

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.

Thursday, September 8, 2011

Tenue à :

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

le jeudi 8 septembre 2011

APPEARANCES / COMPARUTIONS

Brock Martland Kathy L. Grant	Associate Commission Counsel Junior Commission Counsel
Mitchell Taylor, Q.C. Jonah Spiegelman	Government of Canada ("CAN")
Clifton Prowse, Q.C. Tara Callan	Province of British Columbia ("BCPROV")
No appearance	Pacific Salmon Commission ("PSC")
No appearance	B.C. Public Service Alliance of Canada Union of Environment Workers B.C. ("BCPSAC")
No appearance	Rio Tinto Alcan Inc. ("RTAI")
Alan Blair Shane Hopkins-Utter	B.C. Salmon Farmers Association ("BCSFA")
No appearance	Seafood Producers Association of B.C. ("SPABC")
Gregory McDade, Q.C. Lisa Glowacki	Aquaculture Coalition: Alexandra Morton; Raincoast Research Society; Pacific Coast Wild Salmon Society ("AQUA")
Tim Leadem, Q.C. Judah Harrison	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")
Katrina Pacey	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")
No appearance	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")
No appearance	Western Central Coast Salish First Nations: Cowichan Tribes and Chemainus First Nation Hwlitsum First Nation and Penelakut Tribe Te'mexw Treaty Association ("WCCSFN")
Brenda Gaertner	First Nations Coalition; First Nations 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")
No appearance	Métis Nation British Columbia ("MNBC")

APPEARANCES / COMPARUTIONS, cont'd.

Tim Dickson	Sto:lo Tribal Council Cheam Indian Band ("STCCIB")
No appearance	Laich-kwil-tach Treaty Society Chief Harold Sewid, Aboriginal Aquaculture Association ("LJHAH")
Krista Robertson	Musgamagw Tsawataineuk Tribal Council ("MTTC")
Benjamin Ralston Lisa Fong	Heiltsuk Tribal Council ("HTC")

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1 Vancouver, B.C. /Vancouver
2 (C.-B.)
3 September 8, 2011/le 8
4 Septembre 2011
5

6 THE REGISTRAR: The hearing is now resumed.
7

8 CATHERINE STEWART, recalled.
9

10 ALEXANDRA MORTON, recalled.
11

12 CLARE BACKMAN, recalled.
13

14 MIA PARKER, recalled.
15

16 MR. MARTLAND: Mr. Commissioner, Brock Martland
17 appearing as Commission counsel with Cathy Grant.
18 An issue arose overnight, indeed this morning,
19 that I'd like to address briefly before Mr. McDade
20 resumes.

21 Through our witness preparation meetings, and
22 again on a number of occasions yesterday, I
23 reminded the witnesses on this panel of the
24 requirement not to speak about their evidence with
25 anyone, including their own counsel and including
26 other witnesses on the panel. Ms. Morton last
27 night sent an email relating to the evidence to
28 Mr. Backman, who did not reply. There is also a
29 blog posting that I gather Ms. Morton put up, that
30 again engages with and discusses the evidence. I
31 simply look to alert you and participants to the
32 fact, no doubt you'll hear about it through
33 questions today.

34 Mr. McDade is next with 15 minutes remaining.
35 Thank you.
36

37 CROSS-EXAMINATION BY MR. McDADE, continuing:
38

39 Q Mr. Commissioner, I just want to complete the
40 final eight documents that I wish to enter as
41 exhibits. Could we have 67 on the screen. These
42 are documents that are referenced in Dr. Morton's
43 report. This is the report you're referring to in
44 your report, Dr. Morton?

45 MS. MORTON: Yes, that's correct.

46 MR. McDADE: Mark that as an exhibit, please.

47 THE REGISTRAR: Exhibit 1822.

2

PANEL NO. 62

Cross-exam by Mr. McDade (AQUA) (cont'd)

1 EXHIBIT 1822: BC Ministry of Agriculture and
2 Lands Memorandum, Report from Meetings with
3 Mainstream Re: occurrence of *Piscirickettisa*
4 *salmonis* at sites in Broughton, January 3,
5 2006
6

7 MR. McDADE:

8 Q Tab 71, this is a draft report by Dr. Hargreaves
9 you referred to in your report, yes?

10 MS. MORTON: Yes, it is, he found similar clusters of
11 lice than the rest of us at the farms.

12 MR. McDADE: The next exhibit, please.

13 THE REGISTRAR: Exhibit 1823.
14

15 EXHIBIT 1823: Palermo and Hargreaves,
16 Detection and distribution of significant
17 clusters of Sea Lice (*Lepeophthericus*
18 *salmonis* and *Caligus* sp.) infestation from
19 samples of juvenile salmon and stickleback in
20 the Broughton Archipelago, Knight Inlet, B.C.
21 2003-2006 using a spatial scan statistic
22 (SaTScanTM) DRAFT, April 27, 2005
23

24 MR. McDADE: Tab 78, an email from Terry Davis dated
25 August 19th, 2009. Can I ask that be the next
26 exhibit.

27 THE REGISTRAR: Exhibit 1824.
28

29 EXHIBIT 1824: Email string between Terry
30 Davis, Lara Sloan and others re "Brian
31 Riddell article", August 19, 2009
32

33 MR. McDADE: Tab 82, an email from Dr. Hargreaves dated
34 October 16, 2009, Exhibit 1825, please?

35 THE REGISTRAR: Exhibit 1825.
36

37 EXHIBIT 1825: Email string between Brent
38 Hargreaves, Andrew Thomson and others re
39 "Favour Lice", from September 30, 2009 to
40 October 16, 2009
41

42 MR. TAYLOR: Is the map in the exhibit, Mr. McDade?
43 There's a map referred to in the email, is it
44 there?

45 MR. McDADE: I don't know. Apparently not.

46 The next document is Tab 83, an email to Dr.
47 Hargreaves dated October 23rd, 2009. Next

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3
PANEL NO. 62
Cross-exam by Mr. McDade (AQUA) (cont'd)

1 exhibit, please.

2 THE REGISTRAR: Exhibit 1826.

3

4 EXHIBIT 1826: Email string between March
5 Klaver, Andrew Thomson and others re "Sea
6 lice data request for industry", from October
7 1, 2009 to October 23, 2009

8

9 MR. McDADE: Tab 84, an email from Dave Gillis of DFO
10 dated October 26, 2009. Next exhibit, please.

11 THE REGISTRAR: Exhibit 1827.

12

13 EXHIBIT 1827: Email string between Dave
14 Gillis, Robert Elliott and others re "Qs and
15 As for meeting with the FCC on Oct. 29",
16 October 26, 2009

17

18 MR. McDADE: Tab 85, an email from Dr. Beamish, dated
19 October 26, 2009. Next exhibit, please.

20 THE REGISTRAR: Exhibit 1828.

21

22 EXHIBIT 1828: Email from Richard Beamish to
23 Mark Saunders re "Harrison Sockeye", October
24 26, 2009

25

26 MR. McDADE: And Tab 86, an email from Dr. Hargreaves
27 dated January 27th, 2010.

28 THE REGISTRAR: Exhibit 1829.

29

30 EXHIBIT 1829: Email from Brent Hargreaves to
31 Mark Saunders re "Latest version of Fraser
32 sockeye work plan", January 27, 2010

33

34 MR. McDADE: And the final one then, Tab 93, an email
35 from Joanne Power, dated December 1, 2009.

36 THE REGISTRAR: Exhibit 1830.

37

38 EXHIBIT 1830: Email string between Joanne
39 Power, Brian Riddell and others re "A.
40 Morton's comment on egg imports", from
41 November 30, 2009 to December 1, 2009

42

43 MR. McDADE: Thank you. That, I think, Mr.
44 Commissioner, concludes the exhibits that are
45 referenced in Dr. Morton's report. Can I have
46 Exhibit XX for identification on the screen,
47 please.

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- 1 Q Dr. Morton, I understand you prepared this
2 document from the source data that have now been
3 exhibits, and it's a graph showing -- just simply
4 showing the mortalities as listed by Dr. Korman,
5 but broken down for Area 3, the Inside Passage.
6 MS. MORTON: That's correct. And there is an error, as
7 has been pointed out, the 2007, the first four
8 should read 2006 and I have made that correction.
9 Q But the -- that's a typographical error. The data
10 that you entered was the data from 2006?
11 MS. MORTON: That's correct, the data is correct, and
12 it shows a large spike in mortalities in the
13 Marine Harvest farms, while the sockeye that went
14 missing in 2009 were going to sea.
15 Q And this is the evidence you were referring to,
16 Mr. Backman?
17 MR. BACKMAN: I think I should make a comment here.
18 Q Yes.
19 MR. BACKMAN: I referred to this yesterday in my
20 testimony, that that large spike actually occurs
21 at the end of 2006.
22 Q Yes.
23 MR. BACKMAN: And I didn't find a large spike when I
24 looked into our own data. I found it was related
25 to mortalities on the farm sites related to
26 phytoplankton, and it occurred in the later part
27 of 2006, not in early 2007.
28 Q So you're saying those 800,000 fish are a result
29 of phytoplankton? That's your evidence?
30 MR. BACKMAN: I'm saying that the information that I
31 brought forward yesterday showing mortalities for
32 Marine Harvest later in 2006 was a result of
33 phytoplankton blooms, and not in the -- in the
34 area of Discovery Islands, yes.
35 Q So that's -- but you're not quarrelling with the
36 numbers there. That's just your explanation for
37 it?
38 MR. BACKMAN: I also found nothing in the order of
39 800,000.
40 Q So you can't -- if the numbers are 800,000, you
41 don't have an explanation for that?
42 MR. BACKMAN: I don't have an explanation for the
43 800,000 number. No.
44 Q All right, thank you.
45 MR. BLAIR: Mr. Commissioner, I'd like to object. My
46 friend is putting a graph that was prepared by
47 somebody who is not a fish health professional.

1 I'll be objecting to it if it's going to be marked
2 as an exhibit. Suggesting that Mr. Backman ought
3 to adopt this number, he's clearly indicated that
4 he doesn't do that. So to suggest that he should
5 adopt it or to try to enter it as an exhibit would
6 be inappropriate, considering it's prepared by Ms.
7 Morton, who is not a fish health professional, who
8 apparently interprets the data and comes up with
9 these numbers. So perhaps I'm anticipating my
10 friend seeking to have it marked as an exhibit,
11 but those are my objections. Thank you.

12 And for the record, Alan Blair, for the B.C.
13 Salmon Farmers Association.

14 MR. McDADE: It's already in as an exhibit for
15 identification, Mr. Commissioner, as XX and has
16 been for some time. So I'm not pushing beyond
17 that.

18 Q Can we next have Exhibit 1563 on the screen. Now,
19 as I understand it, this is a map prepared by
20 Living Oceans showing the fish farms in the
21 Discovery Islands area. And you'll see there are
22 nine farms with blue circles around them, which
23 are said to be in what's called the "wild salmon
24 narrows". How many of those are your farms, or
25 the farms of your company, Mr. Backman?

26 MR. BACKMAN: With the blue circles around them, there
27 are six.

28 Q Six of the -- six of the nine. Now, those have
29 been identified, as I understand it, by Living
30 Oceans as being farms of particular importance in
31 terms of the interactions with wild salmon; is
32 that right, Ms. Stewart?

33 MS. STEWART: Yes, we prioritized those farms in order
34 to try to clear one migratory route through the
35 Discovery Islands for wild salmon.

36 Q So, Dr. Morton, is the confined or the narrower
37 passage here of the migratory route a particular
38 concern for you?

