

Commission of Inquiry into the Decline of
Sockeye Salmon in the Fraser River



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

Held at:

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

Monday, September 26, 2011

Tenue à :

Salle 801
Cour fédérale
701, rue West Georgia
Vancouver (C.-B.)

le lundi 26 septembre 2011



Errata for the Transcripts of Hearings on September 23, 26, 27 and 28, 2011

Page	Line	Error	Correction
ii	--	Counsel for BCSFA to be added	Alan Blair

APPEARANCES / COMPARUTIONS

Brian Wallace, Q.C. Patrick McGowan Jennifer Chan	Senior Commission Counsel Associate Commission Counsel Junior Commission Counsel
Mitchell Taylor, Q.C. Tim Timberg	Government of Canada ("CAN")
Boris Tyzuk, Q.C. Clifton Prowse, Q.C. Tara Callan	Province of British Columbia ("BCPROV")
No appearance	Pacific Salmon Commission ("PSC")
Chris Buchanan	B.C. Public Service Alliance of Canada Union of Environment Workers B.C. ("BCPSAC")
No appearance	Rio Tinto Alcan Inc. ("RTAI")
No appearance	B.C. Salmon Farmers Association ("BCSFA")
No appearance	Seafood Producers Association of B.C. ("SPABC")
Gregory McDade, Q.C.	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.

Phil Eidsvik	Southern Area E Gillnetters Assn. B.C. Fisheries Survival Coalition ("SGAHC")
Chris Harvey, Q.C.	West Coast Trollers Area G Association; United Fishermen and Allied Workers' Union ("TWCTUFA")
Keith Lowes	B.C. Wildlife Federation; B.C. Federation of Drift Fishers ("WFFDF")
No appearance	Maa-nulth Treaty Society; Tsawwassen First Nation; Musqueam First Nation ("MTM")
John Gailus	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 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); Adams Lake Indian Band; Carrier Sekani Tribal Council; Council of Haida Nation ("FNC")
Melanie Hudson, Articled Student	Métis Nation British Columbia ("MNBC")

APPEARANCES / COMPARUTIONS, cont'd.

Tim Dickson Nicole Schabus	Sto:lo Tribal Council Cheam Indian Band ("STCCIB")
No appearance	Laich-kwil-tach Treaty Society Chief Harold Sewid, Aboriginal Aquaculture Association ("LJHAH")
No appearance	Musgamagw Tsawataineuk Tribal Council ("MTTC")
Ming Song	Heiltsuk Tribal Council ("HTC")

TABLE OF CONTENTS / TABLE DES MATIERES

	PAGE
PANEL NO. 65:	
LAURA RICHARDS (recalled)	
Cross-exam by Mr. Taylor (cont'd)	2/10
Cross-exam by Mr. Blair	39/43
Cross-exam by Mr. McDade	60/67/68/70/72/74/75/79
Cross-exam by Mr. Leadem	83/84/88/89/91/94
DAVID BEVAN (recalled)	
Cross-exam by Mr. Taylor (cont'd)	1/6/15
Cross-exam by Mr. Tyzuk	25
Cross-exam by Mr. Buchanan	35/38
Cross-exam by Mr. Blair	41/43/48/52/55/57
Cross-exam by Mr. McDade	80
Cross-exam by Mr. Leadem	83/86/88/91/94/96/98
CLAIRE DANSEREAU (recalled)	
Cross-exam by Mr. Taylor (cont'd)	5/9/14/16
Cross-exam by Mr. Tyzuk	17/22
Cross-exam by Mr. Buchanan	27/28/33
Cross-exam by Mr. Blair	43/44/46/51/54
Cross-exam by Mr. McDade	66/68/69/71/76/79/80
Cross-exam by Mr. Leadem	86/87/88/96/97
SUSAN FARLINGER (recalled)	
Cross-exam by Mr. Taylor (cont'd)	2/3/5/7/13/15
Cross-exam by Mr. Tyzuk	18
Cross-exam by Mr. Buchanan	26/27/30/36
Cross-exam by Mr. Blair	42/43/46/55
Cross-exam by Mr. McDade	69/71/73/74/77
Cross-exam by Mr. Leadem	84/85/89/90/95/98/99

EXHIBITS / PIECES

<u>No.</u>	<u>Description</u>	<u>Page</u>
1926	Five documents from DFO's website re Salmon Consultations	9
1927	Science Advice for Government Effectives (SAGE), A Report of the Council of Science and Technology Advisors, May 5, 1999	11
1928	Building Excellence in Science and Technology (BEST): The Federal Roles in Performing Science and Technology, A Report of the Council of Science and Technology Advisors	11
1929	Communications Policy of the Government of Canada, August 1, 2006	14
1930	Fisheries and Oceans Canada, Corporate Business Plan, 2011-12	25
1931	National Aquaculture Strategic Action Plan Initiative (NASAPI) 2011 - 2015	44
1932	E-mail from Ruth Salmon to Claire Dansereau, et al, Subject: Aquaculture Act - Industry Outline & background document, dated July 30, 2010	51
1933	E-mail thread between Alexandra Morton and Laura Richards, et al, Subject: High pre-spawn mortality/Egg imports, between November 2, 2010 and December 20, 2010	61
1934	E-mail thread between Alexandra Morton and Paul Sprout, et al, Subject: Dear Mr. Sprout, between October 22, 2009, and October 23, 2009	61
1935	Draft memo to Deputy Minister Claire Dansereau, from T. Swerdfager and B. Antcliffe, Subject: Proposed Transition Licensing Strategy and Licence Conditions Under the New Aquaculture Regulatory Regime in British Columbia	69
1936	Questions and Answers: Science Paper - Fraser River Sockeye, by D. Lake, dated February 10, 2011	70
1937	Fisheries and Oceans Strategic Review of the Aquaculture Collaborative Research and Development Program, Final Report by Goss Gilroy, March 31, 2005	82

EXHIBITS / PIECES

<u>No.</u>	<u>Description</u>	<u>Page</u>
1938	Email thread ending October 1, 2008 re National Precautionary Approach Framework	94
1939	Communications Plan - Sustainable Fisheries Framework, March 9, 2009	96
1940	A Harvest Strategy Compliant with the Precautionary Approach, Canadian Science Advisory Secretariat Science Advisory Report 2006/023	96

EXHIBITS FOR IDENTIFICATION / PIECES POUR IDENTIFICATION

KKK	Factors Influencing Early Marine Survival of Fraser River Sockeye	72
-----	---	----

1 Vancouver, B.C. /Vancouver
2 (C.-B.)
3 September 26, 2011/le 23
4 septembre 2011
5

6 THE REGISTRAR: The hearing is now resumed.
7

8 LAURA RICHARDS, recalled.
9

10 DAVID BEVAN, recalled.
11

12 CLAIRE DANSEREAU, recalled.
13

14 SUSAN FARLINGER, recalled.
15

16 MR. TAYLOR: Thank you, Mr. Commissioner.
17

18 CROSS-EXAMINATION BY MR. TAYLOR, continuing:
19

20 Q I'll begin this morning by picking up on something
21 that was asked by Mr. Wallace, and a couple of
22 other administrative matters, if I may.

23 Mr. Bevan, on Thursday you were asked by Mr.
24 Wallace about the amount of money that C&P
25 received as a result -- C&P in Pacific Region
26 received as a result of the Williams Report, and
27 you weren't sure at that point. Have you had a
28 chance to determine that?

29 MR. BEVAN: Yes, I have. The amount that was provided
30 to C&P in the Pacific Region was an additional
31 \$1.2 million per year, and that funding has been
32 extended past the time allocation for the Williams
33 Report through PICFI money being assigned to keep
34 that additional funding going.

35 Q All right. So that annual allotment is continuing
36 as we speak, then, is it?

37 MR. BEVAN: That's correct.

38 Q And was there any other money that came as a
39 result of PICFI that might be important to know
40 about, too?

41 MR. BEVAN: There's another in the range of half a
42 million dollars provided for intelligence-based
43 enforcement.

44 Q All right. Ms. Farlinger, in ballpark terms, and
45 you can speak to 2010-2011, if that's the easiest
46 year to speak to, or your choosing, what's the
47 approximate C&P budget in the Pacific Region, do

1 you know?

2 MS. FARLINGER: In the 2009-'10 and 2010-'11, the
3 budgets -- the expenditures of the C&P budget were
4 \$20 million and \$22 million, including the PICFI
5 and Williams funds that Mr. Bevan just talked
6 about.

7 Q Okay, thank you. Now, I wonder if Exhibit 1923
8 might come up on the screen, please. Ms.
9 Farlinger, I understand that there's two
10 amendments that should be made to update what's in
11 this, and they're on pages 66 and 67 regarding two
12 First Nations and the treaty situation with regard
13 to those. While it's coming up on the screen, I
14 think you have to mind what those amendments are.
15 Can you tell the Commissioner what they are, or
16 two updates, rather?

17 MS. FARLINGER: Yes, on page 5 on the matter of the
18 Yale Final Agreement.

19 Q Okay.

20 MS. FARLINGER: It's the third --

21 Q My page numbers are different, but that's fine.

22 MS. FARLINGER: Okay.

23 Q Yes, the amendment then is what?

24 MS. FARLINGER: The Yale First Nation has ratified in
25 March 12th, 2011, British Columbia ratified in
26 June 2011, and Canada will be -- the ratification
27 will be completed when Canada finishes with its
28 legislation.

29 Q All right. And then there's one other update, is
30 there?

31 MS. FARLINGER: Yes, I believe it's on the next page.
32 It's the In-SHUCK-ch Agreement-in-Principle.

33 Q There we have it.

34 MS. FARLINGER: In the case of the In-SHUCK-ch
35 Agreement-in-Principle, on the ratification or the
36 initialling of the negotiated final agreement, in
37 2010 the Douglas First Nation did not support the
38 initialling of the final agreement.

39 Q Okay, thank you. Dr. Richards, you're familiar
40 with the various draft Sue Grant papers, of
41 course. I understand that there are some caveats
42 that DFO Science attaches to the production and
43 then the exhibiting of those draft papers in these
44 proceedings. Can you explain that?

45 DR. RICHARDS: Yes, Mr. Commissioner. These documents
46 were intended to be draft documents. And as such
47 the contents of them still could be changed --

1 still could change when we finalize and go through
2 the final level of peer review. And I think that
3 there is concern because normally these documents
4 do not become public until they're final and there
5 may be some concern if some of the material in
6 some of the drafts differs from the final version,
7 that that could cause some confusion. So that was
8 the nature of our concern.

9 Q All right. And is there yet to be peer review
10 happen?

11 DR. RICHARDS: Yes, there is review that's happening
12 right now on the document, the most recent
13 version, which is dated I think August 25th. So
14 that is still not final and we are hoping to have
15 a final version within the next month or so.

16 Q All right. And I take it that the peer review
17 could affect, as peer review does, what the
18 content of the ultimate or final paper is?

19 DR. RICHARDS: Yes, that's always the case.

20 Q All right. I'll move now to some further
21 substantive questions, if I may, and I'm going to
22 pick up and recommence with the question that the
23 Commissioner had on Friday about page 35 of the
24 WSP, where there's two things set out there, that
25 implementation of WSP should be within DFO's
26 existing resource capability and phased in over
27 time, and secondly, it will depend on the
28 effectiveness of sharing of responsibility with
29 First Nations governance and volunteers and
30 stakeholders, and other governments. Ms.
31 Farlinger, can you speak to the plan that exists
32 or the approach that exists with regard to the
33 effectiveness of DFO sharing responsibility with
34 others, First Nations, volunteers, stakeholders,
35 and other governments?

36 MS. FARLINGER: I can speak to it in the sense I can
37 provide -- or briefly provide some context.
38 Collaboration and co-management occurs at the
39 scale of the activity, and must in its nature take
40 account of other collaborations agreements,
41 legislation that occur. For example, we
42 collaborate in the North Pacific Anadromous Fish
43 Commission on a science basis, and we may with
44 individual First Nations work on co-management of
45 a particular fishery that is specific to that
46 First Nation as it pertains to the First Nations
47 authorities that they bring to the table, and the

1 authorities that DFO brings to the table.

2 So collaboration occurs at all levels and
3 scales in terms of our relationships, and also can
4 be very specific and very different, depending on
5 with whom it is, and must always take into account
6 impacts, other impacts, the most obvious one is
7 other First Nations, for example, that fish on the
8 same stock or fish in the same area.

9 Q And with that, how do you see DFO bringing it
10 together, so to speak, with regard to this
11 effectiveness and sharing responsibility. You've
12 outlined what's being done. How is it all going
13 to come together as you see it?

14 MS. FARLINGER: Well, there are a variety of ways. One
15 is through the process we have begun with the
16 First Nations Forum around the management of
17 Fraser sockeye. We are continuing to advance that
18 process in the sense that it is hoped at the end
19 of that process that we may have some agreement
20 between all of those First Nations that fish
21 Fraser sockeye and DFO on the management of Fraser
22 sockeye as it pertains to the Aboriginal fishery,
23 and as it pertains to conservation and other
24 issues around the fishery.

25 In the case of the commercial fishery, for
26 example, we have agreements with individual groups
27 of commercial fishermen in a variety of
28 situations. And the example there as it pertains
29 to Fraser sockeye could be with respect to some of
30 the demonstration fisheries, or on a broader basis
31 with respect to monitoring or other science, or
32 sampling work that needs to be done.

33 And on the broader -- on the broader multi
34 stakeholder and First Nations issues, really it is
35 through the use of our integrated fishery
36 management process, which culminates in the
37 Integrated Harvest Planning Committee that we
38 bring all the various processes, bilateral
39 processes with constituencies and our negotiations
40 with individual First -- negotiations and
41 consultations with individual and collectively
42 with First Nations into the integrated fishing
43 plan. And we are continually working to improve
44 that process, which is really the focus of
45 collaboration and brings together the variety of
46 collaborations we will work on with any
47 stakeholder or with First Nations.

1 Q Okay. This next question is one of the Deputy
2 Minister and for Sue Farlinger, and that is
3 whether DFO sees that it has the necessary tools
4 to accomplish management of the fishery and
5 governance and achieving some of what Ms.
6 Farlinger was speaking about. I'll start with
7 you, Deputy, if I may. Do you see that the
8 necessary tools are in place?

9 MS. DANSEREAU: I see that many of the necessary tools
10 are in place, but I also think that we need to
11 keep a very open mind for new tools and new
12 approaches as they become available. And so for
13 the moment, yes, we do. But we have to remain
14 open to new ways of doing business and new ways of
15 consulting and new ways of working with -- with
16 the science that we receive in order to best
17 provide the Minister with the most fulsome advice.

18 Q Mm-hmm. And are there any specific things that
19 you would see would be useful to add to your
20 toolkit?

21 MS. DANSEREAU: I think there is potential for
22 modernizing the **Fisheries Act** in some parts to
23 ensure that there is more room outside of the
24 Minister constantly being the final decision
25 point. And obviously that would require
26 significant consultation and I couldn't prejudge
27 where -- what type of tools we would develop
28 through consultation around that. But I think
29 that there is some room for improvement there.

30 Q All right. Ms. Farlinger, did you want to add
31 anything, or...

32 MS. FARLINGER: I would just say that we work with a
33 variety of agreements that we can carry out within
34 the confines of the **Financial Administration Act**,
35 and the other relevant legislation that we need to
36 be in line with. And over time those evolve and
37 we continually work with -- with our own
38 Department and -- and with Treasury Board to make
39 sure that we understand the evolving context of
40 that, and to make the best use of those with
41 respect to agreements with stakeholders, for
42 example, or implementing, for example, the terms
43 and conditions of a Cabinet decision like the
44 Aboriginal Fisheries Program. We update the
45 conditions and terms. We look for greater
46 flexibility.

47 So we do have a variety of tools in the

1 toolbox, but as the Deputy said, we're continually
2 looking for improvements.

3 Q Okay. Now, Ms. Farlinger, this next question is
4 for you, and I'll turn now to First Nation
5 interests. Could you explain DFO's approach to
6 co-management with First Nations as applied in the
7 Pacific Region, anyhow.

8 MS. FARLINGER: Yes. The approach, as I made reference
9 to just a moment ago, is fairly variable, and it's
10 highly specific, depending in many instances on
11 the fish, the stocks, the conservation issues as
12 they pertain to the particular group we're dealing
13 with, whether we're dealing with an individual
14 First Nation or a group of First Nations. Our
15 approach is intended to respect potential and
16 existing Aboriginal rights. Our approach is
17 intended to follow the guidelines of consultation
18 and, if appropriate, accommodation that are set
19 out by the Government of Canada. And of course
20 this pertains to all federal Departments, but is
21 very practical and operational in terms of our
22 Department and how we do our work.

23 We are continually, as you can see through
24 the documents from the First Nations Forum and the
25 "Roadmap" that was described here earlier. We are
26 continuing to work on those co-management
27 agreements to understand what it is they can be,
28 what the scope of those are, how to move those
29 things forward, what kind of information and
30 commitments are required to move that whole co-
31 management framework forward.

32 So it very much is guided by government
33 policy, but it's also very much guided by the
34 conservation and practical issues around the
35 management of the fishery.

36 Q Okay. The Roadmap that you referred to a moment
37 ago, that's the Fraser River Salmon Roadmap is it?

38 MS. FARLINGER: Yes, it is.

39 Q And that's Exhibit 1220, Mr. Commissioner. I'll
40 now ask, if I may, Mr. Bevan and Ms. Farlinger,
41 about the role that DFO plays amongst other
42 stakeholders, commercial fishers and NGOs and
43 recreational fishers. I'll start with you, if I
44 may, Mr. Bevan. What role does DFO play in that
45 regard?

46 MR. BEVAN: We have to consult with the various
47 participants in the fishery, whether it's

1 recreational, commercial or Aboriginal, and in so
2 doing, try to come to a consensus. In the absence
3 of a consensus, information is provided to the
4 Minister on the various views, and a decision is
5 taken around the Integrated Fish Management Plan.
6 After that has been established, it's our role, as
7 well, to monitor the catches, and to enforce the
8 requirements outlined in the Integrated Fish
9 Management Plan in a way that would provide the
10 participants with some confidence that the rules
11 are fairly applied across the various groups, and
12 that their adherence to the rules is not going to
13 be undermined by another group's behaviour.

14 Q All right. Ms. Farlinger, did you have points to
15 add to that?

16 MS. FARLINGER: Just briefly I would say that DFO's
17 role is as the regulator.

18 Q All right.

19 MS. FARLINGER: And as the regulator we need to consult
20 with the various interests that Mr. Bevan referred
21 to. I would also add that in the Integrated
22 Harvest Planning Committee for Salmon, we have as
23 a result of recommendations from reports and
24 studies in the early 2000s added the environmental
25 sector, representing the broader environmental
26 interest. And in those -- in those regards the
27 role as a regulator leads to the role to consult,
28 leads to the -- lead to the role to respect
29 potential and existing rights, and often requires
30 us to draw, I think just to use a colloquial term,
31 draw a line in the sand and be clear that the
32 Minister will make a decision, or the Department
33 will make a decision, irrespective of whether
34 consensus is reached or not. And often it is
35 that, I guess I would call it, best alternative to
36 a negotiated solution that brings people to the
37 table and encourages their participation. If they
38 do know that the regulator, for example, for an
39 annual plan will make a decision. And so that
40 role is a very important one in terms of
41 collaboration and creating consensus where it's
42 possible.

43 Q It appears that over the past decade or so DFO has
44 expanded its salmon consultation processes, and at
45 the same time that there's some criticism from
46 some stakeholders about cost and time spent in
47 consultations. How do you respond to that?

1 Firstly, is that all correct, Ms. Farlinger, and
2 if it is, how do you respond to that?

3 MS. FARLINGER: DFO certainly has expanded its
4 consultation processes. As I mentioned a moment
5 ago, the environmental sector is part of the
6 Integrated Harvest Planning Committee. There are
7 subcommittees associated with that. There are a
8 variety of -- a variety of ways, for example, that
9 First Nations, recreational and commercial
10 stakeholders come to the table. And the bottom
11 line is, is although it's very cumbersome and it
12 certainly takes a good deal of our resource
13 manager's time, in my view those who work on
14 salmon spend at least half of their time in
15 consultative processes of one kind and another,
16 either providing technical support or
17 participating more directly in those processes to
18 gather information. It is necessary because of
19 the broad set of interests, both potential and
20 existing rights-based interests, but also public,
21 as well as individual fishing interests in the
22 fishery.

23 So, yes, it is cumbersome and it is
24 challenging, but all of those groups have an
25 interest in the fishery and how it's prosecuted.
26 And it is in our interest to have an Integrated
27 Fishery Management Plan that is understood by all
28 of those groups and people, so that when that plan
29 is implemented in season, or when the Minister may
30 have to make a decision that's different than that
31 plan, the background and the information is
32 commonly understood.

33 Q Okay. Could we have Canada's Tab 19, please, on
34 the screen. What should be coming up - there it
35 is - is an apparent extract from Fisheries and
36 Oceans' website. Do you recognize that, Ms.
37 Farlinger?

38 MS. FARLINGER: Yes, I do. This is a website that we
39 put consultation information on ranging from the
40 dates of meeting, who we're meeting with, and
41 minutes of meetings so that people who want to
42 have access to that information to know who has
43 been consulted and when will know that.

44 MR. TAYLOR: Now, if your computer, Mr. Lunn, is like
45 my binder, there's four different documents in
46 there, different parts of the website, is that
47 correct, there's a 1 of 2, a 1 of 3, and a 1 of

1 10, and then a 1 of 2. We've got a 1 of 1. But
2 am I correct, there are multiple documents?

3 MR. LUNN: Yes.

4 MR. TAYLOR:

5 Q And, Ms. Farlinger, are those all various parts of
6 the website that have to do with salmon
7 consultation processes in this region?

8 MS. FARLINGER: Yes, they are.

9 MR. TAYLOR: May that be the next exhibit, please.

10 THE REGISTRAR: Exhibit 1926.

11

12 EXHIBIT 1926: Five documents from DFO's
13 website re Salmon Consultations

14

15 MR. TAYLOR:

16 Q Deputy, may I ask you how is it that we can ensure
17 that there's - I'm turning to Science now - how
18 can we ensure that there is relevant and
19 independent Science advice within DFO, in your
20 view?

21 MS. DANSEREAU: Well, as I think you know, we have a
22 very -- a very consultative process around
23 science. We have our peer-reviewed process
24 nationally called CSAS, which includes -- which is
25 somewhat different, I would say, from other peer
26 review processes in that we not only have other
27 scientists commenting on our science, but we have
28 stakeholders, as well. And that's done in order
29 to ensure that we, our scientists, are asking the
30 right questions and providing the right answers.

31 Independence also comes from the management
32 side, so directing the kinds of questions that
33 need to be posed in order for us to make
34 decisions, but without directing to say thou shalt
35 arrive at a certain conclusion. So we're very
36 clear that we are hands off in terms of how the
37 scientists do their work. The discussion we had
38 the other day on the title of the document, that's
39 not a discussion that would ever come to the
40 management side of things. That's purely the
41 scientists doing their business.

42 So Science, we are constrained some would say
43 by potentially not having sufficient funds. That
44 will constantly be an argument, but I suspect that
45 scientists in all -- in all circles have that same
46 complaint, whether it's a university or a research
47 centre, or a government. So the funding side is

1 one question, and it's not tied to the
2 independence question.

3 I never question the scientists'
4 independence. I simply make sure that when I am
5 advising the Minister on a question, I can say
6 Science is clear on this point, "A", "B" or "C",
7 and it comes up the way it comes up without
8 interference from anyone.

9 Q All right. Do you see a benefit to having Science
10 conduct research in-house?

11 MS. DANSEREAU: I do very much, as I said, because
12 funds are limited and we need to make sure that
13 the science is directed at those questions that
14 are the most pressing and we require information
15 to make management decisions that have an impact
16 for today and an impact for the future. So, yes,
17 there is an absolute need, I would say, as a
18 regulator for us to be able to -- I consider our
19 -- and some may disagree with this, but I consider
20 our science, and I consider our advice to actually
21 be independent advice. Because we have no vested
22 interest. We simply have an interest in making --
23 providing the best advice we can to the Minister,
24 and as a regulator, we have to be able to rely on
25 ourselves to provide that kind of advice.

26 Q All right, thank you. Could we have Tab 4 of
27 Canada's book on the screen, please, Mr. Lunn, and
28 my question of you, Dr. Richards, when it comes up
29 is whether you recognize and can identify what
30 this is.

