance Seafood Producers Association of B.C.

("SPAB.C.")

No appearance Aquaculture Coalition: Alexandra

Morton; Raincoast Research Society; Pacific Coast Wild Salmon Society

("AQUA")

Tim Leadem, Q.C. Conservation Coalition: Coastal Alliance

for Aquaculture Reform Fraser Riverkeeper Society; Georgia Strait Alliance; Raincoast Conservation Foundation; Watershed Watch Salmon Society; Mr. Otto Langer; David Suzuki

Foundation ("CONSERV")

Don Rosenbloom Area D Salmon Gillnet Association; Area

B Harvest Committee (Seine) ("GILLFSC")

APPEARANCES / COMPARUTIONS, cont'd.

No appearance Southern Area E Gillnetters Assn.

B.C. Fisheries Survival Coalition ("SGAHC")

Chris Watson West Coast Trollers Area G Association;

United Fishermen and Allied Workers'

Union ("TWCTUFA")

No appearance B.C. Wildlife Federation; B.C. Federation

of Drift Fishers ("WFFDF")

No appearance Maa-nulth Treaty Society; Tsawwassen

First Nation; Musqueam First Nation

("MTM")

No appearance Western Central Coast Salish First

Nations:

Cowichan Tribes and Chemainus First

Nation

Hwlitsum First Nation and Penelakut Tribe Te'mexw Treaty Association ("WCCSFN")

Brenda Gaertner First Nations Coalition: First Nations
Leah Pence Fisheries Council: Aboriginal Cauc

Fisheries Council; Aboriginal Caucus of the Fraser River; Aboriginal Fisheries Secretariat; Fraser Valley Aboriginal

Fisheries Society; Northern Shuswap Tribal

Council; Chehalis Indian Band;

Secwepemc Fisheries Commission of the Shuswap Nation Tribal Council; Upper Fraser Fisheries Conservation Alliance; Other Douglas Treaty First Nations who applied together (the Snuneymuxw,

Tsartlip and Tsawout)

No appearance Adams Lake Indian Band

No appearance Carrier Sekani Tribal Council ("FNC")

No appearance Council of Haida Nation

APPEARANCES / COMPARUTIONS, cont'd.

Joseph Gereluk Métis Nation British Columbia ("MNB.C.")

No appearance Sto:lo Tribal Council

Cheam Indian Band ("STCCIB")

No appearance Laich-kwil-tach Treaty Society

James Walkus and Chief Harold Sewid Aboriginal Aquaculture Association

("LJHAH")

No appearance Heiltsuk Tribal Council ("HTC")

No appearance Musgagmagw Tsawataineuk Tribal

Counsel ("MTTC")

TABLE OF CONTENTS / TABLE DES MATIERES

PAGE

PANEL NO. 7 (Continuing):

DR. JIM IRVINE Cross-exam by Mr. Hopkins-Utter Cross-exam by Mr. Leadem Cross-exam by Mr. Rosenbloom Cross-exam by Ms. Gaertner (FNC) Re-exam by Ms. Tessaro	2/4/15/17/20 20/22 33/36/38/43/58/68 74/82/83/97
HEATHER STALBERG Cross-exam by Mr. Hopkins-Utter Cross-exam by Mr. Leadem Cross-exam by Mr. Rosenbloom Re-exam by Ms. Tessaro	5/12/15/17 20/22/24 29/33/34/47/49/53/64 108
DR. KIM HYATT Cross-exam by Mr. Hopkins-Utter Cross-exam by Mr. Leadem Cross-exam by Mr. Rosenbloom Cross-exam by Ms. Gaertner (FNC)	8/14 28 30/34/37/38/60/70 83/85/98/99/103
MARK SAUNDERS Cross-exam by Mr. Leadem Cross-exam by Mr. Rosenbloom Cross-exam by Ms. Gaertner (FNC)	23/25 31/35/46/48/55/62 72/75/82/84/86/97/98/102/104

Cross-exam by Ms. Gaertner (FNC) 72/75/82/84/86/97/98/102/104

EXHIBITS / PIECES

<u>No.</u>	<u>Description</u>	<u>Page</u>
214	Habitat Management Program Practitioner's Guide to the Risk Management Framework for DFO Habitat	
	- Management Staff Version 1.0 dated 2005	6
215	Department of Fisheries and Oceans Habitat	
	Management Program - Habitat Compliance Decision Framework, Version 1.1	7
216	Department of Fisheries and Oceans Aquaculture	,
	Policy Framework, January 1, 2002	12
217	Summary of Meeting Notes from DFO Fall 2006	
	Consultations, Wild Salmon Policy	78
218	Department of Fisheries and Oceans Fall 2006	
	Consultations Report prepared by Chris Hoffman,	
	Norton-Arnold and Company, dated February 20,	
0.1.0	2007	79
219	Highlights from WSP Stakeholder Forum, March 2008;	0.4
000	WSP Planning Meeting May 14-15, 2008	86
220	Fraser River Aboriginal Fisheries Secretariat letter,	
	dated May 26, 2008, from Neil Todd to Amy Mar, re:	87
221	Fraser River First Nations Wild Salmon Policy Forum Fisheries and Oceans Canada letter, dated June 9,	0/
ZZ I	2008, from Amy Mar to Neil Todd	87
222	Department of Fisheries and Oceans Consultation	07
	with Aboriginal Groups, April 1, 2008 - March 31, 2009,	
	Information by Sector	95
223	Email exchange between Amy Mar and Brenda	, 0
	McCorquodale	96
224	Wild Salmon Policy Technical Review and Analysis	
	Report	97
225	Wild Salmon Policy Implementation	99

Vancouver, B.C. /Vancouver (C.-B.) December 8, 2010/le 8 décembre 2010

THE REGISTRAR: Order. The hearing is now resumed.

MR. WALLACE: Good morning, Commission Cohen. Brian

Wallace, Commission counsel, and with me is Lara

Tessaro. If I might just make a couple of

comments about scheduling. I have canvassed the

participants and it appears we have about three
and-a-half hours of cross-examination remaining

for this panel. At the moment, I expect to be

about 25 minutes or thereabouts in re-examination

and there may be re-examination from Canada that

we're not yet aware of. I am hopeful that we can

start the RDG panel this afternoon. They've been

advised that it will be after the afternoon break.

On that panel, I expect I will take about three-and-a-half hours in examination. So in order to complete that panel by -- in this year, we will sit next Thursday, December 16th, from 10:00 till 4:30, subject to adjustments depending on the exigencies of time but that's the operating assumption. And we will reschedule the stakeholders' panel for the new year and will get back to participants on that timing.

Of the participants, I have the order and the time estimates of cross-examination and I very much appreciate people putting their thoughts into how they can keep these brief and I think -- and I -- as I say, I appreciate that. It'll help us get through it. Mr. Blair, for the salmon farmers has estimated 20 minutes; Mr. Leadem, 30 minutes; Mr. Rosenbloom, 40 minutes; Mr. Butcher, I have at ten minutes but I think that was just a calculation from his original one; and for the Metis, Mr. Gereluk, is 15 minutes; and Ms. Gaertner for the First Nations Coalition estimates that she'll be one-and-a-half hours.

So with that...

MR. ROSENBLOOM: Thank you. In response to Mr. Wallace, yesterday I did indeed indicate to Mr. Wallace -- I believe I said 40 to 45 minutes. I've reviewed my notes. I don't see how I can complete my cross-examination within that time. I do remind the Commission that the in-chief portion of this panel, cumulatively between Mr. Wallace and Mr. Timberg, was about two-and-a-half days. I

will do my best to keep within time. And I might add, as I cross-examine if any area of my cross-examination is not helpful to the Commission, I'm sure you, Mr. Commissioner, will inform me of that and I am, obviously, prepared to move on. But I don't believe I can complete within 40 or 45 minutes. Thank you.

- MR. WALLACE: Mr. Commissioner, my -- my concern is that if we -- this panel is not completed today, then we -- I become concerned about completing the RDG panel in two days. So I would ask participants to please try and limit their cross-examination as far as they possibly can. Mr. Blair?
- MR. BLAIR: Mr. Commissioner, for the record, Alan Blair for the B.C. Salmon Farmers Association. couple of observations. Firstly, my associate, Mr. Hopkins-Utter will be dealing with crossexamination this morning. We've tried to take steps to shorten all of our questions and I hope we can finish it within 20 minutes but I do note that we had one of the shortest of estimates in an effort to be efficient and we do, as Mr. Rosenbloom said, need to canvass some of these issues with this panel. Our client's very, very concerned by the slowness with which the aquaculture issues are being dealt with here and we keep being put off for another day. But Project 5 and other projects are a matter of great concern to us so we have this panel and we would like to advance some of them and will try to do so within our estimate. Thank you.

THE COMMISSIONER: Thank you, Mr. Blair.

MR. WALLACE: Mr. Hopkins-Utter, I think you're up.

MR. HOPKINS-UTTER: Good morning, Mr. Commissioner,

Panel. Shane Hopkins-Utter, H-o-p-k-i-n-s hyphen
U-t-t-e-r, for the B.C. Salmon Farmers

CROSS-EXAMINATION BY MR. HOPKINS-UTTER:

Association.

Q I'd like to direct some questions to the panel, this morning, specifically with respect to the Wild Salmon Policy and some of their witness summaries and some of the evidence that they had given in that, specifically the question of whether the Wild Salmon Policy, not being

3
PANEL NO. 7
Cross-exam by Mr. Hopkins-Utter (BCSFA)

prescriptive -- panel members, perhaps you can agree with me on that, that we've already heard the Wild Salmon Policy is not prescriptive. Is that true? It was never -- it was not intended to be prescriptive in its final -- final form?

DR. IRVINE: That's true.

- Thank you. And Dr. Irvine, I believe your witness summary says that the draft operational guidelines, they were never finalized and that progress on the operational ecosystem, objectives under Strategy -- under Strategy 3 has, in fact, "stalled"? Was that also a fair summary?
- DR. IRVINE: Well, the -- you're dealing with two issues, two quite separate issues. So the operational guidelines, as we discussed during the development panel earlier last week, we shifted direction in about 2003 and went away from that approach. And your second comment related to ecosystem objectives and we did -- I guess they stalled from a perspective of putting them into a scientific publication. But we have continued to -- to think about them, I guess, or to work on them, and, in particular, with Dr. Hyatt's work in the Barclay Sound pilot and the Okanagan.
- Q Thank you. I'd like to drill down then into some of what you've just said.
- MR. HOPKINS-UTTER: Mr. Lunn, if you would mind pulling up Exhibit 8? Page 38, bottom of the third paragraph. Now, the Wild Salmon Policy here at the bottom of the third paragraph refers to mitigation measures, improved cage structure, proper farm citing to address risks. And at the beginning of the fifth paragraph, if you would please focus in a little bit, Mr. Lunn, it refers expressly to federal legislation, including the Canada -- Canadian *Environmental Assessment Act* screening for potential environmental effects.
- Q So Dr. Irvine, can you just comment if those operational ecosystem objectives for aquaculture that you had mentioned in your summary were, in fact, intended to apply to these types of mitigation measures?
- DR. IRVINE: Well, I'm not an expert in any way on the CEAA legislation. The operational -- the ecosystem objectives that we were working on for the various sectors, which included cultivation, which was both enhancement and aquaculture, were

really -- we started with upper level ecosystem objectives, which is simply the -- the conservation of ecosystem integrity, which is really dealing with ecosystem structure and function. And then we -- we drilled down from there to make those upper level objectives operational from -- from the perspective of the various sectors. So they weren't intended to -- to link to specific legislation. We didn't get that far, I guess.

Q Okay. Can I ask you then about the draft operational guidelines that you mentioned in your summary? This is your summary of evidence under the development at page 2, fourth bullet down.

MR. HOPKINS-UTTER: if you please, Mr. Lunn?

Q This is Exhibit 103. Page 2, fourth bullet. It reads:

You will see the draft operational guidelines were intended to govern activities currently addressed in the blue sidebars within the WSP, namely, harvest, habitat enhancement and aquaculture.

So my question, I suppose, is if the new operational ecosystem objectives for aquaculture have not actually been finalized, does these draft operational guidelines then apply?

- DR. IRVINE: No, the operational guidelines were never finalized.
- MR. HOPKINS-UTTER: Mr. Lunn, if you could please take us to Exhibit 63, DFO'S Aquaculture Action Plan.
 Mr. Commissioner, this is not listed in BCSFA list of documents. I would like to use this as a visual aid perhaps. It shows a list of seven interim DFO aquaculture sight application guidelines, six of which we did, in fact, list in our documents to examine on the Wild Salmon Policy. Mr. Lunn, at page 4? If you could just focus in on that list a little bit?
- MR. WALLACE: Mr. Commissioner, I don't believe the witnesses will have seen this document so it might take them a moment.
- MR. HOPKINS-UTTER: Absolutely. As I say, this is more of a visual aid.
- Q Does anyone on the panel recognize the interim guidelines or are familiar with them? Perhaps,

5
PANEL NO. 7
Cross-exam by Mr. Hopkins-Utter (BCSFA)

- Ms. Stalberg, being in OHEB, you would have come across some of these? For your reference, these were all finalized in 2002, which was the same year as the Aquaculture Policy Framework and just a few years before the Wild Salmon Policy was finalized.
- MS. STALBERG: Good morning. I quickly scanned the list and I'm not familiar with having reviewed them.
- Q All right. Thank you.

- MR. HOPKINS-UTTER: Mr. Lunn, can you please pull up BCSFA document number 12? This is Department of Fisheries and Oceans Habitat Management Program Practitioners Guide to the Risk Management Framework for DFO Habitat Management Staff, Version 1.0, dated 2005.
- Ms. Stalberg, I'll again direct this to you, although any of the other panel members can answer if they're familiar with this. Are you familiar with this document?
- MS. STALBERG: Yes, I am.
- Q And can you describe it for us generally?
- MS. STALBERG: Can you please scan through a few pages of it for me, please? Actually, if we can stop at the -- or the index, Mr. Lunn, that's probably good. Thank you. Okay. So what would you like me to describe?
- Well, generally, what does this apply to? You could start out -- start us with that. I'll rephrase the question then.
- MS. STALBERG: Yeah.
- Q Is this part of the Environmental Process Modernization Plan of the DFO?
- MS. STALBERG: Yes.
- Q Okay. And how is this document used?
- MS. STALBERG: It's used by proponents so individuals or corporations that have a development proposal and DFO staff internally within OHEB, particularly the habitat management staff or the habitat protection and sustainable development staff. So through a filter of a risk management framework, projects are assessed as to their potential impact and the sensitivity of the habitat or the species of fish.
- MR. HOPKINS-UTTER: All right. Mr. Lunn, at paper page 8 -- I'm not sure of the electronic page on this. This is Figure 1, applying risk management

- framework to decision-making under the habitat protection provisions of the *Fisheries Act*. Yes, that's it.
 - Q And that's a fair representation of flow charts in the process of the decisions made under this document?
 - MS. STALBERG: Yes, and the graphic, the risk assessment matrix, I had mentioned how the WSP links with EPMP. And if we blow up that risk assessment matrix, yes, please -- well, that's not very helpful. On the --
 - MR. HOPKINS-UTTER: For the record, let it show that it's too pixelated (sic) to actually read.
 - MS. STALBERG: On -- risk is a function of -- on an X-axis or the vertical axis on the left, the potential impacts of the development. And on the -- or sorry, that's the Y-axis and then on the Y-axis is the sensitivity of the habitat so the Wild Salmon Policy, through identifying those highly-productive and sensitive habitats, can situate the development-type of proposal if it affects those habitats along that -- along that access.
 - Okay. I believe that that same graphic is, in fact, reproduced at pages 18 and 19 of this document but I think that's -- you've covered it in sufficient detail.
 - MR. HOPKINS-UTTER: Mr. Lunn, could you take us to BCSFA document 13, please?
 - MR. WALLACE: Perhaps that document should be marked as an exhibit?
 - MR. HOPKINS-UTTER: Oh, thank you, Mr. Wallace. Mr. Commissioner -- Mr. Registrar, could you please mark that as an exhibit?
 - THE COMMISSIONER: Sorry, what are we marking? What are we marking?
 - MR. HOPKINS-UTTER: Oh, the document that we were just referring to. That was the Habitat Management Program Practitioner's Guide to the Risk Management Framework for DFO Habitat Management Staff Version 1.0 dated 2005.
 - THE COMMISSIONER: Thank you.
 - THE REGISTRAR: Exhibit Number 214.

EXHIBIT 214: Habitat Management Program Practitioner's Guide to the Risk Management Framework for DFO Habitat - Management Staff Version 1.0 dated 2005

- MR. HOPKINS-UTTER: Our document 13, Mr. Lunn. This is the Department of Fisheries and Oceans Habitat Management Program - Habitat Compliance Decision Framework, Version 1.1.
 - Q Ms. Stalberg, are you familiar with this document? MS. STALBERG: Again, can we go to the index, please? Thank you.
 - MR. WALLACE: Mr. Commissioner, there is a whole topic on habitat management and I'm not sure of the connection to the Wild Salmon Policy in this line of questions.
 - MR. HOPKINS-UTTER: Mr. Commissioner, I believe that the Wild Salmon Policy, as we identified with the previous panel, expressly refers to the citing of aquaculture operations as one of the mitigation measures. I believe that we have Ms. Stalberg and a panel here who are expert in the implementation of the Wild Salmon Policy and it's necessary to canvass some of these -- pardon me -- necessary to canvass some of these issues now to know exactly how Wild Salmon Policy is going to be implemented with respect to those types of citing decisions. Thank you.
 - Q Ms. Stalberg, are you familiar with this document? MS. STALBERG: So it's specific to compliance monitoring and I may have, probably have read it at some time but I -- without reading some more of it, I cannot comment on it.
 - Q Okay. You're generally familiar with it, though? This is part of the -- also part of the EPMP program?
 - MS. STALBERG: Yeah, it has the same format and looks well, compliance monitoring is part of the
 Environmental Process Modernization Program. But
 as to the specifics within the document, I'd have
 to review them or re-review them.
 - MR. HOPKINS-UTTER: All right. May we mark this as an exhibit, Mr. Registrar?
 - THE REGISTRAR: Exhibit Number 215.

EXHIBIT 215: Department of Fisheries and Oceans Habitat Management Program - Habitat Compliance Decision Framework, Version 1.1

MR. HOPKINS-UTTER: Mr. Lunn, Exhibit 181, please, summary of Ms. Heather Stalberg, senior habitat management biologist. First page, last bullet, if

5

6

7

8

9

1

you please?

Q Ms. Stalberg, your summary says at Strategy 2 Implementation in General, I quote:

10 11 12

13 14 15

16 17

18

19

20 21 22

23

24 25 26

27

28

34

35

36

41 42 43

44 45

45 d 46 DR. HY 47 d She will say that the WSB habitat working group was not engaged in aquaculture issues. She will say that DFO's work on developing habitat status indicators and benchmarks under Step 2.2 had not yet included nearshore or marine indicators. She will say that members of the WSP implementation team later determined that marine indicators would be developed through Strategy 3. She will say that it will have to be seen as their ability to track aquaculture.

My question to you then is, although the habitat work group was not engaged in aquaculture issues, can you say what kind of marine indicators could be developed under Strategy 3 to track aquaculture?

- ${\tt MS.}$ STALBERG: I think that question is best asked of ${\tt Mr.}$ Hyatt.
- Q Dr. Hyatt?
- DR. HYATT: As has been mentioned previously, there are precious -- pressure and status indicators -various classes of indicators that are used to follow sectoral activities. And so with respect to aquaculture, a pressure indicator, for example, might be the -- the total production via aquaculture in an area, the amount of -- you know, the number of hectares or lineal kilometres of foreshore lease. So those have not been formally proposed, as indicators as yet, because the process of developing indicators and objectives -actually the other way around -- developing objectives and indicators, Mr. Commissioner, will be done through a dialogue with the various sectoral groups, including the aquaculture group. And that -- that dialogue has not been -- has not been entered into in a way to drive out those indicators yet.
 - Mr. -- pardon me -- Dr. Hyatt, the Wild Salmon Policy identified a number of those pressures, did it not?
- DR. HYATT: Wild Salmon Policy does identify a number of pressure indicators. You know, there are a

wide range of them that cover each of the -- each of the sectoral activity areas. There are some overarching ones like climate change that come from diffuse activities at a global scale that clearly have pervasive influences on -- on the sustainability of wild salmon and individual conservation units so, yes, there are a number of pressure indicators identified. And following pressure indicators, of course, there are also status indicators.

- Q I'm going from memory here, but will you agree with me the Wild Salmon Policy generally canvasses pressures on wild stock, such as population growth, urbanization, use for food purposes.
- DR. HYATT: Yes, all of those -- all of those would be identified as -- as broad-pressure indicators. Under Strategy 1, for example, exploitation has been identified as an indicator. That is actually more properly considered as a threat indicator under Strategy 3. Cumulative exploitation or the rate of exploitation on individual CU's relative to their productivity will be an issue of some concern.
- MR. HOPKINS-UTTER: All right. Mr. Lunn, if you could please pull up BCSFA document number 5? This is Department of Fisheries and Oceans Aquaculture Policy Framework, January 1st, 2002. At page 12 of this document, second paragraph.
- Q Will you agree with me, Dr. Hyatt, that like the Wild Salmon Policy, the Aquaculture Policy Framework identifies here a number of pressures on natural resources, which would include wild salmon? It notes here the risks posed to resources by population growth, expansion of the world economy putting pressure on natural resources, climate change, air pollution, threats to water quality, availability of water, declining biodiversity. Are these generally the same pressures that threaten wild salmon stocks that you've identified as being part of those pressures and stressors?
- DR. HYATT: Yes, many of those would appear on -- on any sort of generic list of pressure indicators.
- MR. HOPKINS-UTTER: Mr. Lunn, page 15, last two paragraphs, please? Middle of the second paragraph, it begins:

The Food and Aquaculture Organization of the United Nations projects that by 2030, aquaculture will dominate fish supplies with more than half of the fish being consumed originating from aquaculture operations. Indeed, by 2025, annual demand for seafood will outstrip the capacity of wild fisheries by some 55 million tons, presenting tremendous opportunities for the aquaculture sector.

Next paragraph, it reads:

With global demand increasing and natural socks already largely or at or exceeding their maximum capture potential, it is clear that the aquaculture will play an important role in satisfying future global demand and in contributing to the security of the global food production system.

At page 16, bullet list, mid-page, fourth bullet down:

The Aquaculture Policy Framework also acknowledges that aquaculture can reduce pressure on wild fish stocks helping them to sustain and enhance the wild fishery.

Q Dr. Hyatt, and all panel members, does this mean that if the risk of aquaculture can be properly managed to ensure its sustainability, it can, in fact, help DFO meet its primary objective of conservation of wild stocks by relieving those pressures?

DR. HYATT: That's an interesting observation.

Certainly if the -- if the risks of aquaculture and the environment -- potential environmental impacts of aquaculture are properly assessed and rigorously managed then it's certainly possible that aquaculture production can reduce the pressure on wild fish stocks in aggregate.

Whether that -- whether that resolves issues related to the conservation of particular conservation units of wild salmon isn't immediately clear.

Q Thank you.

MR. HOPKINS-UTTER: Mr. Lunn, page 25, third paragraph from the bottom. It reads here:

Although conservation of the wild fish stock and DFO's legislative responsibilities for navigational safety and environmental and fish habitat protection will continue to be primary considerations, DFO will, where applicable, consider the social and economic benefits associated with the aquaculture development in the course of its decisions.

- Is it fair to interpret this as expressly acknowledging the primacy of conservation over sustainable use in a manner that is consistent with the Wild Salmon Policy?
- DR. HYATT: Just give me a moment to read the language again. I think that's consistent with the notion that conservation and environmental protection have primacy over development of sectoral activities, such as aquaculture, yes.
- MR. HOPKINS-UTTER: Mr. Lunn, I'll just take us briefly to Exhibit 8, but I'll be coming back to this in a moment. Exhibit 8, page 16, under Principle 3 Sustainable Use.
- Would you agree that this is, in fact, the same idea, although not specifically the same wording that appears in the Wild Salmon Policy at Principle 3, which reads:

Socioeconomic, biological considerations will inform decisions on salmon, their habitats and their ecosystems consistent with the priorities assigned to Principles 1 and 2. Conservation decisions cannot be based solely on biological information. The maintenance of biodiversity and healthy ecosystems must be considered in the context of human needs for use now and in the future. Decisions will not be taken without regard to their cost or social consequences.