39 MS. MORTON: It is. When I first contacted Norwegian
40 scientists about sea lice, they made -- they
41 raised this point right away. Dr. Jens Christian
42 Holst said, "You can have good years and bad
43 years, and in the end you won't have wild salmon."
44 It is, I mean, it's fairly logical to think that
45 if you have a dispersion of viral particles, or
46 parasite eggs, or juveniles into a small body of
47 water, that there will be a higher density in

1 exposure to the wild salmon than in larger waters
2 where the dispersion would be much greater.

3 Q What can you say about the flushing rates or the
4 tidal rates in that area?

5 MS. MORTON: Well, I'm not from this area, but in the
6 Broughton Archipelago and the Institute of Ocean
7 Sciences came up with this, a particle can go ten
8 kilometres in six hours. And for those of us who
9 heat their houses with wood, as the logs float
10 around we have a high understanding of where
11 things will go, or boats that drift away. So the
12 movement is enormous. When I hear that there's a
13 precautionary principle to keep farms one
14 kilometre from a stream, biologically that's
15 highly insignificant. It really doesn't mean
16 anything.

17 So these waters have much greater tidal flow
18 than in the Broughton Archipelago. We saw Kyle
19 Garver's work, how if a farm has a 30 percent loss
20 from an epidemic, that there will be 60 billion
21 particles, viral particles shed per hour, and a
22 complete clogging of the channel was what his
23 image showed.

24 Q So, Dr. Morton, you've reviewed the **CEAA**
25 screenings for these -- for some of these farms,
26 and you've reviewed matters in Ringtail. Is it
27 fair to say that the fact that these farms were on
28 the migratory route for wild sockeye was never
29 considered at the time of their approval?

30 MS. MORTON: I did not see any reference to that in
31 there, and I believe we heard testimony earlier
32 that it was never considered in the original
33 siting of these farms, nor when they were --

34 MS. PARKER: Excuse me.

35 MS. MORTON: -- transferred to the federal government.

36 MS. PARKER: I'm sorry, I'd just like to add to that.
37 The **CEAA** screenings are actually circulated to
38 Fisheries management, as well. So area biologists
39 would have a chance to assess the applications or
40 the existing farms when they're undergoing
41 Transport Canada EA on the basis of impact to
42 local stocks.

43 Q Well, Ms. Parker, are you able to point to any
44 documents that show that the migratory route of
45 sockeye was ever considered for any of these
46 farms?

47 MS. PARKER: I can say with some confidence that salmon

1 habitat, fish habitat and fish population level
2 effects are considered in **CEAA** screenings.

3 Q Yes.

4 MS. PARKER: And you can find that information on the
5 **CEAA** website and also on the Habitat Management
6 website.

7 Q But the point is, the fact that this is a special
8 area, a unique place for wild sockeye migration,
9 that fact was never explicitly referred to in any
10 of the documents, or considered?

11 MS. PARKER: I would say that the entire coast of B.C.
12 is a special place, where there are migratory
13 stocks.

14 Q So you don't --

15 MS. PARKER: So population level effects are regularly
16 and routinely considered in environmental impact
17 assessments on salmon farms.

18 Q All right. Now, I'd like to address my questions
19 to Mr. Backman. Can you confirm that when your
20 company placed its sites on that area that it took
21 no special care because of wild -- the wild
22 sockeye migration route?

23 MR. BACKMAN: I can confirm that all the siting
24 criteria that applied to the application for a
25 salmon farm, which I went through yesterday and
26 explained how they applied to salmon, and not just
27 when they're migrating but they apply to salmon at
28 all life stages, were considered in the
29 application of these farms. And I went through --
30 and I also explained how in the mid-2000s the
31 **CEAA**, the review that was brought in later on,
32 also applied to all of these farms.

33 So I think that it's very fair to say that
34 state of knowledge around what could be concerns
35 about these farms vis-à-vis migrating salmon at
36 all stages, when very young, midrange, when
37 they're -- when they're travelling in, when
38 they're travelling out, all of that comes through
39 the **CEAA** VEC tables and forms part of the
40 consideration of these farms.

41 Q So the fact, though, that the distance or whether
42 they're in the middle of a wild salmon migratory
43 route is not part of the siting criteria, is a
44 pretty significant oversight, is it?

45 MR. BACKMAN: It's actually as I mentioned, the
46 consideration of moving salmon migrating in and
47 migrating out is all captured. It's not that they

- 1 weren't -- it's not that this was not part of the
2 review. It was very much part of the review.
- 3 Q Well, the siting criteria list keep you from
4 putting farms within a kilometre of a single
5 salmon stream containing a single run of salmon,
6 and it would keep you from putting a farm near the
7 spawning habitat of herring, why wouldn't that
8 apply to the place where three or four hundred
9 million sockeye smolts from the Fraser River go
10 past?
- 11 MR. BACKMAN: The considerations are not just limited
12 to migrating sockeye. The considerations are
13 beyond the siting criteria, and these are
14 contained in the additional elements of the
15 reviews that are done internally within the DFO
16 from -- based on their Science work, the Habitat
17 Branch, the reviews that are done in those cases,
18 and that's all factored into the later reviews
19 under the **Environmental Assessment Act**.
- 20 Q So is it your --
- 21 MR. BACKMAN: They look at far more than just the
22 migrating sockeye. They look at implications on
23 pink, chum salmon. They look at implications of
24 depth. They look at implications of relation to
25 shoreline.
- 26 Q Is it your evidence that your company, if it's
27 allowed, unless this Commission makes some sort of
28 recommendation, will continue to put salmon farms
29 in the middle of wild sockeye migration routes?
30 Is that your evidence?
- 31 MR. BACKMAN: Marine Harvest will continue to use these
32 farms according to the conditions of licence on
33 our existing licences under the **Pacific**
34 **Aquaculture Regulation**. We will also continue to
35 work with science groups and DFO in determining
36 any new information about where various groups of
37 fish are migrating, and the sockeye salmon migrate
38 all through here --
- 39 Q And so --
- 40 MR. BACKMAN: -- in different years.
- 41 Q And can I also suggest to you that the licences
42 and the fish health management plans for these
43 particular farms have no different rules or
44 regulations in any way to account for the fact
45 that wild sockeye are migrating right past them.
46 There's nothing special in these licences, is the
47 question, to deal with sockeye?

1 MR. BACKMAN: The situation in these licences at this
2 present time captures the suite of knowledge and
3 understanding...

4 Q So is that a no, there isn't anything?

5 MS. PARKER: I would just like to add that --

6 Q No, I want to --

7 MS. PARKER: -- there's nothing special, because those,
8 those parameters, those valued ecosystem
9 components and that analysis is applied to every
10 single farm.

11 Q There's nothing special about these farms, in your
12 view?

13 MS. PARKER: There's nothing additional because it's
14 already captured.

15 MR. McDADE: I am done. Thank you, Mr. Commissioner.

16 MR. MARTLAND: Thank you. Mr. Commissioner, I have
17 next counsel for the Conservation Coalition, 60
18 minutes.

19 MR. LEADEM: Good morning, Mr. Commissioner, Leadem,
20 initial T., appearing as counsel, along with Judah
21 Harrison, for the Conservation Coalition.

22

23 CROSS-EXAMINATION BY MR. LEADEM:

24

25 Q My questions for the first part will be mainly to
26 my client, Ms. Stewart, and from there I will
27 envelop the other members of the panel in
28 discussions. And if at any time you wish to
29 insert yourself into the process, please let me
30 know by raising a finger or hand and I'll try to
31 include you.

32 Ms. Stewart, can you describe for the
33 Commissioner what CAAR is and what it does.

34 MS. STEWART: Sure. CAAR is a coalition of
35 environmental groups that was formed in 2001, and
36 the acronym stands for the Coastal Alliance for
37 Aquaculture Reform. Anyone concerned about the
38 current status of open net cage farms in B.C. is
39 usually branded by industry as anti-aquaculture.
40 But as the name of the coalition indicates, we're
41 not opposed to aquaculture, we recognize it has a
42 place in our world. Our concerns are how it's
43 practised, and where it's practised, and what its
44 impacts are, and trying to, as the name indicates,
45 reform the industry and put it on a more
46 responsible, a sustainable footing.

47 There are five member groups currently in

1 CAAR: The David Suzuki Foundation, T. Buck Suzuki
2 Foundation, Georgia Strait Alliance, Watershed
3 Watch and my own group, Living Oceans.

4 Q In a moment I'm going to go to some documentation,
5 but I want to start off with respect to asking you
6 some questions about closed containment and about
7 CAAR's role in trying to promote closed
8 containment.

9 MS. STEWART: Mm-hmm.

10 Q Was CAAR actively involved with the industry in
11 trying to move forward in terms of a pilot project
12 for closed containment in this province?

13 MS. STEWART: We still are, in fact, CAAR negotiated a
14 framework for dialogue with Marine Harvest in
15 2005-2006 that contained several components.

16 One of those was a commitment on the part of
17 the company to implement alternating fallow routes
18 in the Broughton Archipelago. So on one year the
19 farms, the majority of farms in the Tribune-Fife
20 outmigration corridor would be empty of fish
21 during the juvenile outmigration period. The
22 following year the Knight Inlet route would be
23 empty of fish during that same timeframe.

24 And the company would implement more
25 proactive lice treatment strategies on the farms
26 that were stocked, and largely would be stocked
27 with juveniles, which some research in Norway
28 indicates are less likely to have heavy lice loads
29 on them.

30 We also embarked on discussions around
31 several collaborative science projects, and I can
32 talk more about how that has been -- has morphed
33 into the Broughton area monitoring program that
34 now involves DFO and the three main companies
35 operating in the Broughton, and the data sharing
36 agreement that was negotiated. And the
37 preliminary findings from that indicate that the
38 coordinated management strategy has met with some
39 success, has lowered lice levels, but it's limited
40 to only dealing with the lice levels on out-
41 migrating juveniles. It doesn't deal with the
42 host of other problems associated with the open
43 net cages.

44 And then we also are discussing with the
45 company the possibility of embarking on a closed
46 containment pilot. Marine Harvest hired the
47 engineering firm, WorleyParsons, they've been

1 looking at site potential, water provision. And
2 we have a joint study underway with the
3 Conservation Strategies Fund out of California
4 that is trying to do a full cost/benefit analysis
5 of open net cage versus close containment
6 operations.

7 Q All right. I'm going to pull a document up for
8 your contemplation. It's a Memorandum to Cabinet.
9 It's Conservation document number 14, please.
10 You're familiar with this document, Ms. Stewart?

11 MS. STEWART: I am, yes.

12 Q If I could ask to go to the PDF number 3 under
13 "Ministerial Recommendations". And point number 1
14 I just want to read into the record, then I'm
15 going to come back and ask you a question about
16 it.

17
18 RECOMMENDATIONS

19
20 It is recommended that:

21
22 1. In partnership with industry (Marine
23 Harvest - \$5 M), the Province of BC (\$10M),
24 and a charitable donor (Gordon and Betty
25 Moore Foundation - \$10M), Cabinet support the
26 investment of \$5M to contribute to a fund
27 which will support initiatives piloting new,
28 commercial-scale aquaculture systems.

29
30 So let me come back to the Betty Moore Foundation
31 and ask you what role, if any, did CAAR play with
32 respect to that funding?

33 MS. STEWART: CAAR actually raised the funding from the
34 Gordon and Betty Moore Foundation with a
35 commitment, that actually I believe it was \$5
36 million, not \$10 million, but we'd be happy to
37 accept ten if the Moore Foundation would like to
38 reconsider, but \$5 million would be earmarked for
39 investment in closed containment pilot projects in
40 British Columbia. The coalition put a lot of
41 effort into securing that commitment from the
42 foundation and then proceeded to work with the
43 Government of British Columbia and the federal
44 government to seek matching investment in order to
45 get the project off the ground. And we also, of
46 course, were talking to Marine Harvest about
47 investing in the project, as well.