31 DR. RICHARDS: Yes. Yes, I recognize this document. It
32 was produced by the Council of Science and
33 Technology Advisors, which was a council that was
34 established in the late '90s, reporting directly
35 to Cabinet to provide advice to them.

36 Q And is that in -- I see it's dated 1999, is it in
37 force now?

38 DR. RICHARDS: Well, very much that it's really an
39 advisory document, not something which is strictly
40 enforced.

41 Q All right.

42 DR. RICHARDS: But it has very much influenced our
43 thinking and very much the principles that are
44 identified in that document are part of our peer
45 review process. And you can see that throughout
46 the terms of reference of what the Deputy just
47 mentioned, CSAS, so the Canadian Scientific

1 Advisory Secretariat.

2 MR. TAYLOR: All right, thank you. Could we -- oh,
3 could that be marked as the next exhibit, please.

4 THE REGISTRAR: Exhibit 1927.

5
6
7
8
9

 EXHIBIT 1927: Science Advice for Government
 Effectives (SAGE), A Report of the Council of
 Science and Technology Advisors, May 5, 1999

10 MR. TAYLOR:

11 Q May we now have Tab 24, please. And again, Dr.
12 Richards, I'll ask you if you can recognize and
13 identify this document.

14 DR. RICHARDS: Yes. This is another document that was
15 produced by the same group in the late 1990s, and
16 it really explains the benefits of having some
17 science capability within government. And I think
18 this was -- it's interesting that this was done
19 and produced at a time of challenges to budget and
20 government downsizing, but argues very strongly
21 that we do need to -- governments do need to have
22 some in-house science capability to serve, in
23 particular, regulatory functions, amongst other
24 things.

25 MR. TAYLOR: All right. And if we turn to page 28 --
26 before we proceed, I do want to go to page 28, but
27 could this be an exhibit, please.

28 THE REGISTRAR: Exhibit 1928.

29
30
31
32
33
34
35

 EXHIBIT 1928: Building Excellence in Science
 and Technology (BEST): The Federal Roles in
 Performing Science and Technology, A Report
 of the Council of Science and Technology
 Advisors

36 MR. TAYLOR:

37 Q Now, if we go to page 28, there's some high-level
38 conclusions or recommendations there, and --
39 sorry, page 27. You'll see there around the
40 middle of the page it says, "We strongly believe"
41 -- I'm looking for a sentence that says [as read]:

42
43
44
45
46
47

 We strongly believe that there is a critical
 role for the Federal Government in performing
 science and technology to fulfil the mandate.

 And as we're trying to find it, I'll ask you, Dr.

1 Richards, if you could comment on that as you --
2 do you agree with that, or have a comment on that
3 statement?

4 DR. RICHARDS: Yes. I think -- I think that that, in
5 fact, these documents --

6 Q It's on 27 somewhere.

7 DR. RICHARDS: -- have been quite useful for us and in
8 explaining part of what the role is for Science
9 within government, and the fact that there are
10 issues, and particularly issues that deal with
11 regulation that is very beneficial for science to
12 be done in-house so that we can be providing
13 timely and effective science advice to senior
14 management.

15 Q Okay. There's another quote on either page 27 or
16 28 and I'm just going to read it to you in the
17 interests of time. It may be on the screen or not
18 [as read]:

19
20 Priority setting in government and across the
21 innovation system should take a more
22 horizontal approach.
23

24 What's your comment on that, if any?

25 DR. RICHARDS: You're asking me?

26 Q Yes.

27 DR. RICHARDS: I think that means that we do need to
28 make sure that we seek to have all the advice on
29 the table. We want to make sure that we, in order
30 to provide sound science, we need to make sure
31 that we consider all of the possible different
32 aspects that could influence that science. And so
33 in that context, it's useful to engage with others
34 and to collaborate with others to make sure that
35 we have the breadth covered, and there's also --
36 because there's lots of areas of expertise and
37 we've already heard about that, and so we don't
38 expect any one group to be an expert in
39 everything. And to ensure that we do look at a
40 problem from lots of different perspectives, we
41 need a broader consideration.

42 Q All right, thank you. During the hearings on May
43 the 5th of this year at pages 14 and 15, the
44 Commissioner asked a witness at the time, Dr.
45 Ford, the DFO scientist, the Commissioner asked
46 Dr. Ford about science planning between DFO and
47 the larger community of universities or

1 foundations and international organizations, and
2 so forth. And I don't need to take you to it, but
3 I'll read the part of the extract. The
4 Commissioner was speaking and said:

5
6 I think Dr. Trites mentioned there are
7 private foundations and obviously
8 universities and others who are involved in a
9 variety of research projects. I'm just
10 trying to get a sense of is this a scrambled
11 situation in our world of research, or is
12 there actually some game plan here now in
13 2011 and going forward that takes advantage
14 of all this work that's been done and tries
15 to get a sense of for the politicians...

16
17 The gist of that, as I see it, is asking whether
18 there's a process or something that ties it all
19 together.

20 I'll break that question into two parts, if I
21 may, and I'll ask you, Dr. Richards, and then turn
22 to Ms. Farlinger. Is there a coordinating body
23 that oversees this work and/or integrates it, or
24 otherwise a process for that?

25 DR. RICHARDS: There isn't a body that integrates
26 absolutely everything. There's bodies that
27 integrate bits, but not all of it in one place.

28 Q All right. Ms. Farlinger, do you have anything to
29 say on that?

30 MS. FARLINGER: My view as a regulator, or working in a
31 Department that's expected to deliver regulatory
32 programs, is improvements I've seen in the Science
33 model recently point to processes where there are
34 large questions and where there is a broad field
35 of expertise that needs to be brought in.
36 Processes like the one that was held in June 2010
37 under the Pacific Salmon Commission are ones that
38 look at a particular topic, take it up to a high
39 level, bring the expertise together and produce a
40 result that is what do we know, what are the gaps,
41 and what are our priorities for moving forward,
42 and that information is amassed from a broad range
43 of scientific expertise relative to the topic.

44 Now, the issue with this, of course, is the
45 expertise associated with any particular question
46 or topic is different in the science community.
47 The science community is, you've pointed out, Mr.

1 Taylor, is very broad. And so these things at the
2 moment tend to be convened within DFO Science as
3 specific projects to take a look at the
4 perspective around a particular question. And I'm
5 informed by our national colleagues in Science
6 that these kinds of processes are becoming more
7 common in DFO Science and I assume across
8 government, to address broad questions and set
9 priorities.

10 So I think that that kind of process really
11 is the evolution of the need, which is more people
12 have more information, people aren't sure what
13 information means, rather than what I might
14 euphemistically call the duelling scientist model
15 of the past, that everybody has their own expert.
16 And so I think these kinds of processes, such as
17 we've seen in Fraser sockeye, are really key to
18 the broad sort of setting of priorities and
19 identifying key research questions moving forward.

20 Q All right, thank you. And you've really answered
21 the second prong of the question that I was going
22 to put, which is the approach for science research
23 between DFO and universities and private
24 organizations as it relates to Fraser sockeye. So
25 I think I'll leave that there.

26 May we have number 47 of Canada's book,
27 please, Mr. Lunn, and this is a question of you,
28 Deputy, when it comes up, whether you can
29 recognize this document and what it is. Do you
30 recognize what that is?

31 MS. DANSEREAU: Yes, I do.

32 Q Microphone, I think.

33 MS. DANSEREAU: Oh, sorry. Yes, I do.

34 Q And what is that?

35 MS. DANSEREAU: It's the government, as it states, the
36 Communications Policy for the Government of
37 Canada.

38 MR. TAYLOR: All right. May that be the next exhibit,
39 please.

40 THE REGISTRAR: Exhibit 1929.

41
42 EXHIBIT 1929: Communications Policy of the
43 Government of Canada, August 1, 2006
44

45 MR. TAYLOR:

46 Q I'm going to ask a question now about instilling
47 confidence, and we're coming close to my time, I

1 can see, although I believe I started at 10:03. I
2 don't know what grace that will get me from Mr.
3 McGowan. But a question about instilling
4 confidence, and I ask you, Mr. Bevan, and Ms.
5 Farlinger, I think, if you could turn your mind to
6 catch monitoring and enforcement and speak to how
7 that -- how those things can be used to instil
8 confidence in the management of the fishery and
9 the work you do. Mr. Bevan?

10 MR. BEVAN: Yes, I think when you're -- particularly
11 when you're looking at a variety of groups that
12 are prosecuting fisheries, each group will have
13 confidence perhaps in their own members'
14 behaviour, but when you're sharing quotas among a
15 variety of people, they need to have the
16 confidence that the catches of every group will be
17 monitored and that there's some confidence that
18 those catch monitors are accurate, and that in the
19 event of non-compliance there will be enforcement
20 applied to the non-compliant parties. So the
21 confidence comes from fairness and transparency in
22 setting the criteria in the fish plans and
23 confidence that those catches will be accurately
24 monitored and that in the case of non-compliance,
25 it will be dealt with.

26 Q All right. Ms. Farlinger, do you have anything to
27 add to that?

28 MS. FARLINGER: I would just say that internally our
29 confidence and our ability to assure the public is
30 based on the fact that the science aligns with the
31 management system in place for a particular
32 fishery. And then we must ensure that the
33 management system and the requirements of the
34 management system, that is the conservation
35 requirements and the sharing requirements, all of
36 those articulate with the enforcement strategy for
37 a particular fishery. And so the fact is, is
38 those are different activities, enforcement and
39 management and science, and all of those things
40 need to articulate and work together, and really
41 internal collaboration is very much the key, I
42 think, to public confidence that the -- I guess
43 the left hand knows what the right hand is doing
44 in the regulator.

45 Q All right, thank you. And my last question will
46 be of you, Deputy Minister, and it is what's your
47 assessment whether it's appropriate or right and

16

PANEL NO. 65

Cross-exam by Mr. Taylor (cont'd) (CAN)

Cross-exam by Mr. Tyzuk (BCPROV)

1 proper for the government to be the responsible
2 authority for managing Fraser River sockeye, as
3 opposed to some other body in some form?

4 MS. DANSEREAU: Thank you. Well, I do, actually, and
5 we had thought about this quite a bit through
6 these proceedings and listening to the various
7 inputs, and I've thought about questions of
8 governance for most of my career, and I do believe
9 that when a resource is a common property
10 resource, as are the fish, very difficult to find
11 another body that would be more independent in its
12 management than the government. The government
13 has no vested interest other than protecting
14 today's citizens, as well as the citizens of the
15 future. You've heard, I think, over the course of
16 the past many months ideas from a lot of people
17 within the Department, and you can see that -- I
18 think you saw some fairly high level, some very
19 good quality presentations from departmental
20 employees who take their jobs obviously very
21 seriously. And each of them within their capacity
22 is adding to our quality of decision-making for
23 the Minister. And no one is perfect, but the more
24 layers we have inside the Department that have
25 input into the decision, the better quality that
26 the decision will be.

27 The fishery needs to be managed, in my view,
28 in an integrated way. No fish stands alone. They
29 live in a habitat that is filled with other fish
30 and all of that needs to be considered in all of
31 the decisions that we make. So I do believe that
32 the government is the best place at this point to
33 provide the most independent management of this
34 incredibly important resource.

35 MR. TAYLOR: All right, thank you. And those are my
36 questions, Mr. Commissioner.

37 THE COMMISSIONER: Thank you, Mr. Taylor.

38 MR. MCGOWAN: Mr. Commissioner, Mr. Tyzuk will be next.

39 THE COMMISSIONER: What's the time estimate, Mr.
40 McGowan?

41 MR. MCGOWAN: Forty minutes, Mr. Commissioner.

42 MR. TYZUK: Boris Tyzuk for the Province of British
43 Columbia and with me is Clifton Prowse.

44
45 CROSS-EXAMINATION BY MR. TYZUK:

46
47 Q Good morning, panel. Before I start on my

September 26, 2011

1 questions on specific topic areas, there's
2 something that came out of the transcript on
3 Thursday. And, Ms. Dansereau, you were answering
4 questions of Mr. Wallace with respect to the
5 strategic and operational review and I guess the
6 targets or the budget targets, and I guess as a
7 lawyer I kind of look at the numbers and maybe you
8 could help me out here. At page 3 that says Mr.
9 Wallace was asking you about what the order of
10 magnitude was for the reductions, and you said
11 five to ten percent. And then he asked when these
12 reductions would take place, and you said starting
13 April of 2012. And then the question was, Mr.
14 Wallace said:

15
16 So that's five..., five to 10 percent
17 annually. It's not a diminishing amount, it
18 stays at five to 10 percent?
19

20 So are we looking at in 2012 to 2013 five to ten
21 percent, and then the following year another five
22 to ten percent?

23 MS. DANSEREAU: No, the total reductions will be
24 between five and ten percent for that three-year
25 period.

26 Q For that. So in numbers I could understand, that
27 if it's a maximum of ten percent on 1.8 billion
28 would be 180 million and the minimum would be 90
29 million. It's 90 million, in that range?

30 MS. DANSEREAU: I would say approximately, because
31 again these are not -- these are numbers and
32 targets that we've been given to work towards, but
33 there might be a request of one Department to give
34 a bit more and one Department to give a bit less,
35 depending on how it all works out, based on the
36 proposals.

37 Q Okay. Thank you for clarifying that. The next
38 question I want to pose to you is the issue of MSC
39 certification. Mr. Morley, who is a
40 representative of the processors, advised that MSC
41 certification is extremely important to access to
42 foreign markets, and, Ms. Dansereau, you made a
43 reference to that in your testimony about one of
44 the activities that the Department undertakes in
45 promoting the fishery. And as a result of that
46 process, there was an action plan that -- to
47 address the conditions for Marine Stewardship

1 Certification, and that's Exhibit 159. Mr. Lunn,
2 could you bring that up, please. It's B.C. Tab 8
3 -- no, sorry. Yes, it's Tab 1. At the bottom of
4 page 1 and going on to the top of page 2, it says:

5
6 The action plan contains significant
7 commitments for Fisheries and Oceans...to
8 implement over the next five years. All of
9 these actions are consistent with plans
10 already...within the department. It is
11 important to note that implementation of the
12 following action plan assumes there will be
13 no requirement for additional departmental
14 resources. However, as we initiate
15 implementation of the action plan, we may
16 discover that this assumption was flawed and
17 a re-evaluation of the original assumption is
18 required.

19
20 So my question to you is where are you in that
21 process? Have you looked at the assumption that
22 the existing resources are adequate?

23 MS. FARLINGER: The action plan is one that is
24 currently being implemented in the Department.
25 The various elements of the conditions set out in
26 the Marine Stewardship Council certification for
27 Fraser Sockeye in particular, are following the
28 action plan as set out, and we are doing that
29 within departmental resources at the moment.

30 Q And do you foresee that you will be able to fulfil
31 those conditions over five years within the
32 departmental resources?

33 MS. FARLINGER: Yes.

34 Q Now, at Tab 2, which is Exhibit, I believe, 959,
35 Mr. Lunn, there was a -- this is a summary of the
36 key deliverables. It's our understanding that
37 subsequent to this being done there was a meeting
38 with the Marine Stewardship Council to review the
39 status of DFO's actions. We've been advised that
40 you're waiting for an audit report to come back.
41 Have you received that yet?

42 MS. FARLINGER: Not to my knowledge.

43 Q And we've also been advised that when that report
44 comes back it will be provided to the Commission
45 and to the participants.

46 MS. FARLINGER: Yes.

47 Q Thank you.

1 MR. TAYLOR: The timing of that is that it will be
2 after the evidence, but that's how it goes.

3 MR. TYZUK:

4 Q In the course of your testimony over the last few
5 days, and even today you've talked about
6 collaboration and collaborative processes. And I
7 believe that you've mentioned, Ms. Farlinger, the
8 ISDF and the Monitoring and Compliance Panel. And
9 I'd like, Mr. Lunn, if you could get Exhibit 855,
10 which is B.C.'s Tab 8. And on the third page
11 under "Foreword", the second and third paragraphs,
12 and this report, by the way, is dated October
13 2010. The second paragraph says:

14
15 BC's salmon fisheries are currently suffering
16 from what might fairly be described as a
17 crisis of confidence. This lack of
18 confidence is in part rooted in concerns over
19 the accuracy and reliability of reported
20 catch. Managers, fishermen and the public at
21 large often don't believe the numbers being
22 reported by other sectors, or even by their
23 own sectors.

24
25 Ms. Farlinger, you alluded to this a bit. Do you
26 concur with that statement, Ms. Farlinger?

27 MS. FARLINGER: We find in consultations and
28 collaborations that the issues of concerns around
29 accuracy of data for others, other than the folks
30 we're consulting with, arises, which is the reason
31 that in the program, the PICFI program, we focus
32 our efforts in the area of enhanced
33 accountability, and in enhanced accountability,
34 this is one of the prongs of the work that was
35 funded by the PICFI program was to support the
36 Integrated Salmon Dialogue and as it moved
37 forward, to support the work of the Monitoring and
38 Compliance Panel that arose out of the Integrated
39 Salmon Dialogue.

40 And this was very much a partner to the
41 process we were doing internally, which is to
42 produce the Catch Monitoring Strategy, which is
43 currently out for consultation. I've made
44 reference to it earlier. And this group focused
45 very much from a stakeholder's perspective on that
46 and also produced a Catch Monitoring document, as
47 well. So in the sense that we recognize that as

1 one of the challenges, we certainly directed the
2 PICFI program to this area of confidence between
3 different groups who fish. Yes.

4 Q Okay. Now, you mentioned your document. If we
5 could go to B.C. Tab 9, which is Exhibit 429. I
6 believe this is the document that you're referring
7 to.

8 MS. FARLINGER: Yes, that's it.

9 Q Yes. And Mr. Masson in his evidence said that
10 this document was informed by the Charting Our
11 Course, which is the M&C Panel document we had
12 just looked at.

13 MS. FARLINGER: That's right.

14 Q And page 6 of that refers to the process, refers
15 to the ISDF and the M&C Panel, and indicates that
16 that panel was made up of independent
17 representatives from First Nations, commercial,
18 recreational and conservation interests and:

19
20 ...working together with the Department to
21 "map a better pathway for monitoring and
22 compliance."
23

24 You agree with that?

25 MS. FARLINGER: Yes.

26 Q Now, at page 20 of that report under "Strategy 6",
27 the second paragraph, it says:

28
29 To promote cost-effective, state-of-the-art
30 monitoring and reporting, it is important to
31 take advantage of best practices and new and
32 emerging technologies for information
33 gathering and management. A collaborative
34 process such as the M&C Panel can be used to
35 identify these opportunities. Additionally,
36 the Panel can have an ongoing role in looking
37 for ways to coordinate efforts across
38 fisheries and tracking region-wide progress
39 on monitoring and reporting.
40

41 Is that something that you see a role for the M&C
42 Panel in the future?

43 MS. FARLINGER: It's certainly a possibility. I mean,
44 the Monitoring and Compliance Panel as part of the
45 Integrated Salmon Dialogue process really was very
46 supportive in indicating to us that at least among
47 some of the stakeholder communities there are

1 those who believe that monitoring and reporting is
2 a key element to moving forward.

3 As to the ongoing role of the panel, I
4 certainly think it possibly could be useful or
5 something else like that, yes.

6 Q And in that regard, a process like the Integrated
7 Salmon Dialogue Forum, and more specifically the
8 M&C Panel, we've received evidence from various
9 stakeholders, be it from First Nations groups,
10 from the commercial fisheries and from your own
11 staff, this is a very positive process, a very
12 safe place and opportunity where people can work
13 on these broader issues, or in the case of the M&C
14 Panel, drill down and do something a bit more
15 specific. So given that positive response, which
16 I don't think we've heard that it's been a
17 frequent occurrence where the commercial fishery
18 and First Nations and DFO have agreed on a process
19 that is being positive, is it -- is it your
20 perspective as the senior person in the Pacific
21 Region that this, these types of processes should
22 continue in the future?

23 MS. FARLINGER: Many of the programs in PICFI,
24 including this one, were really intended to test
25 questions and be informative, and for us, and for
26 the people involved to gather information and
27 think about ways of moving forward. Inside DFO we
28 find the results of the Monitoring and Compliance
29 Panel and the Integrated Salmon Dialogue very
30 useful, and are in some ways moving that forward.
31 Whether it is in the form of the salmon dialogue
32 or the M&C Panel specifically, or whether it's
33 taking the results of those panels and processes
34 and moving them forward and integrating them into
35 management are still things we are working on as
36 we finalize the PICFI program.

37 But there are activities, for example, now on
38 the other side of the ISDF process around
39 governance, where we are taking some of the pilots
40 under the Integrated Salmon Dialogue and piloting
41 bringing that training into the Department to
42 develop it and move it forward. So that's just
43 one example of how we would take a broad
44 unspecific process like this, specifically set
45 out to have people test ideas in a different
46 environment, how we might integrate that into our
47 ongoing regulatory work and consultation. But

1 that's just one example of how we might move it
2 forward.

3 Q Yes. But again that is looking at taking what's
4 learned and what we then acknowledge as a
5 positive process and taking it internally. What
6 about continuing that process outside or is that
7 part of your evaluation that you're going on with?
8 because you've obviously, from what you've said,
9 derived a benefit from those processes of having
10 this collaborative approach.

11 MS. FARLINGER: That's certainly part of the
12 evaluation, what have we learned from this
13 process? How is it that we would move forward?
14 So I wouldn't say we've come to a conclusion on
15 all fronts. But as I've pointed out, there are
16 particular areas in which we've begun to move
17 forward.

18 Q I want to go to another area that's completely
19 different. But just to get a sense of the timing,
20 and, Ms. Dansereau and Mr. Bevan, maybe you might
21 be able to answer these questions more from a
22 federal government perspective, if we're looking
23 at developing legislation, how long does that
24 normally take?

25 MS. DANSEREAU: It depends entirely on the situation,
26 on the context. Some legislation can take years
27 to develop because the starting point is -- or the
28 endpoint is not really quite known, other than
29 legislation is required so extensive consultation
30 will occur. In other circumstances, there can be
31 turnaround in a two-week timeframe. So it really
32 depends on the circumstances themselves and what
33 the requirements are of that change in
34 legislation.

35 Q Okay. And if we're going -- and I was thinking
36 more of an Act. Now, if we're going to a
37 Regulation, we've heard some testimony with
38 respect to the possibility of changing commercial
39 licence fees where the comment was that changing a
40 regulation usually takes three years.

41 MS. DANSEREAU: Well, it depends. Really again it
42 depends on the regulation itself that needs to be
43 changed, the degree of consultation that's
44 required, the degree of analysis that's required.
45 Some regulations can be changed fairly quickly,
46 within a six-month maybe timeframe because we have
47 to post on Canada Gazette I and then Canada

1 Gazette II. So again it comes back to the degree
2 of consultation that's required and the degree of
3 analysis. On something like a licence fee, there
4 would be a need for consultation because we're
5 talking about people's livelihood. So it would be
6 an extensive process. There might be the
7 requirement for the **User Fee Act** to be factored
8 in, which could in fact lengthen that process.
9 Q Which was my next question. So, I mean, we've
10 heard about this and it's almost been put up as a
11 bit of a bugbear: Oh, the **User Fee Act**, we can't
12 do anything. So has there been much experience
13 within the federal government of having user fees
14 established through this **Act**, and if so, how long
15 has that taken?
16 MS. DANSEREAU: There has not been much experience. I
17 think as you heard, I think there was one instance
18 last year where it was used. You're right that
19 some people are a bit nervous about how to go
20 about using it, but if it was felt that it was
21 required for us to do so, we would simply just
22 start applying it and go through the steps that it
23 lays out that must be taken. They are primarily
24 steps around consultation and making sure that
25 we've done the right kind of work to argue the
26 case as to why a licence fee should be changed.
27 Q Okay. And then the last thing would be, we've
28 heard a lot about policy throughout, and we --
29 MS. DANSEREAU: Mm-hmm.
30 Q -- I mean, I think when did the Wild Salmon
31 Policy, when did the discussions start, 2000/2001?
32 MS. DANSEREAU: I think, my understanding is 2001.
33 Q Yeah. And in 2005 there's a policy and we're
34 going through, so any policy change, again
35 depending upon the consultation, could take a fair
36 amount of time.
37 MS. DANSEREAU: That's right. There are some policies
38 that are fairly straightforward and can be done
39 in-house because the group that is affected by
40 them is small and we have consultation with that
41 group. And then we would have our own. We have
42 now, as I think you know, a new governance process
43 inside the Department where any new policy gets
44 vetted through a lot of discussion, and that can
45 be relatively straightforward with advice to the
46 Minister.
47 Q Okay.