So would you agree with me then that in both the Wild Salmon Policy and the Aquaculture Policy Framework, DFO's highest priority is expressly acknowledged to be conservation but that social and economic issues and concerns will also inform

1 those decisions? DR. HYATT: That's a fair statement. They're --3 they're analogous statements and point out that --4 that conservation is our first concern, primary 5 concern, under a number of Acts, Species at Risk, 6 and the Fisheries Act. And that socioeconomic 7 considerations, which clearly are related to 8 sustainable use and benefits for society in 9 general do -- do -- are acknowledged to play a 10 significant role in -- in future decisions. MS. STALBERG: And -- excuse me. Oh, go ahead. 11 12 MR. WALLACE: Sorry. Mr. Commissioner, perhaps the 13 previous document, the DFO Aquaculture Policy Framework should be marked as an exhibit? 14 15 MR. HOPKINS-UTTER: I was going to mark it as an 16 exhibit. We can do that now. I was going to be 17 returning to it. Mr. Registrar? 18 THE REGISTRAR: Exhibit Number 216. 19 20 EXHIBIT 216: Department of Fisheries and 21 Oceans Aquaculture Policy Framework, January 22 1, 2002 23 24 MS. STALBERG: And excuse me, the date on the 25 Aquaculture Framework, that's 2002; is that 26 correct? 27 It's -- my understanding it's January 1st, Yes. 28 2002. 29 MS. STALBERG: Okay. So why I ask about the date is, 30 permitting for aquaculture sites is being 31 transferred from the province to DFO, that 32 responsibility. So I'm not sure how topical these 33 operational quidelines are. They may be in review right now, as DFO delivers more of the program. 34 35 So Andrew Thomson is the lead for aquaculture and 36 he would be able to advise on that. 37 All right. It's my understanding that there are a 38 number of interim quidelines on that list that was 39 in Exhibit 63 that you hadn't identified but 40 perhaps we'll just leave that off for the moment. 41 Would it be Andrew Thomson that we would then 42 consult regarding those interim guidelines, as 43 well as the future development?

MS. STALBERG: Yes.

Q Thank you.

44

45

46

47

MR. HOPKINS-UTTER: Mr. Commissioner, we heard testimony from a number of DFO witnesses before

the -- before this Commission, including David Bevan, the associate deputy minister, and Claire 3 Dansereau, deputy minister, on the 2nd of November, who said -- I'm just summarizing their 5 comments here because it actually encompasses 6 several pages of transcript. It was under cross-7 examination by Mr. McDade for the Aquaculture 8 Coalition. That DFO is required to be internally 9 consistent such that a reference to the DFO's 10 obligations under legislation, regulations or 11 policies, such as in a job description in that 12 case essentially incorporates those other 13 obligations into the citing document. 14 Would the panel members generally agree that there 15 is, in fact, a principle of incorporation by reference in DFO? By citing one document, you're, 16 in fact, incorporating those -- those principles? 17 18 MS. STALBERG: There was a very long intro to the 19 20

- question. I'm sorry. You'll need -- if you could be more specific on what the question is.
- MR. TIMBERG: Mr. Commissioner, I just note that the -my friend's asking this panel to speak on behalf of DFO with respect to policies of a large question. I think this panel can speak as to their own personal knowledge about what they know but they can't speak on behalf of DFO with respect to this large question.
- MR. HOPKINS-UTTER: I'm in your hands, Mr. Commissioner.

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

- THE COMMISSIONER: Well, I understood that they were speaking from the perspective of their role within DFO. Obviously, they are not necessarily instructed to speak on behalf of the DFO on all policy within that -- the purview of that organization. But I understood they were speaking to the extent that their role entitled them to speak or enabled them to speak, they could do so. So I think it's really a question not so much of not wanting to answer your question but not really understanding what your question is.
- MR. HOPKINS-UTTER: Thank you, Mr. Commissioner. rephrase the question then, we heard from Mr. Hyatt that Wild Salmon Policy and Aquaculture Policy Framework do, in fact, seem to have the similar -- similar statements, I believe. Perhaps -- perhaps I'll just move on. I'll leave that -leave that alone. Okay. Can you just take us to

page 7 of the Aquaculture Policy Framework, Mr.
Lunn?

MR. LUNN: Do you have a reference for that?

MR. HOPKINS-UTTER: Yes, this is bullet list, mid-page.

MR. LUNN: Maybe I misunderstood what you're asking for.

MR. HOPKINS-UTTER: Oh, sorry, Exhibit 216.

MR. LUNN: Okay, we're there.

MR. HOPKINS-UTTER: Page 7. Bullet point list. Just below the list -- there are five bullets here listing the objectives of the police framework. Below the list, it says:

DFO's vision for aquaculture development is to benefit Canadians through the culture of aquatic organisms while upholding the ecological and socioeconomic values associated with Canada's oceans and inland waters.

- My question for the panel is, does "ecological" and "socioeconomic" sound like sustainable development?
- DR. HYATT: Well, I think ecological and socioeconomic values are something that society defines in an ongoing process. Whether that is equated to sustainable development depends on your definition of sustainable development.
- Well, fortunately, there's a footnote here that helps us.
- MR. HOPKINS-UTTER: It says at the very bottom, Mr. Lunn. The footnote reads -- defines aquaculture development specifically as:

All references to aquaculture development in this policy framework refer to development that is socially, economically and environmentally sustainable.

Now, going back to the question of incorporation by reference, the words "aquaculture development" also appear in the Wild Salmon Policy at page 38. Mr. Lunn, if you could just take is there, please? Second paragraph down. I'm having a bit of trouble reading that there. The last sentence -- second-to-last sentence of the second paragraph reads:

The first principle of the APF, being the Aquaculture Policy Framework, directs the department to support aquaculture development in a manner consistent with its commitments to ecosystem-based and integrated management, as set out in departmental legislation, regulations and policies.

It then says:

This principle reflects the department's mandate for the conservation of marine resources.

So this is the Wild Salmon Policy referring expressly to Principle 1 in the Aquaculture Policy Framework using the word "aquaculture development", which is the exact same phrase that appears in the Aquaculture Policy Framework.

- Q Would you agree then that aquaculture development in the Wild Salmon Policy likely refers to sustainable development, as defined in that footnote that I just took you to?
- What I'm not clear on, and again, Andrew MS. STALBERG: Thomson could probably answer this, is through the Canadian Environmental Assessment Act reviews and navigable water permit application reviews, certainly through CEAA and the Fisheries Act reviews of development proposals, the socioeconomic impacts doesn't play a role in the risk management framework. It may come into play if there is, say, a panel review or ministerial decision on a development proposal that interests other than solely impacts on fish and fish habitat need to be considered. So I'm not sure about the -- how the Aquaculture Policy Framework that speaks to socioeconomic interests, how that is then reflected in a project review through CEAA.
- Q Thank you. My question was more -- oh, I beg your pardon.
- DR. IRVINE: No, I'd just like to point out that within the Wild Salmon Policy, we have a -- we define "sustainable development" so that the -- the policy would be referring to that definition rather than the one in the Aquaculture Policy Framework, which preceded the Wild Salmon Policy. Now, I haven't sort of focused on the definitions

to understand if they're any different but sustained development in the Wild Salmon Policy is:

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

And that's taken from the Brundtland Commission. But really, I think what you're getting into is -- is Strategy 4. So Strategies 1, 2 and 3, which is what we are experts on, really deal with the science issues, you know, the -- the fish, the habitat and the ecosystems. The Wild Salmon Policy certainly recognizes the importance of social and economic considerations in the decision-making process and that is what Strategy 4 is all about.

Going back to the concept that David Bevan and Claire Dansereau put into evidence before this Commission, they said that if there was, in fact, a reference, in that case it was a job description referring to the DFO's larger mandate, the answer that they gave was that, referring to the DFO's larger mandate, in fact, incorporated all the DFO's mandate. You didn't have to spell out every policy, every -- every framework in that job policy. That was sufficient to, in fact, refer to those other documents. It put that job description into the larger context.

My question to you is just on the phrase "aquaculture development" being expressly defined in the Aquaculture Policy Framework, being mentioned in the Wild Salmon Policy. reasonable to assume that because the Aquaculture Policy Framework was completed in 2002 was, in fact, referred to expressly in this exact paragraph of the Wild Salmon Policy using the same language, "aquaculture development" where the Aquaculture Policy Framework, in fact, defines "aquaculture development" to mean sustainable development, is it reasonable to believe that aquaculture development in the Wild Salmon Policy, in fact, is meant to be sustainable? If the Wild Salmon Policy defines "sustainable development" in its own way according to the Brundtland Report, that would certainly be something that could

potentially reflect on the aquaculture policy.

I'm just asking about the aquaculture development.

Do you believe that that is consistent with the Aquaculture Policy Framework and the Wild Salmon Policy?

DR. IRVINE: I think you're mixing things up a little bit. You know, the Wild Salmon Policy is not

- DR. IRVINE: I think you're mixing things up a little bit. You know, the Wild Salmon Policy is not about aquaculture. The Wild Salmon Policy is about wild salmon. And aquaculture is considered the same as other human activities in terms of -- of their impact on wild salmon. Sustainable development, sustainability is an important objective, as articulated in the Wild Salmon Policy. But really, aquaculture is just one of many potential impacts on -- on wild salmon. So that really, the Wild Salmon Policy doesn't -- doesn't articulate anything really about the development of aquaculture.
- So aquaculture is just like any other human activity except for the fact that Dr. Hyatt has actually agreed with me that aquaculture can, in fact, help alleviate some of the stresses on wild stocks through overfishing.
- DR. IRVINE: Yeah, as can enhancement, as can nutrient enrichment. There's many different ways that one can ameliorate impacts on wild salmon.
- MR. HOPKINS-UTTER: All right. I have just a few more questions, Mr. Commissioner.
- MR. WALLACE: I do note the time. It's well over the 20 minutes.
- MR. HOPKINS-UTTER: I do note the time as well. I apologize and I will wrap up very shortly.

 O Ms. Stalberg?
- MR. HOPKINS-UTTER: Mr. Lunn, please take us to Exhibit 181. This is page 2, the very first bullet. Page

2, first bullet at the very top.

She will say the question of how the WSP would relate to aquaculture came up in WSP consultations and that her response was consistent with the aquaculture sidebar on page 36 of the WSP.

It reads:

Q Ms. Stalberg, is that still your view? MS. STALBERG: Yes.

MR. HOPKINS-UTTER: Mr. Lunn, please --

Q Thank you.

6

7

8

9 10 11

12 13 14

15 16 17

18

19 20 21

26

31

32

37 38 39

40 41 42

43

44 45 46

47

MR. HOPKINS-UTTER: Mr. Lunn, please take us to Exhibit 8, Wild Salmon Policy. This is electronic page 43, upper left-hand side. This is paper page 36. It reads at the top:

> Aquaculture operations will be regulated in a manner consistent with other human activities that may adversely affect salmon or their habitat.

It then reads:

Specific conservation units of wild salmon are threatened by aquaculture operations. Corrective actions will be taken under the Fisheries Act or --

- and I emphasize the word "or" -
 - -- longer-term solutions will be pursued as part of an integrated planning process.
- Do you agree with those statements still? MS. STALBERG: Yes.
- Can you elaborate on what longer-term solutions under the integrated planning process are or perhaps indicate whom we could direct that question to?
- MS. STALBERG: I think that those types of conversations need to happen. They may already have started to be considered after my tenure ended. So other panel members may be able to answer that. But how these kind of implications are incorporated into Strategy 4, we hadn't started talking about those kinds of -- how they might be managed.
- MR. HOPKINS-UTTER: At the very bottom of that same blue bar, Mr. Lunn, it reads:

The risks of hatchery and production --

This is under WSP Implications Salmonid Enhancement Program. I'll refer this to Ms. Stalberg being on the -- on OHEB but I'll open it to the panel.

The risks of hatchery production to wild

salmon will be assessed through the development of a biological risk assessment framework.

Can you say what progress has been made on that framework?

MS. STALBERG: No, I was not involved in the hatchery aspect or salmon production aspect for the Wild Salmon Policy. That was more Carol Cross. She might have shared some information with me but it's more Carol Cross, Blair Holtby and perhaps other members of the team here.

 Q Thank you.

MR. HOPKINS-UTTER: And this is my very last question.

Mr. Lunn, please take us to Exhibit 216,

Aquaculture Policy Framework, page 27, second-tolast paragraph, midway through beginning with the
word "further". Did you keep up? Page 27, midway
through, second-to-last paragraph, the big one at
the bottom reads:

Further, DFO's regulatory decisions supported by enhanced science, improved decision-making and management frameworks will be based on risk management approaches endorsed by the Government of Canada, including adaptive management, involving ongoing monitoring and, where required, the application of the precautionary approach to reduce the likelihood of unacceptable outcomes.

Q So would you agree with me that since the Aquaculture Policy Framework was, in fact, completed, the year before the document framework for the application of precaution in science-based decision-making about risk, which is Exhibit 51 in the Commission, is it safe to assume that the phrase "risk management approaches", "sciencebased risk management approaches and adaptive management", in fact, refer to that document or anticipate it? Is it reasonable to read this paragraph in the Aquaculture Policy Framework and say that that document, the framework for application of precaution in science-based decision-making about risk likely applies to the Aquaculture Policy Framework being the government document on the application of science-based

20
PANEL NO. 7
Cross-exam by Mr. Hopkins-Utter (BCSFA)
Cross-exam by Mr. Leadem (CONSERV)

decision-making about risk and the precautionary principle?

MS. STALBERG: I couldn't say.

MR. HOPKINS-UTTER: All right. Thank you very much. Those are my questions, Mr. Commissioner. I apologize for going overtime.

MR. WALLACE: Mr. Leadem?

MR. LEADEM: Leadem, initial T., for the record, Mr. Commissioner, for the Conservation Coalition.

CROSS-EXAMINATION BY MR. LEADEM:

My questions to the panel members will all be very general in nature and with an aim of helping me to shape some of the recommendations that my clients may make to the Commissioner at the end of the day. And I'd like to begin by acknowledging, Dr. Irvine, your paper where you learn some lessons about the development and I want to now focus upon the lessons learned in the implementation phase and see if we can flesh some of those out.

I'll begin with one that I've heard some of the panel members say that it would have benefited the implementation phase of the Wild Salmon Policy to have a facilitator or a champion -- sometimes I heard that expression used -- that would be able to take on the task of ensuring that the Wild Salmon Policy actually was implemented within certain timeframes would be an enabler. There seems to be some consensus among the panel members that that is indeed something that would have -- that the appointment would have benefited the implementation phase. Is that correct?

- MS. STALBERG: Yes, it is, from my perspective.
- Q And Dr. Irvine, you were nodding your head while I was speaking.
- DR. IRVINE: Well, certainly in the manuscript -- the paper you referred to, I did talk about the importance of having a committed and passionate champion. And I would think -- I mentioned, I think it was several days ago that I've noticed that we have been receiving a lot more direction and coordination during the last year or so, so that it -- it certainly does -- the implementation of anything as complicated as the Wild Salmon Policy does require a lot of coordination. And -- and as I've just mentioned, I think that task or

- that activity has been -- I've been seeing a lot of evidence of improvement over the last year or so.

 But if you had a specific individual or a specif
 - Q But if you had a specific individual or a specific team that had, as its primary focus, had as part of its work plan, the implementation of the Wild Salmon Policy, almost on a month-to-month or even a day-to-day, week-to-week basis, that surely would assist the process in -- in moving it towards completion, would it not?
 - DR. IRVINE: And there is such a committee. This is the implementation committee. And I think it went through a number of individuals over the first couple of years. But as I just mentioned, I've seen evidence of a lot more direction in -- in the last year or so.
 - All right. So you would agree with me that the sense of direction is important because otherwise you tend to get rudderless and you tend to go around in circles and not find your way to the end of the day. Is that fair?
 - DR. IRVINE: That -- that certainly can happen. You know, it's a very complicated issue. It's got multiple sectors, multiple people, people's jobs are changing, there's many other issues. So it's a complicated task, you know, the implementation of this policy.
 - Q And by its very nature, the fact that it's complicated, that says to me at any rate, looking at -- somebody from the outside looking in, that it would actually benefit from someone with a good sense of direction to guide this home. Isn't that fair?
 - DR. IRVINE: Well, I think you could say that about any -- any activity.
 - All right. Okay. I'll move on and talk about another potential submission at the end of the day in terms of recommendations and that's the question of funding. We talked a lot about the funding issue. And I'm not talking about just throwing money at the Wild Salmon Policy in order to get it to a certain phase. I think it has to be a judicious expenditure of money. Would you agree with me?
 - DR. IRVINE: Sure.
- Q Mr. Saunders seems to be nodding his head as well.
- 47 MR. SAUNDERS: Yes.

22
PANEL NO. 7
Cross-exam by Mr. Leadem (CONSERV)

- Q In other words, you just simply don't throw the money at the problem but you actually have to figure out where to spend the money in the most economical, efficient manner; isn't that fair?
- DR. IRVINE: Yes, that's the case.

 Q All right. And I don't want to necessarily suggest where that ought to be spent but my information is, is that the monetary and the habitat seems to be the most costly in terms of the potential costs of this. Is that right, Ms.

Stalberg?

- MS. STALBERG: I don't think we can make that conclusion yet because we haven't seen what Strategy 3 will produce and the type of monitoring that might be involved there and then how that is sort of divvied up; which parties will be undertaking which tasks? So we can't yet say what will be under the auspices of the department and it certainly is expensive to monitor the Strategy 2 indicators whether you are minding existing data that may or may not be robust or doing fieldwork or doing it remotely. But we haven't yet developed a framework to determine the cost.
- Thank you. And I'm wondering because the province owns so much of the habitat and is concerned also about habitat, whether there should be some really concrete measures to engage the province more directly in terms of having it have -- do its share of the -- of the fiscal load; in other words, that the province should be actually contributing to some of these fiscal measures. Would you agree with that?
- MS. STALBERG: Well, it's the department's policy so we're -- the department's responsible for its delivery. There is a federal/provincial MOU on data sharing and I'm not sure what the status of that is, like if it's topical or if it needs to be revitalized but that's an area where the agencies could revisit who's generating what kind of data and how is it shared. So for example, that monitoring work that was done in the Interior Fraser Coho CU that cost \$55,000 to generate, maybe it would cost less through revitalization of that MOU.
- Q And I fully appreciate the Wild Salmon Policy is a federal policy, obviously. But what I'm driving at is that you will -- there will be some

23
PANEL NO. 7
Cross-exam by Mr. Leadem (CONSERV)

provincial derivatives that will come from this Wild Salmon Policy. In other words, by defining habitat and indicators and looking at these measures, the provincial apparatus for assessing environmental development or development that may impact the environment will also benefit from this, would it not, Mr. Saunders?

MR. SAUNDERS: If I might, I agree with Ms. Stalberg's assessment that it's going to take -- it's too early to tell what it's going to take but I also agree, Mr. Commissioner, that there are some linkages between the province and other interests around understanding the state of salmon habitat and ecosystems where there is a tremendous opportunity for synergy. I would hesitate to say that -- to ask others that there's some kind of demand out there for them to participate in a federal -- implementation of a federal policy. But I think there are strong incentives to collaborate and I would sort of refer to the province's Living Water Smart Policy that explicitly talks about the health of watersheds and make some commitments that are very, very closely linked to the Wild Salmon Policy and, in fact, I think their current website refers to that linkage.

And I would, you know, look to the -- perhaps the RDG panel to clarify what current discussions are in play and formal agreements. But I -- I think there's a tremendous amount of opportunity to work together. And therein lies some of the -- the question around the cost. If we're working together in the -- it's a project that Ms. Stalberg referred to, there is some indication that the costs in sharing the data could be almost minimal or shared across many orders -- several orders of government. So it could be quite feasible to -- to take on these pressure indicators for a cost much below what we currently think it might. So I think there's lots to do in terms of pursuing those -- those relationships.

Q So in terms of the actual progress of the engagement of provincial government and local governments that those kinds of questions would better be asked of the RDG panel that's coming up next?

MR. SAUNDERS: That's true. Sort of the high-level

connection, absolutely. I think we've done a lot of work, as Ms. Stalberg's talked about, at the working level across the two -- the organizations but the formal relationship and agreement to work at a higher level should be discussed with the RDG panel.

Q All right. I'll reserve that for them then.
MS. STALBERG: And I would add that during my tenure,
we did, at the working level, look for synergies
between provincial programs and the Wild Salmon
Policy. So the fishery-sensitive watersheds,
that's a forestry-related program and they, too,
are utilizing indicators so trying to build those
relationships. Well, are they monitoring certain
indicators that we have an interest in? So
contacts were made along those kind of lines and
then as well I've referred to data mining as one
way of reporting out on, figuring out habitat
status. And it's sort of only as good as the data
that is within the repositories.

So we did, through Strategy 2, run a pilot where we gained funding through that Fraser Salmon Watershed, it's the Living Rivers Program, to have DFO's scientific licenses, the reports that came in, automatically be input into what's called the Fisheries Information Summary System. So that's a collaborative data source between the province and DFO. And data may not sound exciting but that kind of information can then lead to, say, new fish observations that can influence boundaries of the conservation units and habitat status so trying to build efficiencies into the relationship.

And certainly after that pilot, in talking with the data manager, who was on my team and led the project, the province was still, you know, asking for those reports, "Are any more coming?" So there is a willingness there and these types of pilots show the opportunity for collaboration. It does take, though, energy or resources to set them up.

Q All right. I want to move on to another potential recommendation and this strikes me as being a rather obvious one. But if you want a policy, such as the Wild Salmon Policy implemented, there's got to be the political will; in other words, the minister has got to really issue the

25
PANEL NO. 7
Cross-exam by Mr. Leadem (CONSERV)

marching orders. And if the minister were to do that, we all know or expect that the people, the civil servants at any rate, would simply let it -- make it happen. Isn't that a fair statement of how things trickle down from the minister's office down to the level of implementation?

- MR. SAUNDERS: Could you repeat the question again for me, please?
- Q Well, it's a simple question in the sense that what I'm driving at is, is there has to be a political will to make the Wild Salmon Policy happen, to make it implemented. And if there were, then funding would be found and the program would find the right people to put into the right positions and the job will get done. To me, that seems almost axiomatic.
- MR. SAUNDERS: Well, I think we can demonstrate, Mr. Commissioner. I would agree that, yes, there is direction from the minister and, in fact, a series of departmental priorities that inform programs moving forward. And indeed the Wild Salmon Policy is imbedded as part of -- and I forget the exact language but fisheries reform, you know, modernization of the fishery, and it is imbedded in there. But I think it's a more complicated question around an expectation. I mean the priority is there as an activity but I'm not sure I would agree with your -- I'm not sure where you're going with how that would modify the situation that we're in right now.
- All right. Well, and I don't want to necessarily debate this with you, Mr. Saunders, but essentially, to my way of thinking and being a product of the civil service for many years myself, the way that things often get done is that the minister speaks and people listen and react and things get done. That's how governments function. There -- they tend to be very toporiented so that the minister being an elected official has the final say in a lot of these things. So that if there were a real political will to have the Wild Salmon Policy implemented within a year, I can't conceive of how that could not have -- could not happen.
- MR. SAUNDERS: Well, I think, yeah, the key point you're making is within a year. If that were the case then there would be some level of discussion

about how that would actually happen. Would additional resources be required? What would that look like? Or what would -- what would not be done. It might be helpful to -- Mr. Commissioner, to explain -- I mean there is how we move forward on addressing priorities and how we utilize the resources that we have. And I certainly, as a manager, I would see myself as a middle manager responsible for salmon assessment and freshwater ecosystem research. I receive a budget that is relatively stable and of course subject to some fluctuation. Resources come in to address certain priorities. And resources are taken away as a result of reallocation. And we've heard that we're going into a departmental-wide reallocation.