1 Q Whatever happened to this particular project?
2 MS. STEWART: Well, at the time the province was still
3 largely responsible for aquaculture operations in
4 British Columbia, and we had been working with the
5 Minister and Deputy Minister, now retired, Larry
6 Peterson, other Cabinet Ministers, and there was
7 an election looming. This was in the spring of
8 2009.

9 We had -- this clearly, aquaculture was going
10 to be a politically contentious issue for the
11 government going into the election, and we had got
12 to the point where we had ministerial support and
13 Cabinet support for investment in a pilot fund. I
14 had been told personally by the Deputy Minister
15 that the recommendation had gone to Treasury
16 Board.

17 So we were right on the cusp of the fiscal
18 year 2010 budget coming out, but then the
19 jurisdictional shift took place, and the Province
20 was no longer responsible for aquaculture. They
21 were more or less off the hook, and that money did
22 not make it into the budget. And then the federal
23 government having now been instructed by Justice
24 Hinkson to assume management of the farms was, you
25 know, in a position where they were looking at
26 major restructuring, and so basically this just
27 came off -- came off the table.

28 And the sad part about this is that the Moore
29 Foundation had been holding onto this money for
30 quite some time, hoping to invest it in British
31 Columbia, hoping to trigger, you know, innovation
32 in technology and help to resolve some of the
33 disputes around aquaculture. But, you know, by
34 this time, it was becoming increasingly evident
35 that it was not likely to happen in the near
36 future in B.C.

37 So portions of that money are still available
38 to British Columbia, but Moore has been looking
39 south of the border and has put some of that
40 investment into a closed-containment facility in
41 Washington State.

42 Q Could I ask that we move to page 4, PDF number 4
43 of this document, and paragraph 6. And I'm going
44 to examine this with you:
45

46 6. In an effort to address the environmental
47 controversy surrounding salmon aquaculture in

1 BC, and in keeping with the Sustainable
2 Aquaculture Program thrusts, the proposed
3 Partnership Fund is a one-time investment in
4 the potential expansion of closed-containment
5 technologies which would test, at a
6 commercial scale, technology systems which
7 grow salmon in closed structures rather than
8 in the open sea cages commonly used today.
9 Critics of salmon aquaculture typically argue
10 that the environmental impacts of salmon
11 farming are externalized in traditional
12 aquaculture systems and that they must be
13 internalized for long-term sustainability.
14

15 And I want to come back to that concept with you
16 about the external costs and the internal costs of
17 aquaculture. Are you familiar with that concept?

18 MS. STEWART: Absolutely. And that's one of the areas
19 of research that we're doing with the Conservation
20 Strategies Fund. Whenever -- yesterday we saw the
21 B.C. Farmers Association introduce that report
22 from WorleyParsons that concludes that perhaps
23 closed containment won't be profitable. We've
24 seen the CSAS report from the federal government,
25 saying it could only be marginally profitable.
26 But it's comparing apples to oranges, because what
27 doesn't get factored in is the fact that the
28 companies do not have to bear the responsibility
29 of waste disposal. They're able to externalize
30 that cost into our ocean waters. They dump their
31 waste. They dump the food waste, the fecal waste,
32 into the ocean.

33 I've spoken with the manager, for example, at
34 Marine Harvest Sayward Hatchery, their closed
35 containment facility there where they raise
36 smolts, and one of the things he mentioned to me
37 when we were touring the facility was that one of
38 the most significant costs they had to deal with
39 was dealing with the solid waste, removal of the
40 solid waste, transporting it by truck. It's a
41 burden on the industry.

42 It's a cost that currently they don't have to
43 deal with. They're basically, they're getting a
44 free ride. There's no polluter pay. It's our
45 receiving oceans that pay the price.

46 So whenever we hear the industry saying that
47 closed containment isn't economically viable, we

1 want to compare the value of those ecosystem
2 services that are currently being provided at no
3 cost to the industry, so that we're looking at
4 apples to apples and there's a more level playing
5 field when factoring in the actual operating
6 costs.

7 Q I see that Mr. Backman has his hand up. Do you
8 have a comment?

9 MR. BACKMAN: Well, just on this part about the
10 externalities. It is true that we're going
11 through a very detailed review of internal and
12 external costs with the Conservation Strategies
13 Fund, but one of the things we're doing is looking
14 at the actual what is an externalized cost? And,
15 for example, with the waste piece, when the
16 company is actually held to regulation doing
17 monitoring, and then based on the monitoring
18 having to leave the farm fallow for a period of
19 time to return to close to baseline conditions, in
20 that case the argument is made that the costs are
21 actually internalized. So that's one of the key
22 things that's coming through this.

23 And the other one that I wanted to bring up
24 is we're looking at issues like disease, for
25 example, potential for disease transfer, as has
26 been made very clear by the various panels that
27 have been here at the inquiry, there is a
28 potential -- actually putting a measure on the
29 potential for transfer both to the fish farm and
30 out of the fish farm requires additional work to
31 find out what that externality actually would be,
32 and then be able to monetize that.

33 MS. STEWART: Well, I would agree with Mr. Backman that
34 the research is still underway, at the very least.
35 But I think that it's safe to say that at the
36 moment that the costs of waste disposal are not
37 being borne by the industry.

38 Q Could I have this marked as the next exhibit,
39 please.

40 MS. PARKER: Mr. Leadem, could I just --

41 Q Ms. Parker.

42 MS. PARKER: I just wanted to add that under the FAWCR
43 until it was struck down, companies did pay a
44 waste fee to the Ministry of Environment based on
45 a calculation based on the amount of feed used.
46 So there were annual waste fees paid by the
47 companies.

1 Q Are you aware of that, Ms. Stewart?

2 MS. STEWART: Well, to be honest, I wasn't aware of
3 that, and I'd be interested to know what those
4 fees were.

5 THE REGISTRAR: Your document will be marked as 1831.

6
7 EXHIBIT 1831: Draft Memorandum to Cabinet,
8 Partnership Fund to Pilot Closed Containment
9 Aquaculture Technology

10
11 MS. PARKER: Off the top of my head?

12 MS. STEWART: Sure, well, maybe Mr. Backman can say or
13 you could say, for example for Bennett Point or
14 for Humphrey Rock, one of the farms your companies
15 operate, what would the annual waste fee be?

16 MR. BACKMAN: It was rolled up into an annual fee that
17 was payable to the Ministry of Environment, and it
18 went into the hundreds of thousands of dollars
19 every year.

20 MS. STEWART: Sorry, it was rolled up into an annual
21 fee, was that --

22 MR. BACKMAN: For all sites, based on utilization.

23 MS. STEWART: For all sites.

24 MR. BACKMAN: Yes. It was calculated for all sites.

25 MR. LEADEM:

26 Q So what you're saying, Mr. Backman, is essentially
27 that your company through its various farms pays a
28 licence fee to operate, and that licence fee
29 encapsulates the waste management portion of it,
30 as well?

31 MR. BACKMAN: It's separate from the licence fee. The
32 licence fee is an annual fee, but there are
33 additional fees that are paid, and in this
34 particular case we're talking about a fee which
35 was levied through the Ministry of Environment,
36 related directly to the use of the site and the
37 impact on the ocean floor, and that was a specific
38 fee that was under the provincial, and we don't
39 pay it right now under the federal, so we're just
40 waiting to see how that works.

41 MS. STEWART: So that was combined with the tenure --

42 Q So currently there's no fees being paid, as I
43 understand it, by the aquaculture industry to the
44 federal government; is that correct?

45 MS. PARKER: Since the FAWCR was struck down there are
46 no waste-associated fees yet.

47 Q So it is basically a free ride currently.

1 MS. STEWART: Well, at the moment, you know, I think it
2 would be fair to say there's also a free ride on
3 the licence fees, because now that the federal
4 government has assumed control, the licence fees
5 have to be assessed through the **User Fee Act** and
6 that apparently is a rather protracted process.
7 So my understanding from discussions with Mr.
8 Thomson and Mr. Swerdfager is that there are
9 currently no licence fees being levied on the
10 farms operating in B.C. And also when asking Mr.
11 Thomson if once the licence fee was determined, it
12 would be applied retroactively, he said that would
13 be highly unlikely.

14 MR. BACKMAN: It is true that the licence fees are in a
15 position and a time of being re-evaluated, that is
16 true.

17 But I wanted to get back to the question that
18 it's a free ride. It's not a free ride. I
19 mentioned three things. Under the provincial
20 there was an annual fee, but there was also the
21 cost of doing the monitoring and the reporting,
22 and then there was the cost of leaving the farm
23 site empty at the end of the cycle of fish to
24 return to a fallow state -- to the fallow time, to
25 return to a low state of waste impact. That's an
26 additional cost, as well. So there was three.
27 There are right now two.

28 Q All right. Is there some unanimity amongst the
29 panel that there should be some licence fees, that
30 the industry should be paying to operate and use
31 the waters. Do you agree with that concept, Mr.
32 Backman?

33 MR. BACKMAN: Licence fees? Yes, that's -- I agree
34 with that.

35 Q All right. And you would agree with that, as
36 well, Ms. Parker?

37 MS. PARKER: Yes, I do.

38 Q And certainly you would agree with that, Ms.
39 Stewart?

40 MS. STEWART: Absolutely, but I would also like to see
41 a structure whereby the tenure fees, which are
42 paid to the province for the actual leases on the
43 site and the licence fees, are used in -- rather
44 than going into general revenues, which I assume
45 is what probably happens right now, are used until
46 we have a transition of the industry out of the
47 net cages, are used to do some remediation and

1 science and work that will benefit the receiving
2 ocean environment.

3 Q Now --

4 MS. PARKER: Could I --

5 Q -- yesterday --

6 MS. PARKER: Sorry, could I just add about --

7 Q Sorry, I have to move on, and I don't mean to cut
8 off, but there's a number of topics that I'd like
9 to cover, and I'd like to get into funding of the
10 industry, which -- and perhaps you can fit your
11 comment under that, Ms. Parker. I want to come
12 back to Exhibit 1805, which we saw yesterday,
13 which was the Worley report, the WorleyParsons
14 report, and ask you if you had any comments about
15 that, Ms. Stewart. This was one that --

16 MS. STEWART: Yes. Yes, I'm now familiar with it.
17 Honestly, I have not had an opportunity to read
18 it. I think, you know, there have been other
19 reports on closed containment, and I'm certainly
20 not an expert in the technical details of this.
21 But, for example, the CSAS report that was done by
22 Department of Fisheries and Oceans concluded that
23 closed containment would only be marginally cost-
24 effective, but the data inputs were all
25 theoretical. They weren't able to use actual
26 costs of existing closed containment or net cage
27 systems.

28 Externalized costs were not included in that
29 CSAS report. They factored in a 30 percent
30 contingency, which is an unusually high
31 contingency for typical business operations.

32 I think that one of the concerns we
33 frequently hear from the industry around the use
34 of closed containment is energy consumption and
35 the potential greenhouse gas contributions that
36 that could make, and that comes back to a question
37 of what are the energy inputs? We don't have
38 coal-fired generating plants in B.C., so let's
39 look at the types of energy that could be used to
40 power these facilities.

41 But it also strikes me as quite
42 contradictory. On the one hand the industry says,
43 well, we don't want to do this because it could
44 use more energy and be a greater contributor to
45 climate change, but on the other hand, just a
46 couple of weeks ago Mary Ellen Walling was quoted
47 in the Vancouver Sun saying that they'd like to

1 expand the industry because there's growing market
2 interest in places like India and China. If
3 they're shipping fresh product by plane to India
4 and China, that's quite a contributor to
5 greenhouse gases.