- 1 MS. DANSEREAU: Other policies require that we go to
2 Cabinet committees, because there is more than one
3 Minister involved, and therefore that's a bigger,
4 longer-term process.
- 5 Q Okay. So in the process of this, if the
6 Commissioner were to make recommendations that
7 involved either changes in legislation, regulation
8 or policy, given the disparate groups that are
9 involved, are you suggesting that depending on
10 what the government would decide to do that this
11 is a process that could take some time, that this
12 could take months or years?
- 13 MS. DANSEREAU: It's very hard to say. It depends very
14 much on the government's response to the
15 Commissioner's report, and some of these things
16 are responded to very quickly, others go into a
17 longer-term process. So it will very much depend
18 on many things over which I have no knowledge or
19 control.
- 20 Q And on the topic of legislation, I note in -- Mr.
21 Lunn, if we could go to B.C. Tab 19, this is the
22 -- do you recognize this document, Ms. Dansereau?
- 23 MS. DANSEREAU: Yes.
- 24 MR. TYZUK: I wasn't sure you would. And if we could
25 go to 1.2, I think it's on page 12, Mr. Lunn.
26 Yes, if you could bring that up.
- 27 MR. LUNN: Is there a reference to a particular part of
28 the page?
- 29 MR. TYZUK: Yes, under "Departmental Priorities", about
30 halfway down the page.
- 31 Q And you mentioned this a bit in your testimony,
32 this morning, Ms. Dansereau, bringing forward a
33 new **Fisheries Act**. What exactly does the
34 Department have in mind at this time, given that,
35 I mean, you -- this is with respect to this.
- 36 MS. DANSEREAU: We would work obviously in very close
37 consultation with the Privy Council, the Office of
38 the Privy Council because that's where the
39 management of any new piece of legislation would
40 occur, and we would together with them develop a
41 strategy for determining if this is the
42 appropriate time to bring in a new **Fisheries Act**.
43 For as I think you may know, a **Fisheries Act** was
44 introduced twice in the past five years and didn't
45 make it through the process of the House, so we
46 need to analyze why that was and should we be
47 going back to the drawing board to look at some of

1 the provisions within that to determine if there
2 should be more consultation. So those are the
3 steps that we would be looking at this year, to
4 determine when would be the right time and what
5 would that **Fisheries Act** look like.

6 Q Now, in that context we've heard a fair amount
7 about test fishing and you were asked some
8 questions about that and the **Larocque** decision.
9 Is trying to fix the **Act** to deal with the **Larocque**
10 decision, one of the matters that you would be
11 considering when you look at a new **Act**, or
12 revising an **Act**?

13 MR. BEVAN: I can't speak for what might happen in the
14 future. I can only talk about what we've had in
15 the draft Acts that were tabled in the House
16 previously. And, yes, there was a section there
17 that had what was called "Fish Management
18 Agreements" and that would allow the government to
19 enter into arrangements with groups of fish
20 harvesters, and that would allow, as well, for all
21 participants in the fishery to be bound by that
22 agreement. So, for example, if the majority of
23 people in a particular group wished to have an
24 arrangement whereby their members would pay some
25 fees for some aspects of monitoring, control or
26 surveillance, or science, that would have been
27 permitted under that section of the proposed **Act**.
28 If that's going to be a part of a new **Act** in the
29 future, that would have to be a decision of the
30 Minister and the Minister's colleagues. But it
31 was in the previous drafts.

32 MR. TYZUK: Thank you. Just one moment, Mr.
33 Commissioner.

34 I have no further questions, Mr.
35 Commissioner.

36 THE COMMISSIONER: Thank you, Mr. Tyzuk.

37 MR. TYZUK: Oh, yes, and sorry, Mr. Giles, could we get
38 B.C. Tab 19 marked as an exhibit?

39 THE REGISTRAR: Yes, it will be 1930.

40
41 EXHIBIT 1930: Fisheries and Oceans Canada,
42 Corporate Business Plan, 2011-12
43

44 MR. TYZUK: Thank you. Those are my questions, Mr.
45 Commissioner.

46 THE COMMISSIONER: Thank you.

47 MR. BUCHANAN: Good morning, Mr. Commissioner. Good

1 morning, panel. My name is Chris Buchanan, I am
2 counsel for the Public Service Alliance of Canada,
3 the Union of Environmental Workers. And as the
4 panel will know, my clients represent the majority
5 of employees working for the Department. And I
6 have been allotted a half an hour for my questions
7 this morning. And I don't know if this will come
8 as a disappointment or a relief to you, Dr.
9 Richards, but I have no questions of you.

10
11 CROSS-EXAMINATION BY MR. BUCHANAN:
12

13 Q So, the first area that I have some questions
14 about are some recent announced elimination of
15 positions with respect to Environment Canada, and
16 I won't be asking you to speak on behalf of
17 Environment Canada, but I do have some questions
18 about how those eliminations of positions may
19 impact the Fraser River sockeye salmon and in
20 particular DFO's responsibilities. And I'm going
21 to be addressing my question to you, Ms.
22 Farlinger.

23 In the first week of August, Environment
24 Canada announced that it was eliminating 776
25 positions, which is about 11 percent of its
26 workforce, with one-third of the eliminations
27 coming within the first three months, and that
28 these reductions were not part of the deficit
29 reduction action plan. I have a two-part question
30 to you, Ms. Farlinger. First, have you been
31 informed of what positions are to be eliminated
32 and when? And second, have you made an assessment
33 as to the impact of those cuts on habitat
34 protection on the Fraser River sockeye salmon,
35 including whether that will make any difficulties
36 with respect to your Department with respect to
37 enforcing its obligations.

38 MS. FARLINGER: Thank you. I have not been informed of
39 particular positions that will be cut

40 Q And obviously, then, or when. And so you can't
41 provide us any assurances, at least from the DFO
42 side, that there won't be some impact on your
43 ability to work with Environment Canada on your
44 collaborative cooperative approaches for
45 protection of habitat.

46 MS. FARLINGER: No, without the information I wouldn't
47 be in a position to do that.

1 Q All right. I'm going to ask a question about some
2 of the testimony last week, and I'm going to ask
3 this of you, Ms. Dansereau. And at the beginning
4 of your questions from Commission counsel you had
5 indicated that there is essentially a review of
6 core duties of the Department that's underway, and
7 I think you had indicated that you viewed this to
8 be something that should happen on an ongoing
9 basis, but in particular as a result of the
10 deficit reduction action plan that you're underway
11 with that now. And so my question to you is since
12 you've been in the Department since 2008 at a very
13 high level, and that you've obviously been very
14 alive to the issues with respect to the Fraser
15 River sockeye salmon, and the issues with respect
16 to the Pacific Region, can you tell us what, if
17 any, activities that are currently underway with
18 respect to the Fraser River sockeye salmon do not
19 fall within DFO's core duties?

20 MS. DANSEREAU: No, I can't actually answer that.
21 We're currently in the process, as you know, and
22 the process is not yet finalized.

23 Q I understand the process isn't finalized, but your
24 part of the process and you've been around for a
25 number of years, and you've undoubtedly asked this
26 question of yourself before today. And so is
27 there not anything that you can identify that is
28 not part of the core duty of DFO with respect to
29 what it's currently doing with the Fraser River
30 sockeye salmon?

31 MS. DANSEREAU: No, I can't answer that question.

32 Q Okay. Let me try, Ms. Farlinger, with a different
33 question, but see if I get any more success.
34 Would you in your view, view all the current
35 activities with respect to the Fraser River
36 sockeye salmon performed in the Pacific Region as
37 falling within the core duties of the DFO as you
38 perceive them?

39 MS. FARLINGER: There's a wide variety of activities we
40 do to regulate the Pacific salmon fishery and in
41 this case the Fraser sockeye fishery. And I
42 should say that continuously certainly since my
43 time in the Department in the late '70s, we have
44 continued to refine and evaluate and make sure
45 that those processes are up to date. And I would
46 just say that all of the outcomes we have to
47 provide are definitely the same. And we

1 continuously are moving and changing priorities
2 and processes to make sure that we can provide
3 those outcomes. And I don't think I could be any
4 more specific than that.

5 Q Well, let me just see if I can just try one more
6 time, and that is with the current mandate of DFO,
7 is there any current activities with respect to
8 the Fraser River sockeye salmon, that is not core
9 to those duties that you can identify?

10 MS. FARLINGER: I think it's as you've heard over the
11 last ten months, there is a variety of activities,
12 really an amazing and diverse variety of
13 activities, that pertain to Fraser River sockeye,
14 and I would just say that all of those continue to
15 evolve and we set priorities on them in terms of
16 the issues, the conservation challenges and other
17 challenges of the day, and those things do and
18 have changed over the last 20 years, and I expect
19 will continue.

20 Q Okay. Well, I may come back to that if time
21 permits, but I want to turn to a different area,
22 and that's the reports on the plans and priorities
23 of the Department, and I'm going to ask some
24 questions of you, Ms. Dansereau. As I understand
25 it, this is a report that's provided to
26 Parliament, correct?

27 MS. DANSEREAU: Yes.

28 Q And it is a statement by the Minister to the
29 Canadian public through Parliament as to the
30 priorities of the Department, as well as the
31 amount of money that is anticipated needed to meet
32 those plans and priorities.

33 MS. DANSEREAU: Yes.

34 Q Fair to say?

35 MS. DANSEREAU: Yes.

36 Q Okay. If I could just have Exhibit 1922 put up on
37 the screen. And if you could turn to page 21 of
38 56. And if you see the bottom graph there, you'll
39 see a three-year forecasting of the budget, and I
40 understand is the complex budgeting process by
41 which the ultimate number is arrived at. I'm not
42 going to ask you those questions. But is it fair
43 to say that this report is telling Canadians that
44 the Minister views that he is able to accomplish
45 all the plans and priorities set in the report on
46 the planned spending for 2012 and 2013?

47 MS. DANSEREAU: Yes, this budget. Yes.

- 1 Q Okay. And I have a question with respect to the
2 interplay between this and the deficit reduction
3 action plan. So as we have heard, you've got an
4 exercise in which you have to do a five to ten
5 percent reduction, and my question to you is, is
6 the five to ten percent reduction based upon the
7 numbers found in this document, so five to ten
8 percent off of, you know, 2011-2012, or is it off
9 of current spending?
- 10 MS. DANSEREAU: The five to ten percent will be over
11 the next three years, so we've said, so these
12 numbers will likely look different in next year's
13 Report on Plans and Priorities.
- 14 Q Okay. So those would -- those reductions would be
15 on top of the reductions already set out in this
16 -- this chart, fair to say?
- 17 MS. DANSEREAU: Yes.
- 18 Q So and again my rough math is there's a 25 percent
19 plan reduction between now and 2013-2014, that
20 could be anywhere from 30 to 35 percent reduction,
21 barring any changes.
- 22 MS. DANSEREAU: These numbers are very -- we'd need to
23 spend a lot of time working through the process
24 for these numbers. But some of them include, we
25 have removed, for example, if I remember
26 correctly, we always remove the sunsetters that
27 would not be coming necessarily, because -- back
28 on the table. But the thing is we don't know if
29 they're coming back on the table, so they must be
30 removed from our forecasted spending. Whether or
31 not the budget will go up by a certain amount as a
32 result of getting them back into the system, it's
33 hard to say. So these numbers are very precise,
34 but not necessarily always reflective of the work
35 that's ongoing in terms of preparation for next
36 year.
- 37 Q That's right. But these, this is a guiding
38 document on which --
- 39 MS. DANSEREAU: Yes.
- 40 Q -- the government, the Minister and the Department
41 plans its resources and allocations of resources,
42 right?
- 43 MS. DANSEREAU: Yes. Yes.
- 44 Q And so presently it's planning for a 25 percent
45 reduction and over the three years between now and
46 2013 and 2014.
- 47 MS. DANSEREAU: There are pressures that we need to be

1 absorbing, as you know on the -- where there were
2 no increases given to budgets for operations, even
3 though collective agreements had gone up and there
4 were monies taken out as a result of strategic
5 review and various small amounts. There are some,
6 there's no -- we do not have a 25 percent
7 reduction in our budget, but there are elements
8 taken out at this point that may be reintroduced
9 as we get other monies through various sunseting
10 programs.
11 Q Right. But at this point you have no assurances
12 from Treasury Board that you're going to see --
13 MS. DANSEREAU: Very true.
14 Q -- any of those (indiscernible - overlapping
15 speakers).
16 MS. DANSEREAU: Very true, yes.
17 Q Thank you. I'm going to turn to a different area.
18 MR. MCGOWAN: Just before we leave this document,
19 perhaps just to clarify the record, in the
20 question the reference was made to page 21 of the
21 document. It's actually page 17 of the document,
22 it's the PDF page that's 21. Just for the record.
23 MR. BUCHANAN: Thank you, and I'll in the future try to
24 give both references. If I could pull up Exhibit
25 -- have you pull up, Mr. Lunn, Exhibit 19, page 14
26 of 16 of the PDF, which is page 12 of the
27 document.
28 Q And my question is to you, Ms. Farlinger, and I
29 realize it may be a bit hard to see. In the
30 middle, if we were playing Tic-Tac-Toe it would be
31 the middle left and "Eligible to Retire". And
32 this is a departmental number that shows by 2014
33 some 40 percent of present DFO employees are
34 eligible to retire, and I believe there was an
35 earlier calculation that showed by 2013, 31
36 percent were eligible to retire. My question to
37 you first, Ms. Farlinger, is do you believe that
38 to be kind of representative of the Pacific
39 Region, as well, the 40 percent or so eligible to
40 retire by 2014?
41 MS. FARLINGER: I don't have the exact number for
42 Pacific Region in my head at the moment, but it
43 certainly is a significant proportion of our
44 workforce that will be available to retire.
45 Whether it's 30 or 40, I can't exactly remember at
46 this moment, but it's certainly in that range.
47 Q Right. So, and I think the Department has

1 identified potential turnover and potential
2 recruitment as two very important issues that it
3 faces over the next several years. Is that fair
4 to say, Ms. Farlinger?

5 MS. FARLINGER: That's right.

6 Q Okay. And can you tell us what specific steps has
7 the Department taken to address the impending
8 turnover of staff with respect to maintaining the
9 expertise, knowledge of the Department and its
10 responsibilities?

11 MS. FARLINGER: Well, there are varieties of steps that
12 have been taken at different levels of the
13 Department, and I can only speak to the programs
14 in Pacific Region, of course. For example, both
15 the Fisheries Management Branch and the Ecosystems
16 Branch, which comprise a large number of our
17 employees, as well as the Science Branch, have a
18 human resources plan that includes a significant
19 succession planning component.

20 In each of those plans for those program
21 areas, you will see elements like mentoring, job
22 shadowing. You will see the documentation of
23 historical job responsibilities. You will see
24 programs to have new employees be exposed to these
25 elements, and whether they're mentored with senior
26 employees or whether they're actually given
27 explicit instructions about how tasks get carried
28 out.

29 We have, for example, in the Habitat Program
30 very extensive process documentation available to
31 each and every existing and new employee setting
32 out how various regulatory processes take place.
33 And in the case of fisheries management, a similar
34 process, although the regulatory processes are
35 different. So it's generally those kinds of
36 processes that we have in place to deal with
37 potential retirements.

38 We do have in Pacific Region a pretty clear
39 evidence that people will, or may - well, they
40 certainly may - and they will often choose to stay
41 beyond retirement, so this is a kind of a maximum
42 number that we're looking at.

43 Q And just to complete this area, is it fair to say
44 in your experience, Ms. Farlinger, that part of
45 the people stay and you have a lower turnover rate
46 than other governmental Departments is there's a
47 strong commitment by DFO employees as to the

1 maintenance of the public resource for the public
2 good; is that fair to say?

3 MS. FARLINGER: That's certainly my personal experience
4 working at DFO.

5 MR. BUCHANAN: I'm going to turn to a different area.
6 Perhaps now is a time for a break.

7 THE COMMISSIONER: Thank you.

8 THE REGISTRAR: The hearing will now recess for 15
9 minutes.

10
11 (PROCEEDINGS ADJOURNED FOR MORNING RECESS)
12 (PROCEEDINGS RESUMED)
13

14 THE REGISTRAR: Order. The hearing is now resumed.
15

16 CROSS-EXAMINATION BY MR. BUCHANAN, Continuing:
17

18 Q I'd like to turn to a new area, now, and that is
19 the alternative delivery models that the
20 Department is presently investigating, and I'm
21 going to call it privatization. That's going to
22 be my term for it. As I understand what the
23 Ministry is considering is looking at having
24 others do the work that's presently being done by
25 the DFO. Now, there's a certain part of work
26 that's presently being done that you may decide
27 you don't need to do and, of course, that's not
28 included in my term "privatization".

29 My question to you, Ms. Dansereau, is: As
30 part of the deficit reduction action plan exercise
31 that is presently underway, have you commissioned
32 a study or report from someone independent of the
33 government to assess whether these alternative
34 delivery systems will be as effective, reliable,
35 efficient and instil the same level of confidence
36 with -- among stakeholders as the present system?
37 MR. TAYLOR: Well, I object to the question as phrased,
38 because Mr. Buchanan has tied it to the current
39 deficit reduction action plan, which I submit is a
40 matter of Cabinet confidence. I think he can ask
41 the question that he seems to want to ask, but he
42 can't tie it to a Cabinet confidence. Mr.
43 Buchanan seems to want to know whether there's any
44 study that the Deputy can speak to. And maybe if
45 he severs it from a confidence, and if there is
46 any study, and the Deputy will give evidence, of
47 course, whatever that is, if there is a study that

1 has been commissioned outside of that process.

2 MR. BUCHANAN:

3 Q With your counsel's elaboration or gloss on my
4 question, so tying it outside of the deficit
5 reduction action plan, has the -- can ministry
6 obtain -- commission and obtain such an
7 independent assessment?

8 MS. DANSEREAU: Well, the timeframe, I'm not sure what
9 timeframe you're referring to. So over the course
10 of history, perhaps; at the moment, no.

11 Q And I guess my question to you, then, the follow-
12 up question is: Don't you think it would be a
13 good idea before the Ministry makes whatever
14 decisions it will under whatever processes it
15 might, that before it makes those types of
16 decisions that it receives an independent study
17 about the effectiveness, reliability, efficiency
18 and the confidence of these different systems?

19 MS. DANSEREAU: I'm finding it very difficult, as
20 counsel mentioned, to discuss this, because it is
21 very closely linked to the deficit reduction
22 action plan. So I can either talk in complete
23 general terms about potential processes and
24 hypotheticals, or we talk about the specifics, and
25 either way, it's a difficult conversation.

26 Q Well, before -- I'll ask a general question.
27 Before making a dramatic change of how any
28 ministry makes it -- how it fulfils its
29 obligation, wouldn't it be prudent to have an
30 independent assessment to determine the
31 effectiveness of the different models?

32 MS. DANSEREAU: It depends on the program you're
33 talking about, it depends on the service that
34 we're thinking about doing. There is an awful lot
35 of expertise internally to the Department, so
36 again, it's too broad a question for us to provide
37 any answer to.

38 Q And I take it, then, outside of the deficit
39 reduction action plan, and I'm not going to ask
40 you questions about that, but there are currently
41 no plans to commission such a report for any
42 reason, at this time?

43 MS. DANSEREAU: Not as far as I know. It's a big
44 department, but not as far as I know.

45 Q Okay. And the Department has had some experience
46 with self-regulation and self-reporting, and in
47 this I am going to put some questions to you with

1 respect to the EPMP, in which low risk projects
2 were essentially self-reported and self-regulated.
3 And I'm going to put to you that that
4 experience, through a number of criticisms, that
5 the Department did not have any documentation that
6 it monitored the actual habitat loss, whether the
7 habitat was protected by mitigation measures, and
8 the extent to which the projected proponents
9 compensated for any habitat loss. Those were
10 valid criticisms of the EPMP that the Department
11 accepted; fair to say?

12 MS. DANSEREAU: Those were -- I know -- I was not
13 there, so maybe either Mr. Bevan or Ms. Farlinger
14 can speak more fully to the development of that
15 program or that change. I know that there was
16 some concern that that would happen in the early
17 days. It's not an issue that comes across my desk
18 as one where there's current concern, no.

19 Q All right. Well, perhaps we can put up Exhibit
20 35. And you're familiar with the 2009 report of
21 the Commissioner of Environment and Sustainable
22 Development, protecting fish --

23 MS. DANSEREAU: Yes.

24 Q -- habitats?

25 MS. DANSEREAU: Yes.

26 Q And you're aware, if you go to page 20 of 46, and
27 we'll find the page number, that through
28 paragraphs 146, and for the next 10 or 12
29 paragraphs, that those were criticisms levelled
30 against the Department with respect to its lack
31 of, I'll say, accountability to ensure that these
32 small projects were properly monitored and
33 reported on?

34 MS. DANSEREAU: As this is a report that we've talked
35 about on other occasions, and if I remember
36 correctly, it was not an audit of the EPMP but of
37 the program overall, and that includes projects
38 that were reviewed by habitat staff, were
39 monitored by habitat staff, and so it included the
40 whole of the program and not just the EPMP. But
41 others may have more fulsome answers to that,
42 because they were there for longer than I was.

43 Q Well, the 2009 report, I guess, can speak for
44 itself, but I'm going to put to you that there's
45 been no further development by the Department with
46 respect to how it currently handles the small
47 project EPMP projects?

1 MS. DANSEREAU: You can say that.
2 Q Well, would you agree with that?
3 MS. DANSEREAU: I would have to do some research into
4 it.
5 Q Okay. I'm going to deal with another form of what
6 my client views to be privatization, and I should
7 say my client is opposed to privatization, both
8 because of the impact to its members, but also, it
9 doesn't view that to be an effective mechanism to
10 regulate public property, and I'm not asking you
11 to agree with that principle, but it's
12 co-managed and --
13 MR. MCGOWAN: Well, if my friend's not asking a
14 question about a principle, in my submission he
15 ought not to be making a submission about it.
16 MR. BUCHANAN: I'm just giving the witness my client's
17 perspective and why we're asking the questions
18 that we're asking. I'm not asking her to agree or
19 disagree with the principle.
20 Q So with respect to co-management, where it
21 involves aboriginal framework agreements or
22 comprehensive fisheries agreements, where there is
23 payment by the DFO to the First Nation to perform
24 some catch monitoring and conservation protection
25 work, I'm going to ask you some questions about
26 those types of agreements.
27 The first is: Has the --
28 MS. DANSEREAU: If I may, I think others would be
29 better suited to answer those questions.
30 Q All right. Well, I'll ask Mr. Bevan, because I
31 understand that's within your bailiwick; is that
32 fair to say?
33 MR. BEVAN: It was, it -- until recently.
34 Q Okay. Has there been, to your knowledge, an
35 independent study done with respect to those types
36 of agreements, particularly the aboriginal fishery
37 guardians as to the effectiveness, reliability and
38 efficiency and confidence amongst all the
39 stakeholders with respect to discharging the DFO
40 responsibilities to those types of agreements?
41 MR. BEVAN: First of all, I want to situate co-
42 management agreements. They come in the context
43 of DFO's role of overseeing the fisheries and
44 setting the rules and setting the procedures in
45 place for following the -- or for prosecuting the
46 fishery. Co-management agreements don't happen in
47 isolation of DFO monitoring, control and

1 surveillance activities, either.

2 I think it's fair to say that, generally, and
3 I'll leave it to Sue Farlinger for more specifics
4 on the Pacific region, that when we enter into
5 co-management agreements with First Nations
6 communities, it's relevant to the specifics of who
7 is designated to fish and how they're going to
8 monitor the catch, et cetera.

9 And in terms of First Nations guardians,
10 there's been joint patrols, there's been -- with
11 DFO fishery officers, so it's not something that
12 is a complete delegation and walk away from it.
13 That's not what's happening.

14 Q Sure, I'm happy to have Ms. Farlinger answer my
15 question, which was simply whether there's been an
16 independent study done about the effectiveness,
17 reliability, efficiency, and confidence among
18 stakeholders of these types of arrangements?

19 MS. FARLINGER: I think that the process we talked
20 about a little bit earlier this morning, the
21 monitoring and compliance panel, as well as our
22 internal study which resulted in the catch
23 monitoring strategy, which we also talked about
24 this morning, are two venues and two opportunities
25 for stakeholders to comment on various kinds of
26 catch monitoring-type activities.