So we are certainly -- we operate -- I have within -- I can reallocate within programs but recognize -- within my purview, subject to approval from the regional director of science. The regional director of science has an opportunity to reallocate among programs within -- within science and within -- nationally, the ADM of Science has an opportunity if priorities change, to reallocate. And in certain circumstances, we have opportunities to get new monies through Treasury Board submissions and the like.

With the implementation of the Wild Salmon Policy, I mean we've operated for the last five years under clear direction of the policy, which states that we are changing the way we do business and we're operating within the existing resources that we have. So it's -- it's really not as -- as we move forward, we're moving forward at the speed that we can with the resources that we have. So unless something changes where something, as you suggest we have to do it now within a year, you know, we -- there may be -- that would be a -- something would have to change and we have to reallocate and not do something -- something else or go after new money, Mr. Commissioner. Understood. I want to move on to discuss Strategy

Q Understood. I want to move on to discuss Strategy 6.2, that's the five-year review. That's the -- I think -- and let me see if I have the evidence correct because this was just touched on very briefly. Is it the case that Strategy 6.2, the five-year review, is actually in abeyance right

now, that it's just been deferred? Is that -- is that -- do I have that correct?

- MR. SAUNDERS: I think that's a fair -- fair statement but I -- again, we spoke about this earlier, Mr. Commissioner. I think it's a question for the -- to clarification to the RDG as the reason behind the abeyance, is the word you use.
- Q All right. Could I ask you, in terms of your respective roles, whether the -- one of the factors behind the deferral was the fact that this Commission was called?
- MR. SAUNDERS: Yes, I -- I think that's -- in -- that's my understanding -- personal understanding and it's certainly -- there were discussions and I've said earlier in my testimony that it's for -- as a manager responsible for salmon and freshwater ecosystems so stock assessment research. There's a tremendous workload issue that take on -- in addition to the workload that we've got to take on that review, we felt it would be unfair to staff and impact other -- other deadlines that we have as well relating to our ongoing operational work.
- Q Right. But certainly getting back to 6.2, the panel would agree with me that that review, when it occurs, will be an independent review? In other words, it's not an internal review of DFO investigating its own policies?
- MR. SAUNDERS: It is absolutely to be an independent review.
- All right. And just on that deferral awaiting the results of this Commission, we heard some evidence earlier that scientists, such as yourselves, were told that they should not engage members of the public in terms of going to conferences.

 Specifically, I think there was one that -- at SFU last December on the decline in the Fraser River sockeye. There was also one in March. Recently, there was another conference held by SFU. Is there actually something from somebody that says thou shall not attend -- you, as scientists shall not attend a conference because this review is ongoing, this Commission is ongoing?
- MR. SAUNDERS: That's true. And again, that's a question, I think, for the RDG's. A decision was made at the RDG level regarding participation in meetings, workshops, conferences, that would relate to the question being addressed by this

1 inquiry. We also heard some evidence that scientists were 3 allowed to attend -- DFO scientists were allowed 4 to attend a conference that was hosted by the 5 Pacific Salmon Commission in June. So is there 6 some sort of parameter about which conferences 7 scientists can go to and which they cannot? I'm 8 just trying to get some idea. 9 MR. SAUNDERS: Again, that would be a question for the 10 RD -- RDG panel around the Salmon Commission 11 workshop and why we engaged in that and not in 12 others. 13 All right. Does any other scientist want to say 14 anything about this? Dr. Hyatt, do you have any 15 thoughts on this? DR. HYATT: I have -- I have nothing to add to that. 16 17 It's -- it's beyond my knowledge what the specific 18 rationale was. As Mr. Saunders as said, we have direction to -- or to not participate in external 19 20 forums, you know, unless there's clearance to do 21 And that clearance was provided for the June so. 22 workshop. 23 MR. LEADEM: All right. Thank you. Those are my 24 questions, Mr. Commissioner. 25 MR. WALLACE: It's ten after 11:00. The next is from 26 Mr. Rosenbloom. I'm not sure if we should start 27 that now or...? 28 THE COMMISSIONER: Well, what I would suggest is if we 29 take the break now for, say, ten minutes --30 MR. WALLACE: Excellent. 31 THE COMMISSIONER: -- and then return and Mr. 32 Rosenbloom will then have his opportunity to 33 cross-examine. Thank you. 34 MR. WALLACE: Thank you, Mr. Commissioner. 35 THE REGISTRAR: The hearing will now recess for ten 36 minutes. 37 38 (PROCEEDINGS ADJOURNED FOR MORNING RECESS) 39 (PROCEEDINGS RECONVENED) 40 41 THE REGISTRAR: Order. The hearing is now resumed. 42 MR. ROSENBLOOM: Mr. Commissioner, Don Rosenbloom. 43 represent Area D Gillnet, Area B Seiner. 44 Commissioner, I said at the start of this 45 morning's proceedings that I will be some time,

and I will certainly be over my estimate.

remind you, Mr. Commissioner, that as I look at

46

the hearing room today, I appear to be the only lawyer representing any of the commercial interests, the commercial harvesters that are and I'm not speaking of the Aquaculture group that is here - and is cross-examining, and I would appreciate the courtesy of being afforded the opportunity to obviously have my questions answered.

CROSS-EXAMINATION BY MR. ROSENBLOOM:

- Firstly, if I may follow up on evidence given this morning in cross-examination regarding federal/provincial relations, and mention made of an MOU, a memorandum of understanding, between the two governments. Little was said in your -- in your testimony this morning about it, and we are faced with hundreds of thousands of documents at this inquiry. But I don't believe that MOU is as yet produced, or an exhibit in these proceedings, Mr. Wallace.
- MR. WALLACE: Mr. Commissioner, the MOU will be produced in the Habitat Management topic, where it is appropriately covered.
- MR. ROSENBLOOM:

1

3

5

6

7

8

9 10

11 12

13

14

15

16

17

18

19

20

21

22

23 24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

- Is this MOU related exclusively to habitat issues, Ms. Stalberg?
- MS. STALBERG: I'm not sure, and I don't have a copy to provide to you handy right here. Yes.
- MS. STALBERG: The scope of it I cannot recall. I appreciate that, nor did anyone expect that you would have it in your purse to hand over to us today. But I have a general question regarding federal/provincial relations, and I appreciate each of you is specialized within an area and speaking only to that area. In the context of your area of responsibility within DFO, or in the case of you, Ms. Stalberg, your previous responsibilities with Habitat, my question is this. Is the level of cooperation between the federal and provincial government and their -their jurisdictional -- let me rephrase that. the cooperation between the two levels of government to what the public would expect in respect to fishery management in the areas of your focus, and I might take it panel member-by-panel

member. Does it fall short of what would be the public interest? Ms. Stalberg.

- MS. STALBERG: I'm thinking and thinking and thinking.

 It may take me a while to think about this one.

 I'm not sure if you want to move on to other panel members while I'm thinking.
- Well, there's a -- there's a comment that lawyers make during a legal process such as this, which is "Let the record show that it has taken you a long time to deliberate about that question". I get the impression, and we're supposed to be obviously here to inform the Commissioner, and it's important that the Commissioner receive your perspective, being on the ground level, dealing with these kind of issues day in and day out. I invite you to be blunt from your perspective, whether you believe that the level of collaboration is what the public would expect.
- DR. HYATT: I'm willing to begin that response to that question while Ms. Stalberg has some time to gather her thoughts, partly because I do interact with the province at a number of levels through my capacity as a scientist working on implementation of Wild Salmon Policy.

So let me first say that at the working level there are a number of important interactions that have taken place and that are ongoing between the federal government and the provincial government, of -- where technical personnel are involved in examining a variety of issues that influence both the province and Canada and that are relevant to the Wild Salmon Policy. I'll cite three.

First, there was an initiative undertaken by the province called "Hectares BC" in which the proposal was to essentially assemble data, the kinds of indicator data that both levels of government require to manage and to assess various resource concerns, including Wild Salmon Policy. And the way they propose to do this was to divide the province up into -- and I may get the numbers wrong, but it was something like 16 million or 60 million one-hectare cells, and then to associate data on roads and environmental variables with each of these one-hectare cells in such a way that each time a question of resource assessment came up, one could interrogate this database and say, for example, are there wild salmon there? If so,

are there CU's of Coho or Chinook present? And then query it further and say, and are any of those problematic in the sense that they are at risk? So this is a brilliant solution to the problem of multiscalar assessment, where one has to work at large ecosystem scales, or very small scales to resolve issues that happen at multiple scales.

So we participated in this and provided essentially information on wild salmon populations for incorporation into that, and Matt Austin, who was the lead from the provincial side was one of the architects of that initiative.

- Q Dr. Hyatt, I hate to interrupt you, but my time is so precious --
- DR. HYATT: Yes.

- Q -- and I am not so concerned for a listing by you and by this panel of where there has been cooperation, but because my time is so limited, and Commission Counsel can draw these kind of details out of you in re-examination if the Commission feels it's in its interest. I am more interested in the question that I have posed to the four of you, which is, is generally from 30,000 feet up, is the level of collaboration between the two levels of government at the level that the public would expect, or do we have problems? Yes, Mr. Saunders.
- DR. HYATT: Collaboration -- well, just let me finish.

 O All right.
- DR. HYATT: Collaboration waxes and wanes. During the period when we had an active pursuit of watershed-based fisheries planning with the province, it was at a level that the public would expect. Under Wild Salmon Policy implementation, based on that comparative set of activities that occurred previously, one would say we would be looking for a greater engagement at this time to meet the public good, and certainly to accelerate the implementation of Wild Salmon Policy.
- Q Well, I want to come back to your response and I thank you for it. I believe other panel members want to make a preliminary response to my question. Mr. Saunders.
- MR. SAUNDERS: Yes. Mr. Commissioner, I wouldn't pretend to know what the public would expect. But my personal -- my personal thoughts on the matter

are that we have done -- that there has been a good level of communication and work at the technical level, but that the -- for the collaboration, and this will be, I'm sure, a big subject under Strategy 4. And there's a need to have some kind of a -- it's not one MOU. It's not who's going to meet with who. It's about a whole establishment of a collaborate governance mechanism that's going to allow four orders of government to work together. And do I think we need to do more? Absolutely. Moving forward from here it's going to be the key, absolutely essential.

- So would you agree that it's fallen far short of what would have been your expectations towards the implementation of the WSP?
- MR. SAUNDERS: I don't know that it's fallen -- I don't think it's fallen short. It's just -- it's something that we're moving towards. I have always thought that Strategy 4 would be probably the hardest piece to move towards. It's just a continuous process to try to get to where we want to go. I'm not going to say that what I thought where we -- I didn't -- I was under no illusion this was going to be an easy thing to establish collaborative sort of governance mechanisms. I think most -- it's like a players, you know, your first elementary school dance and everybody's standing around trying to figure out how to -- how to make this thing happen.

And I think that's part of four orders of government, governments are stressed for resources and capacity, and nobody wants to be left committing and holding a single bag. But the power is in the collaboration, and I think we're in the early stages of trying to understand how to make that happen.

- From your perspective is that early stage such that we really are still on the dance floor with the first dance?
- MR. SAUNDERS: I think there's been a lot of work done, and I can speak to, you know, projects. I referred to the Fraser Salmon Watersheds Program. There's a collaborative watershed governance initiative there that has brought together a provincial and four orders of government to talk about what that might look like, and the idea is

well advanced. But in terms of formal discussions between governments, I think it's still in its -- probably in its early days.

Q Ms. Stalberg?

- MS. STALBERG: Thank you for the time. I would say that similar to my team members, panel members, that we have yet to figure out, sort out how would the -- the monitoring results would influence provincial decisions. There's one thing to implement monitoring programs, but if there are land use changes needed or how the land base needs to be managed differently, if that's under the auspices of the province, we have yet to -- unless there has been decisions made subsequent to my tenure, those conversations with the province on how they may change the way that they manage water, or manage land use, land types development, had not yet been determined.
- Q And Dr. Irvine, do you have anything to add?
 DR. IRVINE: Nothing too specific, except that I don't think any of us can really comment on what the public would expect in terms of collaboration.

 And just to comment that I have personally collaborated with non-federal scientists, including provincial government scientists, my whole career.
- Yes. Well, let me answer your question about what the public would expect. I'll suggest to you that the public would expect a level of collaboration wherein the provincial government would be working with the federal government to the extent that the federal government could implement as quickly as possible the WSP with full provincial cooperation. All right? That doesn't change your response, Dr. Irvine?
- DR. IRVINE: Well, no. I mean, I think when you're talking government-to-government interaction you really do have to talk to the RDG's. But at the working level, science is all about -- scientific development is all about collaboration among scientists. So we work very closely with others.
- Q Thank you. Now, we're all here to try to assist the Commissioner in his later deliberations in respect to these kind of matters. And if I can borrow an idea from Mr. Leadem in his cross-examination, but in a different context. He spoke about a facilitator being brought in, but in a

different context. As I hear your responses today regarding federal/provincial matters, can you imagine that it would be of -- of assistance to you in the implementation of WSP if a facilitator was appointed that would really be dealing with the federal/provincial matters to ensure that there is total cooperation on both sides, leading to effective implementation?

- MS. STALBERG: I have a first take on that suggestion. I'm not sure that it needs to be -- if it's a facilitator as an external facilitator, someone outside of the provincial/federal government. I think that -- that would be one of the roles of the champion, the WSP champion, and that could be -- that could be the role of the coordinator. Again it depends on -- it needs to have the right -- the right person needs to be in that role, so has a broad understanding of the DFO programs and is able to inspire these kinds of collaborative works, but in a realistic pragmatic way, and articulate what we're doing now, what we want -the vision, what we want to move forward to, what changes are required and what resources are needed pursuant to those changes.
- Q Thank you. Now, before moving onto another topic, Dr. Irvine -- excuse me, Dr. Hyatt, in your response, you gave less than what I would call a ringing endorsement to the level of collaboration that has been experienced up to this point in time. Do you have any recommendations as to how to bring the level of collaboration to a standard that will be more effective for the implementation of the program, WSP?
- DR. HYATT: Well, coming back to a comment that Mr. Saunders made, it isn't a single memorandum of understanding, but an entire range of formal commitments that and informal commitments that need to be made between different levels of government, different orders of government, to cooperatively first identify whether Wild Salmon Policy implementation satisfies common objectives, and then given that it does, to implement, to support implementation to meet those common objectives.

To elaborate a little bit on your novel suggestion of a facilitator, I might add to Ms. Stalberg's comments that not only should such an

individual be knowledgeable about DFO institutional practices, and, you know, content and process, but also equally knowledgeable about provincial content and process, in such a way that the commonality where common cause can be identified and pursued, it then could -- could find, you know, faster support to see implementation move forward.

- Q Thank you very much.
- MR. SAUNDERS: Might I make a -- add to the...
- Q Yes.

 MR. SAUNDERS: Your suggestion about a facilitator, Mr. Commissioner, I find quite interesting. I'm not sure, again as Ms. Stalberg said, are you talking about a facilitator that would be there for just process to facilitate movement, or engagement between the four orders of government. But I think there's also a potential there that really we've got four orders of government that want to understand the status of the ecosystems and in varying degrees are working towards that, and they want that to inform their -- make good decision-making around sustainability and governance of their activities.

Something along the idea of a board or a body that would take on, on behalf of those four orders of government, the -- you know, bringing together the technical requirements around understanding the state of ecosystems and the ocean, coupled with, you know, assisting in that collaborative move. I think there could be some merit in thinking along those lines.

Q Thank you very much. I'd like to move on. I believe in my cursory examination of the agenda for the upcoming hearings in respect to this inquiry that I don't think see any of you again. Do any of you -- are any of you informed that you're going to be back on any panel? And assuming I am correct about that, I have these questions for you, and again if -- and I'll direct them to Dr. Irving and Dr. Hyatt. I think they're most appropriate to the two of you, and I raised these two questions with Dr. Holt yesterday. They deal with the issue of biodiversity and the very foundation of the WSP.

Isn't the salmon and sockeye fishery largely dependent on a relatively small number of large

1 stocks. First, do you agree with that? DR. IRVINE: First of all, I don't think any of us know 3 if we're coming back. You know, we didn't expect 4 to still be here --5 All right. 6 DR. IRVINE: -- this week. So what happens next year, 7 who knows, but... 8 Well, let's -- we're assuming for a moment in my 9 asking you these questions that I may not have 10 another opportunity. 11 DR. IRVINE: Certainly. 12 So your answer to the question? 13 DR. IRVINE: Okay. So the question was is the 14 commercial fishery, I think you were -- are you 15 limiting it to the commercial fishery? Well, I'm limiting it to the sockeye fishery, 16 17 largely dependent on a relatively small number of 18 large stocks. 19 DR. IRVINE: The Fraser commercial fishery for sockeye 20 salmon is largely -- is numerically largely 21 dependent on a limited number of conservation 22 Of what? 23 24 DR. IRVINE: Well, we're talking conservation units, or 25 I mean, I'm not sure what you mean by "stock". 26 All right. 27 DR. IRVINE: Maybe you could define what you mean by 28 "stock". 29 What I mean by "stock" is the sockeye fish of the 30 Fraser watershed. 31 DR. IRVINE: Yes. So stocks are commonly, or one 32 interpretation of a stock is a unit of management 33 convenience. It's not a biological term, which is 34 why we've kind of gone to conservation units. 35 I think, you know, clearly there are conservation 36 units that contribute the number -- you probably, I don't know what the details would be, they're 37 probably 85 percent of the catch of Fraser sockeye 38 39 in the Fraser commercial fishery would be 40 represented by, I don't know really, maybe --41 Maybe four stock, four areas? DR. IRVINE: Well, I'd rather you talk in conservation 42 43 units, because we're not clear what you mean by a 44 stock. I mean, if you think of the four major run 45 timing groups as four stocks, that really

comprises all of the conservation units. So I

think that you -- you presumably want to drill

46

down a little bit. But certainly there's, what did we say, 30 conservation units, and so the catch would be represented by -- 95 percent of the catch would be represented by fewer than half of the conservation units.

All right. Now, isn't it true that some of the

- All right. Now, isn't it true that some of the small stocks that are the main concern for sockeye biodiversity loss in the Fraser rear in smaller lakes like Cultus that have no potential for ever replacing losses if something bad should happen to the larger stocks?
- DR. IRVINE: Well, yesterday I referred to the work of Dr. Hilborn that showed in --
- Q Bristol Bay.
- DR. IRVINE: -- Bristol Bay that --
- Q Yes.

- DR. IRVINE: -- that there was a dramatic shift in the stocks, the stocks that contribute to the fishery over time. So it's clear that, you know, certain populations or conservation units do better than others under different climate conditions. But that being said, obviously these maximum size of a conservation unit is limited by -- there's different limiting factors, but certainly the size of the rearing environment is one of the major limiting factors.
- Q Dr. Hyatt.
- DR. HYATT: Just to add an element to this, this question, or at least to the answer to the question. When you have small conversation units that represent different elements of biodiversity, those units may do much better under variable environmental conditions than the currently dominant ones. What you're excluding from your question is the prospect that those small units might well repopulate areas with a genotype or a local adaptation that could replace larger units in the fullness of time. So, you know there are a couple of things going on here.
 - Right. I want your responses to these questions on record. I thank you for that. Carrying on with that question, isn't it true that if something really bad does happen, for example, because of climate change, that the smaller and less productive stocks are likely the be the first to go?
- DR. HYATT: I could not agree with that statement,

because the smaller and less productive stocks have different adaptations, different characteristics. For example, one of the small and relatively -- well, in terms of total production, stocks that I work on in the province are Okanagan sockeye, and they are a small stock that actually lives in a desert environment where they're exposed year after year, decade after decade, to extremely high temperature conditions. And it may well be that this -- you know, this very small stock is the very type of genotype that will do well under climate change in the future, or provide the genetic material for -- you know, for sustainable production into the future.

- Q Thank you. Dr. Irvine, do you have anything to add?
- DR. IRVINE: No, I think that covers it.
- Thank you. Another question on the biodiversity before I move on. If the Wild Salmon Policy is not a policy to protect biodiversity at all costs, but a practical policy to ensure biodiversity ensure biodiversity, then why does the science backup for it not include explicit analysis of the trade-off relationships between use rate, meaning harvest, and expected biodiversity loss, instead of just specifying a set of benchmarks or targets for conservation units?

I posed this question yesterday to Dr. Holt. I would like the response of both of you, Dr. Irvine and Dr. Hyatt.

- DR. IRVINE: Well, the Wild Salmon Policy doesn't provide all of the guidance and direction. There's a lot of research and activities that are going on pertaining to the Wild Salmon Policy, particularly from a science perspective, that are not articulated in Strategies 1, 2 or 3. My understanding of the FRSSI process in the Fraser is that they are looking at relationships between exploitation and stock abundance, population abundance. So I think it is being, I believe, examined within the FRSSI process. So, yes, I think I'd leave it at that.
- DR. HYATT: One of the assumptions behind your question is that there is some finite and readily pursuable analysis that one can execute that would relate use rate to biodiversity loss. And that is -- is an oversimplification of really what's involved.

The Wild Salmon Policy looks at biodiversity values, not only among the salmon CU's themselves, but regional biodiversity where salmon are linked in important ways to landscapes, habitats and other species, other biota that may be highly dependent, or at least very strongly linked to salmon. And really, the methods — the methodologies of science and the limits of science, particularly in trying to pursue Strategy 3, preclude that kind of finite analysis where we would have any confidence.

We barely understand the relationships between exploitation use and the finite probability of loss for salmon CU's themselves within a species, much less among salmon species, and to enlarge that issue to other forms of biota really just transcends our abilities at the present time to do these sorts of analyses. So you do really run up against knowledge limits rather quickly in this area.

- Q Well, the Policy states that social and economic consequences will be part of the decision-making process. My question is what economic studies has DFO done so far and what studies are in the works in terms of then moving to implementation?
- MR. WALLACE: Mr. Commissioner, we've drifted, and I think are now squarely into issues of Strategy 4, which will be dealt with in the New Year.
- MR. ROSENBLOOM: Happy to defer if that's -- MR. WALLACE: Thank you.
- MR. ROSENBLOOM: -- the Commission's desire.
- Q Dr. Hyatt, do you believe that it should be a high research priority to try and understand the mechanisms that are apparently causing delayed density dependence and cyclic dominance in some major sockeye stocks, and could be partly responsible for observed declines and productivity in recent years?
- MR. WALLACE: Mr. Commissioner, this is squarely within the Harvest Management issue, and will be looked into at that time.
- MR. ROSENBLOOM: Oh, but is it, when Dr. Hyatt is present in this panel, and is a scientist assisting DFO towards some implementation of this program. I don't have this chance to ask Dr. Hyatt this question at any later date.
- MR. WALLACE: Mr. Commissioner, we've asked

participants to advise us of witnesses they think should be called on a particular topic. This is unlike a trial where once you have a witness, the witness is there for all purposes and you can be opportunistic to mine the depths of their knowledge. That would be very inefficient here, and we have allowed some of that, I'm afraid. But I would -- if the Commission staff is satisfied that Dr. Hyatt should be brought back on Harvest Management, then we can do that. But -- and indeed Mr. Rosenbloom can apply to you for an order that he do so. But this is not the appropriate time for examination, simply because he's here.

MR. ROSENBLOOM: I have a lot of trouble understanding this when I hear evidence for the last, whatever, three, four days of scientific investigation such as habitat evaluation, assessment towards the implementation of the WSP.

The question I have for Dr. Hyatt is to what extent is the focus on density dependence, delayed density dependence, a factor in the scientific research being done in connection with the implementation of the program? That's my question.

THE COMMISSIONER: Yes, I'll allow you to ask that question.

MR. ROSENBLOOM: You will allow me?

THE COMMISSIONER: Yes, I will.

MR. ROSENBLOOM: Thank you.

Q So, would you like the question repeated, or do you have it, Dr. Hyatt?