6 So the industry's position is often quite
7 contradictory. And I think the bottom line is the
8 weight of evidence globally is telling us that
9 this industry poses a risk to the health of our
10 oceans, to the health of our wild salmon, and that
11 we need to put it on a more sustainable footing.
12 And if that lowers the profit margin for industry,
13 so be it. But the risks of impacts to jobs and
14 people who depend, and ecosystems that depend on
15 healthy wild salmon, are so significant that we
16 have to start looking at industry shouldering more
17 costs for their operation.

18 MR. LEADEM: I want to now shift to the Fish Pathogen
19 and Pest Treatment Regulations, the proposal, and
20 Mr. Swerdfager, when he was giving his evidence
21 talked about that. And if we can have Exhibit, I
22 believe it's 1688, Mr. Lunn.

23 MR. LUNN: Thank you.

24 MR. BACKMAN: May I make a comment before we move on?

25 MR. LEADEM:

26 Q Certainly. You have to appreciate that I'm under
27 some time constraints, but I'm also very civil to
28 people, and so I'm going to try to allow you some
29 leeway. But I would ask for some respect so that
30 I can do my work, as well.

31 MR. BACKMAN: Okay. Industry does remain interested in
32 the development of new technology, and closed
33 containment is largely under the umbrella of new
34 technology. And it has a dual purpose, both in
35 reducing impacts to the environment and
36 safeguarding wild salmon, but also is -- has to be
37 nested within the ability of the industry to
38 remain profitable and be able to actually use
39 technologies that are going to work. And so all
40 of the points that Ms. Stewart made are valid, but
41 they have to be put within the context of the
42 necessity of doing it, as well.

43 And, you know, we've learned from the panels
44 here that the concerns around sea lice, the
45 concerns around the transfer of disease, although
46 the work is not complete, what we've learned here
47 from these panels is those are not significant at

1 this point in time to push us in a short period of
2 time to moving to something like closed
3 containment, so...

4 MS. STEWART: Well, I think we'd have to beg to differ.
5 And in terms of closed containment working, it is
6 working. The AquaSeed facility, for example, in
7 Washington State is producing closed containment
8 raised salmon, which are being sold by Overwaitea
9 Food Group in their stores in British Columbia and
10 Alberta, and the market demand for that product is
11 rising.

12 Q Could we have Exhibit 1688, please. Now, when Mr.
13 Swerdfager gave his evidence last week, I put this
14 specific document to him. It's not a draft
15 regulation, as he clearly indicated, but what it
16 is - if we can just look at page 2 together, Mr.
17 Lunn - it's an Impact Analysis Statement
18 concerning the use of therapeutants, and so forth,
19 on fish farms.

20 And I'm going to now turn very quickly from
21 that, I just wanted to provide some context to the
22 next question, to Conservation document number 15.
23 This is a document entitled "The **Fisheries Act** and
24 Fish & Ecosystem Health Management Activities".

25 Are you familiar with this document, Ms. Stewart?
26 MS. STEWART: Yes, not terribly familiar. It's one of
27 the documents that I've read in the database.

28 MR. LEADEM: Could we have this marked as the next
29 exhibit, please.

30 THE COMMISSIONER: I'm sorry, which document are you
31 receiving?

32 THE REGISTRAR: Tab 15.

33 THE COMMISSIONER: Thank you.

34 MR. LEADEM: Tab 15.

35 THE REGISTRAR: That will be marked as 1832.

36
37 EXHIBIT 1832: The **Fisheries Act** and Fish &
38 Ecosystem Health Management Activities, DRAFT
39 Discussion Paper, September 21, 2009
40

41 MR. LEADEM:

42 Q What's your current understanding, Ms. Stewart, of
43 the use of therapeutants, and agents such as
44 SLICE, and other antibiotics, and things of that
45 nature that are in use in fish farms?

46 MS. STEWART: It's a significant concern right now,
47 because the new **Pacific Aquaculture Regulations**

1 indicate that the Minister may allow the use of
2 these treatments, then the government didn't
3 specify regulations within the new **Pacific**
4 **Aquaculture Regulations**. And my understanding is
5 that their intent was to develop the Pest Pathogen
6 Treatment Regulations to deal with this as a
7 separate issue.

8 As Mr. Swerdfager said, there was an initial
9 discussion document that was released. We've been
10 pressing the government to know when we were going
11 to see draft regulations. He's testified that
12 there are no draft regulations currently in
13 existence. And the deposition of deleterious
14 substances is covered under the **Fisheries Act**, but
15 without regulations and enforcement mechanisms, at
16 the moment it seems that there are really no
17 controls, and we're not clear on what the
18 government's intent is.

19 Mr. Swerdfager testified that they are not
20 currently actively pursuing the Pest Pathogen
21 Treatment Regulations. There doesn't seem to be a
22 timeline for it. The regulations have not been
23 gazetted, and yet the companies continue to use on
24 this coast, use SLICE, emamectin benzoate, and on
25 the East Coast, where there are provincial
26 regulations, they're experimenting with a variety
27 of treatments because they're encountering really
28 high resistance to SLICE, and that's a concern
29 here, as well. To the best of my knowledge, we're
30 not seeing evidence of resistance yet, but it
31 could certainly emerge.

32 In conversation with Mr. Swerdfager, he did
33 tell me at one point when they were experimenting
34 with the bath treatments in well boats in New
35 Brunswick, that the lice levels on the fish were
36 not the three to 20 that we may sometimes see in
37 British Columbia, but 200 to 300 lice per fish.
38 So once that resistance emerges, you've got a
39 major problem on your hands. And the lack of
40 regulation right now is something of a regulatory
41 black hole. In discussions with Andy Thomson, he
42 admitted as much. It is currently a black hole.

43 Q I want to now turn to the issue of funding,
44 specifically funding from the federal government
45 to industry.

46 MS. STEWART: Mm-hmm.

47 Q And I want to begin by examining with you a couple

1 of documents. And the first one has already been
2 made an exhibit. It's Exhibit 1729. I believe
3 it's also Conservation document number 19, Mr.
4 Lunn. Now, this describes a program, and I think
5 we have to be careful with our acronyms here,
6 because there's two IMAPs, as I understand it.
7 MS. STEWART: Okay. We call this one AIMAP to
8 distinguish it from IMAP, the Integrated
9 Management Plan.
10 Q All right. So I'm going to call this one AIMAP,
11 following your example, Ms. Stewart, and tell us
12 about this program to your knowledge and what it
13 does and what it purports to do.
14 MS. STEWART: Well, to the best of my knowledge, it was
15 a \$70 million investment that was made by the
16 federal government to facilitate innovation and
17 market access for the aquaculture industry. A
18 portion of it is supposed to go to regulatory
19 reform, a portion to science and a portion to
20 market access.
21 MR. LEADEM: If I could have Conservation document
22 number 45, please. And you're going to have to
23 blow that up and go to the Pacific area, "Pacific
24 Region", and if you can enlarge that a bit more.
25 MR. LUNN: It's because of the width, that's about all
26 I can do.
27 MR. LEADEM: Are we at the limit of your capabilities?
28 MR. LUNN: Unless you want just one column.
29 MR. LEADEM:
30 Q Under the "Pacific" -- can you read that, Ms.
31 Stewart?
32 MS. STEWART: Yes. Yes.
33 Q Under the "Pacific Region", I think if you look
34 down, the third item down, there should be
35 something --
36 MS. STEWART: Yes, there's:
37
38 Soft-flesh Suppression Technology.
39
40 I believe that's for *Kudoa*, a grant that went to
41 Marine Harvest Canada. The first column is the
42 total amount of the project, and the second
43 column, the 142,500 is the AIMAP grant to Marine
44 Harvest.
45 Q Now, what is soft-flesh?
46 MS. STEWART: Now, I'm not an expert in it. My
47 understanding is it's called *Kudoa*, and it is a

1 disease, or whatever, it affects the flesh of the
2 fish, makes it less marketable because the flesh
3 has a tendency to deteriorate. But I'm not a
4 scientist, I...

5 Q Is that basically correct --

6 MS. STEWART: Ms. Morton might be able to speak to that
7 with more accuracy.

8 Q Is that basically correct, Mr. Backman?

9 MR. BACKMAN: Yeah, soft flesh actually occurs for a
10 number of reasons. It can be the temperature of
11 the fish during harvest, and that sort of thing.
12 But the specific piece of work that was being done
13 to look at how to reduce it, according to the
14 *Kudoa* internal parasite, that was what was -- that
15 was what we were after on this particular. And
16 occasionally what happens is that this parasite,
17 which is very, very small, tiny, and occasionally
18 resides within the salmon, has no -- no human
19 health considerations whatsoever, but it just
20 causes the salmon carcass to get soft after the
21 fish has been killed. There is a fair amount of
22 research being done on that, because it comes and
23 goes within the salmon industry. It's been
24 noticed in wild salmon, as well.

25 MS. STEWART: My understanding is it's not particularly
26 a risk, as Mr. Backman has said --

27 MR. BACKMAN: That's right. Yeah.

28 MS. STEWART: -- to human health, or to wild salmon
29 populations. But it is --

30 MR. BACKMAN: I just want to make one quick --

31 MS. STEWART: -- it is a concern for industry because
32 of the marketability of the fish.

33 MR. BACKMAN: We're also in negotiation with the AIMAP
34 group for some funding towards the closed
35 containment pilot.

36 MS. STEWART: Yes.

37 MR. BACKMAN: And so we're very thankful that they're
38 looking at an application there, as well.

39 Q Under the heading "Market Access (National)", the
40 first item down says:

41
42 Market Research for BC Farmed Salmon
43 Producers.

44
45 And there's a reference there to CAIA.

46 MS. STEWART: Mm-hmm.

47 Q And it appears as though the total is 135, and so

1 it looks as though \$100,000 is coming from the
2 federal government directly to CAIA.; is that
3 right?

4 MS. STEWART: Yes, that's the Canadian Aquaculture
5 Industry Association.

6 MR. LEADEM: Could we have -- could that be marked as
7 the next exhibit, please.

8 THE REGISTRAR: Exhibit 1833.

9
10 EXHIBIT 1833: Aquaculture Innovation and
11 Market Access Program 2009-10
12

13 MR. LEADEM:

14 Q Could we have now Conservation document number 46,
15 please. And once again if you can find the
16 "Pacific Region", and I think it's six or seven
17 items down, there's a "Marine Harvest Canada":
18

19 Alternative Fish Cage Nets for Improved
20 Biofouling, Durability and Fish Growth.
21

22 And it looks as though there's a contribution from
23 Canada of \$200,000 for this particular item; is
24 that right?

25 MS. STEWART: And that's correct. And our concern here
26 is certainly that we object to government
27 supporting innovation within the industry, but the
28 government has to make choices and prioritize.
29 And when we hear testimony that important
30 research, like Dr. Miller's research, is
31 potentially not being funded, and yet we see
32 profitable corporations receiving taxpayer grants
33 to deal with issues that are internal to the
34 industry, by and large, that's when we have to
35 question the government's prioritization and their
36 decisions. You know, where are their priorities?
37 The Department of Fisheries and Oceans should be
38 doing their best to ensure the health of marine
39 ecosystems and wild fish, not subsidizing
40 profitable corporations to contend with internal
41 problems that may affect their profitability.