27 With respect to the confidence of
28 stakeholders as it pertains to aboriginal
29 guardians, in Pacific region, one of the main
30 areas of focus for the development of the guardian
31 program was in the Skeena River with the Skeena
32 Fisheries Commission, and there, in fact, was a
33 multi-stakeholder process there in which the
34 recreational fishery agreed to work with
35 aboriginal guardians under the Skeena Fish
36 Commission to have their fisheries monitored. So
37 that's just one example of where stakeholders were
38 willing to work together to have that done.

39 In the case of the comprehensive agreements,
40 we have done internal reviews 10 years after the
41 initial aboriginal fisheries program, and, as you
42 know, through our various co-management processes,
43 to look at the various elements, including how
44 fisheries are monitored. And this, once again,
45 ties back to the catch monitoring strategy which
46 where --

47 Q I don't want to be rude --

1 MS. FARLINGER: -- a fishery is being -- is very
2 small --
3 Q Ms. Farlinger.
4 MS. FARLINGER: -- and has small fishing power, then --
5 Q Ms. Farlinger, but my question was --
6 MS. FARLINGER: -- it relates to --
7 Q -- is there an independent study that you're aware
8 of that examines those things? I apologize to
9 interrupt, but I've only got a couple minutes
10 left.
11 MS. FARLINGER: Yeah, no, I'm sorry, you asked about
12 studies and so those are the kinds of studies
13 we've done. As far as I am aware, there is no
14 independent study.
15 Q Okay, thank you. Just with respect to first --
16 integration of First Nations knowledge and
17 experience, Ms. Farlinger, would you agree with me
18 that one way the Department can have that
19 knowledge and expertise -- and experience is to
20 hire aboriginal individuals directly into the
21 Department?
22 MS. FARLINGER: That's certainly one way, and the
23 other, in which our programs have focused, is to
24 build capacity in aboriginal communities, and that
25 includes people coming into the Department and out
26 of the Department.
27 Q Right. And as I understand, there are about 3.5
28 percent of First Nations representation in the
29 Department nationwide. Is that enough, in your
30 view?
31 MS. FARLINGER: We do have targets associated with a
32 number of aboriginal people in the population in
33 the area, and I would have to go back and look at
34 the specifics for Pacific region, generally, as to
35 whether the number of aboriginal people we have
36 working in DFO on Pacific region is representative
37 of the population. But we do, of course, have
38 various processes in terms of hiring to include
39 visible minority groups, including aboriginal
40 people.
41 Q In the minute or two I have left, I would turn to
42 you, Mr. Bevan, and I just have a couple of
43 questions relating to your testimony about Mr.
44 Nelson and his testimony. And my question to you,
45 Mr. Bevan, is: Since Mr. Nelson is the top C&P
46 person in the region, you would expect him to be
47 alive to and know of the developments throughout

1 Canada as to different techniques and strategies
2 for enforcement; fair to say?
3 MR. BEVAN: Yes, he's part of the enforcement committee
4 at DFO.
5 Q So I'm going to put a proposition to you to try to
6 understand your evidence and his evidence and the
7 conflict that may arise, and the proposition I'll
8 put to you is that Mr. Nelson, being aware of the
9 pros and cons of different enforcement strategies,
10 was giving the Commissioner the region's view as
11 to the present enforcement needs in the region,
12 while you were giving the national headquarters'
13 view as to what type of enforcement it would like
14 to see?
15 MR. BEVAN: I think where there's a bit of a
16 difference, I think Mr. Nelson's saying, "If the
17 status quo is maintained, here's what would be
18 ideal levels of resourcing." What I'm saying is
19 that the status quo is not something that should
20 be maintained and that we have models that have
21 been used elsewhere in the country that could be
22 looked at and applied as a best practice in the
23 Pacific region, and we could achieve outcomes
24 without the need for dramatically enhancing
25 resource levels.
26 Q And Mr. Nelson would be aware of those other
27 areas?
28 MR. BEVAN: I think that would require a collaborative
29 work in the region of C&P with the resource
30 management and other elements, so that would be
31 required. And I'm not quite sure how familiar he
32 is with the e-log process than some of the
33 experience that's been happening elsewhere,
34 because it wasn't necessarily a subject of
35 specific discussion at the national committee.
36 Q Well, your director general, with respect to C&P,
37 would have, as one of his duties, to ensure that
38 the regional directors were up to date on all the
39 current techniques and strategies; fair to say?
40 MR. BEVAN: I think that they're looking at renewing
41 the C&P program, they're doing that, and that is a
42 work in progress.
43 MR. BUCHANAN: Thank you. Those are my questions,
44 given the time allotted. Thank you.
45 MR. MCGOWAN: Yes, Mr. Commissioner, Mr. Blair will be
46 next.
47 THE COMMISSIONER: Time estimate, Mr. McGowan?

1 MR. MCGOWAN: Mr. Blair will be next with 45 minutes.

2 THE COMMISSIONER: Thank you.

3 MR. BLAIR: Good morning, Panel. For the record, my
4 name is Alan Blair. I appear as counsel for the
5 B.C. Salmon Farmers Association.

6

7 CROSS-EXAMINATION BY MR. BLAIR:

8

9 Q I have a number of questions. Some of the first
10 few, I think, are perhaps easy, standard questions
11 that you might all agree with, but we'll see.

12 We've heard through the course of these many
13 months of hearings that the issue of data
14 collection, not just within the aquaculture
15 industry, but really across the broad range of
16 wild fisheries hatchery or enhancement facilities,
17 as well as the aquaculture industry, and there
18 appears to be quite a range of data available for
19 managers such as yourselves and people who work in
20 the Department, as well as in our industry. And
21 my first question is really, and perhaps I'll
22 start with the scientist, if I may, Dr. Richards:
23 Is there a real benefit in standardizing data
24 collection across the host of industry groups and
25 wild and farmed and enhancement facilities,
26 because we appear not to have that, at present?

27 DR. RICHARDS: I think that there are some advantages
28 to data standardization, but you have to take into
29 consideration the context in which those data are
30 collected and the various circumstances. So it's
31 not always ideal or practical. There are
32 different types of data that might be specific to
33 specific -- certain areas or certain questions.
34 We don't -- there is always an opportunity or an
35 interest in collecting many more data than we
36 really have the capacity to collect, and sometimes
37 there may be -- need to be choices about which
38 data are collected and which techniques are used
39 to collect those data for operational and
40 practical reason and also to do with what the
41 purpose is that those data -- to which those data
42 are going to be used.

43 Q And I suppose a follow-up to that would be,
44 there's a very practical issue in the fact that in
45 the wild fishery fish are difficult to sample and
46 the data is more difficult to collect than, for
47 example, in the aquaculture industry, per se, or

1 in salmon enhancement facilities generally; would
2 you agree with that?

3 DR. RICHARDS: I think that any kind of sampling always
4 has its challenges associated with it. It is
5 certainly true, and I've mentioned this already,
6 that if you're interested in wild fish in the
7 middle of the North Pacific Ocean, we don't have a
8 lot of opportunities to sample those fish. So
9 yes, the circumstances need to be adapted somewhat
10 to the specific area, the specific questions being
11 asked, the specific circumstances. And so I think
12 that there isn't just one set method that's
13 applicable across the board.

14 Q You know, I wasn't sure that I was going to go to
15 the Great Pacific -- North Pacific, but you raised
16 that and so I will, just for a very brief
17 question. If you were to search through the 130
18 days of evidence for the word "Alaska", you'd find
19 it closely associated with "Gulf of" Alaska quite
20 frequently, and rarely with "State of", and I mean
21 capital S, State of Alaska. And so my question
22 for you, and perhaps for all of you is: It
23 appears that although the fish migrate from the
24 west coast rivers of both British Columbia and the
25 Alaskan Panhandle and beyond in to Alaska, there
26 appears to be almost two solitudes in terms of the
27 exchange of information between Canada and the
28 U.S. And, of course, there's a mechanism for some
29 exchange, but we've heard very, very little about
30 what goes on along our joint coast.

31 Again, Dr. Richards, I'll start with you.
32 You mentioned North Pacific. My question, after
33 my statement, is to suggest that, really, there
34 could be a much greater level of cooperation
35 between the two nations to understand what's going
36 on in the North Pacific?

37 DR. RICHARDS: I think we always seek a great level of
38 cooperation. In fact, there actually is a lot of
39 exchange going on at the scientific level. We are
40 very active within, first of all, the Pacific
41 Salmon Commission, on a scientific level in
42 sharing data. Also, within the North Pacific, the
43 Anadromous Fish Commission sharing data. It's
44 another mechanism and forum within PICES, the
45 North Pacific Marine Science Organization. So I
46 think, you know, we have a lot of ways and a lot
47 of opportunities to work together and certainly

1 the scientists are always interested in working
2 and collaborating to the extent they can with
3 their colleagues, either with, you know, the
4 Alaska Department of Fish and Game, with -- within
5 the NOAA, National Marine Fisheries Service, and
6 within various universities within Alaska.

7 Q Anyone else want to jump in on that one, or we'll
8 move along? No? I'll go, then, to fish health
9 management plans. And again, this question can be
10 for any of you, although, again, perhaps it falls
11 to Ms. Farlinger or Dr. Richards. The question
12 really is around fish health management plans for
13 all fish producers in British Columbia. That
14 would include client sites of ours, the
15 aquaculture industry, salmon enhancement programs
16 and hatcheries. There appears not to be such a
17 standardization of a fish health management plan
18 across the spectrum of groups managing fisheries
19 resources, wild and then farmed. Do you again
20 review that there would be a benefit in a single
21 sort of standard fish health management plan
22 template that could be used, or is that not
23 something that you see on the immediate horizon?
24 Anybody? I see Mr. Bevan reaching for the mike.

25 MR. BEVAN: Yeah, I'm not sure that I can agree with
26 the premise of the question in that there is a
27 national aquatic animal health program that's
28 administered by the Canadian Food Inspection
29 Agency. They'll certainly look at priorities in
30 terms of where are the risks and where are the
31 concerns, and to focus their program based on
32 that. But they do look at the broad spectrum of
33 national aquatic animal health, and I don't know
34 that I could just say that there is a focus on
35 aquaculture and nothing on wild fish. So I think
36 they do direct their efforts based on risk, but
37 they do look at the broad spectrum of issues.

38 Q Ms. Farlinger, just if I could stick with Mr.
39 Bevan for a moment. When we had the fish
40 veterinarians on an earlier panel, Drs. McKenzie,
41 Sheppard and Marty, we heard quite extensive
42 information regarding the aquaculture industry's
43 fish health management plan. Perhaps I was the
44 only one, but I was left with the impression that
45 there was a very robust fish health management
46 plan specifically towards the aquaculture industry
47 that seemed not to have the same rigour or

1 datasets in, for example, enhancement.

2 MR. BEVAN: I think I'll leave it to Sue Farlinger to
3 talk about the SEP activities, but clearly in
4 looking at what they perceive to be the risks and
5 the need for public confidence, they are focusing
6 on area where those concerns have been raised and
7 making sure that we can demonstrate to the public
8 and to markets that we have processes in place to
9 address those risks, real and perceived, because
10 risk perception is also something that has to be
11 addressed.

12 If there is problems in the wild populations,
13 they will turn to that as well. And I think that
14 your point is that they're focusing more on
15 aquaculture and that has been a, perhaps, recent
16 experience. But I'll leave it to Sue Farlinger to
17 talk about SEP.

18 Q Thank you.

19 MS. FARLINGER: I think the fish health management
20 plans, whatever form they take, generally apply to
21 areas where fish are grown, and you've referenced
22 those, the enhancement facilities which we've
23 operated for, well, quite some time, and the
24 aquaculture farms. And both of those things are
25 focused on two things, and the first for finfish
26 aquaculture, of course, is human health and health
27 of the fish that are growing in the pen and,
28 thirdly, the path of the environment in which they
29 operate.

30 And in DFO enhancement facilities, since the
31 inception of the enhancement program, there have
32 been a set of guidelines around the potential
33 risks that occur there, which are slightly
34 different than fish that are held in the open
35 ocean, and they have to do with mitigating genetic
36 risks, mitigating what we refer to as ecosystem
37 risks, like competitions with wild stock. So
38 those things have been in place for some time, but
39 as you know, we are licensing enhancement
40 facilities, our own enhancement facilities in
41 compliance with the aquaculture regulation in the
42 same way that we're licensing other aquaculture
43 facilities. And really, the fish health plans
44 pertain to a facility after an analysis of risk.
45 And I would say the fish health plan, as it
46 pertains to finfish aquaculture facilities, has a
47 significant component, as Mr. Bevan said, having

1 to do with CFIA and human health, as well as
2 issues like the transport of fish between areas.

3 In the case of enhancement facilities, the
4 human health issue is considerably further out and
5 the focus is more on the impact on potential
6 impact on wild stocks, either genetically or from
7 a biodiversity perspective. So that's why those
8 fish health plans are different.

9 Q Thank you for that perspective. Mr. Lunn, could
10 we please go to the B.C. Salmon Farmers
11 Association Tab 3. On the screen, members of the
12 panel, we see the National Aquatic Strategic
13 Action Plan Initiative. I think it's known as
14 NASAPI by the acronym. It's a forward-looking
15 document, 2011 to 2015. And if you could just
16 flip over to the next page, I think it's page 1.
17 It might be pdf page 4. Yes, the second full
18 paragraph just sets out the document:

19
20 The strategic action plans outline areas
21 where efforts are required to improve public
22 governance of aquaculture and private
23 operations...

24
25 Are any or all of you familiar with this document?

26 MS. DANSEREAU: I am.

27 Q Ms. Dansereau, thank you. There are a number of
28 recommendations in here --

29 MS. DANSEREAU: Excuse me, but others might be as well.

30 MS. FARLINGER: Yes.

31 MR. BEVAN: Yes.

32 Q We want the record to be correct on that. Are you
33 all nodding?

34 DR. RICHARDS: No.

35 Q The record can show that Dr. Richards is not
36 volunteering to take this question. If we can
37 jump to pdf page 8, paper copy 5. So this
38 document attempts to address some of the issues
39 and recommendations with respect to aquaculture
40 and reviews of rights and privileges and
41 obligations of aquaculturists. And on the screen
42 is an action item table.

43 Deputy, if you could refer to that table and
44 just take a moment to review it. Do you agree
45 that there's been some work done by organizations
46 in the past and it continues to be an evolutionary
47 process to try to square the circle to determine

1 how to manage the rights of the aquaculture
2 industry within the greater management of other
3 fisheries rights that DFO attempts to balance?

4 MS. DANSEREAU: Very much so, and I would say it's a
5 piece of work that will be ongoing forever. These
6 things continually are an evolution, and as we
7 learn more we improve.

8 Q Anybody else want to volunteer? No. Mr. Bevan is
9 shifting in his seat, but not necessarily reaching
10 for the mike? Thank you.

11 Could we go, please, to Exhibit 1366. Our
12 Tab 6, if that helps you. I'm sorry, yes, thank
13 you. Could we mark the last B.C. Tab 3 as the
14 next exhibit. Thank you.

15 THE REGISTRAR: This will be Exhibit 1931.

16
17 EXHIBIT 1931: National Aquaculture Strategic
18 Action Plan Initiative (NASAPI) 2011 - 2015
19

20 MR. BLAIR:

21 Q Now, this is a document that some of you may have
22 had an opportunity to review in preparation for
23 coming to the panel. The title is self-
24 explanatory; it's a question and answer on salmon
25 aquaculture in British Columbia. It's exhibited
26 as 1366. And as earlier panellists have been
27 instructed, it was prepared specifically by my
28 client to assist in understanding some of these
29 issues. There's, I think, 400-odd footnotes, so
30 it's meant to be a science-based document, but
31 it's meant to read well if you're the grade 11
32 class trying to understand some of these issues.

33 So this literature review was conducted under
34 the direction of Dr. Tom Watson, but you can see a
35 number of the other people who have assisted him,
36 including you'll see Dr. McKenzie's name, who may
37 be familiar to some of you as a veterinarian for
38 mainstream that the Commission heard from earlier.

39 I wonder if we could please go to pdf 21,
40 please. And if you can just go back to the bottom
41 of the next page there, if you get the title, the
42 question, and this document, as it says in the
43 title page, was a series of questions and answers,
44 and so there's the question:

45
46 Does DFO have a conflict with its mandate(s)?
47

1 And if you can do down to, "However," and just
2 highlight from that to the bottom, please. This
3 answer, provided by -- in this particular
4 document, refers to an auditor general report of
5 2000. You can see that referenced:

6
7 ...does not say DFO's conservation mandate
8 and its commitment to develop sustainable
9 aquaculture are in a clear conflict, only
10 that DFO was not adequately meeting its
11 obligations. The potential conflict noted by
12 the Report was between federal and provincial
13 legislation.¹²² The Report in fact says,

14
15 and then there's a quote talking about mutual
16 interests to the creation of the environment in
17 which wild salmon and farmed salmon can co-exist,
18 thus maximizing sustainable benefits.

19 Now, the questions, really, that I have for
20 you are down at the very bottom, with the
21 paragraph starting, "Now that B.C.". The document
22 continues to say that:

23
24 Now that BC no longer has jurisdiction over
25 salmon aquaculture in the Province, the
26 possibility of conflict with provincial laws
27 is minimized.

28
29 I'll turn that statement around and ask that as a
30 question to each or any of you. Do you
31 acknowledge that life has been made more simple or
32 more complicated - perhaps it's a perspective
33 thing - as a result of the recent court rulings
34 and changes?

35 MS. DANSEREAU: It's been made interesting.

36 Q Interesting. We'll note the Deputy's answer, for
37 the record.

38 MS. DANSEREAU: No, in fact, and Sue is best placed to
39 speak to this, because it's in her region, but I
40 do mean it when I say it's been made more
41 interesting. Obviously this is an important
42 question for Canada, and one which we are pleased
43 to be trying to improve upon. So I'm not sure
44 there is answer as to whether or not it's more
45 simple. There are areas of it that are more
46 simple and areas that might be a little more
47 complicated. I did not mean to be facetious.

1 Q Anyone else on that?

2 MS. FARLINGER: So operationally we have quite a bit
3 more to do than we did in the past, but certainly,
4 and I know our colleagues in British Columbia will
5 agree with us when mandates are not clear between
6 on level of government and another, there are more
7 challenges than when they are. So from my
8 perspective, it's certainly more straightforward
9 to regulate an industry that, with the exception
10 of the 10-year aspect of this industry is within
11 the regulatory framework of DFO, of our
12 organization, it still requires extensive
13 cooperation with B.C., which we've agreed to in a
14 memorandum of understanding and, you know, that's
15 going along well and we expect it to continue.
16 But it certainly is easier for us to explain how
17 aquaculture is regulated, because we are
18 accountable for it.

19 Q So I gather, then, you agree with the balance of
20 that paragraph which says, for the record:

21
22 Moreover, DFO is seeking to implement more
23 rigorous monitoring and reporting
24 requirements than what was mandated by BC.
25

26 MS. FARLINGER: Yes.

27 Q And here's an interesting last question, and
28 perhaps the Deputy has another, similar, one-word
29 answer to this. There's a reference here to an
30 Aquaculture Act, a proposed Aquaculture Act, and,
31 of course, many of my questions from this point
32 forward are going to be on this. This document
33 proposes that that would be a good idea, that it
34 would assist in clarifying government's roles and
35 responsibilities.

36 Open question. Thoughts on that premise?
37 Would it assist in clarifying government's roles
38 and/or responsibilities, and if not that, then
39 what?

40 MS. DANSEREAU: Well, thank you for that question. And
41 as you know, we are actively discussing this,
42 obviously, because it is an area of interest for
43 many people across the country. I don't have an
44 answer. I don't even have a -- remotely have a
45 position on it. I do know that should there be an
46 overt, explicit interest for us to go down this
47 route, we would have to do extensive consultation

1 and analysis to determine whether or not an
2 Aquaculture Act would, in fact, clarify matters,
3 or would it, in fact, create more silos.

4 I am of the -- I'm always of a -- concerned
5 with a loss of integration. I believe that the
6 fisheries management should be done as part of an
7 integrated system, because all of the ecosystems
8 -- all of the parts of the ecosystem are inter-
9 related, and so I'm not sure if a separate act
10 would, in fact, create a new silo that would make
11 it difficult for the two systems to be co-managed.

12 So I don't have a solid opinion, but I would
13 be cautious that we may lose some integration, but
14 we would have to do some research into that.

15 Q Anyone else? If we could go, Mr. Lunn, to Exhibit
16 1627, our Tab 14. I'm not sure which is the
17 easiest way for you to find it.

18 These are a string of e-mails that were
19 entered as Exhibit 1627, and they're e-mails, if
20 you can just perhaps slowly scroll through so the
21 panel can see the string. Trevor Swerdfager was
22 on the stand and spoke to these issues, and I see
23 some of you received, Mr. Bevan in particular,
24 received copies of these e-mails. So perhaps I'll
25 direct my questions to you, if I may, sir.

26 If you can go, Mr. Lunn, to the e-mail
27 written by Mr. Swerdfager to -- on Saturday, April
28 17th, 2010. That's the one. Yes, thank you. So
29 let's understand this in the context of the time.
30 It's April of a year and a half ago, perhaps, and
31 he is speaking in his capacity as the Director
32 General of Aquaculture Management of the
33 Department of Fisheries and Oceans at the time.
34 And he says, in part:

35
36 I understand that efforts to revise the
37 **Fisheries Act** have recently been
38 re-activated.
39

40 And in the balance of that paragraph, you may be
41 familiar with it, sir, he's asking to be somewhat
42 more directly involved to ensure proper
43 considerations are given to the aquaculture sector
44 within the deliberations around a **Fisheries Act**
45 renewal.

46 Mr. Bevan, looking at this e-mail on the
47 screen, your memory's refreshed, this exchange of

1 correspondence?

2 MR. BEVAN: Yes, I recall this. We've also had some
3 conversations around these issues.

4 Q And this is, of course, only one part of a longer
5 e-mail string and, I'm sure, a much longer
6 dialogue that you've been participating in; is
7 that correct?

8 MR. BEVAN: We've had -- I had considerable numbers of
9 interchanges with Trevor at the time.

10 Q Now, picking up on the precautionous approach that
11 the Deputy spoke of earlier, being perhaps you
12 having silos, but perhaps you need to find a
13 mechanism to manage this industry in a different
14 way. This appears to be, and I'm looking down two
15 paragraphs, it starts:

16
17 I feel the **Fisheries Act** may not be seen as
18 an adequate mechanism...

19
20 And then, in the next paragraph:

21
22 In my view, a real opportunity exists,

23
24 if you could put those both on the screen, Mr.
25 Lunn, so -- there we go. I think we've got it.

26 I'll just summarize, and you can read along
27 and tell me if you agree. Clearly, here, the
28 Director General is advocating, at the very least,
29 some consideration be given to an Aquaculture Act,
30 and also speaks of the efforts of the Canadian
31 Aquaculture Industry Alliance, CAIA, in that
32 regard. Do you agree that's a fair summary of
33 what he's proposing?

34 MR. BEVAN: I think that is a fair summary of what he
35 was proposing.

36 Q And he says, at the bottom of the second paragraph
37 I've got highlighted, just three lines from the
38 bottom of the screen:

39
40 Further, such an Act would provide [for] a
41 legal definition of aquaculture, establish
42 aquaculture as an activity distinct from
43 fishing, set out the rights and
44 responsibilities of fish-farm operators, and
45 provide the legal basis for an appropriate
46 policy framework.

47

1 Now, those are his words. Do you adopt that those
2 issues are necessary for a further legal
3 definition, and that's a distinct question from
4 whether you're endorsing an Aquaculture Act.

5 MR. BEVAN: I think there's being court decisions,
6 obviously, subsequent to this, or at this time - I
7 can't recall the exact date of this versus the
8 B.C. court decision that aquacultures are
9 fisheries in the B.C. context, at least. Clearly,
10 there's jurisdictions where there are Aquaculture
11 Acts. I know that Norway has gone through a
12 number of them and there's some desire on the part
13 of the Canadian Aquaculture Industry Alliance to
14 have the same kind of holistic one kind of body of
15 legislation to govern their activities.

16 I think it's not necessary to have a new act
17 to come to the -- to resolve some of the
18 definition issues, the rights issues, et cetera.
19 I think that's been borne out by the experience
20 here in British Columbia with the new regulatory
21 regime that the government or the -- has put in
22 place.

23 I think it's also how much can we get? At
24 the time of this, the priority had to be on the
25 **Fisheries Act**. We're dealing with a very old
26 piece of legislation and the governance in there
27 has some significant limitations and puts the
28 minister in a difficult position because of the
29 fact that there's no legal guidance provided to
30 the minister on how to exercise the minister's
31 discretion. That leaves the minister exposed to a
32 lot of pressure. We were focusing on that aspect
33 of legislative change and not looking at taking on
34 the Aquaculture Act idea and evaluating whether or
35 not we would even recommend it, let alone actually
36 pursuing it.