DR. HYATT: I believe I have it. The question you've posed is certainly of great interest to scientists who work on salmon population dynamics. So it's been an ongoing focal point for research for decades of time without -- without firm resolution. The weight of evidence suggests there are delayed density dependent interactions which should be taken into account, and the tradition on the Fraser has been to take such advice from -- from science into account, and it does inform management decisions.

Whether this should be a -- we have far less than perfect knowledge about this. It would be -- there are many elements of these delayed density dependent interactions that have been hypothesized

and for which there's some evidence for that we would like to know about. It's an issue that's tractable over time, but it's not something that you can immediately focus on and deliver kind of Nobel Prize winning results by next year, or even within the next three or four years.

- Of course not. But when you speak of relying on science, my question is has DFO initiated scientific investigation of this, either in connection with WSP, the Salmon Policy, or for any other purpose? Or are you relying on science meaning outside science?
- DR. HYATT: No, there are ongoing investigations by the, for example, the Fraser Lakes Group to look at conditions in the nursery lakes, to look at how changes in density over time and interactions between and among year classes may produce some of these delayed density dependent effects.

In the marine environment we're less -- we're less able to pursue this. Our capacity is somewhat more limited because the fish are -- disappear for quite a long time, and once they move out onto the high seas, we have relatively little contact with them.

- Q I'll come back to the issue of marine scientific work later on. But to carry on with this question of delayed density dependence, do you think, Dr. Hyatt, that increased fertility may contribute to the apparent dynamic instability represented by the cyclic dominance phenomenon, and should such instability be a concern in WSP implementation.
- DR. HYATT: I'm not certain that I understand the question. Would increased fertility?
- Q Yes.

- DR. HYATT: Increased fertility of what?
- Q Meaning the brood year, the increased fertility through what one might argue is over-escapement, may it contribute to the apparent dynamic instability represented by the cyclic dominance phenomenon, and should such instability be a concern of WSP implementation? That's my question.
- MR. WALLACE: Mr. Commissioner, in trying to understand that question, it strikes me that the addition of the suffix or the final phrase incorporating the words "Wild Salmon Policy", are -- don't really have much to do with the question. It's a tag

line, I suspect.

- MR. ROSENBLOOM: I think it has everything to do with the question. We are here on the Wild Salmon Policy. I'm trying to establish to what extent these scientists believe that delayed density dependence is a relevant factor for the DFO in its scientific investigations leading to implementation.
- THE COMMISSIONER: I think, Mr. Rosenbloom, it might be helpful to find out whether Dr. Irvine or Dr. Hyatt have in their involvement with the Wild Salmon Policy considered the topic that you are raising now, and have given it any personal investigation, or are aware of whether such investigation is taking place. They may not be the right witnesses to address all of the questions you're asking.

MR. ROSENBLOOM:

- Q And then I would tag on a question to Mr. Commissioner's suggestion, which is and do you -- if the answer is you haven't given a lot of thought to it, do you believe that thought should be given to it as part of the DFO processes leading to implementation? I wonder if either of you wish to answer.
- DR. HYATT: Well, certainly some thought is given to As Dr. Holt testified previously, one of the it. -- one of the models that was used to explore potential benchmarks for -- under Wild Salmon Policy was the Larkin Model, which invokes delayed density dependent interaction, and another version of that model, which is the sort of Kalmanfiltered Larkin Model that provides more weighting to production declines in recent years, and how that interacts, is an active subject of analysis to look at what the implications are for developing benchmarks under the Wild Salmon Policy. But that is the current limit certainly of my thought on this as a reviewer of that paper, and as a participant in the review itself and this testimony.
- Q Could you imagine a revisiting of benchmarks at some point in time where there was within the Green Zone a benchmark of an upper Green Zone, an upper-upper benchmark for too many fish? In other words, where remedial steps should be taken because of delayed density dependence?

DR. IRVINE: Perhaps I'll comment on that. I mean, the upper benchmark is generally regarded as being the escapement that would produce maximum sustainable yield. So I think -- I think you were exposed to sort of the stock recruit -- the basics of stock recruit analyses.

O Yes.

DR. IRVINE: And so depending on whether you're using a Beverton and a Holt or Ricker or a Larkin or Kalman or a hockey stick model, there's about six or seven of these different stock recruit models, it's sort of the point when it bends over, so when your recruits per spawner either asymptotes or starts to decline. So that's the point at which the -- it's generally regarded as that upper benchmark.

And I think what you are asking is whether additional escapement beyond that point would somehow be harmful to the environment or the population, is that sort of the intent of the question?

- Well, the intent of the question is whether DFO in approaching the implementation of the WSP is factoring in the issues of delayed density dependence and are prepared to take remedial steps if indeed their findings are that there are those issues of over-escapement.
- DR. IRVINE: Well, over-escapement is a complicated But essentially what tends to happen is issue. you get reduced survival, but you don't get -shouldn't have said survival. You get decreased recruits per spawner with increasing spawners. that the -- so you're increasing the numbers of fish on the spawning grounds, and you're not receiving the benefit in terms of additional recruitment that you had further to the left on the stock recruit curve. However, you are -- you are also introducing a lot more nutrients to the environment. And so really from an ecosystem perspective, when you get beyond that upper benchmark, this is normally regarded to be a good thing for the ecosystem. And then, of course, there are delayed benefits from the additional nutrients in terms of the generation of food organisms which the young salmon and other -other critters in the ecosystem will use. It's a very complicated issue, you know.

 mean, it's not, you know, you could have a panel up here and debate for days about, you know, whether the Larkin Model is the appropriate model, or the Kalman, or the Ricker, you know, and it also depends very much on the species, too. But Doctor, it may be good for the ecosystem, but

Q But Doctor, it may be good for the ecosystem, but not good for the stock, don't you agree?

DR TRVINE: No it's difficult for me to imagine why

DR. IRVINE: No, it's difficult for me to imagine why it wouldn't be good for the stock. I mean -- or at least why it would be harmful for the stock.

Q All right. Well, there will be evidence called about those matters later on.

I would generally have been asking questions about the socioeconomic studies that have or have not been done, but I will defer and raise those questions to panels that are to be before us subsequently.

My question is for Dr. Irvine. You said something that intrigued me earlier on in these proceedings, it feels like a month ago but it was actually December the 3rd, last Friday. And I'll just read it to and if for any reason you want context, Mr. Lunn can put it up. But it relates to the marine environment research matters, and you spoke of it in passing moments ago. You said:

And then I --

And this is, for the record, at page 64, line 23 of Friday's transcript:

And then I guess in the last three or four years I've suddenly - well, not suddenly - but I've kind of shifted to the marine environment, so I'm focusing on marine issues, because I feel that those are really what drive the production of Pacific salmon, and so part of that has been the co-chairing this Fisheries and Oceanography Working Group.

I'm intrigued by how strong your statement is, that the marine environment focus really is driving this fishery. And we've actually heard evidence to that effect, to the extent that Mr. Chamut testified, in fact almost pleaded with the Commission as he left, that there be more

attention to the research side of the marine environment of the two of the four years of cycle where the salmon are out in the Gulf of Alaska and the Bering Sea. Would you like to elaborate on your comments?

- DR. IRVINE: Certainly. It's interesting hearing what I said. You know, I'm not the most well-spoken person, but that sounded particularly awkward, but...
- Q Well, I didn't read it very well.

DR. IRVINE: No, what I really meant to say, or what -I guess as background, you know, I've been
studying Pacific salmonids for, you know, 35
years. Probably the first half of my career was
focused on the freshwater environment. And so
what I really meant was I made a conscious
decision to shift my research interests into the
marine environment, you know, within the last
decade or so.

In terms of what determines the production of Pacific salmon, you have to kind of think of it almost like a lifecycle event. So, you know, if an average female spawns, lays 3,000 eggs, you're probably going to have 50 percent of those that will survive to become alevins, and perhaps ten percent of those will survive to become smolts. So clearly the -- you know, the factors in the freshwater environment have a huge impact on the production of salmon. But that's where most of the research traditionally has taken place.

The research on salmon in the ocean for many reasons was considered to be largely a black box. It was just sort of beyond our capability to get out and understand what's going on in the ocean. And so, you know, a number of us have been making efforts to improve our understanding in the marine environment, and that's been one of my shifts in focus. And I do believe that the ocean is -- the marine environment is a non-constant environment. It's changing. We're seeing shifts in the periodicity and the frequency and the intensity of things like ENSO events, and these have major implications in terms of the survival of young salmon at sea. And that's really where we're trying to go with the fishery -- in part where we're trying to go with the Fisheries and Oceanography Working Group, because we're trying

- to link together these oceanographic factors to improve our understanding of survival in the ocean.
 - Q And it needs money.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

232425

26

27

28

29

30

31

32

33

34 35

36

37

38

39

40

41

42

43 44

45

46

- DR. IRVINE: Certainly. Additional resources is always beneficial.
- Q Well, not just beneficial, but am I correct in assuming that if this research is essential, if it is in your opinion necessary, that it will require a commitment from the Government of Canada and from Treasury Board to pull off this kind of expensive initiative.
- DR. IRVINE: And there are efforts being made. I mean, one of the hats I wear is a scientist with the North Pacific Anadromous Fish Commission, so Canada is one of five signatories to this -- this Commission. So we carry out a number, we participate in a number of collaborative cruises with American scientists, Russian scientists, Japanese scientists, so it's more than just a provincial/federal issue. It's expensive to study in the ocean, and so we need to be looking at -at ways of, you know, things like satellite imagery that we touched on earlier. I mean, there's -- it's an example of a technology that is rapidly developing, and there's the potential to get all sorts of new types of -- well, not new types, but additional information that's relevant to understanding the resource. But we need to have the -- the internal capacity to be able to take advantage of some of these technologies.
- Q Has DFO proposed scientific investigation that has been turned down by Treasury Board, or budget didn't permit?
- DR. IRVINE: I can't comment specifically on Treasury Board submissions.
- Q Right.
- DR. IRVINE: Perhaps Mr. Saunders can.
- Q Either Mr. Saunders, or I will ask it to the Director General, Regional Director General when she's on a panel.
 - Mr. Saunders, do you have anything to say?
- MR. SAUNDERS: Okay. Can you -- what was the specific question about Treasury Board?
- Q The question is whether there had been proposals by Pacific Region to carry out scientific investigation of marine environment issues such as

- just been referred to by Dr. Irvine that have not proceeded because the funding has not been approved.
 - MR. SAUNDERS: I'm not -- I'm not aware, but again a good question for the RDG, yes.
 - Q I appreciate that. I'd like to move on to --
 - MS. STALBERG: Excuse me, Mr. Rosenbloom.
 - Q Yes, sorry.

- MS. STALBERG: I would add that there were Treasury Board submissions made through OHEB to gain funding for the Wild Salmon Policy, and I think they were made '05 through '08. The dates are in the Operations deck that I've referred to in the past. And we got limited funding in one year, but there -- they weren't specific to the satellite imagery question that you were asking about.
- Q But were they specific to the marine environment? MS. STALBERG: No.
- Q No. In fact, were they focused on freshwater habitat issues?
- MS. STALBERG: I can't remember. They were sort of more broad in scope, linking in other programs, as well.
- Thank you. Ms. Stalberg, I now have a series of questions for you. When you arrived here your first day you wanted to make certain corrections to your précis of evidence, and you corrected reference to habitat assessment studies for Cultus Lake. And I believe if I understood what you said at that time, that to the best of your knowledge Cultus Lake assessment -- habitat assessment has not been done. Am I accurately reporting how you informed us that day?
- MS. STALBERG: Almost.
- Q Okay.
- MS. STALBERG: There -- we were talking about the twotier approach to characterizing the habitat under Strategy Action Step 2.1, and that there were both overview reports and habitat status reports. And I was asked if there was a habitat status report generated for Cultus Lake, because originally that had been put out as part of the pilot, the '05/'06 where we were piloting the structure of the overview and habitat status reports.

So upon reviewing the files, I found that there wasn't a habitat status report generated for Cultus. There was an overview report. And that

- overview report included information on the population, status of biological and as well as some of the habitat information.
- All right. What surprises me, and I'd like your response to this, is from the day that I arrived on this file I have seen so much reference to Cultus Lake and the dangers of extirpation of the sockeye of Cultus Lake, so much focus on it. Can you explain to this Commission why as we sit here today there has not been a habitat assessment report for Cultus Lake?
- MS. STALBERG: I can't say what the Department has decided to do since I left the program on WSP. The habitat status reports were, one, they may have thought that there was already one generated, though it's not within the web-mapping application, or I should say the share drive, as far as I know. So the -- I'm not trying to confuse you.
- Q How could they possibly think that? Surely the Department knows what they've done.
- MR. SAUNDERS: Well, I think there's a -- excuse me, Mr. Commissioner, there's a number of ways to get information about status on what's going on in Cultus Lake, and one possible mechanism for that would be a habitat status report. But I mean there is a tremendous amount of literature out there around the recovery team that was convened under -- under SARA, with resources from SARA to understand what the bottlenecks were with Cultus Lake. So examining the predator pits and all of the things that could be affecting and cause of the decline for Cultus, and keeping Cultus down. So I think it's just one -- one potential tool.
- So do I hear you -- before we go back to Ms. Stalberg, do I hear you to say, Mr. Saunders, that basically to have done a Cultus status report, habitat status report, would have been redundant, that you already had all the information. Is that your evidence?
- MR. SAUNDERS: No, I'm not saying that. I don't know the answer to your question, like, why we would not have done one. But it is one tool and one -- one template that you could use to gather information, and I don't know about the workings of the recovery team, which would be interdisciplinary and have looked at bottlenecks.

- So I don't know how the two compare. But it's just -- it would be unfair to say that, you know, the Department hasn't considered habitat in developing its response to Cultus.
- Q Well, sir, if you and Ms. Stalberg cannot tell me why a status report has not been done, who should I be asking that question to? Who would have the answer?
- MR. SAUNDERS: Well, the status report, I mean, that's a good question. It's not -- it's part of -- the status report was developed, is not -- we haven't identified priority conservation units. There isn't a -- we're still in the development of implementation around Strategy 2. So it has been utilized in some cases, in test cases, and it's not a formal requirement yet across the Department that you need to do a habitat -- fill in the habitat assessment.
- But isn't time being lost as the -- as we go year-to-year towards implementation of WSP. We're five years from the announcement. We can be six, seven, eight. Isn't it critical in the public interest that a status report on habitat be completed and acted upon during the interim while we wait for implementation of the policy?
- MS. STALBERG: Two parts of your question. The second part is a good question on what actions are being taken to protect Cultus Lake sockeye. And regardless of whether there's a habitat status report, that question would be better directed to Corino Salomi, who is the Area Chief of OHEB for the Lower Fraser area.
- She will be here, will she?
- MS. STALBERG: I do not know if he will be here as part of, say, the Habitat Panel. The habitat status reports are supposed to capture what has been done, and what could be done to recover the habitat for the species. And I am going to clarify, hopefully not add more confusion, but the 05/'06 pilot of the habitat status reports and the overview reports, including -- and the biological reports, Cultus Lake, there was supposed to be generated a habitat status report, and an overview report. And in my Ops deck I even had in there that there was a habitat status report generated. So it wasn't until this Commission that I went into the -- into our files and found that there

actually wasn't a habitat status report generated.
There was an overview. So that's what I'm referring to about confusion.

- MR. WALLACE: For the record, Mr. Commissioner, the Ops deck exhibit is exhibit the Ops deck to which Ms. Stalberg is referring, is Exhibit 148. It was referred to just now and previously with respect to the Treasury Board submissions.
- MS. STALBERG: Thank you.
- MR. ROSENBLOOM:

- Q Again to you, Ms. Stalberg, are you aware that the Pacific Fisheries Resource Conservation Council has been somewhat critical of DFO's approach and track record for habitat protection? That's my first question.
- MS. STALBERG: Are you referring to a specific report? Q I may be, I don't --
- MR. WALLACE: Mr. Commissioner, is this question grounded in Wild Salmon Policy?
- MR. ROSENBLOOM: It is, because the collateral question which I was going to ask you once you answered this question, because I assumed that you would be aware that that body has been critical of DFO's approach, but my latter -- my collateral question is going to be do you really expect better performance on habitat issues just because there may be the implementation of the WSP?
- Q So let's go back to the first question. Are you not aware that the Conservation Council has been critical of DFO for its approach and track record on habitat protection?
- MS. STALBERG: I remember a David Suzuki report that criticized the Department's habitat management, but I may have read one from the PFRCC, but I cannot recall, so...
- Q All right. And I don't have it to put to you right now.
- MS. STALBERG: Okay.
- Q But let me ask you this, out of -- out of the context of that report. Do you really expect better performance by DFO in habitat protection with the implementation of the WSP?
- MS. STALBERG: You can gain habitat protection in a couple of ways through the WSP. One is this novel approach of bringing habitat -- the habitat status into integrated planning. So I'll give you a couple of examples, hypotheticals.

One might be we've been talking about lake productivity and spawners adding nutrients to the lake. So if there was a sockeye lake that we were tracking the productivity of it and over time it was going down, that's a habitat indicator, and the productivity is decreasing, there could be through Strategy 4 a decision made to increase the escapement from the fisheries, increase the number of spawners back to the lake to naturally boost the productivity within the lake. And as you've questioned Drs. Hyatt and Irvine, there would be significant discussion around that.

Another hypothetical possible --

- Q And we get into delayed density dependence issues, don't we.
- MS. STALBERG: Yes. Yes.
- Q Yes.

- MS. STALBERG: And I cannot speak to that.
- Q Thank you.
 - MS. STALBERG: But then the -- well, you get into ecosystem benefits, as well.

And then another one might be monitoring temperature in the river. That's a habitat indicator. And there may be -- maybe there is a hydroelectric facility on the system that can release flows to support a particular portion of the run coming back to spawn. And so maybe the fishing pressure is adjusted to allow for the escapement during that time.

There's a number of ways that I haven't heard how these discussions have gone, like different kinds of hypotheticals, and they may be entertained now within the implementation team. I'm not sure. So that's one way, though, that there could be better protection of the resource, and then --

- Q Do you have any confidence of those expectations? MS. STALBERG: Yeah.
- Q Yes.
- MS. STALBERG: I think the policy is a good one and it sets up the Department to have those discussions. So I do not know if those have started yet.
- Q All right.
- MS. STALBERG: Now the actual protection of the habitat, say through project reviews, I think the Wild Salmon Policy, it's a planning piece, in that it identifies these highly productive and limiting

habitats that can then be better protected. If they're identified, it's easier to protect them, easier to generate appropriate compensation or restoration. So I think -- and especially if that kind of information is sort of tested with objective indicators.

What I'm not sure of is what Dr. Irvine -or, yes, Dr. Irvine talked about in the
fluctuations between the Bristol Bay example,
where over the space of decades the distribution
of the spawners changed from one river to another.
And I've seen work presented by Dr. -- is it Dr.
Tom Quinn, out of the university of Washington,
and similar Bristol Bay work. And though there
was no changes in the habitat between two
watersheds up there, the production of the salmon,
like millions changed. It went up in one
watershed over the number of decades, and it went
down in another over a number of decades. There
was no development within those watersheds.

So I'm not sure how those really long-term trends in population may -- distribution in changes may be accommodated within the review process within habitat management.

MR. ROSENBLOOM: Thank you.

Mr. Commissioner, I have four areas still to I don't mind giving notice to the panel of those four areas. My first area of questioning after lunch will be on funding this WSP. I want to speak about leadership issues. I want to speak about consultation, and lastly, I have a wrap-up question, which I asked to Dr. Holt yesterday and which you may recall, and I invite you to deliberate over lunch about it, which is what advice could you give to this Commission if the Commissioner were of the opinion that he wished to see implementation or advised implementation of WSP at least substantially within two to three years. Those will be the areas that I wish to cover right after lunch. And with leave of the Commission, I'd ask that I start that at two o'clock.

- MR. WALLACE: Mr. Commissioner, if I may, do you have an estimate of the time this is going to take, Mr. Rosenbloom?
- MR. ROSENBLOOM: Well, I'm learning not to give estimates to Mr. Wallace, but I appreciate why he

 asks. I would suspect that I am, depending on the answers, probably 25 minutes or so.

MR. WALLACE: We have an hour-and-a-half estimate from Ms. Gaertner, 25 minutes from Mr. Rosenbloom and re-examination for this panel, Mr. Commissioner. So if we could entertain sitting even till five o'clock, that might help alleviate some of that. And if everybody could be as efficient as they possibly can.

THE COMMISSIONER: Five o'clock is not possible, 4:30 is our adjournment time, and I am going to ask everybody to readjust their thinking about time estimates so we can finish by 4:30 this afternoon. I am sure counsel will be able to do that. Thank you.

MR. WALLACE: Thank you.

THE REGISTRAR: The hearing is now adjourned until 2:00 p.m.

(PROCEEDINGS ADJOURNED FOR NOON RECESS) (PROCEEDINGS RECONVENED)

THE REGISTRAR: Order. The hearing will now resume. MR. ROSENBLOOM: Thank you, Mr. Commissioner.

CROSS-EXAMINATION BY MR. ROSENBLOOM, continuing:

- Q Ms. Stalberg, with the concurrence of your counsel, you and I had a very, very brief conversation just before the -- at noon time, and at that time, you informed me that you would want to do an add-on to a question that I asked you. My question was in respect to the WSP and whether you imagined that after the implementation of the policy, there would be more attention to habitat issues. I believe that was sort of my question. Do you have something that you want to add?
- MS. STALBERG: Right. Yes. I think your question earlier, would it effectively protect fish habitat, and one of the other means in which the Wild Salmon Policy would improve the protection of fish and fish habitat is that there would be more science to inform the decisions on what's highly productive and limiting habitats, or the potential impacts of developments. So an example would be, if you recall, I talked about that coldwater refuge zone, that indicator for sockeye lakes.

For example, if, hypothetically, there was a development proposed along a lake and there was a discharge proposed to be in the lake, say it was a deepwater discharge, like through a liquid waste management plan or something else, the location of that discharge and the constituents thereof could be reviewed in relation to, well, where is that in relation to the coldwater refuge zone, might it have any impacts on that particularly productive area of the coldwater refuge zone? That's my example.

Yes.

O Yes.

 MS. STALBERG: Thank you.

THE REPORTER: One question.

- Which leads me very, very briefly to a collateral question. Is it envisaged that if there are to be -- during -- through the Wild Salmon Policy, there are recognized habitat problems in a CU, that remedial programs will be immediately implemented as primary mitigation? Is that your understanding of how the program will be implemented?
- MS. STALBERG: I am not sure how the program will be implemented. The -- through undertaking the characterization of the habitat and then monitoring the habitat's status, input -- that information is a key input to guide Habitat Management's decisions on prioritizing restoration efforts and prioritizing conservation efforts.
- Q Right. I wonder if any of the other panel members would have input into the response to that question? Not hearing anything, I will move on. I want to now deal with funding, and I'll try to compress this as much as possible. Mr. Saunders, in your will-say document, Exhibit 101, there are numerous references to the sufficiency of financial resources --

(AUDIO RECORDING MALFUNCTION)

THE COMMISSIONER: Thank you very much, sir.

MR. ROSENBLOOM: I'm sure this was Mr. Wallace's tactic to cut me off, but thank you very much. I presume, Madam Reporter, that I can carry on where I was at, or have you missed anything?

THE REPORTER: Maybe just go back just a little bit?