42 Q And under the heading once again, "Market Access
43 (National)":
44

45 Leveraging Aquaculture Standards and
46 Certification Benefits for Canada.
47

1 Once again there seems to be a grant or some
2 funding going to CAIA in the amount of \$200,000
3 from the federal government; is that right?
4 MS. STEWART: And that's correct. And it's this type
5 of subsidy to the industry that flies in the face
6 of Mr. Swerdfager's testimony that DFO is not
7 acting as a promotional arm of the aquaculture
8 industry. There it is. You know, they're
9 granting industry associations money in order to
10 try to capitalize on market access, to develop
11 certification programs that attest to the
12 sustainability of open net cage practices.
13 There's a lot of federal government
14 investment going into these programs, and I can
15 speak more to that because of work that CAAR has
16 been doing and Living Oceans has been doing in our
17 market outreach program. We do meet with
18 retailers such as Overwaitea, Safeway, Loblaw. We
19 work on a -- we have a program called the Wild
20 Salmon Supporters that does outreach to chefs and
21 restauranters, and we're also part of an alliance
22 called Sea Choice, that is a seafood
23 sustainability program doing a lot of work in the
24 marketplace. And we hear a lot back from those
25 chefs, from those retailers, about their
26 encounters with CAIA, with DFO, with Mr.
27 Swerdfager, and the lobbying and the promotional
28 activities advocating for sustainability of open
29 net cage technology that take place at taxpayer
30 expense.
31 MR. BACKMAN: Just very quickly, if I may, the market
32 access piece is part of the overall strategy for
33 the AIMAP, so it's not -- it's not outside the
34 terms in which the program was set up, and
35 specifically the second Marine Harvest application
36 though.
37 MS. STEWART: It's not outside their mandate. We're
38 not questioning the mandate.
39 MR. BACKMAN: The second Marine Harvest piece, it's not
40 entirely internal to the interests of the company.
41 Good husbandry means healthier fish and it means
42 fewer fish health events and having nets that are
43 more appropriate and have improved fish health,
44 actually benefits everyone.
45 MS. STEWART: Sure, but good husbandry should be the
46 responsibility of a for-profit corporation, not
47 the responsibility of Canadian taxpayers who --

1 and the Department who is currently underfunding
2 Conservation and Protection, and underfunding
3 Science.

4 MR. LEADEM: Could we have that marked as the next
5 exhibit, please.

6 THE REGISTRAR: Exhibit 1834.

7

8 EXHIBIT 1834: Aquaculture Innovation and
9 Market Access Program 2010-11

10

11 MR. LEADEM:

12 Q I'm now going to turn to document 49 on
13 Conservation's list, Mr. Lunn. Now, this is
14 public document. It's the Officer of the
15 Commissioner of Lobbying of Canada, and it's the
16 lobbying statement for CAIA filed by Ruth Salmon,
17 the Executive Director of CAIA. If we can turn to
18 the second page, please. The "Government
19 Institution" there, "Funding Received in Last
20 Financial Year" from "Fisheries and Oceans
21 Canada", there's an amount of \$372,127. And then
22 "Agriculture and Agri-Food Canada", funding of
23 \$470,530. "Funding Expected in Current [Fiscal]
24 Year". This is for 2010, is it, Ms. Stewart?

25 MS. STEWART: That's my understanding, yes.

26 Q And then the "Funding Expected in the Current
27 Financial Year" is also "Yes". Could we have that
28 marked as the next exhibit, please.

29 MS. PARKER: Could I just point out that CAIA advocates
30 on a national level not just for salmon farmers,
31 but for growers of many different products
32 throughout the country, particularly shellfish
33 growers on the East Coast, and trout, freshwater
34 fish culturists in the Centre Region. So their
35 activities are on behalf of very broad
36 stakeholders.

37 Q But it's basically funding, is it not, Ms. Parker,
38 funding from Canadian taxpayers that's basically
39 going into industry, whether it be East Coast or
40 West Coast; isn't that right? It's Canadian
41 funding, Canadian taxpayers' dollars going into
42 the industry which should be self-supportive.

43 MS. PARKER: Respectfully, I would suggest that
44 Canadians expect a lot from their government and
45 it's not at all unusual for smaller producers or
46 small business holders to collectively engage in
47 an industry association who will lobby on their

1 behalf for their special needs.

2 MS. STEWART: My concern is not that the federal
3 government is supporting Canadian businesses, I
4 mean that's standard practice across the board,
5 and I think it's expected of the trade commissions
6 in various countries. My concern is the
7 misrepresentation that is undertaken by the
8 agencies and by the government and the support
9 that's given with taxpayer dollars to counter the
10 weight of scientific evidence, the concerns of
11 indigenous people, and the concerns that I think a
12 lot of us share around the impacts of open net
13 cage salmon farming.

14 Just as an example, we've been doing a lot of
15 work over the years with Safeway, and a couple of
16 years ago myself and Dr. Craig Orr were at a
17 meeting in California, and I set up a meeting with
18 the executive of Safeway headquarters in
19 Pleasanton, California. We went and met with
20 them. We did a presentation to the executive
21 level around our concerns with open net cage
22 practices in B.C. And within about a week, a week
23 and a half, I got a call from Safeway saying that
24 Mr. Swerdfager and Ruth Salmon from CAIA had come
25 down to California to meet with them and counter
26 all of the information that we had put forward,
27 advancing claims that the Canadian industry is
28 completely sustainable, that sea lice are simply
29 not a problem, despite the fact that they're a
30 problem everywhere else in the world, as is
31 acknowledged by governments in Europe, for
32 example. I personally don't think that that this
33 a responsible use of taxpayer dollars.

34 And just further to that, we talked a little
35 bit when Mr. Swerdfager was on the stand about the
36 outreach program they had been doing through the
37 trade commission and Ms. Ginsberg in the San
38 Francisco office, one of the members of our Wild
39 Salmon Supporters Campaign, a chef in the United
40 States, contacted us to say that Ms. Ginsberg was
41 organizing a tour of British Columbia for chefs,
42 restauranters, distributors and retailers, and
43 that they were going to visit a Marine Harvest
44 farm, and he wanted some information in advance of
45 this trip, which I have to assume was paid for by
46 the Canadian government. I asked him if he was
47 paying his own way, and he said he was not.

1 But after that meeting, he wanted to try and
2 set up sort of a round table discussion because he
3 was hearing the government's side of the story, he
4 was hearing the industry's side, he was hearing
5 CAAR's side, he said, "Let's get everyone in the
6 same room and let's have the discussion out on the
7 table." And that was something that I had
8 experienced during my work in the forest sector,
9 where customers from Europe, the provincial
10 government, the federal government, the
11 environmental groups, the First Nations, everyone
12 had met together. So you know, it kept all sides
13 honest, and people were able to say frankly what
14 they believed and counter the information put
15 forward by the other.

16 When he proposed this to the trade
17 commission, they said, well, they'd be interested
18 in doing it, but only if the ENGOs were limited to
19 one panel for one hour of the entire day, and that
20 was it. They were not willing to actually engage
21 in a dialogue. And it just seems to me that it's
22 an inappropriate use of our tax dollars for our
23 government to be out there lobbying on behalf of
24 the industry, and then refusing to engage in an
25 open and transparent dialogue with industry, with
26 customers, retailers and the government and the
27 ENGOs.

28 MR. LEADEM: Could we have this lobbying report marked
29 as the next exhibit, please.

30 THE REGISTRAR: We haven't marked Tab 49 yet, so that
31 will be marked as 1835.

32
33 EXHIBIT 1835: Office of the Commissioner of
34 Lobbying of Canada, lobbying statement for
35 CAIA filed by Ruth Salmon
36

37 MR. LEADEM: Thank you.

38 Q And I'm going to ask to go to -- your
39 conversation, Ms. Stewart, prompted me to go to
40 document number 34 in Conservation's list. It's a
41 document entitled "CAIA / DFO California Trip
42 Report". And it appears as though this references
43 a meeting with Safeway and so forth. Is this what
44 you had in mind when you were discussing your
45 evidence?

46 MS. STEWART: Yes. It's interesting, this is from Mr.
47 Swerdfager's files, and it's interesting that he

1 puts CAIA first and DFO second, but, yes, this was
2 the follow-up, the memo summarizing the trip that
3 he and Ms. Salmon took to California.

4 I think what I also find unfortunate here is
5 that the grocery retail sector is shifting.
6 Increasingly they are adopting sustainable seafood
7 policies. Safeway, Loblaw, you know, the major
8 chains, Overwaitea Food Group, they are all
9 adopting and setting timelines for implementation
10 of sustainability policies around the seafood that
11 they will sell.

12 And in all responsible seafood sustainability
13 programs, such as the Monterey Bay, or SeaChoice,
14 where assessments are conducted of fisheries and
15 they're categorized as to whether they should be
16 red-listed, which is avoid, or yellow or green,
17 open net cage farmed salmon falls into the red-
18 listed category. The only one that is green-
19 listed and given a sustainability ranking by
20 Monterey Bay, for example, is the AquaSeed closed
21 containment re-circulating facility in Washington
22 State.

23 So what we're seeing is a market trend to
24 phase out red-listed species and stop carrying
25 them in the grocery stores, at the same time that
26 the Canadian government and the industry here in
27 British Columbia are digging in their heels,
28 denying the evidence, and resisting any change.
29 The investment is going on in the United States,
30 and while we're bickering, they're going to be
31 cornering the market on more sustainable
32 production methods. I just think that that's very
33 short-sighted of the Canadian government, and that
34 they should shift their priorities, stop defending
35 practices that are indefensible and invest in
36 innovation and change.

37 MR. LEADEM: Could we have this "CAIA / DFO California
38 Trip Report" marked as the next exhibit please.

39 THE REGISTRAR: Exhibit 1836.

40
41 EXHIBIT 1836: CAIA / DFO California Trip
42 Report
43

44 MR. LEADEM:

45 Q And before leaving funding, I want to turn to
46 another acronym and I think the next set of
47 questions may be for you, Mr. Backman. If I can

1 have Exhibit 1734, please, on the screen. This is
2 an email chain that appears to be emanating from
3 Mary Ellen, that would be Mary Ellen Walling, to
4 the best of your knowledge, Mr. Backman?

5 MR. BACKMAN: Yes.

6 Q And if you can just scroll down to the second
7 email chain, you'll see that there's a reference
8 there in an email from Mary Ellen dated August 18,
9 and you're copied in that email chain. Do you see
10 that, Mr. Backman?

11 MR. BACKMAN: Yes, I do.

12 Q And the topic is this ACRDP Committee and its
13 source of funding, and whether or not that source
14 of funding is going to be afforded to Dr. Kristi
15 Miller with respect to being -- or enabling her to
16 test some of the Atlantic salmon in open net cages
17 for her -- what she describes as her parvovirus.
18 So that's the context, as I understand it. Do I
19 have that right?

20 MR. BACKMAN: That's correct. Ms. Walling is
21 mentioning that the -- two things, really, that
22 now that there's a -- the beginnings of the
23 understanding of a parvovirus that can be actually
24 tested for, that she's coordinating the response
25 by the industry to provide samples. But based on
26 the fact that there's limited funding in order to
27 do this work, Ms. Walling is also finding some
28 access to some existing ACRDP money that could be
29 made available so that those samples can be
30 processed and can further Kristi Miller's work.

31 Q So what does that acronym stand for, the ACRDP? I
32 stumped you on that one, did I?

33 MR. BACKMAN: You did stump me this morning on that
34 one.

35 Q Yeah.

36 MR. BACKMAN: It's a federal government program of
37 research which is set up to partnership -- to
38 partner with aquaculture, all kinds of aquaculture
39 whereby federal research can be brought forward
40 and issues that are of interest, both to the
41 industry and federal government researchers, and
42 it requires a component of funding from both
43 parties, in cash or in kind from industry.