37 So I think you can resolve those issues in a
38 way independent of new legislation, and clearly
39 our priority at the time was the **Fisheries Act** and
40 dealing with aquaculture in the context of the
41 **Fisheries Act**, not looking at a separate act and
42 trying to suggest to government that we had a
43 great idea, that instead of trying to resolve one
44 set of issues we're going to try and solve
45 everything by two acts. We weren't prepared, at
46 that time, to consider that, and we aren't
47 actually prepared, now, to recommend yes or no on

1 it. Our steps taken in response to the B.C.
2 decision was to put in place regulations that
3 allow us to have the same kind of approach to
4 fisheries, wild fisheries, as to aquaculture, both
5 covered by integrated plans that recognize the
6 reality of the ecosystem that they're both -- that
7 they're functioning in, and where possible,
8 certainly something like geoduck or some other
9 species, it will be possible to have an integrated
10 plan that covers both wild and Aquaculture
11 Activities, and that's the kind of objective we
12 want to have for the future, is both activities
13 are using an ecosystem in somewhat different ways,
14 but both are using the ecosystem and they have to
15 be integrated.

16 So this was an interesting discussion that we
17 had at the time. My response was, we have to
18 focus on the priority of the day, the **Fisheries**
19 **Act**, and we'll try to resolve these other issues
20 in that context and that we weren't, at that time,
21 ready to engage in a discussion on a new
22 Aquaculture Act.

23 Q I just want to pick up, several times you used the
24 term "At that time," and then once or twice, "Now,
25 at this time." I want to go back to "At that
26 time." This was April of 2010, and as I
27 understand correctly, there were, at that time,
28 some proposed bills -- proposed amendments to the
29 **Fisheries Act**; am I correct in that, or am I off
30 on timing?

31 MR. BEVAN: At the time of -- I can't recall the actual
32 timeline, but we -- clearly, we put the **Act** to
33 parliament twice in the last number of years.

34 Q For amendments to the **Fisheries Act**, which haven't
35 passed?

36 MR. BEVAN: That's correct. And I would say it was
37 more than just amendments, it was a fairly
38 substantial rewrite.

39 Q Right. So at that time, the whole issue of
40 managing aquaculture in British Columbia posed by
41 the court changes, was trying to be managed within
42 the regulatory scheme, number one, which you've
43 done, and number two, in whatever manner necessary
44 under modifications to the **Fisheries Act**, as
45 distinct from a stand-alone Aquaculture Act?

46 MR. BEVAN: That's correct, that's our priority at that
47 -- was and still, in my view, as we do need to

1 continuously look at the **Fisheries Act** issue.

2 Q So speaking for yourself, I'm not sure that
3 anybody up there can ever speak for themselves and
4 not for government, but I am asking you, speaking
5 for yourself, then, you are still favouring,
6 perhaps, amendments to the **Fisheries Act** such that
7 might be necessary to bring aquaculture more up to
8 date in terms of DFO's management of it rather
9 than a stand-alone Aquaculture Act?

10 MR. BEVAN: If I only get to change one act --

11 Q Okay.

12 MR. BEVAN: -- it'll be the **Fisheries Act** for the
13 higher priority.

14 Q I have your point, thank you. Could we please go
15 to B.C. Salmon Farmers' Tab 15. And I didn't mean
16 to cut anybody off. I'm sorry, I looked at my
17 questions. If anybody has anything else? Thank
18 you.

19 So this is really -- we can go through this
20 quickly, because this is an e-mail and this
21 question is for you, obviously, Deputy. It's an
22 e-mail string, and it's on the lines of the same
23 questions, it's now a little more recent in time,
24 it's the end of July 2010. It's from the Canadian
25 Aquaculture Industry Alliance, and again, it
26 discusses this issue of the Aquaculture Act. And,
27 really, the point of putting those on the screen
28 and perhaps marking it is to demonstrate to the
29 Commissioner that this is an important initiative
30 from the industry's perspective, and you're aware
31 that they have been and are continuing to hope to
32 advance the concept of an Aquaculture Act?

33 MS. DANSEREAU: Yes.

34 MR. BLAIR: Could we mark this as the next exhibit,
35 please.

36 THE REGISTRAR: Exhibit 1932.

37

38 EXHIBIT 1932: E-mail from Ruth Salmon to
39 Claire Dansereau, et al, Subject: Aquaculture
40 Act - Industry Outline & background document,
41 dated July 30, 2010
42

43 MR. BLAIR:

44 Q Just at the bottom, if you can scroll up a little
45 bit, please. No, that's fine, we've covered that.
46 I'm just going to take us to Exhibit 1626, if
47 I may. I have a series of questions here, panel,

1 but I'm going to just very quickly put this next
2 exhibit up on the screen. You'll see this is a
3 document prepared by the Canadian Aquaculture
4 Industry Alliance, and it speaks specifically to
5 their position on this issue, and I believe the
6 date of the document is July 2010. If you flip it
7 over to the next page, Mr. Lunn, I think you'll
8 see the date at the bottom. There we are. Yes.

9 Are you all familiar with this document? Any
10 of you familiar with this document? It's
11 presently already exhibited.

12 MS. DANSEREAU: At a very high level, yes.

13 Q Yes. And so you're aware, then, at a high level,
14 this was the industry's position, attempting to
15 advance the subject we've been discussing, the
16 Aquaculture Act?

17 MS. DANSEREAU: Yes.

18 Q Thank you. Could we go to B.C. Salmon Farmers'
19 Tab 17, please. I'm not sure if we had any polls
20 added to the list of exhibits, so if not, we've
21 got one now. Are any of you familiar with this,
22 either in preparing for the panel or generally?
23 It's, on the screen, it's a poll which has the
24 heading, Canadians Overwhelmingly Support a
25 National Aquaculture Act, and it's prepared in
26 April of 2011. Have any of you seen this before,
27 preparing for the panel? I see no's. Mr. Bevan?

28 MR. BEVAN: Not specifically with respect to this. I'm
29 familiar with the views of CAIA, the Canadian
30 Aquaculture Industry Alliance, their support for
31 an act, and their -- they have raised issues that
32 Canadians would support it as well, but I haven't
33 looked at this in any -- I'm not familiar with the
34 content of it in detail.

35 Q Yeah, just if we can go to pdf 5, please, Mr.
36 Lunn, if there's a reference in the poll, which --
37 right there, right under the support for a
38 national Aquaculture Act, and I'll just -- if you
39 can highlight that.

40 Really, I want to get your reaction, panel,
41 to that statement, which is, and I'll read it into
42 the record:

43
44 Currently, the Canadian aquaculture industry
45 is governed by up to 73 pieces of often
46 conflicting legislation making Canada's
47 aquaculture industry one of the most over-

1 regulated in the world. As well, Canada is
2 the world's only major farmed seafood
3 producing country without national
4 legislation specifically designed to govern
5 and enable its aquaculture industry.
6

7 That statement, it speaks of a number of pieces of
8 legislation, perhaps 73 or thereabouts. Can any
9 of you comment, generally, on the statement? Mr.
10 Bevan?

11 MR. BEVAN: Well, clearly, the industry's made it known
12 that they are somewhat frustrated by the fact that
13 the way regulations work in Canada right now is
14 that there's not a body of -- or law that governs
15 an individual set of activities, such as
16 aquaculture or such as wild fisheries as separate
17 legislation but, rather, we have layers of
18 legislation, so we have the **Fisheries Act**, but
19 plus the **Navigable Waters Protection Act, CEAA**, et
20 cetera, et cetera. To go down the route that
21 you're looking at here, or requested by the
22 industry, would require considerable re-evaluation
23 of regulation in the country and re-write of a
24 number of acts in order to go down the route that
25 they're proposing. And I understand their desire
26 to go there.

27 Q And we've heard your view before, if you could
28 only modify one act, you're sticking with the
29 **Fisheries Act**?

30 MR. BEVAN: That's correct.

31 Q Could we go to exhibit -- I'm not seeking to have
32 this marked. I think they're only generally
33 familiar with the concepts and who it was produced
34 by, and I thank Mr. Bevan for his comments to it.

35 Exhibit 1804, please. This document is
36 entitled, Commissioner Sustainable Aquaculture
37 Recommendations for Change. It's a 2004 document.
38 And if we could go to pdf 55, paper page 47. I
39 should ask - it's marked as an exhibit - are some
40 or all of you familiar with this document?

41 MR. BEVAN: Yes, I'm familiar with it.

42 Q Thank you. I've taken you to a page in the
43 document, sir, where there are a couple of
44 scenarios being proposed, and, really, this is
45 getting back to the whole issue of regulation and
46 management of the industry, and the scenarios that
47 are on this page, the scenario at the top, 1,

1 talks generally about managing aquaculture either
2 within Agriculture and Agri-Food Canada, or in
3 some other fashion.

4 Sir, are you alive to the debate about how
5 you manage aquaculture industry?

6 MR. BEVAN: Yes, I think at that time there was a
7 debate going as to how we should be structured in
8 terms of the management. I think we've dealt with
9 that debate. The determination in B.C.,
10 particularly aquaculture as a fishery, has brought
11 some of that to a conclusion. The other issue is
12 that we look at the management of aquaculture,
13 wild fisheries and all of the other ecosystem
14 responsibilities of the Department as an
15 integrated whole. We are looking at the use of a
16 marine ecosystem by various users, whether they're
17 extracting wild fish or growing aquaculture fish,
18 they're all having an impact on the ecosystem, and
19 we think it's better to have one regulator, and
20 that's we we've landed on the Department of
21 Fisheries maintaining the responsibility.

22 At that time, there was a feeling that
23 aquaculture was not getting the kind of service
24 that was necessary, there was a long time for site
25 approvals, et cetera, and they were looking for a
26 more responsive home for the regulation of their
27 industry.

28 Q That's a very useful comment to help bring us from
29 the 2004 time period to -- forward about seven
30 years. I see the Deputy nodding. Do you
31 generally agree with the summary that Mr. Bevan
32 has just provided?

33 MS. DANSEREAU: Yes. I wasn't there at the time, but I
34 know that was a discussion and I know that that's
35 where we are now.

36 Q And so in summary, just as we get to the break, in
37 summary, this panel is of the view that
38 aquaculture can be best managed under the broad
39 umbrella of DFO with its various mandates, as
40 opposed to necessarily hiving it off to either
41 separate legislation or, this may be in
42 particular, separate departments?

43 MS. DANSEREAU: Well, certainly if -- even if there was
44 separate legislation, it could still be managed by
45 the Department. Again, I'll say what I said
46 earlier, my fear in any of the scenarios that
47 you've described, is the loss of integration and

1 the -- and creating extra steps prior to being
2 able to integrate information and make sure that
3 the fisheries are all well managed under very
4 similar sets of rules and regulations and the
5 participants also, then, managed according to
6 that.

7 Having said that, if decisions are made for
8 it to be moved, then the bureaucracy will do what
9 it does and make sure that things are managed as
10 well.

11 Q We're at the half hour. Mr. Bevan, did you want
12 to put a thought on the end of that?

13 MR. BEVAN: Well, I just think it gets more complex if
14 you have two separate organizations trying to
15 manage one ecosystem. So that's just something to
16 point out to the Commissioner, that that's the
17 reality as I see it, and it's much easier for us
18 to integrate when it's all in one organization.

19 MR. BLAIR: Mr. Commissioner, by my count I have about
20 five or possibly six minutes left. We could
21 either take the break or we could carry on and I
22 could finish, your choice.

23 THE COMMISSIONER: We'll take the break, thank you.

24 MR. BLAIR: Thank you.

25 THE REGISTRAR: The hearing is now adjourned until
26 2:00 p.m.

27
28 (PROCEEDINGS ADJOURNED FOR NOON RECESS)
29 (PROCEEDINGS RECONVENED)
30

31 THE REGISTRAR: Order. The hearing is now resumed.

32 MR. BLAIR: Good afternoon, Mr. Commissioner. Just on
33 the record briefly, we could have started four
34 minutes ago, but Mr. Wallace was absent. He's
35 absent again. I hadn't looked up. I wasted that
36 line, really. And the Registrar's ready with a
37 red card, which looks decidedly pink.
38

39 CROSS-EXAMINATION BY MR. BLAIR, Continuing:
40

41 Q Could we go to Exhibit 216. This question, I
42 suppose, could be for Ms. Farlinger, to start
43 with. And really, my questions are regarding the
44 precautionary approach used in aquaculture.
45 You're familiar with this document? It dates back
46 to 2002.

47 MS. FARLINGER: Yes, I am.

1 Q And really, at least from that point, and perhaps
2 before 2002, and certainly up until present, you
3 would agree that DFO's primary consideration as it
4 relates to fisheries matters is conservation, and
5 that, also, that DFO would apply a precautionary
6 approach to aquaculture?

7 MS. FARLINGER: Yes.

8 Q If we could go to page 21, pdf 25, and the
9 paragraph that starts, "Although conservation,"
10 near the bottom middle, Mr. Lunn. So this is a
11 bit of an overarching statement, speaking of
12 conservation, wild fish stocks being the primary
13 consideration, where applicable, DFO consider
14 social and economic benefits associated with
15 aquaculture development in the course of that --
16 those decisions?

17 MS. FARLINGER: I see that, yes.

18 Q And if we could then go to, more specifically, to
19 aquaculture in the context of the precautionary
20 approach, which is pdf 28, page 24 on paper. This
21 refers in further detail to the precautionary
22 approach as a distinctive approach within the
23 realm of risk management. Do you see those words
24 on the screen, Ms. Farlinger?

25 MS. FARLINGER: I do.

26 Q And so this describes how DFO, at that point in
27 time, attempted to apply the precautionary
28 approach and again you continue to try to apply
29 that approach as it relates to aquaculture in the
30 west coast today?

31 MS. FARLINGER: Yes, we do.

32 Q Can you describe, briefly, the precautionary
33 approach and adaptive management as two terms that
34 may overlap somewhat in your lexicon?

35 MS. FARLINGER: The precautionary approach, as
36 described in detail by Mr. Bevan last week, is
37 taking into account the risk of catastrophic
38 events or problems and mitigating against them,
39 and the adaptive approach is continuing to learn
40 from various, in this case, management regimes.

41 Q Thank you. Mr. Lunn, could we please to get
42 Exhibit 1906. Just as this is being brought up on
43 the screen, members of the panel, this document
44 was introduced into evidence, I believe, on
45 September 20th, by Mr. Marmorek, and it was a
46 paper by Mr. Peterman. Do you see it on the
47 screen there, now? An overview of the

1 precautionary approach in fisheries and some
2 suggested extensions. I suppose I'll stay with
3 you, if I may, Ms. Farlinger. Are you familiar
4 with this particular document?

5 MS. FARLINGER: I've certainly seen it before. I
6 wouldn't say I've reviewed it in detail, but I've
7 certainly seen it before.

8 Q Is there anyone else who has looked at it in any
9 greater detail?

10 MR. BEVAN: I've looked at it and I'm not sure I can
11 claim to have seen it in any -- or studied it in
12 more detail than Ms. Farlinger, but I've seen it.

13 Q Well, I'll take you to two pages. I only have the
14 paper copy, sir. It's paper copy 234 and 235.
15 Here we are. Just take a moment and highlight
16 from the bolded at the bottom, "Precautionary
17 principles" to the bottom, please.

18 So you'll see that in this particular passage
19 of this exhibit there's a discussion of the
20 precautionary approach and the distinction between
21 the precautionary principle and the precautionary
22 approach. I'm sure you're all scanning it as the
23 rest of us are. You'll see that there's a table
24 at the bottom or rather, I should say, a line
25 graph, I guess, where you apply the precautionary
26 principle and where you might apply the
27 precautionary approach. And do you see the way in
28 which this paper tries to graphically demonstrate
29 the distinction between the two, Mr. Bevan?

30 MR. BEVAN: Yes, I do. I'm not sure we share this
31 exact understanding, but clearly what they've got
32 is a spectrum of risk and consequences of the
33 problems and suggested reaction to deal with those
34 and mitigate those risks.

35 Q I'm going to ask Mr. Lunn to go over to the next
36 page and then have Mr. Bevan perhaps pickup on
37 that theme. That first full paragraph,
38 "Precautionary Approach", there's reference there,
39 sir, to fisheries scientists and managers and the
40 choices that have to be made and the use of the
41 precautionary approach to reflect the knowledge
42 that a fisheries manager may have. And the bottom
43 portion, the last four lines of that paragraph
44 says:

45 The precautionary *approach* to fisheries
46 management is thus more flexible than simply
47

1 applying the precautionary *principle* in the
2 presence of major uncertainties. This
3 frequently overlooked distinction is
4 important because it can make the difference
5 between clear communication and
6 misunderstanding among scientists, managers,
7 and stakeholders.
8

9 Now, that's the whole sum of the passages that I
10 wanted to refer you to, the table on the previous
11 page and this page. Would you like to elaborate
12 on your understanding of the distinctions and
13 similarities between those two terms,
14 precautionary approach and precautionary
15 principle?

16 MR. BEVAN: I'm not going to speak for the author on
17 this one. Clearly, the author is suggesting that
18 the precautionary principle is the application of
19 draconian measures, where the risks are
20 extraordinary high, and the precautionary approach
21 is a more flexible approach that allows
22 continuation of human activities, but with
23 mitigation of the risks.

24 In our view, precautionary principle is a
25 principle that you need to deal with the
26 scientific uncertainty and manage in the face of
27 scientific uncertainty the precautionary approach
28 as it relates to how we go about our business is
29 the use of limit reference points to define the
30 population of fish that we're managing as either
31 in a critical zone, where much care must be taken
32 and very little fishing mortality, a cautious zone
33 or a zone where there's a lot of ability to
34 manoeuvre and take in decisions.

35 But in this case, what he's suggesting is
36 that the principle is where you're dealing with
37 something like toxic waste dumping or some
38 activity that is clearly extraordinarily high
39 risk, huge consequences and consequences that
40 could be very difficult to reverse or long-term in
41 duration. So in that case you take draconian
42 action.

43 So we make a distinction, we don't share the
44 same view, but in our view, as he suggested,
45 precautionary approach, what we do there is we
46 understand that there's a potential risk, we
47 understand that we don't know the risk in absolute

1 detail and that we can't quantify it down to a
2 very precise level, but we take measures to
3 mitigate the risk, notwithstanding, and that we
4 endeavour to manage the activity, whether it's
5 aquaculture or fisheries or whatever, to ensure
6 that the impacts on the ecosystem are not severe
7 or irreversible.

8 Q And so that use of the precautionary approach and
9 adaptive management would be an approach that the
10 DFO would take not just with respect to
11 aquaculture but really managing salmon stocks,
12 generally, including wild salmon stocks, correct?

13 MR. BEVAN: That's correct.

14 Q So for example, in the commercial fishery, an
15 example of a precautionary approach might be when
16 you're looking at strong stocks and weak stocks to
17 take a harvesting strategy which is adaptive to
18 the reality of that particular year and is
19 precautionary in its harvesting, for example, to
20 use an example other than aquaculture?

21 MR. BEVAN: Well, I think, when we're saying a
22 "precautionary approach" what we want to do is try
23 to find a mechanism to have the harvesting such
24 that it's selective, doesn't overly harvest weak
25 co-migrating stocks, and where we can, to find the
26 strategy to allow a reasonable harvest rate on the
27 stronger stocks. By "adaptive" I think that just
28 means that we learn.

29 If what we have right now is overly
30 restrictive and doesn't require that, we may find
31 that out in time and be able to adapt our approach
32 to exercising the precautionary approach. On the
33 other hand, if we find that a risk that we are
34 understanding that we have -- an understanding of
35 a risk right now that we think we're mitigating
36 and we find out that that's not adequate action,
37 we'll have to take more significant action in the
38 future. So "adaptive" means as we learn from
39 subsequent research and from exercising precaution
40 over the course of a number of years we may learn
41 more that may require us to change our approach.

42 MR. BLAIR: I've had the look from counsel, but I
43 haven't yet had the hook, so I'm just going to ask
44 for one more exhibit to be put up, 1591, one page
45 only.

46 MR. MCGOWAN: Mr. Blair's about to find out the hook
47 comes very closely after the look. We are several

1 minutes over.

2 MR. BLAIR: PDF page 11.

3 Q And just very quickly, this is Exhibit 1591. This
4 screen shot demonstrates an example of how **CEAA**
5 and the **Fisheries Act** deals with aquaculture, in
6 terms of licensing, to look at some of the issues
7 that you've been talking about, socioeconomic
8 ecosystem adaptive precautionary approaches to
9 licensing of aquaculture. So would somebody like
10 to say, "I agree," in which case I'll sit down?
11 Or I guess I'll sit down even if you say, "I
12 disagree," but...

13 MR. BEVAN: No, I agree.

14 MR. BLAIR: Thank you. Thank you, Commission Counsel,
15 for the indulgence.

16 MR. McDADE: My name is Gregory McDade, and I appear
17 for Dr. Morton and the Aquaculture Coalition. I
18 have, Mr. Commissioner, I have 45 minutes, I
19 believe.

20 THE COMMISSIONER: Thank you, Mr. McDade.

21
22 CROSS-EXAMINATION BY MR. McDADE:
23

24 Q Let me start, first, just simply by marking a few
25 documents, and then I'll commence asking
26 questions. Mr. Lunn, can we have Exhibit for ID P
27 as in Paul. It's Tab 1 of my material.

28 Ms. Farlinger, when you were on the stand on
29 December 9th, you were asked to identify that
30 document, and then I think somebody forgot to come
31 back to you after the break. You --

32 MR. MCGOWAN: I believe it's Exhibit 1913.

33 MR. McDADE: Oh, it has been marked? All right, never
34 mind, then. Thank you. I apologize for that.

35 Q Tab 36 of the Aquaculture documents. Dr.
36 Richards, this is an e-mail string between Dr.
37 Morton and yourself, dated December 20th, 2010.
38 I'd just like you to identify that, that that is
39 an accurate e-mail strong?

40 DR. RICHARDS: Yes, that is correct.

41 MR. McDADE: Can we have that as the next exhibit,
42 please?

43 MR. TAYLOR: I don't mind that, as long as it's clear
44 that it's in for the communication being made and
45 not for the truth of the content.

46 DR. RICHARDS: Let me be clear and say that is an
47 e-mail exchange which I was part.

61
PANEL NO. 65
Cross-exam by Mr. McDade (AQUA)

1 MR. McDADE: Yes, that's all I'm asking.
2 THE REGISTRAR: It will be Exhibit 1933.

3
4 EXHIBIT 1933: E-mail thread between
5 Alexandra Morton and Laura Richards, et al,
6 Subject: High pre-spawn mortality/Egg
7 imports, between November 2, 2010 and
8 December 20, 2010
9

10 MR. McDADE: Tab 13, please.

11 Q Now, this is an e-mail string in which both you,
12 Ms. Farlinger, and you, Dr. Richards, are on.
13 It's dated -- it's from Kyle Garver, dated October
14 23rd, 2009. Perhaps you, Dr. Richards, can
15 identify that this is an accurate e-mail string?

16 DR. RICHARDS: Yes, that is, it's accurate in that that
17 was part of the e-mail, yes.

18 MR. McDADE: So can we have that as the next exhibit?

19 THE REGISTRAR: 1934.

20
21 EXHIBIT 1934: E-mail thread between
22 Alexandra Morton and Paul Sprout, et al,
23 Subject: Dear Mr. Sprout, between October 22,
24 2009, and October 23, 2009
25

26 MR. McDADE:

27 Q And finally, Tab -- Supplemental Tab P from the
28 Aquaculture list, Mr. Lunn. It should be a
29 memorandum for the Assistant Deputy Minister.

30 MR. LUNN: I'm not sure I have that ready to hand. It
31 will take me just a moment to bring that up.

32 MR. McDADE: All right, let's -- don't let me sit down
33 without reminding me.

34 MR. LUNN: Okay.

35 MR. McDADE: All right, I'll move onto the questions
36 and we'll come back to that.

37 Q Dr. Richards, I just want to follow up on some
38 questions that you were asked by Commission
39 Counsel on Friday. I take it, in terms of the
40 focus of research on the -- on disease, you agreed
41 with Commission Counsel that Dr. Kent had the
42 focus right, which was that primarily the research
43 had been dealt with, in terms of looking at
44 cultured fish rather than at the effects of
45 disease on wild fish. Can I have Dr. Kent's
46 report up? That's Exhibit 1449, page 23.