MR. ROSENBLOOM: Just a little bit? I don't know what quite "just a little bit" means, but --

MR. ROSENBLOOM: Pardon me? 1 UNIDENTIFIED SPEAKER: I'm not sure if we'd notice 2 3 that. 4 MR. ROSENBLOOM: I'm sorry? 5 THE REPORTER: The beginning of your cross-examination. 6 MR. ROSENBLOOM: Yes. Thank you. 7 THE REPORTER: Sorry. 8 MR. ROSENBLOOM: I hope you don't mean my first 9 question about an hour-and-a-half ago. Thank you. 10 All right. In respect to the funding side of it, 11 Mr. Saunders, I have reviewed your will-say and 12 there are numerous references to the funding 13 issues and Human Resource issues within DFO. 14 if I can just summarize the thrust of what I 15 understand to be your testimony through your willsay and, again, if you doubt anything in terms of 16 17 my précis of your evidence, please speak up, and 18 I'm happy to give you references, but you speak 19 about the fact that through the consultative 20 process leading to the announcement of the policy, 21 there were a number of interest groups speaking of 22 their concern whether there'd be sufficient financial resources to implement the plan, 23 24 correct? 25 MR. SAUNDERS: That's correct. 26 Yes, and you also say that, and I'm quoting here: 27 28 Mr. Saunders will agree that additional 29 funds, including for human resources, would 30 have allowed faster WSP implementation over 31 the last five years. 32 33 And you obviously agree with what you've already 34 informed us, correct? 35 MR. SAUNDERS: That's correct. 36 You also say, in part: 37 38 He will say that it was made clear to the 39 region that there should -- that they should 40 not seek any new monies for WSP 41 implementation. 42 43 Can you tell me the year or context of that 44 statement? 45 MR. SAUNDERS: Well, that's a -- that's in the policy, 46 itself. 47 All right. And forgive me, just bear with me for

a moment, when you say it's in the policy, itself, that the Region would not apply for additional funding for implementation? I'm not understanding.

- MR. SAUNDERS: Well, it is -- I've got it highlighted here --
- Q Thank you.

MR. SAUNDERS: -- on page 35, it says:

Implementation must be accomplished within DFO's existing resource capability and will be phased in over time.

- Q And do you understand that to mean that it would be inappropriate for your Ministry, for the Minister to go to the Treasury Board to ask for additional funding? Is that how one reads that?
- MR. SAUNDERS: I don't think I would ever presume, you know, the Minister's -- his or her role as -- her -- his or her prerogative, that's a political question or issue, but we understand that we were working within the existing resources for implementation.
- Q Is anyone within this panel able to speak to the drafting of that particular provision, what drove that paragraph to be inserted into the policy, as some of you were involved in the drafting of the policy. Does anybody have input into that?
- MR. SAUNDERS: Well, Dr. Irvine and I were -- you know, as we were on the previous Development Panel, we had a -- you know, a hand in -- well, obviously, in the development, but I think Mr. Chamut was the one who spoke to that, and I think it would have been an interaction with the Deputy, possibly the RDG, and Mr. Chamut that would have worked through that. That wouldn't have been any of us that were on the previous panel that would have made that decision.
- Q Can I assume, Mr. Saunders, from the evidence you've given through your will-say, and some of it I've just made reference to, that that provision or paragraph within the policy has been to the prejudice of implementing expeditiously the Wild Salmon Policy?
- MR. SAUNDERS: I think that's a fair statement, that that practice has certainly dictated the pace of implementation, yes.

3

5

6

7

9

10

11

12 13

14

15

16

17

18

19

20

21 22

23

2425

26

2728

29

30 31

32

33

34

35

36

37

38 39

40

41

42

43 44

45

46

47

Q You say, in part, in your will-say, and again, I quote:

He will say that Science is currently at a tipping point with WSP implementation funding.

What is meant by your use of the term, "tipping point"?

- MR. SAUNDERS: I don't recall saying "funding," the last word in there. I may have -- I may be -potentially, I said that, but that wasn't -- we were at a tipping point in the implementation. think Science, a lot of the implementation around Strategy 4, a lot of the uncertainty around what it's going to take to move forward has been removed in that we now understand the number of conservation units, we are -- have a better understanding of the benchmarks, and if we were to go forward now, it would be much -- a lot of the -- in trying to understand what it's going to take, it will be a much easier job, and the tipping point is that that can all start to happen, I think, fairly quickly now.
- Q Well, I did read directly verbatim from your evidence where you said:

... Science is currently at a tipping point with WSP implementation funding.

You didn't mean that?

- MR. SAUNDERS: No, the -- up to "implementation" is where I would have ended it, but I didn't catch that in my statement.
- Q Thank you. We also learned from your will-say that -- and I'm reading again:

He will be asked if the WSP Implementation Team has ever conducted or been informed of any costing exercise to determine what full implementation of the WSP would cost, including, for implementation, Strategy 4.

Now, maybe I missed this over all these days, but you obviously affirm what you have stated in this will-say, as I just read it out?

MR. SAUNDERS: Yes.

- 1 Q And has this ever been done up to this moment in time?
 - MR. SAUNDERS: Not that I'm aware of, but as I say, I have been -- there may have been something done in the period that I was away from the Department for -- through 2000 --
 - Q Fair enough.

- MR. SAUNDERS: -- for part of 2008, yeah.
- Q Fair enough. And who should I be asking that question to? Would it be the Regional Director General?
- MR. SAUNDERS: That would -- yes. Yeah, that would be a reasonable question.
- Q Thank you. I will come back to funding in the overarching question that I asked at the end of the day to Dr. Holt with all of you, but I want to move on to leadership for a moment, and Mr. -- Dr. Irvine, you said, in part, and again, I can refer you to the passage if you in any way doubt my verbatim quote:

He will say that another limiting factor on Strategy 3, as with WSP implementation generally, is the lack of strong leadership and direction from senior management.

Now, I'm interested in hearing from you, and I'm sure the Commission is, what quite do you have in mind there? Where has leadership been lacking? Is it at the ministerial level, is it at the DM or ADM level, is it regional, is it with the Regional Director General?

- DR. IRVINE: No, what I was referring to there is more leadership within the Region.
- Q Sorry, within --
- DR. IRVINE: Within the Region.
- Q Yes? And can we zero in a little more precisely? Does that mean Regional Director General?
- DR. IRVINE: Well, it could or it could be essentially through the line of command up to the RDG.
- Q Well, you state --
- DR. IRVINE: I mean, with -- you know, from the perspective of Strategy 3, you know, one of the issues is sort of how does Strategy 3 relate to Strategy 4? So does the ecosystem include humans, for instance. And if you take the sort of bigger picture of an ecosystem, then, in fact, Strategy 3

and Strategy 4 could almost become synonymous. So I think there's just some uncertainty as to how particular aspects of the policy are being implemented.

Q Well, Dr. Irvine, your opinions here, your comments here are very valuable to the Commission because you are on the ground level, in many ways piloting, in part, the Implementations Program. Your statement as given in the will-say is, as you see, a lot more than simply Strategy 3. You say:

... as with WSP implementation generally, is the lack of strong leadership and direction from senior management.

Nobody wishes to embarrass you or anybody else in these proceedings, but it's important for the Commission to have a sense --

DR. IRVINE: Mm-hmm?

- Q -- from your perspective of exactly where that leadership has been lacking and how it might be rectified in the future.
- DR. IRVINE: Certainly. And I have indicated a couple of times, today, and I believe yesterday, that I've seen evidence of significant improvement in the last year, but the policy was passed in 2005, we're now at 2010, and it almost seemed like there was a period of a -- you know, where there was relatively -- the leadership was lacking in terms of implementation. And I think it has become recognized within the Department that this is an important policy, it needs to be implemented. think there was a lot of burnout. You know, this policy took -- you know, some of us worked on it almost fulltime for a number of years and finally you get the policy passed and, you know, you're ready -- you know, so I think that there was a bit of sort of internal burnout, and I think in the last year, year-and-a-half, we've seen some new people get involved who are a little bit more energized and so we are seeing more effective leadership over the last year or so.
- Q Thank you. And Dr. Hyatt, you also make reference in your will-say to leadership issues. In particular, you make reference in passing to leadership transition delays. I'm happy to read the whole passage if, for any reason, you wish it

5

6

7

8

9

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

to be read to you. What were you speaking of when you made reference to leadership transition delays?

DR. HYATT: Well, there are orderly transitions and sometimes there are delays in those transitions as new personnel move from one position to another. Implementation of Wild Salmon Policy is no different. There have been changes at the level of the RDG, although that's -- that certainly doesn't create an inordinate delay. Those RDG successional plans are usually carried out expeditiously, but it takes some time for a new RDG to become familiar with all of the files that they're responsible for and so that will create a certain amount of lag in uptake. At the level of the Implementation Team, there have been, as Dr. Irvine noted, a number of new individuals who have come into that Implementation Team and others who have transitioned out. And again during those periods, if appointments aren't immediate and aren't clarified right away, then you have lag -not only just the normal lag time, but you have a period in which, you know, that particular part of the implementation activity may languish.

The Barkley Sound Pilot, which is an important demonstration project to do an end-to-end assessment to test and refine all elements from Strategies 1 right through Strategy 4 is another example where there have been at least two separate transitions and some period of several weeks at a time where there wasn't a clearly identifiable lead. And when that lead finally was appointed, again, it's taken some time for them to catch up with where that initiative actually has been, where it is and where it can go.

- Q And we're not here to point fingers, but all of this, as you describe it, the history, has been to the prejudice of an effective implementation of the program up till now?
- DR. HYATT: These things come back to -- really do come back to capacity, to working within existing resources, our ability to carry workloads and multitask and have additional tasks assigned, all of that just simply takes quite a bit of time on the part of the organization and on the part of individuals. You can find that those loads simply can't be sustained and, at the same time, result

in acceleration in one of the files.

- And my memory of your testimony on an earlier day is Barkley Sound is part of your particular interest, is it not?
- DR. HYATT: Barkley Sound is an area that I've spent a good portion of my career as a scientist, actually associated with provision of science advice to all sectoral managers, Habitat, Enhancement, Harvest managers, and it was an area in which we thought, because of the information assets, an end-to-end implementation trial of WSP was warranted and would be highly beneficial.
- And am I right, and I'm just doing this from memory, that I had been informed that the Barkley Sound Pilot Project has been seriously compromised by a lack of funding? Has that not been the case?
- DR. HYATT: This is entirely a matter of perspective. If you wish the Barkley Sound Pilot to be completed within a finite period of time, then you must balance off the necessary intellectual capital and financial capital to ensure that it can be accomplished within that amount of time. If one wishes to work within the envelope of existing resources, without reallocation, then, in fact, over the fullness of time, this could be implemented, but it will take a much, much longer period of time. And so these are choices that departmental managers have to weigh and then make decisions about.
- Q I thought I had heard that Barkley Sound Project had run out of money. Is that maybe my error?
- DR. HYATT: I don't believe it's run out of money yet. It's different sectors within DFO contribute different amounts to the Barkley Sound Pilot so it's a question of --
- Q And have some of those sectors gone short in terms of making their contribution?
- DR. HYATT: Some of the contributions are modest.
- Q That's not answering my question. Are some of the sectors not contributing as they had committed to because they did not have the money?
- DR. HYATT: I don't believe they've identified that they would commit to -- they've said there's a shortage of capacity, a shortage of both financial and personnel resources to be able to accelerate the Barkley Sound Pilot, but they had not made a commitment in advance to remain on a particular

- schedule so this was, again, you know, one of these weighing of decisions about will we do it in a short period of time, expeditiously, with a very strong focus, or will it be spread out over a longer period time?
- Q Thank you. I want to move to consultation very briefly. A great deal of evidence has already been given about consultation and in the context of First Nations, in particular, I want to focus on consultation of First Nations, but in the context of the First Nations that are commercial fishers, as opposed to the First Nations that are up river. I'm speaking of the marine area. My question to you, to the best of your knowledge, these consultative processes that you've embarked on, have you brought in the Native Brotherhood of British Columbia in those consultations? And if you don't know the answer to this, just tell me who I should be asking.
- MR. SAUNDERS: I don't remember. I would be questioning the Consultation Secretariat so Deborah Phalen for DFO heads up the Consultation Secretariat.
- MR. ROSENBLOOM: I'm sorry, and is she going to be before us, Mr. Wallace?
- MR. WALLACE: I don't know.
- MR. ROSENBLOOM: Oh. Well, I'll, I guess, consult with Mr. Wallace later about receiving an answer to this question, even if it's in writing, it's fine.
- I also have a secondary question on the same matter. Has there been consultation, to the best of your knowledge, with the Aboriginal Fishing Vessel Owners' Association?
- MR. SAUNDERS: Again, I don't have an answer for that -- on that.
- Q All right. And I assume the rest of you don't.
- MR. ROSENBLOOM: I will pursue that with Commission counsel.
- Also in the context of consultation, my clients, the Seiner Fleet of Area B, the Gillnet Fleet of Area D are most interested in your reply to this question. What is the intention of DFO in terms of this point onwards in implementation in consulting with the commercial fishery step by step as you lead towards official implementation of the program?
- MR. SAUNDERS: I think there -- as there has been in

the past, there's sort of a combination of 1 targeted consultative meetings and forums and --3 that are -- would be of interest, and the organizations that you refer you would all be on 5 the invited list of organizations. We're also 6 open to -- I don't know that we've ever turned 7 down a request to come and provide information to 8 a particular organization that's interested. 9 finally, existing processes around resource 10 management that would be affected, like integrated 11 harvest planning committees, that your 12 organizations are -- I believe, are associated 13 with, we would be utilizing all of those 14 consultative mechanisms that we currently use. 15 Well, you see, Mr. Saunders, I have had 16 consultation with my clients and I could have 17 taken up a whole day at this hearing just in 18 respect to the issues of past consultation with 19 the commercial fishery and, in particular, Area B 20 and Area D. And I have been informed, and I don't 21 want to get into -- this is water under the bridge 22 -- that the consultations, one major consultation in March of 2005 was during the herring season, 23 24 which all of you, the DFO would be well aware of 25 so the fishers were not available. Secondly, that 26 many of the consultations were just public 27 meetings with presentation to the public, 28 including inviting my clients, but that that --29 they did not deem to be consultation in terms of 30 one-on-one, where you invited their viewpoint and 31 there was a private discussion back and forth. 32 Rather than going into water under the 33 bridge, my question is will you assure us that 34 your intention in the -- from this point onwards, 35 in implementation, is to have one-on-one meetings 36 with the harvest interests? Much as you testified 37 about meetings with First Nation communities? 38 MR. SAUNDERS: Mr. Commissioner, I think we can say 39 that with absolute certainty that we're committed 40 to a consultative process. That it would be one 41 on one with all of the individual organizations, I 42 don't know that I can commit to that, but I can

certainly see working with all the respective

around consultation.

All right.

public meeting?

organizations to agree on subsequent processes

Something more than just a PowerPoint

43

44

45

46

47

Q

MR. SAUNDERS: Sure.

1 2

Q Thank you. Now, I'd like to move to my last overarching question, which you've already heard because I posed it to Dr. Holt. I will repeat it and I would ask for the response of all of you.

Assuming for a moment, and I have no reason to assume this, but for the purposes of my question, I want it assumed that the Commissioner is of the opinion that the implementation of the WSP is in the public interest. Assuming that, and assuming the Commissioner, again, and I have no knowledge, would want to recommend to the Government of Canada a fairly substantial or full implementation of WSP within a period of two to three years. My question is what recommendations do you wish to deliver to this Commission that should be considered by the Commissioner in his report to the Government of Canada to ensure a substantial implementation within that timeframe.

I wonder who we should start with? Maybe I'll just go from left to right, my left, Ms. Stalberg?

MS. STALBERG: Mr. Commissioner, you have the daunting task of hearing all of the programs, I believe, within Federal Fisheries that relate to sockeye so this question, while it refers to just the Wild Salmon Policy, asking for additional resources for this program, if it is simply taking resources from another possibly very valuable program within the Region, may be counterproductive. So I qualify my answer with additional resourcing, realizing that even at a national level, there's only so many dollars so something else at a national level is not going to get done if there is additional monies put to the WSP.

But we have talked about capacity, the number of people within DFO that could dedicate their energies to work on WSP, and, for example, Mr. Hyatt -- Dr. Hyatt works on a number of initiatives. If he was solely tasked with Strategy 3, that could move it along, but Dr. Hyatt does do important work in the Interior on water issues, as well. So I do think the Program would benefit from a lead within each of the -- for each of the strategies. It doesn't have to be the current branches that are leading each strategy, but a lead that there is some more time

5

6

7

8

9

10

11

12

13

14

15

16 17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39 40

41

42

43

44

45

46

47

and resources to support moving those strategies together in coordination with a coordinator. And where that overall -- overarching coordinator sits, I don't have a recommendation on that.

I think that there needs to be consideration to the time and effort that it takes to consult and that is no small undertaking and it -- as you're posing the questions, time needs to be put into -- in what you're talking about, a compressed timeframe to deliver on that. And Carrie Holt mentioned it yesterday, sort of longer-term resourcing versus just a quick injection of funding, and the benefit of that is the Department is a large organization and this is a transformational policy that effects so much of our business and it takes time to build awareness and then adoption, and actual advocacy within the Department on delivering the policy. You'll have higher success if that kind of commitment is built within the Department and through a champion, or however this person is considered. Those kind of considerations need to be also provided to external parties that we wish to generate partnerships with for the delivery of the WSP.

Now, where we now -- where do we -- what's the vision? Where do we want to go? How can individuals, organizations and branches effect that change?

And as well, I think that another consideration is looking at -- this is a transformational policy and business can be done differently, but who is most affected? And this isn't the only change within the Pacific Region and policies. There is a Species at Risk Act that is bringing new responsibilities to the Habitat Management Program. There's the EPMP that we talked a little bit about this morning, and the changes, when you look at those programs and step back, a lot of the -- the majority of the changes hit sort of field-level staff that have to deliver on these. So how do you prepare them to deliver on the program? And again, it's -- it takes time to -- lots of communications and building awareness, and then adoption, okay, they understand and they can deliver on the program, and then actually if you build up your communications and understanding enough, that they

3

4

5

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21 22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38 39

40

41

42

43

44

45

46 47 advocate the program and they can speak to the benefits more broadly. That would be my recommendation.

Thank you very much. Mr. Saunders? MR. SAUNDERS: Yes, Mr. Commissioner, I think the core of what I would suggest is that we need -- I talked about the tipping point earlier on the implementation, that a lot of the background science and process, information that's required to sort of go to the next level of implementation is close to being completed, and I'll come back to that in a second, but I think if we took that information and went into a business, an integrated, collaborative, multi-interest business planning, or call it strategic plan, if you like, around how we're going to move forward on implementation with all of the potential interests engaged in that, I think that would be one of the key activities that I would go forward with.

Before I went into that, though, I think there are some things we need to complete that are well in -- are close to being in hand. Completion of the stock assessment framework, completion of the synoptic analysis that gives us, similar to the Slaney paper that Dr. Hyatt and Dr. Riddell spoke about earlier, a process to give us a synoptic view of the status of salmon, rather than dealing with one CU at a time and one issue in a -- you know, pinning, trying to look at just one issue. Try to get the whole -- excuse me -- the whole problem or sort of synoptic scope in front of us. Some completion of the benchmarks. need to do some work on planning units. We were sent away by our senior management to do one pilot in Barkley because it was unclear what the implications would be and the complexities of what exactly a planning process would look like. So take the results of that and we need to understand how we would implement, do some work on what a governance model for planning processes would look like.

We also have a review that's pending which could inform how we would go forward. So with some of that -- those underpinnings completed within that -- if you're going to use -- hold me to a two-year -- two to three-year timeframe, I would then go into an integrated planning process.

 And I think you framed it in the context of thinking about, you know, are more resources needed, do we need a Treasury Board submission, do we need to do some reallocation? I think, in that business plan, across all the partners, we would also look to not just new resources, we would look at -- or reallocation of existing ones, we'd look at efficiencies. We would look at partnerships and we would look at technology to say, "What are we actually -- what can we all bring to bear to make this work?" So that would be my suggestion around how to move forward, would be engaging the multi interests in a development of a business plan going forward.

- Thank you very much. Is it reasonable for the Commission to have the expectation of substantial implementation within two years, in your opinion?
- MR. SAUNDERS: I have trouble with the word,
 "substantial," Mr. Commissioner. I think work we -- I -- that's a matter of debate whether we've
 made -- I believe we've made substantial progress,
 and I believe that we will continue to make good
 progress. I don't know how you would qualify and
 understand when you would hit a benchmark of some
 sort around 100-percent or 80-percent
 implementation.
- Well, maybe we're at cross purposes here. When I use the term, "implementation," I'm assuming at a point where the baseline work has been done and the managers are reviewing the status of a stock in a CU and where it may be into those zones that require remedial steps, that those remedial steps would be taken pursuant to the Wild Salmon Policy. That's my definition of "implementation." Is that off base?
- MR. SAUNDERS: I don't think it's off base, but you -- you know, are you talking about such advice being given for all CU's? Are you talking -- yeah.
- This is precisely why I use the term,
 "substantial," because I'm sure that you'll say
 within two years, or even three or four, you still
 won't have total implementation in the sense that
 there won't be stock assessment of all the CU's in
 the Province of British Columbia. That is
 precisely why I speak of "substantial." I speak
 of "substantial" in the context of the important
 CU's that obviously are within the watershed of

the Fraser. And my question is is it reasonable to expect a substantial implementation within two years?

- MR. SAUNDERS: I feel uncomfortable with that, just precisely because of the inability to define what "substantial" is.
- Q All right.

- MR. SAUNDERS: Yeah.
- Q I've done my best. Dr. Irvine?
- DR. IRVINE: Yes, thank you. I actually have five points I'd like to raise in terms of advice that I might provide the Commissioner in terms of ways forward, and the first I would categorize as organizational within DFO and I've -- I made this point in my statement, that I think that as far as the Wild Salmon Policy implementation, we need to become much more integrated and we should be going away from the action step by action step process. I feel that we should be focussing on one particular action step and that's Action Step 4.2. And Action Step 4.2 is basically the implementation of a fully integrated strategic planning process for salmon conservation.

So recognizing that this a policy and, as I mentioned the other day, we didn't -- when we wrote it, we didn't really expect a bunch of lawyers to be examining it clause by clause, you know, I think that we've sort of come to the point where we should be looking at the -- we should be looking at it almost from a top down, at least from a Strategy 4 perspective. And then to try to determine what scientific information is required, so a little bit less stove piping. So that would be my first recommendation or piece of advice.

Secondly, is dealing with the articulation of objectives for particular conservation units and groups of conservation units. So here, I'm not talking about the benchmarks, the scientific benchmarks, I'm talking about the Management objectives. And there's a phrase that's sometimes used in the literature called the plurality of legitimate objectives, and we need to recognize this. And what is meant by that is that you, as somebody that's representing the commercial fisheries' interest have particular objectives with regard to the harvest of salmon, which are completely legitimate. The Environmental

Coalition have alternate objectives which are entirely legitimate. So I guess what I'm saying is that it's -- I think, a step that would be useful would be the articulation of these objectives from the perspective of multiple interest groups for particular conservation units and groups of conservation units. So that would be my second.

Q Number three?

- DR. IRVINE: That would be my second piece of advice.

 The third -- my number three is capacity. And so we've talked about -- you've got a couple of graveyards up here who are sort of working on ecosystem and habitat kind of issues and have been for, you know, two or three decades now, you know? We kind of need some -- we need, you know, additional scientific capacity, youthful capacity. We saw Dr. Holt yesterday.
- Q Yeah.

- DR. IRVINE: So we -- certainly, in terms of the -- in the field of ecosystem-based management, this is a career, it's not something that you do in two years. So we do need capacity. But I just want to touch on --
- Q And not to put too fine a point on it, that means money, doesn't it?
- DR. IRVINE: Well, everything needs money. But I want to -- to me, it's more important to articulate what's needed, rather than to identify that we need money. But a couple of issues or areas that -- in terms of capacity that we haven't touched on, and that's outside of the natural science realm, and I feel very strongly about this. I mean, the Department needs to have more capacity with regard to things like resource economics, social -- evaluation of social alternatives, so kind of getting outside of the science issue.

And again, we're talking about Strategy 4, which is what I've said is really where -- what we should be focussing on.