44 Q All right. And as I understand it, Ms. Walling
45 sits on this ACRDP Committee, does she not?

46 MR. BACKMAN: Right.

47 MR. MARTLAND: Just because I like to have a very clean

1 record, if we can do it, the PPR at page 150 gives
2 a list of acronyms. Aquaculture Collaborative
3 Research and Development Program is our note of
4 that acronym.

5 MR. LEADEM: Thank you, Mr. Martland.

6 Q So if I could just scroll down to the initial
7 email that has given rise to this chain in which
8 you were copied, it's a lengthy email from Dr.
9 Miller-Saunders, and if you can go to the next
10 page, about the middle of the page, "I had heard",
11 you see there's a third paragraph there:

12
13 I had heard that there was some ACRDP money
14 that has not yet been spent, about 30K, I
15 believe.

16
17 And she goes on to say:

18
19 As we do not have funding to do this
20 screening, it would be helpful --

21
22 - she's writing to Mary Ellen Walling -

23
24 -- if you could suggest (to Laura Brown) --

25
26 - who, as I understand, is a DFO representative -

27
28 -- that this work could be funded using these
29 extra funds. Otherwise, the actual screening
30 will have to await our finding funds to do
31 so.

32
33 So it looks as though this ACRDP, which is a
34 collaborative effort between industry and DFO
35 Science, has some money and that's why Dr. Miller
36 is trying to tap into that. Is that your
37 understanding of what was going on at this time?

38 MR. BACKMAN: Yeah, that's my understanding.

39 Q Now, getting back to the issue of -- could I have
40 Conservation document number 48, please. Do you
41 recognize this, Ms. Stewart?

42 MS. STEWART: Yes.

43 Q It's a letter dated May 27, 2001 and you're
44 writing to the Minister of Fisheries and Oceans,
45 Minister Ashfield?

46 MS. STEWART: That's correct.

47 MR. LEADEM: Could we have that marked as the next

1 exhibit, please.

2 THE REGISTRAR: Exhibit 1837.

3

4 EXHIBIT 1837: Letter to Mr. Schuessler and
5 Minister Ashfield from CARR, May 27, 2011

6

7 MR. LEADEM:

8 Q Under the heading "Synthetic Parasiticides", under
9 the first -- you reference some issues. Do you
10 want to just speak generally to this letter first,
11 and then we can --

12 MS. STEWART: Sure.

13 Q -- look at some of the topics.

14 MS. STEWART: The Canadian government currently has a
15 program underway to secure organic certification
16 for open net cage farm salmon products in Canada,
17 and we've been extremely concerned about this. We
18 heard from parties within DFO that discussions had
19 been initiated with the aquaculture industry.
20 Those were taking place behind closed doors.
21 There was no effort to seek input from other
22 parties. DFO and industry representatives were
23 developing the draft standard on their own. We
24 were told that we would be -- we would have an
25 opportunity to engage in the dialogue once there
26 was a draft standard, and it went to the Canadian
27 General Standards Board, who would then take over
28 the process of working through towards a
29 certification standard, an organic certification
30 standard.

31 When the draft standard first came out, it
32 was going to allow antibiotic use, for example, on
33 the farms, which is fundamentally contrary to the
34 very notion of organically certified food
35 products. We had been working with various
36 terrestrial organic associations and farm
37 associations, and they were extremely concerned
38 that if this was allowed to go forward without
39 stronger criteria, it would undermine the value of
40 the organic label as a whole in Canada, because
41 consumers would become uncertain whether
42 pesticides were allowed in organically certified
43 foods, whether antibiotics were allowed in
44 organically certified foods.

45 It was looking to us as though the Department
46 was more or less going to certify the status quo.
47 One of the requirements of organic certification

1 for terrestrial animals is that the feed itself
2 has to be organic, but the determination of the
3 industry and the Department was that you can't
4 certify wild forage fish, such as Peruvian
5 anchoveta, which are ground up and turned into
6 fish meal and oil to feed the pellets to the
7 farmed salmon. You can't certify those as organic
8 because they're a wild species, so therefore there
9 wouldn't be a requirement for organic feed going
10 into the product, either.

11 So this is still ongoing. We have engaged
12 as representatives of CAAR in the National Organic
13 Standard Board process in the United States.
14 We've intervened in that. And the U.S. has a
15 draft standard currently up for consideration for
16 the FDA, which is quite a bit stricter than the
17 current draft standard that is under discussion in
18 Canada. There's a concern there, though, because
19 there is sort of a harmonization agreement between
20 Canada and the United States that would
21 potentially bring the standards down to the lowest
22 common denominator. So if Canada goes forward
23 with an extremely weak standard, that could also
24 impact slightly more credible standard in the
25 United States and tend to put downwards pressure
26 on that.

27 And we believe it's just wholly inappropriate
28 for again our Department of Fisheries and Oceans,
29 our government, to be seeking market access for
30 open net cage salmon by investing in a program to
31 certify that product as organic to an extremely
32 low standard.

33 MR. LEADEM: Could we have this letter marked as the
34 next exhibit, please.

35 THE REGISTRAR: Exhibit 1838.

36 MR. MARTLAND: Our note is it may already be 1837, so
37 we can cancel the last assignment of number.

38 Thank you.

39 THE REGISTRAR: That's correct, it's 1837.

40 MR. LEADEM: Sorry.

41 Q I want to quickly turn now to Conservation
42 document number 43, Ms. Stewart, which should be
43 one of your productions, "A Resource Guide to
44 Farmed Salmon Certifications".

45 MS. STEWART: Correct.

46 Q Does this set out basically the background on eco-
47 certifications and certifications dealing with

1 farmed salmon worldwide?

2 MS. STEWART: It does. What we did was -- there's a
3 growing number of certification schemes. Some of
4 them are industry-driven. Some of them are, you
5 know, multi-stakeholder processes. But
6 increasingly there is a desire on the part of the
7 industry to have some sort of sustainability level
8 -- label, sorry, on their product.

9 So we looked at the -- at the standards that
10 were determined by the United Nations Food and
11 Agriculture Organization, and by ISEAL, the
12 International Social and Environmental Standards
13 Accreditation, and I'm sorry, I can't remember all
14 the details of the acronym, but it's in the
15 report. But both of those bodies define what are
16 the elements that constitute a credible
17 certification program, that doesn't necessarily
18 mean that the standard itself will be a good
19 standard. But if you're going to develop a
20 program in order to issue a certification
21 standard, what are the elements of that program.
22 And those include that it's scientifically based,
23 that it's transparent, that it is multi-
24 stakeholder, that the standards are publicly
25 available and can be assessed. You know, what
26 goes into that label, what -- what is it that
27 allows that, you know, that certification label to
28 claim that it is more environmentally sustainable
29 than another.

30 And this looks at various programs, such as
31 the Global Aquaculture Alliance, and the Cooke
32 Aquaculture's True North label, and assesses them
33 against those UN Food and Agricultural
34 Organization criteria.

35 MR. LEADEM: Could we have that marked, please. Mr.
36 Commissioner, I'm in your hands. I've got about
37 five minutes left to me in my allotment. We could
38 either take the break now or I can push on and
39 finish.

40 THE COMMISSIONER: I think if it's five minutes, Mr.
41 Leadem --

42 MR. LEADEM: That's all I have.

43 THE COMMISSIONER: -- I'm content to carry on.

44 MR. LEADEM: Thank you.

45 THE REGISTRAR: The document will be 1838.

46
47

1 EXHIBIT 1838: Better than the Rest? A
2 Resource Guide to Farmed Salmon
3 Certifications, CARR, 2011
4

5 MS. STEWART: I think the important thing about this
6 report, and it was written as a guide for
7 retailers, is that it informs them on whether or
8 not the various labels that are being pushed by
9 the industry meet those criteria that would deem
10 them to be at least credible, and then beyond that
11 you can look at the details of the standard itself
12 and say, do the indicators for that standard seem
13 appropriate? Are they really achieving a degree
14 of increased environmental sustainability.

15 MR. BACKMAN: If I --

16 Q I'm going to just note for the record that Mr.
17 Backman wants to reply, but I'm in my last five
18 minutes and I want to end with a topic. And I'm
19 going to suggest that my learned colleague, Mr.
20 Blair, can perhaps ask that in redirect. So you
21 can put your marker, Mr. Backman, and hopefully
22 Mr. Blair will pick you up on that.

23 I want to end by looking at some of the
24 discussion that I heard yesterday with respect to
25 the precautionary principle, that I thought was
26 quite interesting, that you engaged in, Ms.
27 Parker. And before I do so, I don't know whether
28 you actually acknowledged, Mr. Backman, that your
29 company buys into the precautionary approach and
30 precautionary principle as well; is that not
31 right?

32 MR. BACKMAN: Yeah, that's correct.

33 Q And specifically you raised it with regard to
34 siting, and you said, for example, this is
35 evidence -- this is what you, at least I think
36 what I heard you say, Ms. Parker, this is evidence
37 that the companies take into consideration the
38 precautionary principle because we don't site fish
39 farms within one kilometre of known salmon bearing
40 streams. Do I have your evidence more or less
41 encapsulated correctly?

42 MS. PARKER: I think I said that the federal government
43 has a precautionary approach framework --

44 Q Yes.

45 MS. PARKER: -- for the regulation, and we followed the
46 regulation.

47 Q Right. So but basically as good corporate

1 citizens you would want to be precautionary too, in
2 terms of whatever environmental degradation you
3 might be causing. Isn't that fair, Mr. Backman?
4 MR. BACKMAN: I think a precautionary principle of
5 going forward is a foundational element of how
6 business, and our business, conducts itself. So
7 the answer is yes. Precautionary principle,
8 though, uses the best available information and is
9 adaptive as we learn more.
10 Q But it also references the fact that if you have
11 an uncertain area, in other words, if the science
12 is uncertain, that you take measures in order to
13 protect the environment. Isn't that a fair
14 restatement of the precautionary principle?
15 MR. BACKMAN: Yes, I think we mentioned a few. The
16 one-kilometre separation applied to all streams
17 and all rearing areas is an example, separation
18 from shellfish beaches is an example. Additional
19 work is done to fill in the scientific knowledge.
20 Q And there's also a separation between farms, as
21 well, as I understand it, is there not?
22 MR. BACKMAN: Currently at three kilometres separation
23 (indiscernible - overlapping speakers).
24 Q So the farms are situated three kilometres from
25 one another. And so if science were to say, for
26 example, that that one kilometre is not
27 sufficient, that we have evidence that there's
28 actually spread of pathogens or sea lice on a
29 greater distance, say five to eight kilometres,
30 obviously then if DFO as the regulator were to
31 come back to you and say, well, we think you
32 should be siting your farms eight kilometres, for
33 example, from fish farms and also eight kilometres
34 from streams that have salmon in them, you would
35 of course comply with that, would you not?
36 MR. BACKMAN: That's a really good statement, and I
37 think we can go back to the fact that the
38 separation from salmon -- from streams has already
39 gone through a stage of change under the very
40 early set of guidelines. It was one nautical mile
41 -- I'm sorry, between salmon farms it was one
42 nautical mile separation when the provincial
43 government licence came in. It was extended to
44 three kilometres separation, based on a whole
45 bunch of information that had been made available
46 at that time. It's stayed at three kilometres now
47 for over 20, 30 years -- 20 years, I should say,

1 and it's -- it's stood the test of time in terms
2 of additional information coming forward. Should
3 that be resolved again, either less or greater
4 than three kilometres, and we'd adjust our
5 business to operate accordingly.