47 DR. RICHARDS: I think your wording is not quite

September 26, 2011

1 accurate.

2 Q All right. Well, I'll ask you my question and you
3 can give your answer.

4 MR. LUNN: Sorry, your page number again?

5 MR. McDADE: Page 23 of the report.

6 Q Now, in the third line of his state of the science
7 section, Dr. Kent says:

8

9 The state of the science for understanding
10 the impacts of pathogens on wild salmon in
11 British Columbia is minimal,

12

13 Particularly compared to that of aquaculture. And
14 that's true, is it not? There's very little
15 research on wild salmon diseases?

16 DR. RICHARDS: We have done some research on wild
17 salmon, but I think I agree that there is
18 certainly many unanswered questions.

19 Q Further down in the next paragraph, in the middle
20 of the next paragraph, he says that in recent
21 years -- or:

22

23 ...there are various well-accepted approaches
24 that have been used to evaluate impacts of
25 diseases in wild animal populations,

26

27 And he says, two lines further down:

28

29 In recent years, this type of research has
30 not been well supported as it is considered
31 by some funding agencies to be merely survey
32 work and not hypothesis driven.

33

34 That's a correct statement as well, isn't it?

35 DR. RICHARDS: I'm sorry, I just need a minute to read
36 that. I'm not sure that I would agree with that
37 within the -- without our context. I think what
38 he is referring to is probably largely within the
39 university context, he is currently sitting in a
40 university position, and funding for universities
41 like his, he's probably looking for funding for
42 something such as National Science Foundation in
43 the U.S., and that would require more hypothesis-
44 driven research.

45

46 Certainly within the government context, I
47 think we do think that survey work and monitoring
is important and is part of the function that

1 government would carry out.

2 Q Well, Dr. Richards, did you read the Project 1 and
3 Project 5 reports the Commission is considering?

4 DR. RICHARDS: I have seen those reports, yes.

5 Q Yes. And if I suggest to you that all of the
6 report authors agreed or put forward the
7 proposition that there's simply not enough
8 research on disease in wild salmon to be able to
9 draw conclusions around disease transfer
10 mechanisms?

11 DR. RICHARDS: I think that, I mean, I think any
12 scientist you will speak to will say that there
13 isn't enough research in any of their fields, but
14 I do agree that I would like to see more research
15 on this, on diseases in wild fish in general. I
16 do agree that that is an area that has not been
17 very, very thoroughly researched.

18 Q Well, there's been very little research by your
19 department in relation to the transfer of disease
20 from fish farms to wild fish?

21 DR. RICHARDS: That's a very specific line that you're
22 suggesting.

23 Q Yes.

24 DR. RICHARDS: I mean, I think the first thing is to
25 understand exactly what diseases are taking place,
26 and there certainly has been some work that has
27 been done on the area of diseases and, in
28 particular, you know, looking at what's going on
29 in terms of salmon returning up the river, there's
30 been some work done, and certainly in the spawning
31 ground context for sockeye.

32 Q But let me put that question specifically to you.
33 Research into the transmission of disease from
34 fish farms to wild fish, I suggest to you you've
35 done no -- there are no studies that DFO has done
36 in the last decade that relate to that; would that
37 be fair?

38 DR. RICHARDS: No, I don't think that would be fair.

39 Q Which --

40 DR. RICHARDS: I think that we have done some work.
41 But let me say, first of all, I think your comment
42 has a hypothesis in it, in that the transfer is
43 only one way. I think the scientists I've spoken
44 to would argue that that actually goes both ways,
45 that there also could be a concern of aquaculture
46 fish picking up disease from wild fish, certainly
47 within the context of work that we have done in

1 the Broughton Archipelago, we have done some work
2 looking at models for water circulation, we have
3 done some work to look at how far particles would
4 travel and the kind of paths they would take and
5 the time that they would travel. So I think that
6 that does go to address some of the questions --
7 that issue that you just raised.

8 Q Well, you talk about the vector going the other
9 way, but what I'm suggesting to you is you've done
10 no research about the transmission of disease from
11 fish farms to wild fish?

12 DR. RICHARDS: I do not agree with that. I will not
13 agree to that.

14 Q Can you name a study?

15 DR. RICHARDS: I don't have a list of particular study
16 names in front of me.

17 Q Will you provide those to Commission Counsel?

18 DR. RICHARDS: Well, we have done -- we have done
19 significant numbers of studies within the
20 Broughton Archipelago. I think there are lots of
21 work that we have done within the context of the
22 Broughton Archipelago --

23 Q Those relate to sea lice, don't they?

24 DR. RICHARDS: Yes.

25 Q I'm talking about disease, viruses.

26 DR. RICHARDS: Okay, that was a different question, and
27 I had not understood your context.

28 Q All right. So now, if you understand the question
29 in that context, you'd agree with me --

30 DR. RICHARDS: So your -- so let me understand
31 specifically. So what you're asking is, have we
32 done any studies to look at disease transmission
33 from aquaculture fish into the wild?

34 Q Yes.

35 DR. RICHARDS: I think that Dr. Garver, when he was
36 here on the stand, did describe some of the work
37 that he was doing in conjunction with our
38 modellers, our circulation modellers that would be
39 looking at the dispersal of virus-type particles
40 within the water column.

41 Q So this is work that's underway now?

42 DR. RICHARDS: That's correct.

43 Q But over the last decade, there hasn't been any
44 work done on this? We're starting to do the work,
45 but we haven't done the work in the past?

46 DR. RICHARDS: I mean, I think what we do is, in terms
47 of the work that we do, we try to do research,

1 which is addresses the questions that we're asked
2 of the day, and these questions have now been
3 raised and we're trying to address them.

4 Q So we can agree, Dr. Noakes, as I took his report,
5 said there was a -- the lack of fish health
6 information for wild fish is a serious deficiency;
7 you'd agree with that?

8 DR. RICHARDS: Well, "serious" is a value-judgment
9 word. I agree that there is a lack of evidence on
10 this and a large number of other topics.

11 Q Dr. Stephen said [as read]:

12
13 The health research paradigm for fish
14 diseases has been one of eradication or
15 control of specific pathogens that limit
16 productivity and survival of fish in fish
17 culture settings and this has largely defined
18 health as the absence of disease of cultured
19 salmon rather than the capacity for wild
20 salmon to thrive and survive.

21
22 Do you agree with that statement?

23 DR. RICHARDS: I'm not familiar exactly what that
24 particular statement. I'm not sure, I'd have
25 to --

26 Q The point is that the science has largely focused
27 on cultured fish -- disease in cultured fish,
28 rather than looking at the risks of transfer to
29 wild fish?

30 DR. RICHARDS: There has been a lot of work that's done
31 on cultured fish, yes, I agree, but there has also
32 been some work, I think, that we have done in sort
33 of our hatchery context, which is a little bit
34 different, I think, than what you're referring to,
35 and also work that's been done on -- in spawning
36 channels for sockeye.

37 Q Right. But nothing relating to fish farms in the
38 migratory routes?

39 DR. RICHARDS: If you're asking me if I think that we
40 need to do more research, yes, I would agree that
41 more research could and should be done, and I hope
42 that we will continue to do more research.

43 Q All right. Could we go to page 24 of Dr. Kent's
44 report, the next page. Bottom of the first
45 paragraph there.

46 So Dr. Kent concluded that based on the fact
47 that there's so little research on that point [as

1 read]:
2

3 We cannot conclude there's a specific
4 pathogen that's a major cause of demise to
5 the Fraser River sockeye salmon; however,
6 pathogens cannot be excluded at this time, as
7 adequate research on the impacts of disease
8 on this population has not been conducted.
9 In other words, there's not enough science on
10 the wild salmon to be able to say one was or
11 the other whether the disease is the cause.
12

13 You'd agree with that, wouldn't you?

14 DR. RICHARDS: I think what we're -- I guess, again, we
15 need to make sure that we put this into specific
16 context. I think that the -- I agree that we
17 could do more work on pathogens. But at this
18 point, and I think that we have also indicated in
19 the notes that we have done, that some types of
20 disease could be a probable cause, so I think we
21 have been upfront about the possibility that there
22 is some disease that's contributing to this.
23 Whether it's going to be the only cause, I think
24 we've also heard that there's a lot of suggestions
25 that there are cumulative effects here and it
26 isn't just one thing that is really the issue, Mr.
27 Commissioner, it's most likely a multiplicity of
28 issues which are really at stake here, and
29 certainly I don't disagree that disease could be
30 one of the factors which is implicated.

31 Q Yes. My questions go to the question of what
32 science has been done in the past. You'll agree
33 with me, I think, that DFO has had responsibility
34 for protection of the wild fish, even before the
35 transfer of aquaculture jurisdiction in 2010.
36 Maybe that's a better question for the Deputy
37 Minister.

38 Let me ask it again: DFO had responsibility
39 for protection of the wild salmon prior to
40 December 2010?

41 MS. DANSEREAU: It certainly had responsibility for
42 managing within the -- with the tools that we have
43 and the knowledge that we have, yes.

44 Q So if disease was being caused -- if disease in
45 wild stocks was being caused by aquaculture
46 facilities, that's a risk that DFO would have been
47 responsible for dealing with?

1 MS. DANSEREAU: To some extent, yes, but I don't think
2 we had seen evidence in those days that there was
3 disease in wild salmon as a result of the salmon
4 farms.

5 Q Well, I think it's fair to say, isn't it, Dr.
6 Richards, that that's because you never studied
7 it?

8 DR. RICHARDS: No, I don't think that that's fair. I
9 don't think that that's a fair statement.

10 Q Well, I thought we agreed there was no studies
11 showing the transfer of virus from fish farms to
12 wild fish?

13 DR. RICHARDS: I think the issue, really, is -- well,
14 first of all, you're asking -- you've got a very
15 narrow context here and I think I need to be
16 careful to look at this in a much broader context.
17 I mean, first of all, what is the overall state of
18 health of the fish on the farms? And so was
19 there, in fact, disease there that even could have
20 been transferred? And so I think that's a
21 different question.

22 Q So are you saying that in your opinion there's
23 been no disease present on fish farms in the last
24 20 years?

25 DR. RICHARDS: I think you're trying to put words in my
26 mouth.

27 Q Well, I thought that's what --

28 DR. RICHARDS: No, I'm not saying --

29 Q Yes or no?

30 DR. RICHARDS: No, but I'm saying that you need to look
31 -- there have certainly been, you know, report --
32 audits and statements on that, and I know that in
33 evidence you've already looked at the database of
34 diseases that's been reported in earlier evidence,
35 so I think -- I'm just saying, because there is a
36 farm doesn't mean that there is always disease.

37 Q When there is a disease on the farm, and we have
38 heard lots of evidence about disease on farms,
39 it's my understanding that DFO cannot point to any
40 studies where they've looked at whether those
41 diseases have caused problems and been transferred
42 to the wild stocks. You simply haven't done the
43 studies; is that right or wrong?

44 DR. RICHARDS: I think that we would have done the
45 studies if we had thought that we had seen any
46 evidence that that was a possibility, if -- but I
47 am not -- I mean, the studies that we -- that I'm

1 aware of I've already mentioned.

2 Q Okay.

3 MS. DANSEREAU: Excuse me, if I may, and not being an
4 expert in this field, but it seems to me that over
5 the period of time that the farms have been there,
6 certainly the advice that I would be receiving
7 from scientists is whether or not there was a
8 disease outbreak that they were aware of, there
9 would have been some correlation as to whether or
10 not there was some potential impact on the salmon
11 and it would depend on the time of year, it would
12 depend on the -- where they are in the cycle, and
13 maybe there were no salmon going by. So there's
14 not -- I think it's -- it would be difficult for
15 any of us, here, to make an immediate leap to a
16 statement that said there was no -- at least not
17 even any thinking about that. We would not say
18 that. But we are not, any of us at this panel,
19 the ones who would have sat down and made those
20 determinations over the course of a few years.
21 Presumably, those people have already given
22 evidence at the panel.

23 Q Yes, well, that's what -- that's why the nature of
24 my questions. As I hear your evidence today, I
25 think what you're saying is, "We didn't see any
26 evidence of impacts of disease on the wild salmon,
27 so we didn't do any studies about it," would that
28 be fair?

29 MS. DANSEREAU: I don't know. I'm answering in the
30 general, as to how things would have occurred, I
31 was not there and none of us would have been the
32 direct people to be making those decisions.

33 Q Well, the context of my statement is that we have
34 heard evidence from all of the Project 5
35 scientists and the Project 1 scientists, that
36 there's a serious gap in the science on this
37 question. And what I'm trying to do is understand
38 how you can say there's no evidence of something
39 when you haven't studied it.

40 DR. RICHARDS: I think we agree that there is -- this
41 is an area where there hasn't been as much
42 research as potentially some of the other areas,
43 but you've asked us a very specific question
44 within a broad area where I think that we could
45 certainly do more research.

46 Q Yes.

47 DR. RICHARDS: So you've only -- you're focusing on a

1 very specific research question within a suite of
2 things where we could do more work.
3 Q All right. Can we have Tab 12 on the screen,
4 please.
5 MR. LUNN: And I do have your Tab P as well, when
6 you're ready.
7 MR. McDADE: Okay, well, let's do that while I
8 remember. Tab P up.
9 Q Probably, Deputy, you're the right person to ask
10 this question. This is, I understand, a draft
11 memorandum that was prepared in relation to the
12 transition licensing and on the question of
13 whether these sites would be grandfathered. Can
14 you just identify that and -- or Ms. Farlinger,
15 and so I can mark that as the next exhibit? It's
16 been provided by your -- by Canada's legal
17 counsel.
18 MS. DANSEREAU: I can identify that this is the cover
19 page for such a memo.
20 Q Well, can we go to the next page. Can we identify
21 it as the memo, now?
22 MS. FARLINGER: Whether a memo is a -- or a draft or
23 final depends on whether it's signed at the end.
24 So I'm not trying to be obstructive, I'm just
25 trying to figure out whether this is a draft memo
26 or whether this was finally a memo that went
27 forward.
28 Q Well, we were told that it was draft.
29 MS. FARLINGER: Okay.
30 MR. McDADE: Can we have that marked as the next
31 exhibit.
32 THE REGISTRAR: 1935.
33
34 EXHIBIT 1935: Draft memo to Deputy Minister
35 Claire Dansereau, from T. Swerdfager and B.
36 Antcliffe, Subject: Proposed Transition
37 Licensing Strategy and Licence Conditions
38 Under the New Aquaculture Regulatory Regime
39 in British Columbia
40
41 MR. McDADE: Thank you. And now Tab 12. Just blow up
42 the first question and answer there.
43 Q This is a document prepared by DFO in terms of
44 question and answers. And I think this relates to
45 Dr. Miller's research. It was prepared by a Diane
46 Lake. And you'll see the first sentence there,
47 Dr. Richards, under the answers:

1
2 Fisheries and Oceans Canada has not conducted
3 research associated with this particular
4 disease and salmon farms and would not
5 speculate on such a link.
6

7 That's a fair statement, isn't it? You can't
8 speculate on whether or not there's such a link
9 without doing some research?

10 DR. RICHARDS: First of all, I think that I'm not sure
11 I would quite agree with the actual wording here
12 about disease, because I'm not sure we -- this is
13 in the context, I think, of the work of Kristi
14 Miller, and I'm not sure that we've actually
15 identified that there is, actually, a disease.
16 We've identified that there is a genomic
17 signature. But it is true that we have not looked
18 for that signature on aquaculture sites at this
19 point.

20 MR. McDADE: Can we have that made the next exhibit.
21 THE REGISTRAR: 1936.

22
23 EXHIBIT 1936: Questions and Answers:
24 Science Paper - Fraser River Sockeye, by
25 D. Lake, dated February 10, 2011
26

27 MR. McDADE: And can I have Tab 46 up on the screen.
28 Q This is a document in terms of the funding request
29 for Dr. Johnson to do his research. I think this
30 is one of the studies you were referring to, Dr.
31 Richards, that is ongoing. Do you recognize that
32 document?

33 DR. RICHARDS: I think I would like to see the context
34 of that, but I believe that that is -- I believe
35 that that was part of a proposal for Dr. Johnson
36 to do some work that was already discussed
37 probably in his evidence.

38 Q Could we --

39 DR. RICHARDS: And I did raise this question earlier
40 last week -- or I did speak to this in general
41 terms last week.

42 Q Can we just get the first sentence under
43 "Introduction" enlarged, Mr. Lunn. Now, this is
44 Dr. Johnson's statement:

45
46 The role that pathogens and host physiology
47 play in determining growth and survival of

1 sockeye salmon following seawater entry is
2 unknown.
3
4 Is that a fair statement?
5 DR. RICHARDS: It's a bit strong, but I -- you know,
6 it's not to say that we don't know anything, but
7 I'd say that in general our knowledge is very
8 limited on these topics.
9 Q It is a plausible, is it not, and a legitimate
10 risk, Dr. Richards, that fish farms amplify
11 disease in the natural environment?
12 DR. RICHARDS: That could be a possibility. But, you
13 know, disease could also be amplified by other
14 stocks, like herring, which are in schools and in
15 that area.
16 Q But you recognize that the unnatural density of
17 fish in a fish farm is an ideal situation for the
18 amplification of disease?
19 DR. RICHARDS: I'm not sure the "ideal" I would agree
20 to, but I would agree that it is possible that it
21 -- yes, in general I would agree that there could
22 be amplification in that situation.
23 Q And you've looked at -- have you looked at the
24 disease databases that were presented before the
25 Commission?
26 DR. RICHARDS: Personally? No, I have not.
27 Q Ms. Dansereau, have you?
28 MS. DANSEREAU: No.
29 Q And either of the other members of the panel, have
30 you looked at the disease databases and the amount
31 of disease that is found in there?
32 MS. FARLINGER: I may have seen them, but I certainly
33 haven't reviewed them in detail.
34 Q Can we have Exhibit 1565 on the screen, please.
35 And while we're going there, can I suggest --
36 sorry, I should mark that last document as an
37 exhibit, please.
38 MR. TAYLOR: Is this a document that Dr. Johnson
39 authored?
40 MR. McDADE: Yes.
41 MR. TAYLOR: Did you put it to him?
42 MR. McDADE: No.
43 MR. TAYLOR: Then why are we marking it as an exhibit
44 now?
45 MR. McDADE: I'm putting it to Dr. Richards.
46 MR. TAYLOR: I've both asked questions and had my --
47 made my submissions on it.

1 MR. McDADE: Yes.

2 DR. RICHARDS: I do want to be clear that on this
3 document I can't verify that that's what it is
4 that you just -- you referenced it as described in
5 that project. It likely is, but I can't verify
6 the source.

7 THE COMMISSIONER: We should mark it for identification
8 purposes, then, Mr. McDade.

9 THE REGISTRAR: It will be marked as KKK, triple K.

10

11 MARKED KKK FOR IDENTIFICATION: Factors
12 Influencing Early Marine Survival of Fraser
13 River Sockeye
14

14

15 MR. McDADE: All right.

16

16 Q Now, the document 1565, then? If you'll go under
17 the Fish Health Audit tab, I think it's the fourth
18 tab, and scroll across to the -- keep scrolling
19 across, there we go, to the Diagnosis and
20 Comments.

21

21 This is a -- Dr. Richards, you haven't seen
22 this, have you?

22

23 DR. RICHARDS: I have not seen this.

24

24 Q If we could look down to the larger box there,
25 towards the bottom of the page, do you see where
26 the mouse is now:

27

28

28 There is active infectious disease at the
29 population level.
30

30

31

31 Do you see that?

32

32 DR. RICHARDS: Yes.

33

33 Q Can we scroll down a couple more boxes. You see,
34 two boxes further down:

35

36

36 BKD is active at the population level.
37

37

38

38 DR. RICHARDS: Yes, I see that.

39

39 Q All right. Now, there's a number of similar
40 comments in this document that we looked at in the
41 Commission. My suggestion to you is: You are
42 aware that despite all the fish health management
43 plans that the Province has in place, there is
44 regularly disease at the population level in fish
45 farms; were you aware of that, Dr. Richards?

46

46 DR. RICHARDS: I think that that's not strictly within
47 my area of responsibilities, to look at that.

47

- 1 That is looked at certainly by our management
2 group that's dealing with this, but that is not
3 strictly within my area of responsibility.
- 4 Q So who, in DFO, would be aware of that? Let me
5 first ask, I think this -- these documents refer
6 to the pre-2010 period, in 2007 and 8 and 9. Was
7 the Province under any obligation to report to DFO
8 about active disease at the population, Ms.
9 Dansereau or Ms. Farlinger, do you know?
- 10 MS. FARLINGER: I don't know the answer.
- 11 Q Is there a department of DFO whose job it was,
12 prior to 2010, to actually deal with these
13 diseases that were present at the population
14 level? Does anyone know?
- 15 MS. FARLINGER: The fish health group in science
16 regularly consulted with and advised the Province
17 on the fish health plans. I don't know
18 specifically how they dealt with these audits.
- 19 Q So the fish health plans are the documents that
20 are prepared in advance of disease. Once a
21 disease hits, there was, I -- I don't believe,
22 anyone in DFO whose job it was to do anything
23 about it; would that be fair?
- 24 MS. FARLINGER: I don't know the answer to the
25 question, sorry.
- 26 Q So you can't think of anyone under your
27 organization chart whose daily job or weekly job
28 it was to actually protect the wild salmon from
29 diseases that were actually occurring on fish
30 farms? There's nobody at DFO who does that?
- 31 MS. FARLINGER: As I understand it in the broader
32 context, particularly at the time when the
33 Province was requiring these fish health plans,
34 and I think this audit is from that time, I'm not
35 -- I think that's what you said, that the
36 decisions -- the veterinarians in the Province
37 would have set out what fish health actions needed
38 to be taken to deal with problems as they
39 pertained to the fish in the pond and, therefore,
40 the fish in the surrounding areas. That's my
41 understanding of how it worked.
- 42 Q Right. So you relied on the Province. There was
43 nobody at DFO to do this; is that fair?
- 44 MS. FARLINGER: We provided advice to the Province when
45 asked specifically on the matter of the fish
46 health plan and on matters relating to disease.
- 47 Q And when we say we consulted with the fish health

1 people, you would mean people at science under Dr.
2 Richards' department? You're nodding. That's a
3 "Yes"?

4 MS. FARLINGER: That's true.

5 Q Now, Dr. Richards, you would then know, as I
6 understood it, the people at fish health were
7 scientists who did research. I didn't think they
8 had a regulatory responsibility. There isn't
9 anybody under the science department that was
10 required to act when disease was found on fish
11 farms; is that fair?

12 DR. RICHARDS: I think that is a fair statement.

13 Q And there is nobody, today, who has that
14 responsibility, is there? In your department?

15 DR. RICHARDS: No, the issue for science is to provide
16 advice, but it's not necessarily to take action.
17 But we are under a different regulatory regime
18 today.

19 Q So when a disease strikes in fish farms, and we've
20 heard evidence from Dr. Korman that there's some
21 30 fish health events per year of the kinds of
22 diseases that are serious risk to wild salmon,
23 when a disease strikes today, is there anybody in
24 your department who's got a responsibility to go
25 study the impacts of it?

26 MS. FARLINGER: There is a fish health monitoring
27 section, including veterinarians, who audit the
28 compliance with the fish health plan, and the
29 veterinarians who work for the aquaculture program
30 in DFO then work with the veterinarians on the
31 farm. I don't know, specifically, what the
32 response is, but the response is generally around
33 the health of the fish on the farm so that the
34 fish on the farm are healthy. So then the -- then
35 mitigating the opportunity for the spread of
36 anything to wild fish.

37 Q But you accept that there are diseases happening
38 no matter how good your fish health management
39 plans are?

40 MS. FARLINGER: There are also a number of these
41 diseases that are endemic in the wild sockeye
42 populations as well.

43 Q Well, let me ask my question again: You accept
44 that there are diseases happening in the fish
45 farms, despite the fish health management plans?

46 MS. FARLINGER: As I understand the fish health
47 management plans, they are to deal with and manage

1 the disease to produce a healthy fish farm, yes.

2 Q Okay. Once --

3 MS. FARLINGER: So "Yes," is the answer.

4 Q Thank you. But once a disease hits in a fish
5 farm, there's nothing to stop the pathogens from
6 going through the nets into the water and contact
7 with the wild salmon, is there?

8 MS. FARLINGER: I can't claim to be an expert on the
9 treatments of those diseases and how those affect
10 the potential to spread that disease to the wild
11 fish, so I can't answer your question.