My fourth sort of area is better involvement of what is referred to as the extended peer community. So the --

- Q Sorry, the what?
- DR. IRVINE: Extended peer community.
- 46 Q Yes?
- 47 DR. IRVINE: So the extended peer community basically

includes people like — that you represent, so stakeholders, First Nations, non-government biologists, people that — members of the public that are interested in the future of wild salmon in British Columbia. So I think the Department can do more to work with this extended peer community. And I say that for a couple of reasons. One, that we can obtain knowledge, whether it's aboriginal traditional knowledge, or whatever, but it's also that in terms of dealing with complicated conservation issues where you have multiple objectives which are often in conflict, potential conflict with each other, you can find solutions by involving individuals from different backgrounds. And so —

- Q I appreciate that point. And your last point?
 DR. IRVINE: Okay. My last point is one that we've touched on before and it's simply better linkages with different levels of government so that's First Nations, municipal and provincial.
- Q Yes.

- DR. IRVINE: Thank you.
- Q I appreciate that. Dr. -- it's so late in the day. Yes, Dr. Hyatt, I wonder if you would briefly give your response to my question?
- DR. HYATT: Yes, I've summarized in my will-say document five points that would accelerate this. Others have spoken about the need for a range of agreements, both bilateral and multi-party. Foremost among those, a formal agreement or a set of agreements between the Government of Canada and British Columbia to make common cause in implementing Wild Salmon Policy towards common objectives that both have.

The second is that in order to implement Wild Salmon Policy Strategies 1 through 5, we really do need a successful pilot that takes us through the entire range of familiar and to unfamiliar, rather novel strategies like ecosystem-based management to inform Strategy 4 and to allow us to formulate an assessment framework under Strategy 5. And if we omit steps, omit development, we're going to find that we have to pay for it later and go back. So we need a successful end-to-end to pilot to show both how content standards and process standards can be developed for application and acceleration of implementation in other areas of

the province.

Third, DFO needs to clarify its sector-specific objectives under the various strategies. Dr. Irvine just mentioned this with respect to Strategy 1 and CU's, but we also need to do this with respect to Strategies 2 and 3 where sector activities have particular impacts on either habitat or on ecosystems.

Fourth, and this is something that has been touched on, but not really explored very deeply, DFO will need to invest in significant efforts to access, integrate, analyze and interpret data from a multitude of fragmented monitoring frameworks and databases that are maintained by other agencies, governments, and industry. The point is is that we don't carry sole responsibility for this, but the Wild Salmon Policy does make us the executors of the assembly analysis interpretation application of those data to meet Wild Salmon Policy objectives. That isn't a responsibility of others. They may wish to help us, but that is a principal responsibility that we carry.

And fifth, we will need to initiate some new Science programs to examine marine and freshwater ecosystem linkages to -- in salmon production variations in order to reduce severe knowledge gaps we have both on how ecosystems influence salmon, wild salmon, which this inquiry is particularly interested in, on the Fraser, but also to clarify how wild salmon influence ecosystems, about which we currently have limited science capacity to examine.

- MR. ROSENBLOOM: I thank all four of you for your patience and your contribution. Thank you very much.
- MR. WALLACE: Mr. Commissioner, Mr. Lunn has asked for a few moments to deal with a couple of documents which have been sprung on him at the last minute so perhaps we could take a six-minute break?

THE COMMISSIONER: Very well, we'll now recess for six minutes.

(PROCEEDINGS ADJOURNED)
(PROCEEDINGS RECONVENED)

THE REGISTRAR: Order. The hearing is now resumed.
MS. GAERTNER: Mr. Commissioner, Brenda Gaertner, and

72
PANEL NO. 7
Cross-exam by Ms. Gaertner

with me is Leah Pence, for the First Nations Coalition. I'll just give you an overview of what I intend to do. I'm hoping that I actually will be shorter than my time estimate; I think I only will need an hour. And I'm only going to focus on two areas: one, is the consultative process that has unfolded with First Nations after the implementation, or after the passage of the policy; and the second is the challenges associated with integrating traditional ecological knowledge into the work ahead of us. And so those are the two primary areas of focus.

And the -- for the benefit of the panel members, the approach that the First Nations Coalition has instructed me to do at this stage in the inquiry and with this evidence, is to actually lay the foundation through this implementation, or through the questions on the implementation of the Wild Salmon Policy as an example of some of the challenges that are associated with engaging with First Nations and entering into consultative or collaborative processes with them and seeking to see whether or not this is a good example of some of the ways that we can benefit and move forward together. So that's the approach.

Mr. Saunders, as you might expect, many of my questions will be directed to you. I have some questions for Dr. Hyatt.

CROSS-EXAMINATION BY MS. GAERTNER:

I just want to do a very brief -- just a recap of Q where we were, Mr. Saunders, at the end of the development panel and, in particular, you were able to confirm for the Commissioner the kinds of concerns First Nations had raised and the issues they raised during the development; in particular, the importance of governance structures and decision-making during the implementation, ensuring that implementation met the honour of the Crown and did not infringe title and rights and, in particular, the food, social and ceremonial rights and the priority that they have in law, and that they were concerned that there wasn't sufficient DFO and First Nations capacity, both human and financial, to successfully implement the Wild Salmon Policy. And at the time in which the

 policy was passed, you were able to confirm that DFO was -- did know and that had -- that First Nations expected to be involved in the development of an implementation plan, the identification of conservation units, and the determination of their status. They expected to be involved in developing a strategic planning process. And they expected to be involved in the development of a transparent decision-making structure.

So now I want to turn your attention, first, to Exhibit 213, and what I'm going to do, Mr. Saunders, is yesterday you asked me whether or not I could do an overview and a step-by-step through the consultative process. That's what I'm going to do with you in the next while. I'm just going to take you through the different steps that we were able to determine, through the documents and some discussions as to what has happened with respect to consultation.

So I'm going to turn you, first, to Exhibit 213, and that's the minutes of the meeting that was held on December 7th, at Musqueam, that was facilitated by Chris Corrigan. Both yourself and Dr. Irvine were present at that meeting. And I want to just direct your attention -- actually, I'm going to go to pages 4 and 5, and then 6 and 7. You may not need the minutes, but they may refresh your memory.

Specifically, already at the implementation, you'll agree with me that littered throughout that policy is a commitment by the Crown to integrate traditional ecological knowledge and First Nations in the implementation of the Wild Salmon Policy; correct?

- MR. SAUNDERS: That's correct.
- Q And initially and immediately upon the passage of the Wild Salmon Policy, there are concerns raised with you and others regarding how to incorporate traditional ecological knowledge into the benchmarks?
- MR. SAUNDERS: I'm not sure about the benchmarks. Can I have the question again, please?
- Q Sure. If you go to page 4 and 5 of the minutes. And you'll see, at that point, we're talking about conservation units. I'm at page 4. And then, if you go over to page 5, you'll see a question, "How do we incorporate traditional ecological knowledge

into benchmarks?"

- MR. SAUNDERS: Yeah, I think it's fair to say there's a commitment to however TEK can -- or ATK can inform our -- be integrated with our science. There's a commitment to do that.
- And then if you go over to the bottom of page 6, and a concern was raised at the bottom of the page:

Consultative approaches - issue of incorporating traditional ecological knowledge. Unless we deal with this out front, we risk losing it under a scientific process. Perhaps we need a foundation document that characterizes TEK/ATK - will help to define the role of First Nations.

You will agree that that concern and that suggestion was made right after the policy was passed?

MR. SAUNDERS: Yes.

Now, Dr. Irvine, at page 9 of those minutes -actually before that, I'm sorry, could you flip
back to page 7? Mr. Saunders, I want to also have
you confirm that at the same meeting once again it
was confirmed with the DFO representatives that
TEK is site specific and tribal specific in areas;
that's a matter you already knew, probably, but
that was reemphasized with you at the time of that
meeting?

DR. IRVINE: Yes, that's true.

- Q Dr. Irvine, at page 9 of the minutes, you're talking about Strategy 3 and the inclusion of ecosystem values and monitoring. And will you agree with me that at that meeting you proposed that an expert panel would be formed, including academics, stakeholders and First Nations, and that this group would meet with different stakeholders and First Nations, and the idea is that we would develop an ecosystem framework over the next 18 months using such a forum?
- DR. IRVINE: Yes, we proposed to do that at this meeting.
- Q Do you recall your thinking behind that and what the idea was in terms of trying to use a panel like that? Actually, maybe I'll take you -- maybe it will be useful to refresh your memory at the

page - I should have done that earlier, I'm sorry
- the bottom of page 9 and over to page 10.

- DR. IRVINE: Yes. No, I remember this now, yes. I mean, the concept was a little bit -- was somewhat analogous to the process that we had used when we were completing the development of the policy where we had, you know, an expert panel or a group that we met with multiple times and essentially learned from each other during the period, and then these -- this expert panel would represent others and -- yes, that's -- yes, no, I remember that. Yes, no, we did propose to do this.
- So it was a method of actually integrating the different perspectives and the different kinds of knowledge that would be held?
- DR. IRVINE: That's true.
- Q All right. Could I next turn to Exhibit 137B. Gentlemen, what happens next is there's a -- the next day there's a meeting of all the -- the First Nations and the stakeholders. Both of you were present at that meeting; that's correct? And what I'm placing before you is not so much the minutes but a report that occurred that was provided to the Department of Fisheries and Oceans by Norton-Arnold and Company on that forum meeting.

Again, I'm going to have to have you say, "Yes."

DR. IRVINE: Yes.

MR. SAUNDERS: Yes.

Thank you. And I want to turn you to page 4 of that report, please, and I'd ask you to review the paragraphs just before comments on Strategy 2, so we're actually talking about Strategy 1 and the -- you'll see that on the page before. But I just want you to read the paragraphs regarding the summary of the First Nations perspective on the conservation units.

And you'll agree with me that First Nations were pleased with the breakdown of the populations and that -- I think it's so elegantly said there that I'm going to confirm it again:

First Nations break down populations into nations, then tribes, then families, and then individuals.

So the discussion there was talking about how they

identify themselves as people within their homelands.

We would never sacrifice any one individual. The same analogy applies to fish. We would never say that we have enough of one type of individual and we can ignore it. We would never do that. The CU concept seems to be a shortcut route to the management of individuals.

And what I want to stress with you is that that comment was something, Mark -- Mr. Saunders, that you would have heard over and over again how important it was for First Nations to make sure that individual - using the scientific term - conservation units were properly looked after and managed not from only the perspective of abundance, but for ensuring that individual communities had access to fish; is that correct?

MR. SAUNDERS: Yes.

Q And then the next paragraph, the summary on how First Nations wanted to be involved and how that was brought to your attention was that they asked to be involved and establish relationships with local communities in establishing conservation units; do you agree with that?

MR. SAUNDERS: Yeah, I'm assuming the report's accurate, yeah.

Q Do you recall that at the meeting?

MR. SAUNDERS: I don't recall that specifically related to CU's, but yes, it's been -- I've heard it before, yeah.

 Q Okay. Now, I want to turn you to page 9 and 10 and 11 of this document, and the facilitator at this meeting then provides specific recommendations to DFO at that meeting. Do you recall reviewing those recommendations, Mr. Saunders??

MR. SAUNDERS: I don't recall reviewing them, but I would have, yes.

 When DFO hires a facilitator and gets a report, it would have been your job to take a look at it and make sure that any of the wisdom of the report would have -- and the meeting would carry on; is that correct?

MR. SAUNDERS: Absolutely.

Q All right. And so it's clear that you've gotten very specific recommendations on a number of matters, many of which you've spoken about, one of which is to make sure that you make a clearer case for conservation units. Get all the players to the table. Continue to build partnerships. All of these things you've talked about. Build a constituency for Wild Salmon Policy implementation through communication and education.

Let me just pause on that for a moment, and you'll see, as we go forward, but at the time in which this meeting occurred, its your understanding and your experience that there is a varying level of understanding on technical issues within the First Nations community; is that correct?

- MR. SAUNDERS: Yes, it is.
- Q And that it's somewhat challenging sometimes to translate scientific documents into practical approaches of First Nations? I'm at page 11 -- or page 10.
- MR. SAUNDERS: Yes.
- And so that part of what was being talked about at that meeting, and something that needed to be considered, was to how to properly build the necessary communication and the necessary dialogue on a go-forward basis with First Nations both at a larger forum level but also right into the communities; is that correct?
- MR. SAUNDERS: Yes.
- Q And you'll agree with me that one of the things that people did encourage was the development of the website?
- MR. SAUNDERS: Yes.
- Q But you'll also agree with me the development of a website is a one-way information street?
- MR. SAUNDERS: Generally.
- Q And that at page 11 of this document, one of the other strong recommendations is that you continue consultations with respect of the Wild Salmon Policy implementation; would you agree with me on that?
- MR. SAUNDERS: Yes.
- Q And that was something that was vey important to First Nations in terms of ongoing implementation of the Wild Salmon Policy, is that they stay actively involved?

MR. SAUNDERS: Yes. 1 All right, the next chronology that we go to is -3 thanks for being patient - I can't help but call it the sticky note meetings. And we then do a 5 range of meetings in October of 2006 to November 6 -- the end of November 2006. And am I correct, 7 Mr. Saunders, that you were at most of those 8 meetings? MR. SAUNDERS: I was at a number of those meetings. I 9 10 don't know if it was the majority or not, but... 11 Were you at the meeting in which the Upper Fraser 12 Fisheries Council presented, when they attended up 13 in Prince George? MR. SAUNDERS: I believe I was at the Prince George 14 15 meeting, yes. 16 Do you recall them letting you know that they were 17 interested in becoming a pilot group for 18 benchmarks and habitat monitoring and that they 19 wanted to be involved in this knowledgeable 20 persons panel that was being suggested? 21 MR. SAUNDERS: I don't recall that specifically, but I 22 do recall that a lot of requests to be the WSP 23 pilot from a lot of organizations, including a lot 24 of First Nations. 25 I guess I should take you to Exhibit 213, then. 26 Oh no, sorry, I haven't marked this as an exhibit, 27 I'm actually becoming exhibit challenged. 28 Could you pull up for me Exhibit 13. Is it the 29 minutes of these meetings? 30 MR. LUNN: What are the dates of the meetings, again? 31 MS. PENCE: Sorry, Mr. Lunn, it was on the handwritten 32 list we gave you yesterday. 33 MR. LUNN: I gave that list back to you. 34 MS. GAERTNER: So the ringtail number I have is Canada 35 CAN1684910001. Thank you. 36 MR. LUNN: 37 MS. GAERTNER: And if I may, could I have that marked 38 as the next exhibit? These are on a list; these 39 are not new documents. 40 THE REGISTRAR: That will be marked as Exhibit 217. 41 42 EXHIBIT 217: Summary of Meeting Notes from 43 DFO Fall 2006 Consultations, Wild Salmon

MS. GAERTNER: And actually, I think, just for ease, we might as well do the next document on the list,

Policy

44

45 46

46

47

1 which is Canada 016908. THE REGISTRAR: That document will be marked 218. 3 4 EXHIBIT 218: Department of Fisheries and 5 Oceans Fall 2006 Consultations Report 6 prepared by Chris Hoffman, Norton-Arnold and 7 Company, dated February 20, 2007 8 9 The Canada number is CAN16908. THE REGISTRAR: I think 10 that's one number short. MS. GAERTNER: Thank you for your patience. 11 12 MR. WALLACE: Excuse me, Mr. Commissioner. Gaertner, could you describe the document that's 13 14 been marked as Exhibit --15 MS. GAERTNER: Yes, I'll describe both of them. The first -- these are -- you know what, I just have 16 17 to say that my notes on the front of the document 18 don't tell me exactly what list I got them from. 19 These are not new documents to the parties. 20 The first is a summary of the meeting notes from DFO's Fall 2006 Consultations regarding the 21 22 Wild Salmon Policy, so it's a summary of 11 23 meetings that were held, the sticky note meetings. 24 The second is a report of the Department of 25 Fisheries and Oceans on those meetings, and the 26 recommendations arising from them. 27 THE REGISTRAR: Do you have dates for the meetings --28 or for the notes? 29 MS. GAERTNER: There is no date on the document, it's 30 just called Summary of Meeting Notes from DFO, 31 Fall 2006; that's the document. 32 THE REGISTRAR: Fall 2006. 33 MS. GAERTNER: The second document is dated February 34 20th, 2007. 35 Sorry, it's actually fairly -- it's important that 36 you have these documents before you. I don't have 37 to do too much with them, so I just want to 38 confirm, and now I want to take you to the meeting 39 that occurred -- well, actually, I'll take you 40 through the documents so you're clear about the 41 kinds of items that are being raised by First 42 Nations. 43 The theme in Prince George, in particular, 44 that I was referencing you to, is on page 2, there

clearly raising with you habitat monitoring,

benchmarking and pilot projects. So under the

themes from the Prince George meetings, is that

46

47

MS. GAERTNER:

1 helpful to you, Mr. Saunders? 2 MR. SAUNDERS: Yes. 3 And so you'll -- perhaps it refreshes your memory 4 on the types of issues that the UFFCA, which are 5 specifically noted in the document, raised with 6 you at that meeting? 7 MR. SAUNDERS: Yes. 8 And particularly, they raised habitat monitoring, 9 benchmarking and pilot projects. You'll see that 10 in the action items and technical information 11 below it. They also raise with you local 12 communities have extensive ATK to contribute to 13 ecosystem work. Scroll down to the end of that 14 page. And that UFFCA wants to be involved in the 15 KPP, and I'm assuming that the KPP is that 16 knowledgeable person panel that was being 17 discussed? 18 MR. SAUNDERS: Yes. 19 All right. If you flip down, then, to the end of 20 page 3, there's a meeting in Kamloops, and at that 21 meeting, already concerns that the budgets won't 22 be forthcoming to implement the Wild Salmon Policy 23 are raised with DFO; is that correct? 24 MR. SAUNDERS: Yes. 25 And that on the next page over, the top of page 4, 26 the fourth bullet back, they're asking that: 27 28 Report back to the participants on 29 accomplishments, including establishment of 30 funding and partnerships. 31 32 Is that correct? 33 MR. SAUNDERS: Yes. 34 And then at page 6, you had a meeting in Merritt, 35 and at that meeting in Merritt, under conservation 36 units, they clearly raise with you the 37 incorporation of TEK and ATK and gathering 38 knowledge about the conservation units? 39 MR. SAUNDERS: Yes. 40 MS. GAERTNER: I'd like to go, now, to the next 41 exhibit, now, Exhibit 218. 42 MR. LUNN: Sorry, MS. Gaertner, I think there's a 43 number missing from that CAN number. Thank you. 44 It's got a zero.

I want to take you to pages 15 through 18 of that

document. Mr. Saunders, I'd just like you to

39

40

41

42

43

44

45

46 47

scroll through that, I think that will be helpful, 1 and just let the registrar know when you need 3 to --MR. SAUNDERS: This wouldn't have been anything I would 5 have been involved with. 6 No, sorry, page 15. 7 MR. LUNN: Sorry, the numbering on the electronic 8 version is different. 9 MS. GAERINER: Seventeen on the ringtail, if that 10 helps. There you go. 11 MR. LUNN: There we go. 12 MS. GAERTNER: 13 And I just need you to confirm for specific areas 14 in which it all became clear to you as a result of 15 this report and continuing on, was that there was regional differences regarding the setting of 16 17 conservation units. There was some concerns in 18 some areas that there would be too many 19 conservation units and that in others there 20 wouldn't be enough. Is that something that you 21 recall as a result of these meetings, that there 22 were different concerns about how conservation 23 units would be set? 24 MR. SAUNDERS: Yes. 25 Also confirm that there was strong concerns raised 26 about the importance of provincial involvement in 27 habitat work? MR. SAUNDERS: Yes. 28 29 And there was strong concerns about incorporating 30 ecosystem values and Wild Salmon Policy in the 31 implementation stage; is that correct? 32 MR. SAUNDERS: Yes. 33 If you could turn to page 2 and 3 of that 34 document, now, and those are the list of 35 recommendations that resulted as -- or as a result 36 of those meetings. And the recommendations 37 clearly included that you needed to be clear on

the topics of consultation.

Recommendation 2 is to discuss the topics that are relevant to each geographic area, so it was important to ensure that when you did consultation you were specific about the areas and the issues that arose in the different areas.

Recommendation 3 is that you would allocate more time to developing the key issues. Recommendation 4 is that you follow through with a more robust and regular reporting back mechanism.

Recommendation 5 is that you get out of the box. And recommendation 6 is that you secure formal agreements for the participation of the Province in consultations with stakeholders and First Nations.

 Do you agree with me on all of those recommendations, and would those have been recommendations you would have reviewed after the holding of the sticky note meetings?

MR. SAUNDERS: Yes, I'm not sure I would call these the sticky note meetings, though.

 Oh, isn't this a summary of the meetings that were held in the different areas?

MR. SAUNDERS: But it's, I think, and I could be mistaken, but I think the sticky note meetings were meetings when we were getting feedback specifically on the first round of conservation units. Maybe Dr. Irvine can recall more clearly than I can.

DR. IRVINE: Well, no, there were presentations on the four strategies, so one, two, three, and I believe four

MS. GAERTNER: Perhaps you could go to page 5 of the document, and I think that might help the witnesses. You don't have the full document in front of you. It's page 7 of the electronic version. This is a listing of all of the meetings that were held that are the foundation of this report.

MR. SAUNDERS: Okay, my mistake. My colleagues seem to think the sticky note is a consistent reference.

DR. IRVINE: I mean, the sticky notes were just providing information on the conservation units.

MS. GAERTNER: I'm just actually using it, I'm sorry, and I mean no disrespect, whatsoever.

DR. IRVINE: It's a good term.

 Q I was just using it to refer to that round of meetings that was held in 2006, in those various places and the type of interaction and work that was done there. So I was just trying to use it as a descriptive --

DR. IRVINE: I'd just like to make one comment: the meetings actually did go through until January 2007, so that there was a meeting at Alert Bay. Oh, I see.

DR. IRVINE: And I don't think that's listed. I'm not sure that this is the -- or at least the list you

May 2008.

46 47

had in the previous report I don't think is 1 complete, and I'm not sure whether this shows them 3 all or not. The meetings did go through until 4 January, or at least there was at least one 5 meeting in January, in Alert Bay. 6 Thank you. Okay, I'd like -- I'm finished with 7 I'd like to now go to Exhibit 193. that exhibit. And in terms of the chronology, the next 8 chronology of meetings that I'm aware of is we go 9 10 to March 27 and 28, as meetings of the Department 11 of Fisheries and Oceans Wild Salmon Policy forum 12 And again, it's my understanding in Richmond. 13 that at this meeting Mark Saunders, you were 14 there, Dr. Hyatt's there and Dr. Holt is there; is 15 that correct? Do you recall those meetings? 16 MR. SAUNDERS: Yes. 17 DR. HYATT: Yes, I do. 18 DR. IRVINE: I'm pretty sure I was there, too. 19 Oh, did I miss you? 20 MS. STALBERG: And myself, as well. 21 Oh, sorry. Now, again, if I may, I'd like to take 22 you to another document. I want to think about 23 that meeting and what I am going to provide to you 24 is a summary that DFO did of that meeting. 25 think that might be a faster way of getting 26 through the important outcomes of that meeting. 27 And it's a document on Canada's -- 166562, number 28 1 on Canada's list. 29 MR. LUNN: Thank you. 30 MS. GAERTNER: 31 And this is a document that provided highlights, 32 as it says, from the Wild Salmon Policy 33 stakeholder forum of March 2008, and it's my understanding that this was presented at a Wild 34 35 Salmon Policy planning meeting on May 14 and 15, 36 as reflected on the front of the document. 37 Can I confirm, Mr. Saunders, Dr. Irvine, Ms. 38 Stalberg, and Dr. Holt (sic), you were all a part 39 of that team at that point in time; is that 40 correct? 41 MR. SAUNDERS: I don't think I was, at this point. 42 DR. HYATT: I've been part of the planning team fairly 43 continuously, so I would have been part of this 44 planning meeting. 45 MS. STALBERG: I was part of the implementation team in

All right. So Mr. Saunders, you may not --

DR. IRVINE: Me, also.

Q -- have seen this document, then, but as I mentioned, it's a highlight of the forum of the meetings that you were at, and so to the extent that that might help refresh your meeting and provide a summary, I'm going to try to pursue that with you.

If you'd like to go back to a more detailed summary, just let me know and I'll go there. And I want to go to page 2 of the -- it's the second page of the summary, and it's also second page of ringtail. What we wanted to come away from in the forum, and you'll confirm that those were the goals that you had at the time of the forum?