6 Q But isn't it time that we revisit those siting
7 criteria? I mean, it's been in place for 20
8 years. Isn't it time that we actually take a look
9 at the state of the science today and actually
10 revisit that siting criteria with an aim to
11 determining what would be the precautionary
12 approach? What would be precautionary in light of
13 what we now know about the migratory pathway of
14 Fraser River sockeye, and what we now know about
15 the spread of pathogens. Wouldn't it -- isn't it
16 time that we actually revisited that issue?

17 MR. BACKMAN: I think it's being revisited
18 continuously, as the environmental assessments are
19 done on salmon farms, and as new information is
20 gathered, the Valued Ecosystem Component tables
21 are updated, and it's an ongoing process of
22 looking at it.

23 MS. STEWART: But what we're failing to see is any real
24 change in the industry. So all of the revisiting
25 in the world is not going to matter to the wild
26 salmon, or to the health of our marine ecosystems,
27 if it doesn't result in actual change. And I
28 think it's important to remember that the
29 definition of the precautionary approach that Mr.
30 Blair put up on the screen yesterday said where
31 there are threats of irreversible damage, lack of
32 full scientific certainty, is not a reason to fail
33 to act. And the weight of evidence continues to
34 mount and our government continues to fail to act.

35 So I can only encourage the Department of
36 Fisheries and Oceans to take their responsibility
37 to Canadians seriously and start acting.

38 MR. LEADEM: Thank you, Mr. Commissioner, those are my
39 -- those are my submissions.

40 MR. MARTLAND: Mr. Commissioner, I have a few brief
41 procedural things, and I'm sure this won't prompt
42 any applause. But what they are is first just
43 simply noting that Ms. Reeves from the First
44 Nations Coalition pointed out Exhibits 1554 and
45 1475 are identical, to our understanding. I just
46 wish to read that into the record.

47 Secondly, there was an affidavit from Rob

1 Morley, who testified in the commercial fishing
2 hearings. An objection was -- the affidavit was
3 proposed to pick up on a point that Mr. Rosenbloom
4 addressed in his questions of Mr. Morley. There's
5 been an objection put to the admission of the
6 affidavit. Mr. Lunn may be able to find that, but
7 we've circulated that out to participants. I'm
8 proposing not to have this go in as an exhibit
9 proper, but as an exhibit for identification.
10 I've spoken with Mr. Rosenbloom and Mr. Dickson.
11 We'll we addressing a process to deal with this
12 document, as well, but I'll suggest it's
13 appropriate that it be put in as an exhibit for
14 identification to permit it to be addressed
15 through the process that we'll use for other
16 documents for ID, exhibits for ID.

17 Those are the two quick points. If I might
18 suggest a ten-minute break, if that's not
19 disagreeable, that would help us to stay on
20 schedule. We are on schedule at this point.
21 Thank you.

22 MR. TAYLOR: We need it marked for ID.

23 MR. MARTLAND: That's the request.

24 THE REGISTRAR: That will be marked now, that will be
25 FFF, triple "F".

26
27 FFF FOR IDENTIFICATION: Affidavit of Rob
28 Morley

29
30 MR. MARTLAND: Thank you.

31 THE REGISTRAR: The hearing is now adjourned for ten
32 minutes.

33
34 (PROCEEDINGS ADJOURNED FOR MORNING RECESS)
35 (PROCEEDINGS RECONVENED)

36
37 THE REGISTRAR: Order. The hearing is now resumed.

38 MR. MARTLAND: Mr. Commissioner, counsel for Canada,
39 with 60 minutes, is next. Thank you.

40 MR. TAYLOR: Mitchell Taylor, and with me is Jonah
41 Spiegelman, Mr. Commissioner. I have 60 minutes,
42 as Mr. Martland pointed out. I'm prepared to
43 continue through and sit five or so minutes into
44 lunch, if the Commissioner and the court
45 officials, or the hearing officials are, and you
46 can tell me, as we get to that point, whether
47 that's so, in your view or not, but I'm prepared

1 to.

2

3

CROSS-EXAMINATION BY MR. TAYLOR:

4

5

Q I'm going to start my questions, if I may,
6 directing questions to Ms. Stewart and Ms. Morton,
7 and I'm going to ask questions about jurisdiction
8 and regulation.

9

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I understand that both of you are unsatisfied
or dissatisfied with the Provincial regulation and
with the Federal regulation of aquaculture;
Provincial before December of 2010, and the
Federal afterwards, of course. And in that, I
think we all recognize that at all times both
governments have had a role in aquaculture. It's
where the majority of the regulatory power is, or
regulatory authority.

18

19

20

Now, Ms. Stewart, will you agree with me that
one or the other of the Provincial or Federal
government is going to have to be the regulator?

21

MS. STEWART: Yes.

22

Q And Ms. Morton, you agree with that?

23

MS. MORTON: Yes.

24

Q All right. So far, so good.

25

MS. STEWART: Maybe we should end there.

26

27

28

29

30

Q No, we won't. Thank you for that offer, though.
Now, with that, do you accept that open net pen
salmon aquaculture is an activity that can occur
somewhere on the British Columbia coast? Ms.
Stewart?

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MS. STEWART: Well, this goes back to the question that
was asked last night by the representative for the
Aboriginal Aquaculture Association. I think it
would be difficult to argue that one open net pen
in an area the size of the Broughton Archipelago
would be, you know, fundamentally destructive to
ocean ecosystems. The question has to be one of
scale. You know, the current numbers of open net
cages we have, I believe, are unsustainable, and I
don't believe that we can -- I certainly don't
believe that we can increase production. The
burden on the environment is already too high.

43

Q Are there places or locations on the B.C. coast
44 that, in your view, can have sustainable
45 aquaculture coexisting with wild stocks where you
46 have multiple farms and, whatever that number is,
47 multiple farms that is supporting an industry

1 similar to what we have now, are there locations
2 where that can occur?
3 MS. STEWART: Sure, in closed containment systems.
4 Q No, no, we're talking about open net.
5 MS. STEWART: Again, no, I don't think so. Not
6 multiple farms, no. The impacts and the weight of
7 evidence suggests that the impacts are already too
8 great and the risks are extremely high.
9 Q No location anywhere on the coast?
10 MS. STEWART: Well, there's over 9,000 individual
11 salmon stocks on the coast of B.C. Virtually the
12 entire coast is a migratory route for wild salmon,
13 and wild salmon are really the foundation of the
14 coastal Pacific ecosystem. They feed a variety of
15 species as we know, multiple species, over 300.
16 They even feed the forests.
17 Q All right. I have your point on that, thank you.
18 Ms. Morton, what do you say?
19 MS. MORTON: No, there's no place that open net pens
20 can coexist with wild fish.
21 Q Now, your point, Ms. Morton, has been, as I
22 understand it, that the problem is the salmon
23 farms on the migratory routes; is that your point?
24 MS. MORTON: The problem is that salmon farms amplify
25 pathogens, they break the natural laws, and so
26 they disrupt the ecosystem that they're in.
27 Q And so you say that even if they weren't close to
28 where the salmon are migrating, it's still a
29 problem?
30 MS. MORTON: If there was such a place in British
31 Columbia, it wouldn't be a problem, but I've spent
32 a long time looking for that place, and it doesn't
33 appear to exist.
34 Q All right. I have your point, thank you. Now,
35 Ms. Morton, you took steps to bring before the
36 courts of British Columbia the question of whether
37 the Provincial or Federal Government have
38 jurisdiction over aquaculture, and ultimately you
39 obtained a judgment that, for finfish aquaculture,
40 it is the Federal Government who has regulatory
41 control. We all know that.
42 Now, am I correct that you went into that
43 litigation knowing that you might win and the
44 court might say that it's a matter of Federal
45 jurisdiction?
46 MS. MORTON: Yes, based on my lawyer, Gregory McDade,
47 we thought we would win.

1 Q All right. And so here we are, and you did win,
2 and there is Federal jurisdiction. So when you
3 pursued that litigation and ultimately were
4 successful, did you, as you were pursuing the
5 litigation, have an understanding that if you were
6 successful and there was Federal jurisdiction,
7 there would have to be a fairly quick turnover
8 from Provincial to Federal regulatory regime?
9 MS. MORTON: Yes, the understanding existed.
10 Q And you full well knew the complexity of the
11 subject matter, you've spoken a lot about that; is
12 that right?
13 MS. MORTON: For me it's very clear, the DFO needs to
14 protect the wild salmon from whatever it is, so
15 the complexities of regulation and the bureaucracy
16 behind it, I don't fully grasp, but I do grasp the
17 biology of the situation.
18 Q Well, I suppose you might say that it's all very
19 simple if everyone agreed with you, but you know
20 that everyone doesn't agree with you, correct?
21 MS. MORTON: It's really not a matter of agreeing with
22 me, it's a matter of an honest appraisal of the
23 natural world and what's happening, the dynamics
24 between the two populations.
25 Q All right. That's your view of it, I take it, but
26 you full well know that there are people who hold
27 contrary views to what you do, correct?
28 MS. MORTON: I full well do, but I believe they're
29 wrong.
30 Q Yes, I know that. And many of those people that
31 hold contrary views are very respected scientists,
32 correct?
33 MS. MORTON: Are they respected? I have honestly lost
34 a lot of respect in this process, I have to be
35 honest with you. I don't mean to be harrassive
36 with that statement, but when you are looking at
37 the fish and you have put enormous effort into it,
38 there is -- it's inescapable, the effect of this
39 industry, whether it's toxic algae blooms,
40 displacement of the whales, --
41 Q Yes, we're talking about --
42 MS. MORTON: -- lice, bulging eyeballs --
43 Q -- respected scientists.
44 MS. MORTON: -- blackening skin, it's just really --
45 Q Ms. Morton, we're talking about respected
46 scientists at the moment, if we could stick to the
47 question, please. You know that people like Dr.

1 Noakes, Dr. Beamish, Dr. Jones, Dr. Johnson, Dr.
2 Dill, with certain caveats, and others, all have a
3 different view than you, don't you?
4 MS. MORTON: I don't believe Dr. Dill does have a
5 different view from me, but the rest --
6 Q Well --
7 MS. MORTON: -- of them I know have a very different
8 view.
9 Q All right. Thank you. We won't debate Dr. Dill's
10 view right now, then. Now, with all that, do you
11 accept that there is complexity - I think you do -
12 to creating a new regulatory regime?
13 MS. MORTON: I accept there are complexities.
14 Q And there also has to be consultation with quite a
15 number of interested parties and stakeholders,
16 including First Nations, doesn't there?
17 MS. MORTON: Yes.
18 Q And will you agree with me that in the time
19 available, which is approximately 12 to 16 months
20 from the decision until the regulatory regime came
21 into play, that a lot of good work was done in
22 order to set up a new regulatory regime?
23 MS. MORTON: No, I don't think it was good work.
24 Q All right.
25 MS. STEWART: I would like to make a comment on that,
26 actually, because I was involved in discussions
27 with both the Provincial and Federal Governments
28 after the **Morton** decision came down, and for the
29 first six months there was an awful lot of debate
30 around what they were going to do. The Province
31 wasn't sure they wanted to totally relinquish
32 control, the Federal Government wasn't sure they
33 wanted to completely accept control. I sat in
34 meetings with Trevor Swerdfager and Harvey Sasaki
35 from the Provincial Government, where they were
36 debating whether or not they would negotiate a
37 constitutionally acceptable memorandum of
38 understanding around sharing jurisdiction. There
39 was a long debate, and it wasn't until around
40 September or October of 2009, when I got a call
41 from a Provincial Government official, saying that
42 the Province had decided they were going to
43 relinquish regulatory control to the Federal
44 Government entirely, and my understanding was that
45 that decision was not one that the Federal
46 Government necessarily knew was coming. So, you
47 know, the first six months of that jurisdictional