12 Q Dr. Richards, you can answer that question. You
13 know those pathogens go from a diseased fish out
14 into the water, don't they?

15 DR. RICHARDS: I mean, to the -- if the pathogens are
16 water-borne, then they can be carried out, as they
17 could be carried in.

18 Q Yes. And I don't think, Ms. Farlinger, that
19 there's any rules in any fish health management
20 plans I've -- plans I've seen that prohibit the
21 transfer of pathogens through a net into the open
22 water.

23 MS. FARLINGER: As I understand it, the fish health
24 plans set out a strategy or application to deal
25 with fish health problems when they arise, in
26 order to control or eradicate them.

27 Q Now, Dr. Richards, let's go back to the question
28 what science DFO has done. Have you done any
29 science to determine whether these fish health
30 management plans reduced the incidents of transfer
31 of disease to wild salmon or not?

32 DR. RICHARDS: I think it lets -- okay, let me just be
33 clear about what you're talking about. With
34 disease, I think we have certainly done quite a
35 lot of work in that regard in relationship to sea
36 lice, but if you're speaking about other kinds of
37 disease --

38 Q Viruses.

39 DR. RICHARDS: -- in terms of viruses, then I have to
40 agree that while we have done some work on
41 viruses, we have not done extensive work on
42 viruses.

43 Q And let me suggest, also, to follow-up on a
44 question that was asked Thursday, that if you
45 haven't done any work on the transfer of viruses
46 from individual fish farms, there's certainly no
47 studies at all as to the transfer of viruses from

1 a collection of fish farms, the cumulative impact
2 of fish passing multiple farms with disease,
3 there's no science at all been done by DFO to
4 determine what those impacts are; is that fair?

5 DR. RICHARDS: Well, I did mention that we have
6 initiated some projects looking at the
7 circulation, so we would be able to do that, and
8 as I recall from some of the work that we have
9 done so far, viruses do not stay active very long
10 in the water column as part of this transport, is
11 my understanding and talking to Dr. Garver, is
12 that they are -- quite quickly pass out through UV
13 radiation.

14 Q Well, that's a study that's still underway, is it
15 not?

16 DR. RICHARDS: I believe it is still underway.

17 Q Right.

18 DR. RICHARDS: I'm not sure of all the details.

19 Q Well, it's admirable, and I'm pleased that DFO is
20 now doing this study, but if you're doing it now,
21 that means it hadn't been done before.

22 MS. DANSEREAU: If I may just interject, you're making
23 it sound as though the farms are infested with
24 disease and remain infested with disease without
25 any actions taken to prevent -- to clear up the
26 diseases.

27 Q No, no, I'm not saying that.

28 MS. DANSEREAU: At least that's how it's sounding, that
29 there's an entirely infested area, and it's in no
30 one's interest, certainly not in the farmer's
31 interest, to maintain disease-ridden fish farms.
32 So actions are taken and the amounts -- there's
33 been no evidence to indicate there is this
34 cross --

35 Q And to be fair, Deputy --

36 MS. DANSEREAU: -- infection --

37 Q To be fair, there is no evidence that there isn't,
38 is there, because you haven't studied it? That's
39 the evidence before the Commission, that that
40 evidence doesn't exist?

41 MS. DANSEREAU: The extreme position that would result
42 from your description is that there would be no
43 fish, there would be no wild fish, because there
44 would be only disease-ridden, mutated fish of some
45 type, but there are fish and there have been
46 cycles that have been going on long before any
47 fish farms were there. So there has been no

- 1 evidence to support that the disease has had any
2 impact. There will be things that we will be
3 doing, now that we are the regulator, or playing a
4 greater role in regulation. But so far, the
5 Department has been keeping an eye on these things
6 and these are questions that we regularly ask
7 without necessarily targeting science to go do the
8 work because there hasn't been, in our priority-
9 setting exercises, evidence to this point, to say
10 that this ought to be done.
- 11 Q I don't want to belabour the obviously, but
12 didn't, in 2009, a whole bunch of fish disappear;
13 isn't that why we're here?
- 14 MS. DANSEREAU: Yes, and didn't, in 2010, a whole lot
15 more come back?
- 16 Q And in 2009, our Department believes that disease
17 played a role?
- 18 MS. DANSEREAU: We are incredibly interested in finding
19 out what this Commission will determine at the end
20 of its deliberations. We are continuing to ask
21 ourselves the same questions, and we will continue
22 to do so.
- 23 Q But when the siting decisions that were made for
24 the farms that are in the constrained areas -
25 could we have 1563 up on the screen - the siting
26 decisions were made 10 years ago and more for
27 these areas, let me suggest to you there was no
28 science upon which people could depend to
29 determine whether or not these farms would have
30 impacts on the wild salmon migrating sockeye;
31 that's a fair statement, is it not?
- 32 MS. DANSEREAU: I wouldn't know.
- 33 Q And --
- 34 MS. FARLINGER: I think I should say that 10 years ago,
35 at that time we had in place, and in fact, there
36 recently had been an aquaculture forum in B.C.
37 hosted by the B.C. Government, that looked at
38 these things. A host of siting criteria, which
39 our then, as was our regulatory responsibility,
40 our habitat biologists looked at in terms of
41 siting in farms, and they had to do with the
42 location of salmon rivers, salmon estuaries, as
43 well as a host of other valued ecosystem
44 components.
- 45 So while the science was not in a state to
46 evaluate any disease implications, there certainly
47 were things that were considered with respect to

1 salmon stocks and with respect to the potential
2 impacts on wild salmon. And then, following that,
3 for example, the returns of stocks in the area
4 surrounding farms did not, in any way - which is
5 something we measure each and every year - did not
6 provide us with a reason to go looking at that
7 problem.

8 So there is some context and there were some
9 previous considerations of this, although not
10 nearly as specific as we're talking about here,
11 today, and as the research that is going on today.

12 Q So as I understood, Rebecca Reid testified before
13 the Commission that when her department looked at
14 assessments of these sites back in 2005, when
15 there was a mass amount of sea assessments that
16 were completed on 91 sites, I believe, she
17 testified that they only looked at benthic impacts
18 from DFO's perspective. There was no assessment
19 of disease, the disease potential in the wild
20 sockeye population; is that correct?

21 MS. FARLINGER: The siting criteria that originally,
22 back in the '90s, were fundamentally the checklist
23 for any habitat biologist having a reference from
24 the Province about where a fish farm might be
25 sited, did include distance from salmon farms,
26 distance from shellfish operations, and a wide
27 variety of elements about avoiding fundamentally
28 ecosystem -- ecosystem values. That by the time
29 the -- that was examined in the mid-2000s, that
30 was merely -- those elements were merely a rough
31 screening criteria which, today, is still used,
32 and the specificity around the actual habitat
33 impacts was limited to the organic material on the
34 bottom, or other physical disruptions of habitat
35 that might occur from the farms. That did not
36 mean that the broad screening tool of siting
37 criteria was not used.

38 Now, I mean, at the time and in the day,
39 avoiding salmon rivers and the mouths of salmon
40 rivers was really the level of precautionary
41 approach that was taken, but the kind of thing
42 we're talking about today, in terms of the
43 research, not surprisingly, is much more specific
44 than that.

45 But to say there was no consideration of
46 that, I think, is not quite reasonable.

47 Q Do you consider that it would make sense to avoid

1 the wild salmon migratory route where millions of
2 young smolts are coming through that area?
3 Doesn't that make sense to you, today? Shouldn't
4 that be on the criteria list?

5 MS. DANSEREAU: Not as a general statement. We don't
6 function from general statements. So we would
7 have to investigate and continue to investigate to
8 see whether or not there was a reason to do that.

9 Q All right. I've got to move on. I've got just
10 one area of examination left. Can I have Tab 33
11 on the screen, please.

12 Now, Dr. Richards, as I understand it, much
13 of the funding for science research relating to
14 aquaculture came through this Aquaculture
15 Collaborative Research and Development Program,
16 right?

17 DR. RICHARDS: No. I mean, that is one of the sources
18 of funding. We have had other sources of funding
19 besides this one.

20 Q Well, there's some 59 million dollars that's been
21 dedicated to that over the last five years, hasn't
22 there been?

23 DR. RICHARDS: This is a national program. I can't
24 give you, explicitly, the figures there, but
25 certainly there has been some substantial funding
26 here, but there is funding, also, for research for
27 aquaculture through other sources.

28 Q Could we go to page 7, please. Could we just blow
29 that up. No, sorry, I need Part 6 or, I'm sorry
30 -- yes, the next page, sorry, page 9. I'm sorry,
31 page 5, under ACRDP. I'm sorry Mr. Lunn.

32 Now, if we just highlight the first paragraph
33 there. Let me suggest to you, and you'll see this
34 four lines in, that that program is an industry-
35 driven program; that's correct, isn't it, Ms.
36 Dansereau?

37 MS. DANSEREAU: That's what it says.

38 Q Yes. And it provides funding that is jointly
39 proposed by the industry and DFO?

40 MS. DANSEREAU: That's what it says.

41 Q Yes. And industry people sit on the committee
42 that assigns that funding; isn't that right?

43 DR. RICHARDS: That is correct.

44 Q Mary Ellen Walling, in fact, sits on that
45 committee?

46 DR. RICHARDS: This is a national program. There are
47 different committees across the country with

1 different levels of membership. I'm not sure on
2 which committee she may sit. She probably does --
3 she may have, or she may have for some time. I
4 can't -- but there --

5 Q We saw an e-mail from Dr. Miller, earlier in these
6 hearings, where she was writing to Mary Ellen
7 Walling, asking her to approve the funding so she
8 could go study the --

9 DR. RICHARDS: Well, I'm not --

10 Q -- particular disease -

11 DR. RICHARDS: -- sure that that was because she was on
12 that committee or not. I'm not sure exactly -- I
13 don't know what the current membership on that
14 committee is.

15 Q And I'll just, for my - then I'll sit down - if we
16 could go to page 2, under Rationale and Relevance,
17 you'll see the last sentence of the first
18 paragraph:

19
20 There are also communication challenges as
21 there is a negative perception of aquaculture
22 among certain influential NGOs.

23
24 In bringing a rigorous scientific approach to
25 the issue of environmental impacts associated
26 with aquaculture, ACRDP has the opportunity
27 to clarify some of the misinformation that
28 persists.

29
30 So part of that program is to fund science that
31 changes -- that rebuts the public perception; is
32 that right?

33 MS. DANSEREAU: Sorry, if I may, it is, from what I can
34 gather from reading this, and I wasn't there in
35 2005, but it's to ensure that if there is
36 misinformation that is, in fact, frightening
37 people, real truth would be brought to bear on a
38 question. So the fact that industry is part of
39 that doesn't make it -- doesn't make it suspect,
40 it simply means that real research was being done
41 to uncover real truths. And so it's not a
42 communications exercise, it's a science exercise
43 to get at real answers.

44 MR. BEVAN: I was there, and you'll have to remember
45 the context at the time, there was a number of
46 studies put out that have subsequently been found

1 to be inaccurate relevant to contaminants in
2 aquaculture products, and they were using the
3 sampling and the analytical methods to establish
4 that these products were unsafe when, in fact,
5 they were very much the opposite, they're very
6 good for you.

7 And I would also point out, context around
8 how we direct science and how we set priorities,
9 empirical evidence is used. So you're making the
10 point that we don't know for sure, that we haven't
11 proven a negative, that there's no impact on
12 disease or disease isn't being transmitted. What
13 we were doing as noted by Sue Farlinger, is
14 tracking returns in those areas and looking at
15 them relative to history and tracking them to see
16 if there's been a trend that would mean that we
17 have something we missed. And we didn't see that.
18 Therefore, that didn't trigger the kind of
19 research that we're now undertaking, as you've
20 noted, and that's just use of empirical
21 information to determine whether or not there was
22 a problem that we had not anticipated.

23 Q There were three studies that were done by DFO
24 into sea lice on sticklebacks. Is that done to
25 address communication issues, or is that done
26 because the most pressing need for scarce DFO
27 research dollars is to save the stickleback?

28 MR. BEVAN: I think it's also done because stickleback
29 is a vector. It's a species that's a vector, and
30 we should understand the presence of sea lice in
31 the environment, not just looking at it more
32 narrowly. And I think there's been a lot of work
33 done in that area. And again, I point out that we
34 are looking at the returns to see if there's
35 something we're missing in order to help direct
36 science. And we didn't see that evidence that
37 triggered this in the past, so we're continuing
38 that work and would like to track things so that
39 we make sure that we aren't missing something.
40 Right now, the concern that you're raising is
41 viral. In the past it was lice, and viral now.
42 There may be something else in the future that the
43 best way to look at it is tracking the local
44 populations of returning salmon.

45 MR. McDADE: That's my time, Mr. Commissioner. Thank
46 you. Thank you, panel.

47 THE REGISTRAR: Mr. McDade, would you like your Tab 33

1 marked?

2 MR. McDADE: Yes, thank you.

3 THE REGISTRAR: That will be 1937.

4

5 EXHIBIT 1937: Fisheries and Oceans Strategic
6 Review of the Aquaculture Collaborative
7 Research and Development Program, Final
8 Report by Goss Gilroy, March 31, 2005

9

10 MR. McDADE: The Strategic Review.

11 MR. TAYLOR: That's fine.

12 MR. McDADE: Yes.

13 MR. MCGOWAN: Perhaps a short break, Mr. Commissioner.

14 THE COMMISSIONER: I'm sorry, that was 1937?

15 THE REGISTRAR: That's right.

16 THE COMMISSIONER: Thank you very much.

17 THE REGISTRAR: The hearing will now recess for 10
18 minutes.

19

20 (PROCEEDINGS ADJOURNED FOR AFTERNOON RECESS)
21 (PROCEEDINGS RECONVENED)

22

23 THE REGISTRAR: The hearing is now resumed.

24 THE COMMISSIONER: Mr. Leadem.

25 MR. LEADEM: For the record, Tim Leadem, appearing as
26 counsel for the Conservation Coalition.

27 In all probability, Mr. Commissioner, this is
28 probably the last time I will be able to address
29 you through a panel, and I wanted to take the
30 opportunity to thank specifically Mr. Giles, Mr.
31 Lunn and Ms. Kealy. They have been very helpful
32 to me throughout the course of these hearings and
33 I wanted to acknowledge publicly on the record
34 their assistance throughout.

35 THE COMMISSIONER: Thank you, Mr. Leadem.

36

37 CROSS-EXAMINATION BY MR. LEADEM:

38

39 Q Welcome back, panel. I think that I recognize
40 most of you from other appearances, and I thank
41 you for coming back at the tail end of our
42 examination of this topic. And I want to ask many
43 questions about the Wild Salmon Policy
44 specifically, so most of my focus will be directed
45 at that policy and its implementation, and some of
46 the other issues around it. But I also want to
47 begin by trying to understand if I can get this

1 panel's evidence with respect to two critical
2 questions, and I think they're mainly scientific
3 questions.

4 We've heard a lot of science, as you probably
5 know. We've heard a lot of panels come and go
6 with esteemed scientists who have come and given
7 their opinion about what has caused or what could
8 have caused the decline of the Fraser River
9 sockeye over the last decade, and what
10 specifically could have caused or led to the
11 decline in 2009. And it's a bit perplexing
12 because in 2010, as you acknowledged, Deputy, they
13 came back in record numbers. So I wanted to make
14 sure before I embark upon my questions that I had
15 this panel's evidence with respect to in your
16 opinion, or does this panel have an opinion, about
17 what caused the general decline.

18 And we've heard evidence, for example, that
19 there are many multivariate factors that led to
20 the decline. I wondered if this panel shares that
21 view that somehow the factors may have been
22 contributing, either in a synergistic fashion or
23 in some compensatory fashion to have brought about
24 the decline. So do I have your evidence that you
25 are of that view, as well, that there's no one
26 single cause for the decline?

27 MR. BEVAN: I can respond. As a manager, I was not in
28 the business of forming opinions about what things
29 were going on. I was receiving information from
30 Science, recommendations from Science, and I would
31 do the same in this regard. I would not presume
32 to have a formed opinion about what may have done
33 it. Clearly, we deal with complex systems and
34 there's probably no one answer, but that's
35 something that I would turn to our scientific
36 colleagues to --

37 Q To answer.

38 MR. BEVAN: -- to receive that information.

39 Q Well, that leaves me with you, Dr. Richards. Are
40 you of the view that there's no one single factor
41 that overall has contributed to the decline of the
42 Fraser River sockeye, and specifically with
43 reference to the 2009 decline we can't really
44 point our fingers at one specific cause, can we.

45 DR. RICHARDS: I think our best evidence was done, Mr.
46 Commissioner, in a briefing note that I authored,
47 following on a workshop that we held in April of

1 2011. And certainly we have not been able to
2 identify one single cause. We're looking at
3 likelihood. We think that it's most likely that
4 there was something early in the marine history,
5 in the time spent in the marine area for juvenile
6 sockeye, in the Strait of Georgia, or perhaps
7 extending a bit further north.

8 Q Into Queen Charlotte Sound.

9 DR. RICHARDS: Into Queen Charlotte Sound.

10 Q Yes.

11 DR. RICHARDS: But we have not been able to identify
12 any individual specific factor.

13 Q Right. And I take it that the managers on the
14 panel accept that advice; is that correct? I see
15 heads nodding.

16 MS. FARLINGER: Yes.

17 DR. RICHARDS: And maybe if I could just be a little
18 clearer. I think we would agree and concur, I
19 think, with some of the work that was done and
20 presented by Mr. Marmorek and say that, yes, we
21 think it's likely it was not -- just because we
22 can't find one single event, suggests to us that
23 it wasn't necessarily one single event, but
24 probably a sequence of things which contributed.

25 Q Right. So what that tells me as a layperson here
26 examining the managers and the scientist, is that
27 we're basically in a position of not knowing.
28 We're basically making some educated guesses and
29 drawing some alternative hypotheses, but we
30 basically do not know; is that fair to say?

31 DR. RICHARDS: I think we have some evidence on some
32 things. I mean, science is always -- it's very,
33 very difficult to prove something in science. You
34 can have -- you try to go to the extent you can
35 with certainty, but it's very difficult to
36 actually get proof in this context. What we're
37 looking for was some event that happened in 2009
38 or earlier, and for which, you know, we don't --
39 and going back in retrospect necessarily have all
40 the right data that we might wish we had had to
41 try to answer some of those questions. So, you
42 know, I think we've got a lot of evidence about
43 some things. And so we certainly have done a lot
44 of work and made some progress, but this is not an
45 area where you're going to have certainty.

46 Q Right. And so we still have some distance to go
47 before we can definitely say, and we may never be

1 able to say.

2 DR. RICHARDS: I mean, I think if I may that the --
3 based on our best evidence now is we certainly
4 have been able to -- well, we've tried to give you
5 and lay out the evidence that we had, but there's
6 always a situation where, "Gee, I wish I'd had
7 that particular sample at that time, that might
8 have helped."

9 Q All right. And to a large extent I think your
10 evidence, Dr. Richards, mirrors what I've heard
11 from a lot of other scientists who have preceded
12 you to that particular place, in which they say
13 "We wish we knew, but we don't know." That's
14 fair, is it not?

15 DR. RICHARDS: I mean, I think we always would wish
16 that we could provide more certainty and that we
17 always wish that we'd had more information on
18 certain points, but I think we have done a
19 tremendous amount of work to try to pull the
20 evidence together and to try to present as much
21 information as we have in front of this
22 Commission.

23 Q Now, a lot of the scientists who came and
24 presented evidence to this Commission called for
25 research proposals. They called for further
26 research into discrete areas, more often than not
27 it happened to coincide with the area that they
28 themselves were researching, but I don't
29 necessarily see that as a disparaging thing on
30 their parts. What are we going to do or make of
31 all those calls for research proposals. What,
32 does DFO have a reaction to all of that?

33 MS. FARLINGER: I did mention earlier that one of the
34 things we have been doing in the interim since the
35 June workshop is an inventory of the work that's
36 going on out there about the priority or most
37 probable areas that were identified, not only in
38 that workshop, but in the interim. So reviewing,
39 and there may be some modification of that based
40 on this inventory. And we're doing that under the
41 auspices of the Pacific Salmon Commission. And we
42 are planning to at this executive meeting discuss
43 and formulate next steps in terms of exactly the
44 kind of things that were being talked about at
45 that forum, which is what are the priorities for
46 research, and what are the areas where there is
47 data and information. You know, it's kind of the

1 probable thing, where can you make the most
2 headway, and what are the most probable causes.
3 So we do, DFO is very much engaged in moving that
4 forward.
5 Q And, Ms. Farlinger, if I can just stay with you
6 for a moment. Would you also envelop within that
7 moving forward in a workshop type procedure, the
8 academic community who also shares some interest
9 in these bigger questions, and also the
10 consultants who have come and gone, and also
11 traditional Aboriginal knowledge into that kind of
12 approach. Would you agree with me on that?
13 MS. FARLINGER: We were hoping very much to use a
14 similar format to the workshop in 2010, but I have
15 to say we haven't yet come to that conclusion. We
16 do know that we need to include expertise outside
17 the Department and to the extent we can use
18 traditional ecological knowledge we would
19 certainly be looking for ways to include that.
20 Q And, Deputy, you have a comment.
21 MS. DANSEREAU: If I just may add to that. Certainly I
22 would expect that when they -- when the results of
23 that workshop make their way through the system in
24 any form of advice, I would be looking to make
25 sure that the groups that you've just defined have
26 been involved in some way.
27 Q Right. And, Mr. Bevan, you had your hand raised.
28 MR. BEVAN: Yes. And while there's going to be work
29 done to try and fill knowledge gaps, I think it's
30 really important for managers to understand that
31 we're dealing with extraordinarily complex systems
32 here that we don't fully understand, and I don't
33 think we will fully understand them for some time.
34 Therefore management decisions are going to have
35 to be made in the face of a high level of
36 uncertainty.
37 Q Yes.
38 MR. BEVAN: And in the knowledge of that, we can help
39 to avoid risks. Indeed, in my opinion that if we
40 were to think we had it made, we knew exactly what
41 was going on and act on a level of certainty, that
42 in our past has led us to a rather unhappy
43 outcome, because we thought we had it right, we
44 didn't, and we made mistakes that were very
45 significant and have -- have led to the
46 implementation of the precautionary approach in
47 this country and in fish management around the

1 world, as they fall witness what happened to
2 northern cod, et cetera, as a classic example of
3 where we thought we had a system that was very
4 accurate, acted on it, and only to find out it was
5 wrong. And we brought, hopefully reversible, but
6 it's been a long time, but very significant damage
7 to the ecosystem. So we're going to live with
8 uncertainty for a period of time and have to be
9 prepared to face that as our reality.

10 Q Right. And I'm going to come back to you, Mr.
11 Bevan, because I want to come back to you with
12 respect to a discussion of the precautionary
13 approach in the context of the Wild Salmon Policy.

14 Before I do that, I want to talk to you about
15 the Wild Salmon Policy and engender some
16 discussion, because certainly from the perspective
17 of my clients, they see that as a way of moving
18 forward. You probably are well aware that at the
19 time that the Wild Salmon Policy was passed, there
20 was a significant buy-in gradually from all
21 significant stakeholders into that policy. And my
22 clients certainly see it as a way of moving
23 forward in terms of how the fishery is managed and
24 how habitat is protected, and how the ecosystem is
25 going to be actually acknowledged in the context
26 of Fraser River sockeye.

27 And I know, Deputy, the last you came here I
28 think you talked about the ecosystem approach and
29 how it was in your DNA, that essentially that you
30 recognize that it's important to look at things
31 globally and not just isolate Fraser River sockeye
32 as a single species. You're nodding your head
33 yes.

34 MS. DANSEREAU: I am, and I think I've repeated those
35 comments here in the past few days.

36 Q Yes.

37 MS. DANSEREAU: It's impossible for us to even pretend
38 to manage without that consideration.

39 Q Right. Now, I accept the evidence I heard earlier
40 from you last week that when the Wild Salmon
41 Policy was being brought in, perhaps there was a
42 certain aura of naivety about how long it would
43 actually take before the policy could be rolled
44 out as an implemented policy. And so obviously
45 there had to be some fundamental work, some
46 research done, and we're still doing that, are we
47 not, Dr. Richards, and with respect to Dr. Grant's

1 work that we've seen?

2 DR. RICHARDS: I think these -- when we start to look
3 at some of these questions, like others, we
4 uncover other questions that we need to look at,
5 and really this is going to continue as a work in
6 progress. There will always be something new that
7 we could do on the subject, and in fact the
8 science and the scientific thinking in these areas
9 continues to evolve as we get more knowledge,
10 worldwide on the -- on how to approach these kinds
11 of problems.