MR. SAUNDERS: Yes.

- Q And I want to take you to Strategy 1, page 5.
 Actually, I better be clear on the record. The
 two areas that you wanted to come out of the forum
 was communications and engagement; is that
 correct?
- MR. SAUNDERS: Yes.
- Q Thank you. And if we go to Strategy 2 -- sorry, Strategy 1, page 5. and Strategy 1, of course, is the establishment of the conservation units and at this meeting and at the discussions at that point in time, it's clear that one of the things that came out of those regional meetings was that one of the best ways to inform and engage people in the work on this CU was to use existing processes and structures. That's the third bullet. Would you agree with me on that?

MR. SAUNDERS: Yes.

And particularly, I want to turn your attention to the fifth and sixth bullet of that document. And it's clear as a result of those regional meetings that the best -- one of the best ways to inform and engage people on the work of the CU's was to develop an engagement strategy for each stakeholder group and to develop in-depth dialogue forums for meaningful discussion; is that correct?

MR. SAUNDERS: Yes.

Q And then over to page 6. As a result of those meetings, it was clear that the process should integrate LEK and TEK with benchmark data collection; is that correct?

MR. SAUNDERS: Well, maybe we could just clarify. I mean, I think what we're looking at here is what

- we heard, not necessarily an endorsement of what we think should be done as a result of what we've heard.
 - Yes, but you also agree that the policy, itself, suggests that you integrate, where available, TEK and --
 - MR. SAUNDERS: No, absolutely, yes.
 - Yeah. And one of the bullets under the Partnership Building, including involving First Nations, is to expand DFO capacity to interact and seek partnerships with First Nations and stakeholders; is that correct? That was clearly something you heard at the time?
 - MR. SAUNDERS: Yes.

- Q And over to page 8, Strategy 2. One of the things you heard very clearly at the time was scientists need to better understand TEK and LEK and better incorporate it into your decision-making; is that a fair summary of some of the concerns that were raised?
- MR. SAUNDERS: Yes.
- Q And Dr. Hyatt, as it relates to Strategy 3, at page 9 of that document, you'll agree with me that there were certain themes, or the themes that are -- well, if you could just take a moment to look at that and see if that reflects your recollection of the types of themes that were coming out of those meetings and the issues that were raised with you at this meeting?
- DR. HYATT: As Mr. Saunders has indicated, this appears to be a record of some of the concerns or focal points that were identified, yes.
- Q And that as part of Strategy 3, there was an interest raised by those in the various regions to again use TEK and work with First Nations to identify and/or test indicators?
- DR. HYATT: Yes, as a general principle, that's part of the policy and something we've accepted as something that's desirable.
- Q And then finally, at page 13 of that document, as a result of the work that was done at this meeting, there were comments from the facilitator and general recommendations. Do any of you recall reviewing that? Do any of those surprise you?
- MR. SAUNDERS: No, they don't surprise me.
- Q So they're -- and particularly working with stakeholders to co-create a new engagement

process, so there was a goal of actually engaging 1 the stakeholders and working with them to actually 3 develop the process that would be used? 4 MR. SAUNDERS: I don't remember that one specifically, 5 but, I mean, this is the facilitator's 6 recommendations, or it's not clear to me whether 7 it's the facilitator's recommendation or the 8 general consensus coming out of the meeting. 9 Again, it doesn't surprise you? These are issues 10 and suggestions that have bee raised by First 11 Nations with the Department of Fisheries and 12 Oceans regarding the implementation of the Wild 13 Salmon Policy? 14 MR. SAUNDERS: I would agree with the general thrust of 15 the recommendations there. 16 So those were all recommendations that came out of 17 that forum meeting in March 27 and 28, in 18 Richmond, which was a forum, as I recall and as 19 the minutes reflect, that brought both First 20 Nations and multi-interest parties together. 21 forum didn't have a separate First Nations meeting 22 before that; is that correct? MR. SAUNDERS: That's correct. 23 24 Now, it's my working knowledge, and that's all it 25 is, is working knowledge, that -- and I'm going to 26 take you to the document subsequent to that, but 27 that's the last large forum meeting that's been 28 held specifically with either First Nations or 29 multi-stakeholders on the implementation of the 30 Wild Salmon Policy; would you agree with me? 31 MR. SAUNDERS: That's my recollection, yes. 32 MS. GAERTNER: Mr. Commissioner, the next document that 33 I'd like to take Mr. Saunders to is a document 34 that I absolutely confess I gave late notice on. 35 Oh, can I mark that last one? 36 THE REGISTRAR: Do you -- yes, the last document? 37 MS. GAERTNER: Yes, please. THE REGISTRAR: That will be marked as 219. 38 39 40 EXHIBIT 219: Highlights from WSP Stakeholder 41 Forum, March 2008; WSP Planning Meeting May 42 14-15, 2008

MS. GAERTNER: Thank you. This is a document that came to my attention late. One of my clients brought it to my attention very, very recently, as a result of a phone call I had with them around the

43 44

45

46

topics and issues that are being discussed. I've provided a copy to counsel. It is a document totally relevant to this issue and on point, and so I would like to refer to it to complete the story on the consultative record.

Mr. Timberg, are you going to speak to it? Do you want to speak to it? All right, apparently, there's no objection.

- MR. TIMBERG: Mr. Timberg for Canada. There's no objection to these documents.
- MS. GAERTNER: All right, so this is Canada 172578 and Canada 172579. I would like these marked as exhibits. Mr. Saunders, you may not have seen these documents, I appreciate you were no longer there. I'm not sure whether any of the other panel members would, but particularly I want to bring to the attention of Mr. Commissioner, and to be complete in my assessment of the steps that were taken --

Oh, I'll have them marked as an exhibit. THE REGISTRAR: Okay, the Canada document ending in 578 will be 220, and the Canada number ending in 579 will be 221.

EXHIBIT 220: Fraser River Aboriginal Fisheries Secretariat letter, dated May 26, 2008, from Neil Todd to Amy Mar, re: Fraser River First Nations Wild Salmon Policy Forum

EXHIBIT 221: Fisheries and Oceans Canada letter, dated June 9, 2008, from Amy Mar to Neil Todd

- MS. GAERTNER: And for the record, these are letters that are written from the Fraser River Aboriginal Fisheries Secretariat to Ms. Amy Mar.
- Q She took over your position after you left from the department on your secondment; is that correct, Mr. Saunders?
- MR. SAUNDERS: That's correct.
- Q And the letter reflects a request by the Fraser River Aboriginal Secretariat to host a meeting, giving special attention to the relationship between First Nations and the Wild Salmon Policy and, in particular, how that -- on the Fraser River level, the Fraser River Aboriginal Fisheries level; is that correct?

- MR. SAUNDERS: I don't -- that's the first time I'm seeing this and I wasn't there at the time, so I have no knowledge of the situation.
 - Q So I just bring to your -- the attention, then, on paragraph one, two, three -- the last paragraph:

To that end, the Fraser River Aboriginal Fisheries Secretariat requests that DFO sponsor a forum related to the Wild Salmon Policy as part of your communications, engagement, and implementation strategy that's outlined in your e-mail of May 22nd.

And then on page -- the next exhibit, Exhibit 221, is Ms. Mar's response. And there's a letter that says they'll consider it; that's what the response reflects?

- MR. SAUNDERS: I don't know what to say. The letter's there and --
- Q Speaks for itself.
- MR. SAUNDERS: -- speaks for itself, I guess. I don't know. I have no relationship with this issue.
- Just before I take you to the next set of documents, and Mr. Saunders, I appreciate that you were away, and so I just I actually need to put these documents in as part of the record you requested a sort of overview of all the consultative meetings and I'm trying to respond as best I can to that request.

Mr. Saunders, I'm curious, when you hold those tier 2 and tier 3 meetings on Wild Salmon Policy in the forums in somewhere like Richmond, what's the rough estimate of the cost of such a meeting?

- MR. SAUNDERS: My recollection is that they're probably between -- in the neighbourhood of \$40,000 to \$60,000 to do that.
- MS. GAERTNER: The next document I want to take you to and bring Mr. Commissioner's attention to is number 9 on Canada's list.
- Q Now, again, Mr. Saunders, you were likely away during this time period; is that correct??
- MR. SAUNDERS: I would have returned to the department in February of 2009, at the very tail end of this.
- Q Did you attend any -- well, no, you wouldn't have attended any -- either of the two meetings that are reflected under Wild Salmon -- three meetings

that are -- two meetings that are reflected under 1 the Wild Salmon Policy; a meeting in the Central 3 Coast Marine Use Planning Committee, and a meeting 4 of the Fraser Watershed Joint Technical Committee? 5 MR. SAUNDERS: No. 6 But if you could, the fifth column over on 7 "Outcomes" and "Barriers/Challenges", I wonder if 8 you could review those? And at the same time, I 9 also wonder if you could also review the "Lessons 10 Learned" from those meetings? 11 MR. SAUNDERS: Okay. 12 And you'll agree with me that one of the things the department is learning through moving from the 13 14 more forum-like provincial meetings and bringing 15 them a little bit more local in the areas, they're experiencing technical challenges -- or 16 17 experiencing challenges associated with explaining 18 technical implications to a non technical 19 audience, while there's a high expectation for DFO 20 to implement the Wild Salmon Policy more quickly. 21 And you'll also agree with me that one of the 22 barriers and challenges that's reflected in this 23 document is that participation by First Nations in 24 the process is challenged because of the lack of 25 resources and the dissemination of information to 26 all of the First Nations -- actually, we have to 27 go over to the next page - with interest in the 28 salmon fisheries; is that correct? 29 MR. SAUNDERS: The third -- before you do that, if you 30 could go back. The third line is related to the 31 Pacific Salmon Treaty, which I don't -- maybe I 32 don't understand -- that's not clear to me what 33 that meeting would be, whether this is a -- how the Wild Salmon Policy is -- fits not that. I'm 34 35 having trouble understanding that. 36 All right. 37 38

39

40

41

42

43

44

45

46

47

MR. SAUNDERS: I will say, on the barriers and challenges, I think we, as science organization and scientists, we always have an ongoing challenge to communicate technical issues. But I will say that I think, Mr. Commissioner, that the time -- that the work that we've done, in particular in the last several years -- well, I should say that maybe over the whole course of it has required sort of a science -- has a strong science basis, so we're always challenged by that communication.

But we've also maintained a strong connection and, again, it's this level in a forum. If I can -- if I'm -- I can't point to where it will be in the documents, but my recollection is that at the last major forum in that 2008 one, people said the usefulness -- we're getting to the point where we have very technical issues and the -- there tends to be a fairly high level participation of representatives at -- for both First Nations and others at those meetings, and they felt that (a) we needed to be -- come back to that larger group when we had more -- something really substantive to put on the table that we'd done, and in the interim we should be meeting with -- we should be dealing with audiences that appreciate and understand that technical nature.

So you'll see that we've done a lot of work, the work around the conservation units, the benchmarks, the habitat indicators, engaged people in a much more -- a subset rather than this higher level. So it's always a question of whether it's appropriate to come back to the larger table or to go and have smaller meetings, and I think we have a very strong connection with First Nations, technical representatives and the various commissions, such as the FRAFS and the Skeena Fisheries Commission and the Nuu-chah-nulth, et cetera. So there's a lot of work going on in the background that isn't -- and meetings that aren't reflected in, you know, these high level forums.

- Just for the record, I think I know what you mean by "high level" participation. Are you meaning leadership, political leadership that attends the larger forums?
- MR. SAUNDERS: Yes.
- Q And they would not necessarily be informed on technical aspects and they would prefer that you meet directly with those technical people that they have access to; is that correct?
- MR. SAUNDERS: Yes.
- Q And that these meetings, for example, the meeting with the Fraser Watershed Joint Technical Committee, is actually an attempt to do that?
- MR. SAUNDERS: Yes. I wasn't at that meeting and I actually have not, myself, had the opportunity to participate in a joint technical committee, so I'm not familiar in exactly how the discourse

proceeds.

MS. GAERTNER: Yes, I just have to make sure I put the entire bundle before them.

So I'd like to mark as an exhibit a bundle of documents that are reflected in this -- that this was an attachment to. And if I'm using the numbers right, it's DFO 154372.

MR. LUNN: Do you have CAN numbers?

MS. GAERTNER: CAN166561.

MR. TIMBERG: Mr. Commissioner, these documents that Ms. Gaertner is entering right now, we were provided copies of these last night. They are in bundles, and so my agreement was that we would have these entered as a bundle, because the bundle shows usually an e-mail -- they're all e-mail trains with attachments. And so it explains these attachments.

So Ms. Gaertner is going to the attachments, and I just want it on the record the actual bundle, because it will become relevant when, in future hearing dates when our future witnesses will be able to speak to these, because I note that none of these panel members actually received these correspondences.

So I expect we'll see these again, and so the recommendation is that the three bundles be entered as, I would suggest, as one exhibit each, so we would have three exhibits with attachments, would, I think, be the best means of doing that. And perhaps Mr. Lunn, the Registrar, and the parties, can do that after the court is over, and we can just clarify that on the record in the morning.

That might be the most efficient way of doing it.

- MS. GAERTNER: I'm through with that attachment, and I apologize with the time it's taken to get through that. Okay, the last two documents in the consultative -- sorry?
- MR. LUNN: So the current document, is that going to be marked as part of the bundle?
- MS. GAERTNER: Yes.
- MR. LUNN: Okay, thank you.
- THE REGISTRAR: Shall we mark it now, then, or in the morning?
- 46 MS. GAERTNER: We can mark it in the morning.
- 47 THE REGISTRAR: Thank you.

- MS. GAERTNER: Finally, I want to go to Exhibit -- or second to last in the process of consultation is Exhibit 191, and that's the June 2008 consultation plan that DFO developed, and I'd like to turn your attention to page 2.
 - So this is three years after the passage of the Wild Salmon Policy, and at page 2 of the document it confirms that funding for consultations is still to be determined 5.2 you'll agree with me on that?
 - MR. SAUNDERS: I was away at this time, but I'll agree that that's what it says, yes.
 - MS. GAERTNER: Thank you. And in two thousand -- and then go to Exhibit 189. This is a next document challenge that I have, Mr. Commissioner, which is this is an actual, it's Exhibit 189, but Ms. Pence, when reviewing the actual exhibit discovered, today, that the exhibit that's marked is only one page, where the document, itself, is 10 pages, so we're going to need to address that. I'm not sure whether or not you now have the full document or not. You do have nine pages?

And so I wonder if we could just keep the same exhibit number with the full document?

- MR. WALLACE: I think that, Mr. Commissioner, is the simplest way to deal with it, that, for the record, Exhibit 189 has nine pages.
- MS. GAERTNER: Thank you.
- Q And this, again, Mr. Saunders, you're now back with the department; is that correct?
- MR. SAUNDERS: Yes, I am.
- Q And you'll reflect, under paragraph 2.0, the fourth paragraph I'm on page 1 and it reflects that while a forum was planned for the fall of 2009, it didn't take place. As well, this year, the fall dialogue meetings are not going to take place.
- MR. SAUNDERS: Yes.
- Q And was that because there was nothing to report?
- MR. SAUNDERS: I don't recall the -- that --
- Q Or was it because there was no funding?
- MR. SAUNDERS: No, I think it was the issue that I spoke to a moment ago, that whether or not there was a -- the group that would be brought together would be high level and that we still had interest in doing more targeted work around the benchmarks and the other pieces that were coming -- that were

slated for review and making progress that year,
would be better -- the time would be better
invested in doing a multi-stakeholder forum later,
a dialogue session, rather than in that year.

And if you go to page 2 of that document, secondlast -- the second two -- second-last paragraphs

- And if you go to page 2 of that document, secondlast -- the second two -- second-last paragraphs in section 3.0, just before the key stakeholders list, there continues to be recognition within the implementation of the Wild Salmon Policy that new refined governance structures would be necessary, and that the team considered a proposal to set up an external advisory board with First Nations; however, they decided not to go ahead with that.
- MR. SAUNDERS: I don't recall that discussion, but I'm sure this statement is accurate.
- Q And then if you reflect at page 5 -- section 5.0 on the consultation strategy, 5.2, any activities under consultation would require reallocation. There's no money for consultation in Wild Salmon Policy.
- MR. SAUNDERS: That's true and that's -- but that's been the case right from the very beginning, that it's always been determined at the beginning of each year what contributions would be received from each sector, and if we had decided to go ahead we would have pulled together the resources to do that.
- Thank you. I'm now going to turn to the next issue. That has me full circle on the efforts on consultation. Is there anything else that you would like to add, Mr. Saunders, in terms of the chronology of the consultative efforts to date? I'm going to take you to the traditional ecological knowledge work next.
- MR. SAUNDERS: Okay, well, I think that's, again, how you define -- I know consultation has a very strict meaning and interpretation with First Nations and others, but I think if you were to take a -- there's a fuller description of -- that would go down another layer down in terms of technical meetings and workshops related to Strategy 3, there were a number of specific workshops related to moving forward on Strategy 3, which would have included the articulation of the -- of why -- of how we, you know, moved forward with the knowledgeable persons panel or not, were a result of some of those meetings.

Some of the documents -- or some of the CSAS proceedings, I would say, while not necessarily meeting a certain description of consultation, they are open processes that we chose to develop and move forward on implementing -- or on coming to ground on scientific methodology.

So there are another -- if we drill down another layer, there's a lot more work that was going on during that time, and I would characterize the last several years as being very much in a technical mode and may fly under the radar of being consultation.

MS. GAERTNER: All right. I need to, next, take you to document number 1 on our November 22nd list.

Mr. Commissioner, concerns around time are being raised with me. I am going to take probably the amount of time that I estimated. I had hoped I could condense this. I'm going as fast as I can.

And then if you could also bring document number 2 on November 22nd, our list, and have both of those documents in front of Mr. Saunders.

- Q Mr. Saunders, I don't know if you had a chance to read that e-mail, but it reflected a proposal that you were working on with Fred Fortier and Dave Moore. You're familiar with both of those individuals?
- MR. SAUNDERS: Yes, I am.
- Q And you'll confirm for us that they're First Nations -- Fred Fortier was a First Nations representative from the Secwepemc Fisheries Commission, and Dave Moore was one of the consultants working at that time?
- MR. SAUNDERS: Yes.
- Q And together the three of you drafted, in 2006, a Proposal for the Development of Guidelines for the use of Aboriginal Traditional Knowledge Management of Fisheries Resources in DFO's Specific Region?
- MR. SAUNDERS: Yes.
- Q And that proposal is in front of you?
- 41 MR. SAUNDERS: Yes.
 - MS. GAERTNER: May I have that marked as the next exhibit?
 - MR. LUNN: The proposal?
 - MS. GAERTNER: The proposal, yes.
 - THE REGISTRAR: Number 222.

EXHIBIT 222: Department of Fisheries and Oceans Consultation with Aboriginal Groups, April 1, 2008 - March 31, 2009, Information by Sector

MS. GAERTNER:

- Q And you'll agree -- could you actually -- Mr. Saunders, do you remember this work?
- MR. SAUNDERS: Yes, I remember the general intent of it, yes.
- Q And that was to draft guidelines and have those guidelines reviewed by both DFO and First Nations on the use of traditional ecological knowledge and the work of the WSP Implementation?

MR. SAUNDERS: Yes.

- Q And that the goal was to have that work done in August of 2006 through to June 2007?
- MR. SAUNDERS: Yes, we -- well, this proposal was developed but then subsequently revisited several times as to whether we would actually move forward. And when I say "we", I'm talking about Mr. Fortier, as well as myself, how to move it ahead.
- Q And at that point in time, the budget that's reflected in this document is approximately 35,000?
- MR. SAUNDERS: I don't recall but yes, that sounds right.
- Q I'll take you to page 2 of the proposal. That sounds about right; is that what you said?
- MR. SAUNDERS: Yes, that sounds about right.
- Q It's our knowledge that none of this work has proceeded with respect to this proposal; is that correct?
- MR. SAUNDERS: That's true. I can add to that in that I think I spoke to this in the last day or two but, Mr. Commissioner, this was a recognition in discussions with Mr. Fortier and Mr. Moore and others that -- that First Nations -- it would be appropriate for First Nations to take the lead role in explaining their position or their understanding of how best to incorporate ATK. And we certainly struggled with it as a western science organization on how to do that, extremely interested and recognized the commitments that we made.

Mr. Fortier and Mr. Moore were working within

the context of the Aboriginal Fisheries Commission because they recognized that it's not just two people that can bring this forward; they would need engagement of -- of interior, coastal, northern and southern First Nations in this. So there was a piece that they were working on how to do that engagement. And when the Aboriginal Fisheries Commission was disbanded, there was a vacuum there for them to actually go about how to pull that together. So we never -- while the money would not have been an issue, the ability for them to move forward without a framework to work within, they were hoping that they would be able to work within the context of the then emerging First Nations Fisheries Council.

But I left around that time and we did talk about it subsequently when I was with the Fraser Salmon and Watersheds Program. But I think the new council had more -- was in its infancy and start-up and so we just never had a good opportunity to put that proposal back on the table again. And since then, Mr. Fortier has -- is not, to my knowledge, actively sort of engaged in the Council. But I -- it would be something that I would see it going back to the Council to discuss.

- MS. GAERTNER: And I think just for the record then, I should put number 3 of our November 22nd letter in as -- I've marked the last one as an exhibit already, which is an email exchange between Amy Mar, your -- and Brenda McCorquodale, of the First Nations Fisheries Council from...
- MR. LUNN: Yes, I have it.
- MS. GAERTNER: You have it there on the left there.
- 34 MR. LUNN: Yes.
 - MS. GAERTNER: Great. If you could mark -- if we could tender it as the next exhibit?
 - Q So this confirms that there's ongoing interest in doing this work?
 - MR. SAUNDERS: Yes.
 - THE REGISTRAR: That's Exhibit 223.

EXHIBIT 223: Email exchange between Amy Mar and Brenda McCorquodale

MS. GAERTNER:

Q But as of 2008, that work has not yet been done. And as of 2010, that work has not yet been done.

- MR. SAUNDERS: I am not aware. There may be other initiatives within the -- within the region that I'm not aware of.
 - Q Within the -- any work done on the Wild Salmon Policy, in specific, a report collaboratively done by DFO and First Nations on the integration of traditional ecological knowledge and the implementation of the Wild Salmon Policy?
 - MR. SAUNDERS: Again, I'm not aware of anything else but I can't -- I couldn't -- there may be others that are involved in something that I'm not aware of.
 - Q Okay. The next report that I want to tender as an exhibit is -- it was document number 5 on the coalition list. It's dated on the first -- preface page March 2009. And this is a report that was provided to the Department of Fisheries and Oceans. Do any of the panel -- have any of you seen this report? Have you --

MR. SAUNDERS: Yes.

- Q It's been brought to your attention? Great.
- DR. IRVINE: Yes, I've seen it.
- Q Great.

THE REGISTRAR: Exhibit 224.

EXHIBIT 224: Wild Salmon Policy Technical Review and Analysis Report

MS. GAERTNER:

- And I'm just going to take you through the summary of that report. And Mr. Saunders, you'll confirm that Julie Gardner provided an extensive overview and summaries and recommendations that was brought to the attention of the Department of Fisheries and Oceans regarding the integration of traditional ecological knowledge and other forms of knowledge and that's reflected in this report; is that correct?
- MR. SAUNDERS: Yes.
- Q And at page 4 of that report, Roman numeral iv, sorry, it provides an overview of the challenges associated with the integration of science and traditional and local knowledge?
- MR. SAUNDERS: Yes.
- 45 Q And in particular, at the bottom of page iv and 46 over to page v, it provides limitations on the 47 integration of traditional local knowledge -

98
PANEL NO. 7
Cross-exam by Ms. Gaertner

that's the TLK frame - into the integrated planning process will include a number of challenges?

MR. SAUNDERS: I'm not sure what you're asking not sure what you're askin

- MR. SAUNDERS: I'm not sure what you're asking me to agree to.
- Or actually, all of you -- any of you. One of the challenges associated with integrated traditional ecological knowledge and scientific knowledge is the difference in approach in the gathering of the information and how it's used and how it's integrated. Mr. -- Dr. Hyatt may have something to add to this.
- DR. HYATT: Well, I've certainly had some experience in this area in terms of integrating traditional environmental knowledge or traditional local knowledge with the more formal kind of western approach to science. And these are some of the challenges and concerns that are commonly raised, accuracy and verification. This is a reasonable list that would appear in many publications.
- Q And then, at page vi and vii and viii of the document, Mr. Saunders, you -- did you review -have you reviewed this document and considered it in the context of implementing the Wild Salmon Policy?
- MR. SAUNDERS: I certainly have read it and thought about it in terms of where we're going. I don't have a -- but that would be the extent of what I -- yeah, I would have read it and considered it in how we're moving forward.
- Q And if I take you to Roman numeral viii, the report sets out some of the challenges associated with collecting and processing that information? Dr. Hyatt, Mr. Saunders, those are challenges you're familiar with?
- DR. HYATT: Yes, those are -- those are certainly challenges I'm familiar with. I've actually published a paper or two on how to -- how to retrieve information and systematically assemble it from local environmental knowledge within knowledge frames that -- that local informants feel comfortable with and -- and are able to -- to populate in a way that that information then becomes not only useful to them but useful to -- to technical forums.
- Q And in that work, Dr. Hyatt, is it clear that working closely with the First Nations and -- and

in a way in which -- respects the traditional ways in which they hold the knowledge on how it's communicated as a necessary component?

- DR. HYATT: It's an essential component and, in my experience, it's a rate -- to some extent it's a rate-limiting component. It takes -- I've worked with many First Nations groups. It takes upwards of several years to a decade to build the kind of trusting relationship with local informants, elders, even with groups that have some technical capacity that are of First Nations orientation in order to work effectively together. And there is actually no replacement for that. There's -- you can attempt to accelerate it but you know the fundamental trust that has to be built on is -- is something that is irreplaceable.
- Q Thank you, Dr. Hyatt.
- MS. GAERTNER: I think hopefully I'm near -- the last of the documents is document 17 on our November 22nd list. This is the work plan for 2009 for the Wild Salmon Policy Implementation. And I'd like to go to page 8 of that work plan. Now, I appreciate that Mr. Wallace might be concerned that it relates to Strategy 5 but there is -- it's the only indication of traditional ecological knowledge in this work plan. Could I have this marked as an exhibit?

THE REGISTRAR: Exhibit Number 225.

EXHIBIT 225: Wild Salmon Policy Implementation

MS. GAERTNER:

- Q And it reflects that Aboriginal traditional ecological knowledge is now in the work plan, but it's -- you'll agree with me that it's new to the work plan. That's what's confirmed in this document? I'll start, Dr. Hyatt?
- DR. HYATT: Sorry, could you repeat the question?

 Q Sure. I'm going to take you to the -- the only entry for Aboriginal traditional ecological knowledge in this work plan, which is the second bullet, or the second square.
- DR. HYATT: I see.
- Q All right?
- DR. HYATT: And so in the second square, it says, "New to work plan"?

Yes.

1 Q Yes. 2 DR. HYATT: 3 Q And ye

And you'll then confirm that there is no money allotted to that item?

DR. HYATT: That's correct. And there -- I do recall some discussion within the implementation team around this item to the effect that there were broader initiatives underway to develop a kind of standardized approach to Aboriginal traditional environmental knowledge. And these broader initiatives were taking information and -- and sort of best practices from some of the work that had been done by other government departments in the Yukon, in the Yukon Treaty Settlement Agreement so outside of the -- the implementation area for Wild Salmon Policy.

And my recollection, although if you later on have opportunity to speak to either Lisa Wilson or to Wesley Hamilton, they may be able to give you better -- a better recollection than I can. But my recollection was that we had been informed that these departments were bringing information forward into a standardized approach that would benefit us considerably because a lot more work had been put into this than we were able to do locally. And so we were hopeful that that might provide a way forward.

Q So I'm just confused actually and I just -- if you could help me. It seems to be a common understanding that in order to develop and use traditional ecological knowledge, you have to work closely with the First Nations, who are holders of that. Mr. Saunders, as soon as you started the implementation you worked with some of the gentlemen on the Fraser River to develop an approach -- wasn't even a very expensive approach -- as to begin to provide some guidelines. But if I read this document correctly, you've -- DFO and the members of this committee have now decided that:

A draft targeted approach to how we like to include ATK should be developed before seeking additional First Nation input.

Is that what that document reflects? It's at the second from the right column, same entry, last

101
PANEL NO. 7
Cross-exam by Ms. Gaertner

sentence. And I'm just confused, frankly, that's all. And if you could help me. If it's a funding issue, that's fine. You can just say that, if that's what the challenge is. If it's a challenge that you don't know. Clearly, you knew at that point in time that you could not do this work on your own and so I'm surprised to see a document that suggests that DFO was going to work on this on their own.

DR. HYATT: Mr. Saunders, perhaps I'll come first, because I do recall this — this discussion. I think this — the language in that particular comment in the column does not communicate the full intent here. I think, as I recall from the discussion, there's both a content requirement for dealing with ATK or local — local environmental knowledge, as well as a — as well as a process requirement. And we had neither and certainly it's acknowledged that in order to develop those close work with First Nations groups, Aboriginal Groups, is a necessary source of — of formulating such content and process standards that are agreeable to both First Nations and non-First Nations participants.

And again, relating to my previous comments, the -- the expectation was that a group nationally were working on this and were going to provide in -- in the near future at the time of this writing, materials that could actually help guide us before we then began the engagement of a regional process that attempted to replicate this both with respect to content and process. None of us on the implementation team regarded ourselves as -- as ATK specialists or, you know, people with a wealth of experience with -- with this area.

Q All right. I'm just going to go -- hearken back to the summary that I gave -- or I presented to you, Mr. Saunders, at the time in which the policy was completed. The expectations of First Nations would be that they would be directly involved and how do you -- the expectations of the First Nations in British Columbia that you can -- that you engaged in discussions with was they would be involved and there would be an open and transparent decision-making, at least as it relates to traditional ecological knowledge, never mind the whole of the process. I couldn't find

any information and I wasn't provided any information how the decision that you've just reflected, Dr. Hyatt, was made. It definitely wasn't made in consultation with First Nations, was it?

- DR. HYATT: No, this particular decision resulting from that discussion was not made in consultation with First Nations.
- Q All right. I just have a couple of closing questions. You know, I want to say again at the beginning of my presentation, my client is looking for learning form the experiences we're having. I'm surprised I haven't -- are any of you aware of budget submissions within the Wild Salmon Policy to engage in the traditional ecological knowledge and the gathering of traditional ecological knowledge?
- MR. SAUNDERS: I am not, to my knowledge. There may -you know, again, policy branch, you know, Lisa
 Wilson and -- and others, and Amy Mar before that,
 may have been involved in something I'm not aware
 of.
- Q But under -- in work in progress right now, you're not aware of any funding that's --
- MR. SAUNDERS: I'm not aware. I'm not aware, no.
- Q And so is it -- is it your recommendation that in order to begin to implement some of the work around integrating traditional ecological knowledge that there be funding that's provided for that work and a mechanism and assistance to DFO in how to implement it through a consultative process with First Nations?
- MR. SAUNDERS: I think it's an issue that we need to continue to work on, and I can't recall clearly, but it may have been a priority that we established in -- with the First Nations Fisheries Council. So I would say that the First Nations Fisheries Council is the first place that I personally would look to for some engagement between DFO and that Council to work on how you -- how to move forward and in that discussion consider how to -- you know, appropriate mechanism and how to fund it.
- Q And you'll agree with me that at that level, what you'll be able to achieve, hopefully, is an overall guideline for how to implement that commitment; is that correct?

103
PANEL NO. 7
Cross-exam by Ms. Gaertner

- MR. SAUNDERS: Personally, that's what I've thought was -- was reasonable. I don't know if the department has -- you know, we have not -- I don't recall coming to the conclusion that that's the absolute way to go. That was where I was proceeding as a coordinator, and I still would stand by that.
- And that -- and once you've got those types of guidelines, Dr. Hyatt, your experience is that in order to do this work you have to go right into the communities and work strongly with them and that that would take time, effort and resources in order to do that; is that correct?
- DR. HYATT: That's correct. And certainly in some of the projects that we have underway, which down at the working level, that is the approach.
- Q And would that be the approach that you're using in the work that you're doing in Barkley Sound?
- DR. HYATT: That would be what we -- we hope to do in Barkley Sound. We have quite -- again, it was one of the reasons that that area was selected as a pilot is that the participants -- a number of the participants in the Barkley Sound pilot already have the several years of engagement and trust of First Nations representatives and their -- and their technical advisors, and so that makes things move along much -- at a much quicker pace and makes it possible to achieve a better outcome.
- Q And am I -- have I heard you right then, Dr. Hyatt, that the -- at the gathering of traditional ecological and -- has not been done in Barkley Sound?
- DR. HYATT: The gathering of traditional environmental knowledge has not been done by us. There -- there certainly are a number of groups outside of the department. And in fact, some of the individuals involved with this did presentations at the Barkley Sound Knowledge Symposium last spring that was well-attended and well-represented -representative of First Nations' views. So there is material that has been assembled. But again, with respect to using this material or bringing it into and integrating it into Strategy 2 and Strategy 3 of Wild Salmon Policy, that's a requirement that Fisheries and Oceans Canada will have to -- will have to pursue but it's quite feasible to do it there.
- Q And have you developed experience in the Barkley

Sound pilot to provide some recommendations to DFO as to how that will be done?

- DR. HYATT: The work plan has -- I can't say that the work plan has progressed to that level of providing explicit recommendations. It's certainly a general category of activity that's part and parcel of the pilot. The Nuu-cha-nulth Tribal Council is engaged. We're currently reviewing terms of reference with Westcoast Aquatic that are mutually acceptable to Westcoast Aquatic Group, as well as DFO. And within Westcoast Aquatic Organization, the First Nation group -- First Nations groups are well represented.
- And so can we look forward to a report through the pilot project on how to integrate traditional ecological knowledge into Strategy 3?
- DR. HYATT: Certainly there -- there should be a -- as part of that end-to-end pilot, there should be a chapter, if you will, or a report that could stand alone. Of course, it's better if it's linked to the other components of WSP Implementation so one can see how they're -- they all integrate together.
- MS. GAERTNER: I just have two remaining questions of the panel.
- Mr. Saunders, I think you're best suited to answer them. If I'm wrong, please -- you heard my questions yesterday of Dr. Holt and the confusion that my clients have around how quickly the benchmarks for conservation units are now being set without consultation or without engagement with First Nations. Did you recall that discussion I had with Dr. Holt yesterday?
- MR. SAUNDERS: I recall that, yes.
- Am I'm wondering now if you could offer some observations as to why that is happening given the expectations that you confirmed earlier that at the time of the passage of the Wild Salmon Policy and subsequent to that, and in the reports that you've heard, First Nations definitely want to be involved in setting the benchmarks and confirming the benchmarks for conservation units.
- MR. SAUNDERS: Yes, I think -- you know, we've taken the course of action that we would use the CSAS or the peer review process to move forward on any development of a scientific methodology and we've

done that with the habitat indicators, with the conservation units and now with the benchmarks. We did have -- and the paper, Grant et al, follows that mould. But I think it gets back to my point earlier where I think we've been in a -- in a development mode right now that -- where very technical details are being around the -analytical things are being developed. And I think First Nations are -- at the technical level, are very much engaged in -- as we move forward on these pieces so the Fraser River technical bodies, the -- the work that's being done in the Somass Pilot, the work that's being done up in the Skeena engages the -- the Skeena Fisheries Commission technical staff. So I don't think there's an intent to exclude First Nations from -- from these processes.

- MS. GAERTNER: Could I go to Exhibit 8, the Wild Salmon Policy?
- Q Sorry, Mr. Saunders. I want to take you to step Action Step 1.2. You're not excluding First
 Nations from this process but as I understood the
 evidence after the completion of this report, the
 goal of the Department of Fisheries and Oceans is
 to set the preliminary benchmarks for the
 conservation units for the Fraser sockeye salmon;
 is that correct? And we've got about -- I think
 by February of this year -- of next year, 2011, if
 that paper completes, we'll have the initial
 benchmarks?
- MR. SAUNDERS: Well, as Dr. Holt was speaking to, I think there may be -- I would have to -- I can't recall exactly. I thought there was a discussion around splitting the current document and the intent of that document in two. So she did refer to a subsequent piece of work and I think that would include sort of the final stage of the -- of the benchmarks.
- Q My recollection of the evidence was that she said the benchmarks will continue to evolve.
- MR. SAUNDERS: Oh, absolutely. Absolutely, yes.
- Q But that the intention is within this -- in the -the finalization of the paper is to set the first benchmarks.
- MR. SAUNDERS: I'm not clear on that.
- Q All right. If you can, you'll recall, and you'll recall your evidence on how important every word

in this policy was to First Nations. And you'll go to page 17 of the policy, which is Action Step 1.2, and the determination of the benchmarks. And in this policy, at the bottom of main paragraph, there -- it reads:

 There is no single rule to use for a determination of the lower benchmark. Rather, it will be determined on a case-by-case basis and depend on available information and the risk tolerance applied. The determination of the risk tolerance to apply is a value judgment that requires consultation with First Nations and others affected by this choice.

You'll agree with me that that's what's in the policy?

- MR. SAUNDERS: Yes.
- And you'll agree with me that once this paper is finalized, there won't have been even engagement on the benchmarks set up, never mind consultation, with the First Nations with respect to the setting of the initial benchmarks?
- MR. SAUNDERS: Again, it gets back to how you're defining consultation but I --
- Other than the -- other than the -- the scientific peer reviews and the participation perhaps by Mike Staley of the reports, there won't be any other engagement with First Nations around the setting of these benchmarks?
- MR. SAUNDERS: I don't -- I think it's -- saying it would just be Mike Staley might be too narrow. I think there would be engagement of other technical -- and I -- as this is being moved out into the area staff, so Carrie Holt, Dr. Holt, is working on the development of this piece. But Sue Grant and then a host of other authors and area people are involved. So we would -- you would need to talk to Ms. Grant and others about how they -- what the engagement, again, at the technical level was. But was there a meeting at that higher level of -- you know, of a public --
- Q A forum?
- MR. SAUNDERS: -- sort of an open forum? No, there wasn't.
- Q So there wasn't even a forum on the setting of those benchmarks?

- MR. SAUNDERS: Well, I wouldn't say "even" a forum.

 No, there wasn't. So I -- I'm not disputing that.

 It's -- I haven't -- I don't -- I think it's

 worthy of some thinking about where the next steps

 are on the benchmark. We've been very locked down

 -- not -- locked down is the wrong word but very

 focused on trying to move through the development

 of these benchmarks. And if there's a step that

 we're missing, I would like to talk to our area

 staff to understand how that will roll out in the

 areas and I think that's worth having that

 discussion to understand the level of comfort that

 we've got with First Nations on how they would

 like to be involved in -- in those -- in that

 step.
 - Q And that's a commitment you're prepared to make?
- MR. SAUNDERS: I'm prepared to make that, yes.
- Q All right. I have one final question for you, Mr. Saunders. You're familiar with Tier 1, Tier 2, Tier 3?
- MR. SAUNDERS: Yes.
- Q All right. Would you agree with me that a well-mandated Tier 1, 2, 3 process would be useful in the ongoing implementation of the Wild Salmon Policy?
- MR. SAUNDERS: A clearly articulated process, yes, that would be very helpful.
- And would you also agree with me that a scalebased analysis on what type of topics could be dealt with at a Tier 1, Tier 2 and Tier 3 and what needs to go into the -- into the areas specifically could be helpful to the Department of Fisheries and Oceans?
- MR. SAUNDERS: I think that would be helpful, yes.
- MS. GAERTNER: Thank you. Those are my questions.
- MR. WALLACE: Mr. Commissioner, I've been advised by Mr. Timberg he has ten minutes or so of reexamination. If I beg your indulgence, the Commission counsel would like to ask one small series of questions and put the remainder, which are clarifications essentially, in writing, if that's agreeable and get written answers rather than putting -- so all-in-all, I think it's about 20 minutes.
- THE COMMISSIONER: I would prefer not another 20 minutes, Mr. Wallace. If you can do it in ten, I'm content.

108
PANEL NO. 7
Cross-exam by Ms. Gaertner
Re-exam by Ms. Tessaro

- MR. WALLACE: Thank you. Mr. Timberg, I'm not sure if perhaps written clarifications might work for you as well?
 - MR. TIMBERG: I'm just considering this for the first time. Just one moment.
 - MS. GAERTNER: Just as he's considering that, I just want to put on the record that my time estimate as of this morning was an hour and a half and that's exactly how long I took.
 - MR. TIMBERG: In recognition of the amount of time that this panel has been here for and especially Mr. Saunders and Dr. Irvine, I'll agree to following up in writing, if we can let them go.
 - THE COMMISSIONER: All right.
 - MR. WALLACE: Thank you. That just leaves one line of questions from Ms. Tessaro, if I may?
 - THE COMMISSIONER: Can we do that in 10 minutes, Ms. Tessaro?
 - MS. TESSARO: Definitely, Mr. Commissioner.
 - THE COMMISSIONER: Okay, thank you.
 - MS. TESSARO: My name is Lara Tessaro. I haven't had the opportunity to introduce myself to you on the record yet. Actually, we will be following up, as Mr. Wallace had said, with some written questions for you. They're all in the nature of clarification. But for one line of questions, which arises from a document that we did not have at the time of our initial examination. And that's the document that's been referred to by you, Ms. Stalberg, and by Mr. Timberg, as the habitat overview report for Cultus Lake. And I'm just wondering if that could be quickly pulled up. That's Exhibit 212.

RE-EXAMINATION BY MS. TESSARO:

- Q Ms. Stalberg, I just want to confirm that you're relatively familiar with this document. Have you read it recently?
- MS. STALBERG: Just very briefly, quickly pulled it up and brought it to the proceedings. So no, I'm not really familiar with the contents of the document.
- Q Are you familiar enough with the document to say that it is, in fact, what's been characterized as a habitat overview report?
- MS. STALBERG: I can say that it is a combination of population information and habitat information.

The population information is part of the biological status information that was sought in the '05/'06 pilot. And it contains some habitat-related information, I think, from the recovery planning process that was being drafted for Cultus Lake sockeye earlier.

 Would it be common that a habitat status report -sorry, habitat overview report under the Wild Salmon Policy wouldn't reference the Wild Salmon Policy, because this document doesn't?

MS. STALBERG: I wouldn't think that would be common, no. You would be talking about the conservation unit on the top and then there would be probably some reference to the Wild Salmon Policy relating to some of the habitat restoration or management priorities that might be input into the habitat management program pursuant to the Wild Salmon Policy. Something like that.

Maybe I can assist you with just referring to the language of Strategy 2, Step 2.1, where:

Habitat overview reports are said to 'provide sufficient information on key habitats to identify priorities for protection, rehabilitation and restoration. It will also identify information gaps and factors such as water quality and quantity that potentially threaten the future health and productivity of habitats.

That's what you were just referring to, the kind of the information that you'd expect to see in a habitat status -- habitat overview report; is that right?

MS. STALBERG: That's correct.

 Are you able to identify any such information in this document that -- that provides sufficient information on -- on key habitats that would help identify priorities for protection and rehabilitation?

MS. STALBERG: I think if you scroll towards the end is where the habitat component is. But I will say that --

MS. TESSARO: Can you just scroll quite slowly, John?

 MS. STALBERG: Slow. No, keep going, thanks. Okay. So -- and there is -- this was an early pilot, so this is testing out the thinking. And this

doesn't have the habitat status template information within it. But there is some habitat-related information in here: Eurasian water milfoil — thank you. So we didn't have our indicators at the time again. So I'm not saying that this is the best example of an overview report. I'm saying this is a product of the 0'5/'06 attempt to test the thinking on what we wanted within overview reports, population or the biological status reports and the habitat status reports.

- I appreciate that you don't have indicators yet because indicators -- or the work, as you've explained that was done, up to 2009 when your report was published. But my understanding is that the habitat indicators, the pressure and state indicators that you've given evidence on, those are a feature of habitat status reports. This, I understood you to have characterized as a habitat overview report. So am I right about that?
- MS. STALBERG: No, this -- so this is to reflect some of the elements that we wanted within the overview report and this is a combination of the population status report sought by -- through Strategy 1 and overview information sought through Strategy 2.
- And so if I have your evidence right, and you may need to further scroll down the remaining pages, I'm not sure, and I think this is my final question. Your evidence is that that direction in the Wild Salmon Policy that an overview report will provide sufficient information on key habitats to identify priorities for protection, rehabilitation and restoration, that direction is served by this paragraph on water milfoil? Or is there another place --
- MS. STALBERG: I did not say that.
- Q Well, could you tell me perhaps where, in the document, that direction would be satisfied by this -- by this document?
- MR. SAUNDERS: Go ahead.
- DR. IRVINE: Yeah, I think I should --
- Q Actually, sorry, Ms. Stalberg, my question's for you. If you could tell me where in this document the direction that an overview report will provide information on key habitats to identify priorities for protection, rehabilitation and restoration,

111
PANEL NO. 7
Re-exam by Ms. Tessaro

where that information is found in this document. If Mr. Lunn needs to keep scrolling through, he can.

- MS. STALBERG: Yeah, you can keep scrolling. think from my recollection that it is in here. has some information about habitat that was pulled out of the recovery planning process but it didn't meet the needs of what we were looking for. common threats and then the outlook. It doesn't have what we would seek in the overview report. think that is something that needs to be resolved as part of moving forward with the Wild Salmon Policy, is finalizing the overview report, like making sure that -- because we went through that data that indicators monitoring process and fond that was very expensive and that was -- and challenging. And we thought that would be a ready source to pull out things like predominant threats within a CU. And that is -- that turned out to not be a ready source of information. So I think that is still -- that needs to be resolved, the overview report there, how the information is going to be gained in there in a ready fashion.
- Q Thank you. And Dr. Irvine, I have just really one minute, so if you have -- I understand that you have actually reviewed this document before back in 2005, but do you have any recollection of this document?
- DR. IRVINE: Well, I was involved in the development of the template. But the comment I really want to make is I think there's some confusion about these different reports. So Ms. Stalberg was talking about a habitat status template. This is a conservation unit template, right? So this is --my recollection is that this was intended to include, you know, information primarily form a Strategy 1 perspective but where habitat concerns would be thought to be possible for the -- perhaps a decline in status that you would input that information. But this is clearly drawn from the recovery document that was developed for Cultus Lake sockeye.
- Q That's helpful context, thanks.
- MS. TESSARO: Commissioner, that's my only question orally.
- THE COMMISSIONER: Thank you very much, Ms. Tessaro. I want to thank the members of the panel very much

 for making yourselves available far beyond what you anticipated you would have to put yourself through. So I'm grateful for that and thank you. Each and everyone one of you, thank you very much. We're adjourned then until 10:00 a.m. tomorrow morning.

THE REGISTRAR: The hearing is now adjourned until 10:00 a.m. tomorrow morning.

(PROCEEDINGS ADJOURNED TO DECEMBER 9, 2010, AT 10:00 A.M.)

I HEREBY CERTIFY the foregoing to be a true and accurate transcript of the evidence recorded on a sound recording apparatus, transcribed to the best of my skill and ability, and in accordance with applicable standards.

Karen Acaster

I HEREBY CERTIFY the foregoing to be a true and accurate transcript of the evidence recorded on a sound recording apparatus, transcribed to the best of my skill and ability, and in accordance with applicable standards.

Pat Neumann

I HEREBY CERTIFY the foregoing to be a true and accurate transcript of the evidence recorded on a sound recording apparatus, transcribed to the best of my skill and ability, and in accordance with applicable standards.

I HEREBY CERTIFY the foregoing to be a true and accurate transcript of the evidence recorded on a sound recording apparatus, transcribed to the best of my skill and ability, and in accordance with applicable standards.

Karen Hefferland