12 Q But from a management perspective, Mr. Bevan,
13 wouldn't you agree with me that as the science
14 starts to inform the management, that those kinds
15 of information, the scientific information
16 particularly with respect to the designation of
17 conservation units, the benchmarks and so forth,
18 they should be incorporated into management
19 decision-making, right?

20 MR. BEVAN: Yes, that's the basic element of the
21 precautionary approach. We need to identify the
22 stock, that's the conservation unit, in the case
23 of Fraser River sockeye. We need to identify
24 where the limit references are, where that
25 population can bounce back from, and have some
26 assurance that we aren't taking it to a position
27 where it's going to be a long time or it will be
28 impossible to recover. But those are very, very
29 complex scientific questions.

30 So we, in the Wild Salmon Policy, put to
31 Science those questions, and I think we're
32 discovering just how difficult it is for Science
33 to answer. And that's not just in Fraser River
34 sockeye. That's been a real question, like, how
35 low can a population be before there's a long
36 recovery problem, and that's been very difficult
37 to come to those conclusions. We're getting there
38 and we are incorporating them in our fish
39 management plans.

40 Q Now, you're also -- sorry, Deputy, you had your
41 hand --

42 MS. DANSEREAU: Sorry, if I may on that. Yes. It's
43 back to the question of is it implemented or not.

44 Q Yes.

45 MS. DANSEREAU: And I mean, I would say that the
46 approach within the Wild Salmon Policy has been
47 implemented and will continue to be implemented.

1 We were not as -- we were not able to gather the
2 information and answer the tough -- all the tough
3 questions as quickly as we thought we could be.
4 But as those questions are being addressed, or
5 information found, it is being incorporated. And
6 the approach to managing the fishery as defined in
7 the Wild Salmon Policy is to the best of our
8 knowledge at this point being implemented, and we
9 will continue to look for other information.

10 Q And that will be done, Deputy, at the Integrated
11 Fisheries Management Plan, would it not? Maybe
12 the Regional Director has some information on
13 that.

14 MS. FARLINGER: Well, I think the annual expression of
15 what that long-term decision is around where those
16 management decisions will be made, is in the
17 individual or in the Integrated Fishery Management
18 Plan. But I think as several people have said, it
19 will be incremental as new information comes.
20 There will be those kinds of decisions that will
21 require broad sort of public policy kind of input,
22 as opposed to just the people who are harvesting
23 the fish.

24 And so there are a number of challenges
25 envisioned, I think, in Strategy 4 that are going
26 to be longer term rather than shorter term. But I
27 think as we've talked about over the last five
28 years there are specific elements where we have
29 the information in the Integrated Fishery
30 Management Plan, and when we have it, we pull it
31 in and we use it to inform the decision.

32 Q Right. And so once you have certain information
33 about the conservation units and I'd like to
34 concretize this by referring to a discrete example
35 of Cultus Lake sockeye, which we all know about
36 and we've heard a lot of evidence about. And so
37 once we know that we have a conservation unit such
38 as the Cultus Lake sockeye, which has a specific
39 genetic diversity from other conservation units,
40 you acknowledge that, do you not? Dr. Richards.

41 DR. RICHARDS: Well, we have identified Cultus as a
42 separate conservation unit.

43 Q Right. Okay. So once we know that, right, I
44 think then it becomes a decision of management how
45 will you protect that genetic diversity for the
46 Cultus Lake in the context of what we've -- what
47 we're calling a mixed-stock fishery. And that's,

1 that's the problem, you see, and that's the
2 problem that I've tried to raise with scientists,
3 and it's a problem I'm going to come back to with
4 you. How do you deal with preserving genetic
5 diversity of specific conservation units if you're
6 fishing non-selectively, if you're fishing in a
7 mixed-stock fishery. Do you have any solutions to
8 that?

9 MS. FARLINGER: We did talk earlier and as I said,
10 there's some detailed discussion of this in the
11 Skeena Science Panel Report, and I wish there were
12 an easy answer. But the issue of selectivity and
13 how you do it is highly variable, depending on the
14 fishery and the circumstances. But to move beyond
15 that, I think is really looking at how can we
16 manage this fishery differently so that fishing
17 selectively is what happens.

18 Q Right. And are you looking at that?

19 MS. FARLINGER: Well, I think you've heard some
20 evidence that talks about DFO's work across a wide
21 spectrum, taking a look at, for example, how a
22 share-base fishery might do that. That doesn't
23 mean a share-base fishery is the only way to do
24 it.

25 Q Right.

26 MS. FARLINGER: It just means it's a way to do that and
27 one of the reasons -- well, there are two reasons,
28 as regulators we're looking at, that one is to
29 meet the conservation requirements, first and
30 foremost, and then secondly is to provide
31 fishermen the flexibility to be able to make a
32 living out of the fishing they do. But I'm not
33 suggesting share-base management is the light and
34 the way. It's simply a way to explore other ways
35 of fishing. The Selective Fishing Policy and the
36 demonstration fisheries we've been doing, whether
37 they're about share based, or whether they're
38 about fishing in a different area, or whether
39 they're about fishing with a different gear, are
40 all setting us in that direction of how better to
41 manage the fishery to meet the conservation and
42 the economic prosperity requirements, which are
43 both -- and the cultural and other requirements
44 that are there.

45 Q Right. And one other way might be to move the
46 fishery further along the Fraser, because we are
47 specifically talking about Fraser River sockeye

1 here. So would you not also in your toolkit, as
2 you called it, also consider moving the fishery
3 further inland and looking at terminal fisheries
4 and how you can protect genetic diversity in the
5 context of having more terminal fisheries?

6 MS. FARLINGER: That's certainly the direction of the
7 fisheries management that's occurred over the last
8 20 to 25 years in management of British Columbia
9 and Yukon salmon fisheries. And also, as you know
10 very well, it's one of the aspects of
11 demonstration fisheries we're looking at. It's
12 probably -- well, it certainly isn't the only
13 solution. It's certainly one of the solutions
14 that we are looking at.

15 Q I want to pull the discussion back into
16 precautionary approach and make sure I understand
17 your evidence before I embark upon a discussion
18 with you, Mr. Bevan. Did I hear you correctly
19 when you said that in the context of a multi-stock
20 fishery, such as we have with Fraser River
21 sockeye, that a precautionary approach is embodied
22 within the Wild Salmon Policy?

23 MR. BEVAN: That's -- because of the biology of the
24 salmon, you can't just transport or use the
25 current model for the precautionary approach in
26 these context of a species where you'll fish on
27 one year class just as it's spawning and then it
28 all dies. So the Wild Salmon Policy was the
29 method of applying the precautionary approach to
30 that kind of a population.

31 Q Okay. And I want to begin by pulling up an email
32 exchange that I have listed and hopefully you had
33 an opportunity to visit this before I came to the
34 podium. Could we have Conservation document
35 number 8, please. It's an email exchange. And I
36 realize that, Mr Bevan, you probably were not
37 copied on this, but a number of high ranking
38 officials, Paul Ryall, I see is listed there.

39 And just to set the context, as I understood
40 it for this email exchange, the discussion is the
41 Precautionary Approach document that has been
42 tendered into evidence. And I found some words
43 from Mr. Rob Kronlund to be rather informative. I
44 don't know who he is in the context of DFO. You
45 probably are better poised to answer that than I
46 am.

47 DR. RICHARDS: He -- Rob Kronlund is a biologist

1 working on the Groundfish Group at the Pacific
2 Biological Station in Nanaimo for Fisheries and
3 Oceans Canada.

4 Q Okay. So admittedly it's coming from a groundfish
5 perspective. But what I found, if go to PDF 2,
6 the second page, and I'm going to read this, Mr.
7 Bevan, because I think it will set the context and
8 will allow you to follow along as well. The
9 question 1 relates to multi-stock fishing. How
10 can you have a precautionary approach in multi-
11 stock fishery, and he says:

12
13 Part of the answer...relates to being clear
14 about the fishery objectives. The "PA" --

15
16 - meaning precautionary approach -

17
18 -- applies equally well whether there is one
19 stock or many. The difficulty is that we
20 have some capacity building to do within DFO
21 and with stakeholders to learn how to define
22 measurable fishery objectives for a multi-
23 species or multi-stock situation. The
24 lessons from salmon indicate that the total
25 yield from a mix of stocks is less than the
26 sum of the individual single-stock yields,
27 and development of the Wild Salmon Policy
28 indicates how difficult it is to grapple with
29 stating the objectives.
30

31 And then he talks about the groundfish fishery
32 there. And then he says:

33
34 Furthermore, being clear about what is
35 desired in terms of measurable objectives
36 across the species in a multi-species fishery
37 is as close as we are likely to come to
38 making "eco-system" management operational.
39 For example, focus on maximizing harvest from
40 the more productive stocks will inevitably
41 result in over harvest of weaker stocks. The
42 goal is to make those trade-offs explicit in
43 order to inform decision-makers.
44

45 I'm just going to stop there, because I think this
46 is pretty sage advice in terms of how you move
47 forward. If you have genetic diversity that

1 you're trying to protect through the Wild Salmon
2 Policy, you basically have a situation where
3 you're going to be in danger of overharvesting
4 certain conservation units because they're weaker
5 and you need to rebuild back. Do I have that
6 right, that concept right?

7 MR. BEVAN: Yes, you do. In the past we had harvest
8 rates 60 to 80 percent. You can't do that in the
9 current context. The weak stocks just couldn't
10 take that kind of pressure, and you have to drop
11 the overall harvest rate. So when he's saying
12 that the overall rate of exploitation will be less
13 than you could have if you were able to fish
14 specifically on each individual population
15 component, that's correct. You can't fish as hard
16 as you otherwise could on the aggregate because
17 you have to protect the weak stocks.

18 Q Yes.

19 MR. BEVAN: And this also comes from the groundfish
20 where we have the integrated groundfish process
21 and we set specific limits on every population
22 that they are exploiting, and every mortality had
23 to be accounted for and within the limits that
24 were set.

25 Q And certainly we saw that for the 2009 return when
26 there was basically no fishing.

27 MR. BEVAN: That's correct, and that's not just 2009.
28 We've -- in salmon happily is one pattern that
29 hasn't been found in a lot of other fisheries, and
30 that is that the fishery has gone down
31 substantially, but more substantially than the
32 escapements. We reduced the fishery in order to
33 provide the appropriate level of escapement or the
34 best level that we could under the circumstances.
35 And if that meant no fishery, that's what
36 happened, and therefore the drop in the fishery is
37 actually greater than the drop in the escapements.

38 Q And later on in that same paragraph, Mr. Kronlund
39 says:

40
41 The job of Science Guys is to make those
42 trade-offs clear and describe the risk in the
43 face of uncertainty which will never go away.

44
45 And he says:

46
47 As Sinclair points out below,...

1
2
3
4
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

This is, I gather, another scientist, is that right, Dr. Richards?

DR. RICHARDS: Yes, Alan Sinclair is a scientist who is now retired, but I can't remember exactly what year he retired, but I assume at this time that he was still working as a scientist within the same Groundfish Group.

Q So:

...there is a host of international/national agreements that provide guidance on the conservation axis, and fishery managers and stakeholders need to weigh in on the yield and volatility axes (as described by the Framework).

So coming back, then, to the Wild Salmon Policy, if we apply the Wild Salmon Policy in a precautionary way, as you suggest it ought to be applied, Mr. Bevan, then obviously we have to protect the weak stock and protect against overharvesting, do I have that right?

MR. BEVAN: And I think that you can see from the behaviour of the Department that that is indeed what has been happening in recent years.

MR. LEADEM: Could we have this email exchange marked as the next exhibit, please.

THE REGISTRAR: Exhibit 1938.

EXHIBIT 1938: Email thread ending October 1, 2008 re National Precautionary Approach Framework

MR. LEADEM:

Q Now, the Wild Salmon Policy not only talks about conservation as the core central and foremost principle, but it also talks about getting to a state where we can have sustainable fisheries. I mean, I think all of us in this room want to be able to see that our fisheries are sustainable. And to that extent I think that what you're endeavouring to do is build up the stocks so that they can be sustainable. Do I have that right from a management perspective?

MR. BEVAN: I think that's always our objective is to have that, but the real challenge, and I'll turn

1 to Sue Farlinger for a more detailed answer, is
2 that when we're dealing with mixed stock -- mixed
3 stocks, mixed species, or at least populations, of
4 different productivity, it's very difficult to get
5 to the point where you have constant level of
6 harvest. That's not -- that's not realistic.
7 We're dealing with too variable a system and too
8 much difference between one year and the next, or
9 even one year on a particular cycle and the next
10 cycle. It's just too variable to actually have a
11 constant. We need to find a way to allow the
12 industry to adjust to that reality, to function
13 within that reality, and to be able to adapt as
14 required based on whatever Mother Nature is
15 putting to us.

16 Do you want to add anything?

17 MS. FARLINGER: Well, I was just thinking about this
18 whole issue of protect weak stocks and in the face
19 of somehow creating access to those more
20 productive stocks, and my mind went back again to
21 the analysis that was done on the Skeena where we
22 have precisely the same problem. We have various
23 more productive stocks for a variety of different
24 reasons, than on the Fraser, and we have wild
25 stocks. And there is a discussion in there with,
26 you know, innumerable graphs and discussions of
27 the scientific uncertainty about whether you're
28 actually really just preventing a stock from being
29 harvested at its maximum yield, or whether you're
30 just preventing a stock from rebuilding, or in
31 fact whether you are driving it down to
32 extinction.

33 So there, you know, remain a huge number of
34 questions about whatever management decisions go
35 in place that, you know, the whole matter of
36 simply protecting weak stocks is so complex. And
37 when I look at that analysis, I see that there's a
38 variety of opinions and possibilities within those
39 things I just talked about. So it gets back to
40 the issue that even if you accept the uncertainty,
41 there still is -- it's very hard to find an
42 understandable simple answer that we can have
43 confidence in.

44 Q All right. And hence this Commission, I mean,
45 basically, I don't accept for a moment that all of
46 you are satisfied with the status quo and that
47 you're looking to this Commission to provide some

1 advice to you in terms of how to move forward with
2 respect to all of these very difficult issues and
3 competing interests, are you now?

4 MS. DANSEREAU: Yes.

5 Q I want to get a couple of exhibits marked, if I
6 could, and if I could have Tab 11 of the
7 Conservation Coalition's documents. This is a
8 Communications Plan for Sustainable Fisheries
9 Framework. Have you seen this before, Mr. Bevan,
10 or anyone on the panel?

11 MR. BEVAN: Yes, I have.

12 MR. LEADEM: Could we have this marked as the next
13 exhibit, please.

14 THE REGISTRAR: Exhibit 1939.

15
16 EXHIBIT 1939: Communications Plan -
17 Sustainable Fisheries Framework, March 9,
18 2009
19

20 MR. LEADEM:

21 Q And could I have Tab 31 of Conservation
22 Coalition's documents, please. This is a document
23 entitled "A Harvest Strategy Compliant with the
24 Precautionary Approach". Mr. Bevan, have you seen
25 this, as well?

26 MR. BEVAN: Yes, I have.

27 MR. LEADEM: Could we have that marked as the next
28 exhibit, please.

29 THE REGISTRAR: Exhibit 1940.

30
31 EXHIBIT 1940: A Harvest Strategy Compliant
32 with the Precautionary Approach, Canadian
33 Science Advisory Secretariat Science Advisory
34 Report 2006/023
35

36 MR. LEADEM:

37 Q So I want to come back to a hard question again,
38 which is realizing that the Wild Salmon Policy is
39 a difficult policy in terms of what it means or
40 how it's to be implemented, what will be going
41 forward in time in terms of what we can look
42 forward from DFO in terms of the actual
43 implementation of that policy. I don't want to
44 necessarily pin you down to dates, but I do want
45 to get some sense that there is some commitment
46 from DFO in terms of how we're moving forward and
47 how you conceive of us moving forward on that.

1 MS. DANSEREAU: We can't be pinned down on dates
2 obviously because as we've said many times,
3 science begets more science, and so we will
4 continue to implement it, we will continue to work
5 with our stakeholders to make sure that it's the
6 correct approach to go. But we are really, as you
7 said earlier, looking forward to the findings of
8 this Commission, because there's been a
9 significant amount of time and attention paid to
10 the Wild Salmon Policy, and we will obviously read
11 with interest and study with interest any
12 recommendations that would come in relation to the
13 Wild Salmon Policy. So whether or not there would
14 be changes, we will have to wait and see, and
15 whether or not there are new timelines attached,
16 we will have to wait and see.

17 Q Yes. Thank you for that, Deputy. I want to pick
18 up a little bit further. When we discussed the
19 Wild Salmon Policy, we heard from Mr. Pat Chamut,
20 and you may recall and you may know from
21 experience, either personal or through hearsay,
22 that the negotiations and discussions around
23 bringing that Wild Salmon Policy actually to a
24 state where we can call it a policy, it was bogged
25 down. And Mr. Chamut took over and he basically
26 championed it and moved it forward in a way that
27 perhaps no other senior civil servant could at
28 that time. And I'm wondering if we're in that
29 same sort of lock status right now, where the --
30 where if we actually appointed someone as czar of
31 the Wild Salmon Policy, that we could actually
32 move this forward. Does that sound reasonable to
33 you, Deputy?

34 MS. DANSEREAU: I think David has a desire to say
35 something as well. But we've heard the notion of
36 the champion a few times in the past week, and as
37 I've said, Sue is in fact the guardian of this
38 policy, if not the champion, as are others,
39 though. And we are moving in the Department
40 towards, or at least we are continuing the road
41 towards integration in all that we do, and rather
42 than creating more silos and having people defend
43 their turf, we're trying very hard to be very
44 integrated in what we do. And so the Wild Salmon
45 Policy needs be integrated into the broader suite
46 of policies to make sure that it is moving along
47 with everything else.

1 So for me the verdict is not quite in yet as
2 to whether not a champion is what's required at
3 this point. It may have been required at the time
4 because some of the thinking in the policy was
5 quite new at the time, or at least my
6 understanding is it was really a matter of
7 corralling the common practice and putting it in a
8 codified form, if I can say that. So maybe a
9 champion was required to concretize it at that
10 point, but there's no dispute, really -- well,
11 there might be some dispute, we may hear some
12 dispute in terms of application, but generally now
13 it's a matter of moving forward on it, and that's
14 a different world than where we were before. But
15 I think David was there, so he may have a
16 different answer.

17 Q And I think that you for that, Deputy, but my
18 clients want some -- they want some reassurance, I
19 think, that the Wild Salmon Policy is not just
20 sitting off to the side of somebody's desk, and
21 particularly with respect to the science that's
22 necessary to inform the decision-makers under the
23 Wild Salmon Policy, that somehow we don't get
24 bogged down in the science and in defining limit
25 reference points and conservation units. And I'm
26 wondering if there's a role for somebody to really
27 make sure that things are actually being done.

28 MR. BEVAN: I will turn it over to Sue, because there's
29 somebody there who is actually accountable for
30 getting the things done in the region. But --

31 Q You're holding your head, Ms. Farlinger.

32 MS. FARLINGER: Wouldn't you?

33 MR. BEVAN: But I think, though, that looking at where
34 we are right now, you've got a document up on the
35 screen that's taking about Harvest Strategy
36 Compliant with a Precautionary Approach. We're
37 moving to implement the precautionary approach in
38 the fish management plans of all our major
39 fisheries. So we've got them in a number of --
40 one of the more interesting one was Gulf crab.
41 That decision -- that precautionary approach
42 helped the Minister take very tough decisions
43 because it involves defining the limit reference
44 points and how to keep the fishery out of the
45 critical zone and then also define decision rules
46 up front.

47 That application of the precautionary

1 approach, as I noted, is not simple to deal with
2 in terms of Pacific salmon because you're not
3 dealing with a fishery that's clean. It's a mixed
4 stock. You're not dealing with a standing biomass
5 of multiyear spawners. You're dealing with a
6 different circumstance. And that's why there was
7 -- the Salmon Policy was more complex. Pat Chamut
8 got it through to get it approved, but now what we
9 have to do and are doing, I would argue, is using
10 that concept of looking at the populations in a
11 more complex, not managing the stock aggregates,
12 but rather looking, considering things like Cultus
13 Lake, and considering things like coho, Thompson
14 River coho, that drive some decisions on limiting
15 fishing opportunities on other species. So it's
16 not just sockeye we have to look at. It's the
17 whole ecosystem, and we have moved down that path.

18 We aren't going to say, look, we're not going
19 to implement it until we have every CU identified
20 with limit reference points, et cetera. We're
21 moving now, and we are considering harvest
22 strategies in light of weak stock. We go to the
23 Minister and we say we need the following
24 decisions from you relevant to Fraser River
25 sockeye. It has to involve Cultus Lake harvest
26 rates and other weak stocks of concern, and then
27 once the Minister has accepted that, we manage to
28 it.

29 Sue, I don't know if you want to add more
30 about what's going on in the Pacific Region.

31 MS. FARLINGER: I think there are a couple of things.
32 If we were just managing the fish, life would be
33 easy, but of course, we're not. We're managing
34 all kinds of human activity, and that's why there
35 is a Department of Fisheries and, you know,
36 everybody knows that.

37 So there is a science component, and there is
38 uncertainty which we've all talked about.
39 However, that uncertainty plays into the decisions
40 that have social and economic impacts, too, and
41 that means when we speak with those who are
42 concerned about the stocks, those who are affected
43 at various levels, that, you know, we have very
44 much to deal with the social issue. And then we
45 have very much to provide the advice to the
46 Minister who has to deal with it through another
47 political and social process.

1 And so I think what David is saying really is
2 the reality, that there is not a decision that we
3 put up about how we manage salmon, that does not
4 say if you consider the Wild Salmon Policy
5 Strategy "X", "Y" or "Z" and where we are on that
6 continuum, you know, this is the advice we have,
7 these are the uncertainties we have around it, and
8 these are the social and economic implications of
9 moving forward on that. And that really is, I
10 think, the test of the implementation is are we
11 actually doing that and making sure that that is
12 influencing all the decisions that are made.
13 Because at the end of it, we are a regulator and
14 we're regulating human activity, so all our
15 decisions have to be taken in that context.

16 And I would just return to something I said
17 earlier, that the reason we had to write down the
18 Wild Salmon Policy is because we were going in
19 that direction. Because we were, most of us,
20 we're a science-based organization, we began to
21 understand things we didn't understand 30 and 40,
22 50 years ago when we were managing these fish.
23 We've had international relationships, you know,
24 all of these things pointed us in that direction.
25 I think the real issue is we need to understand
26 there is a social, economic and political
27 decision-making process that must be informed by
28 the whole premises that are set out in the Wild
29 Salmon Policy. And so in terms of implementing
30 it, that is job one, I think.

31 It's also important to say that if we have
32 choices about what science gets done, and we
33 always have choices and have to set priorities,
34 that that's something we keep alive and well. And
35 similarly with respect to the other aspects, I
36 think the Habitat Renewal is taking a look at the
37 Habitat Program, the Habitat Policy in that same
38 sort of context, Let's think of it in the context
39 for salmon as it pertains to salmon in that
40 context.

41 And so I think you can probably hear me
42 saying that I think that is how we do it, and that
43 is how we'll move the Wild Salmon Policy forward.

44 MR. LEADEM: And, Deputy, I know you had a thought, but
45 we're going to have to come back to you tomorrow,
46 so hold that thought. No, you did not have a
47 thought? Okay. All right. Well, I'll come back

1 to some other discussions with you tomorrow, then,
2 if I may. Thank you, Mr. Commissioner.
3 THE COMMISSIONER: Thank you very much.
4 THE REGISTRAR: The hearing is now adjourned until ten
5 o'clock tomorrow morning.
6

7 (PROCEEDINGS ADJOURNED TO SEPTEMBER 27, 2011
8 AT 10:00 A.M.)
9

10
11
12
13
14 I HEREBY CERTIFY the foregoing to be a true
15 and accurate transcript of the evidence
16 recorded on a sound recording apparatus,
17 transcribed to the best of my skill and
18 ability, and in accordance with applicable
19 standards.
20

21
22
23 _____
24 Pat Neumann
25

26
27
28 I HEREBY CERTIFY the foregoing to be a true
29 and accurate transcript of the evidence
30 recorded on a sound recording apparatus,
31 transcribed to the best of my skill and
32 ability, and in accordance with applicable
33 standards.
34

35
36
37 _____
38 Karen Hefferland
39
40
41
42
43
44
45
46
47