1 handover was spent debating what it would even
2 look like.
3 Q All right. Thank you. And that's all part of the
4 complexity, isn't it?
5 MS. STEWART: It's certainly complex, but at --
6 Q That's a yes or --
7 MS. STEWART: -- the end --
8 Q That's a yes or no question.
9 MS. STEWART: At the end of the day they basically
10 adopted the Provincial regulatory regime with some
11 changes.
12 Q It's part of the complexity, isn't it?
13 MS. MORTON: One of the complexities that jumped out at
14 me is the Province moved away from regulating this
15 industry as soon as the Fraser sockeye crash in
16 2009.
17 Q I'm going to, as Mr. Leadem did before me, ask the
18 panellists to recognize that we're all time
19 limited and if you could respect the need to have
20 some level of conciseness, please, in your
21 questions -- in your answers.
22 Ms. Morton, I'm going to read something, and
23 I think you'll recognize the words that I read [as
24 read]:
25
26 I am very interested in ensuring that
27 aquaculture is properly managed and regulated
28 and have a real concern that the Government
29 of B.C. is acting outside its legal
30 jurisdiction in its regulation of ocean
31 aquaculture and the Government of Canada, as
32 represented by Fisheries, has withdrawn from
33 a proper regulatory role.
34
35 Now, do you recognize those words?
36 MS. MORTON: No, sorry, I don't.
37 Q Okay. If I said that's paragraph 12 of your
38 affidavit in support of your litigation, does that
39 refresh your memory?
40 MS. MORTON: That would help, yes.
41 Q And do you now recognize those words as being
42 paragraph 12 in your affidavit?
43 MS. MORTON: Well, could you put it up on the screen?
44 Q I'm not sure that I can. Yes, I can, apparently.
45 Or Mr. Lunn can, to be more precise. Do you
46 recognize -- maybe we should start at the
47 beginning.

- 1 MS. MORTON: I saw the beginning. Yes, I recognize it,
2 thank you.
- 3 Q Go to paragraph 12. You swore to those -- to
4 those words, didn't you?
- 5 MS. MORTON: Yes, thank you.
- 6 Q And while you may not agree with the approach
7 chosen, do you agree that an objective sound
8 management and regulation of aquaculture is a key
9 component in attaining sustainable fisheries?
- 10 MS. MORTON: It's key. I believe that the split
11 mandate that DFO has is going to make that
12 impossible.
- 13 Q I want to ask you about American University.
14 That's where you got your degree isn't it?
- 15 MS. MORTON: Yes, it is.
- 16 Q And that's in Washington, D.C.?
- 17 MS. MORTON: That's correct.
- 18 Q And you obtained your degree in 1977, did you?
- 19 MS. MORTON: Yes, that's correct.
- 20 Q That's a private university?
- 21 MS. MORTON: Yes, it is.
- 22 Q And is it known as famous for political activism?
- 23 MS. MORTON: I don't know.
- 24 Q All right. What do you know its reputation to be?
- 25 MS. MORTON: It was close to where my mother was
26 living, and so that's where I began to take
27 classes. I hope we're going to get back to the
28 sockeye here at some point.
- 29 Q Is it what's referred to as a liberal arts
30 college?
- 31 MS. MORTON: I don't know.
- 32 Q Okay.
- 33 THE COMMISSIONER: Ladies and gentlemen, again, if I
34 could ask you to respectfully honour the process
35 here. We welcome the public's participation, and
36 certainly we welcome your being in the public
37 gallery, but if you would allow counsel to do
38 their work, I would be very grateful. Thank you.
- 39 MR. TAYLOR:
- 40 Q And that university has a college of arts and
41 science, doesn't it, and did at the time you were
42 there?
- 43 MS. MORTON: If you tell me it does, it did.
- 44 Q Well, that's the college you were in, isn't it?
- 45 MS. MORTON: Yes, but, you know, I was just taking my
46 courses, going through it, and don't have a
47 recollection of exactly what that university was

1 and all degrees and scope.
2 Q Did you get a bachelors of arts and science?
3 MS. MORTON: I got a bachelor of science. I graduated
4 *magna cum laude*.
5 Q All right. Now, will you agree with me that you
6 are an advocate against open net fish farms?
7 MS. MORTON: I am an advocate for wild salmon.
8 Q Okay. And is the corollary of that, that you're
9 an advocate against open net pens?
10 MS. MORTON: As a corollary, yes. Because of the
11 damage I see, I have become against net pen farms.
12 Q And you collaborate with other like-minded people
13 in campaigning against active -- or against open
14 net pens, do you?
15 MS. MORTON: I've collaborated with a wide range of
16 people.
17 Q All right. Do you have a blog?
18 MS. MORTON: Yes, I do.
19 Q And it's under the name Alexandra Morton?
20 MS. MORTON: Yes, it is.
21 Q Do you have control over the content?
22 MS. MORTON: Yes, I do.
23 Q Do you know what's on it at any given time?
24 MS. MORTON: Yeah, I'd have to refresh my memory to
25 look at it, but yes.
26 Q All right. You, personally, put material on the
27 blog, do you?
28 MS. MORTON: Yes, that's correct.
29 Q And over quite a long period of time you've been
30 putting material on your blog to do with this
31 Commission of Inquiry, haven't you?
32 MS. MORTON: Yes, I have, because it's a public inquiry
33 that relates to wild salmon to which people are
34 interested.
35 Q And you've put up material that is your account of
36 the evidence given from day to day; is that right?
37 MS. MORTON: Yes, that's correct.
38 Q And your material on the blog includes commentary
39 on witnesses?
40 MS. MORTON: Yes, that's correct.
41 Q And some of the commentary is quite disparaging?
42 MS. MORTON: Yes. It's been a disparaging experience.
43 MR. TAYLOR: Mr. Lunn, are you able to pull up the
44 September 8th blog?
45 MR. LUNN: Yes.
46 MR. TAYLOR:
47 Q Do you recognize this as your blog, Ms. Morton?

1 MS. MORTON: Yes, I do.
2 Q Is that a blog you posted late last night or early
3 this morning?
4 MS. MORTON: Late last night, yes.
5 Q And you posted that blog after you went under
6 cross-examination in these proceedings?
7 MS. MORTON: Yes, that's correct.
8 Q And you --
9 MS. MORTON: I realize, now, that that was a mistake.
10 Q All right.
11 MS. MORTON: But in the explanation as to what I was
12 able to do and not do, it was the dialogue and the
13 assisting of your evidence, so I thought, in that
14 it was the back-and-forth, not the actual just
15 writing down things that had happened that the
16 people were able to see that were sitting here.
17 Q It's my understanding that Mr. Martland or Ms.
18 Grant specifically told you not to discuss your
19 evidence with anyone.
20 MS. MORTON: Yeah, so it was the "discuss" that I made
21 the mistake on, the back-and-forth. But since
22 there's people sitting in the audience able to
23 hear this, because it was live-streamed, I did not
24 realized that there was that boundary.
25 Q In this regard, though, you e-mailed Mr. Backman
26 last evening, did you?
27 MS. MORTON: Yes, because he made an interesting
28 observation that I hadn't heard before, that the
29 Harrison sockeye had been found going north, and I
30 just had never heard that before, so I was just
31 curious what his reference was for that.
32 Q You'll agree with me that that e-mail you've just
33 described to Mr. Backman is a specific reference
34 to evidence in this proceeding yesterday?
35 MS. MORTON: Yes.
36 Q After you'd been warned not to discuss your
37 evidence with anyone, or any evidence with anyone?
38 MS. MORTON: I asked him a question about a reference
39 that he had made. It was not his opinion. And I
40 do apologize to the courts if I've made a mistake
41 here.
42 Q We're kind of dancing on --
43 MS. MORTON: But if I --
44 Q -- the head of a pin, aren't we?
45 MS. MORTON: -- was doing this in a -- if I knew I was
46 breaking the rules, I certainly would not have
47 been public with it, I would have done something

1 privately, but I didn't realize I was breaking the
2 rules.
3 Q Let's go to your blog of September 8th, and I want
4 to specifically address the bottom of page 1 and
5 over onto page 2, if we could go there. I think
6 that would be fine. If you start, Mr. Martland
7 (sic), by pulling up or blowing up where you are,
8 over onto -- okay, that's fine.
9 Now, let me just start with -- oh, the print
10 here is slightly different from mine. Can we have
11 the paragraph -- as well, can we have the
12 paragraph above where you are, Mr. Lunn, please?
13 That's fine. Now, Ms. Morton, that paragraph:
14
15 I am really glad Cohen will take a look at
16 what I pulled together.
17
18 I take it you mean the Commissioner in these
19 proceedings?
20 MS. MORTON: Yes, that's correct, I was very glad to
21 hear that he was going to read the report --
22 Q Right.
23 MS. MORTON: -- because it's based on 500,000 documents
24 that were provided to this Commission, and I take
25 my role seriously to offer all the information
26 that he will need to make that decision as to
27 whether aquaculture is impacting the Fraser
28 sockeye.
29 Q Okay. As do many other people take their role
30 seriously; you'll agree with that, will you?
31 MS. MORTON: Yes, I will agree with that.
32 Q There's many people doing a lot of good and hard
33 work in this Commission; do you agree?
34 MS. MORTON: There's many people, yes.
35 Q And the 500,000 documents you just referred to are
36 mostly from the Federal Government, aren't they?
37 MS. MORTON: Yes. Lots of Provincial documents as
38 well.
39 Q And for your part, you produced about a couple of
40 hundred documents, haven't you?
41 MS. MORTON: That's right, because I'm not an expert on
42 the Fraser sockeye.
43 Q And yet you've got an awful lot of documents,
44 don't you?
45 MS. MORTON: I have an awful lot of what type of
46 documents do you --
47 Q To do with Fraser sockeye and aquaculture.

1 MS. MORTON: I do now, yes. I have --

2 Q No, no, never mind what you got through this
3 Commission. Apart from this Commission, you,
4 yourself, and the Raincoast Research Society, have
5 a lot of documents on Fraser sockeye and
6 aquaculture, don't you, from your work you've
7 done?

8 MS. MORTON: From the think tanks I've gone to and
9 visiting the First Nations throughout the Fraser
10 Valley last fall, I have lots of documents, and
11 then on aquaculture, of course, I've got my own
12 research and also an archive of scientific papers.
13 I'm not really sure what you're getting at. I
14 suspect this line of questioning is to prevent me
15 from talking about what was actually in those
16 documents.

17 Q Well, please don't try to speculate or worry about
18 where I'm going with my questions. I'll just ask
19 if you could answer them.

20 Now, still with your documents, do you
21 understand, when I say "documents", I'm including
22 electronic material such as e-mails?

23 MS. MORTON: Okay.

24 Q Do you understand that?

25 MS. MORTON: I understand that.

26 Q And you're quite a prolific e-mailer to do with
27 Fraser sockeye and aquaculture, aren't you?

28 MS. MORTON: Yes, I am, because working through
29 government processes and working through science
30 didn't work, so it has pushed me to another phase
31 where I feel that the public need to hear from me
32 directly.

33 Q All right. And you've produced virtually none of
34 your documents to this Commission; is that right?

35 MS. MORTON: Yeah. They're in my blogs, though.

36 Q All right. Now, you say, in your blog, which
37 we'll return to now, in that sentence beginning,
38 "I'm really glad,":

39

40 The report is not my work, it is a
41 compilation of what DFO has been saying.

42

43 The report you're referring to is the document
44 that was spoken of yesterday that Mr. McDade tried
45 to get into evidence and it's an exhibit for ID.
46 It's either BBB or DDD, I can't -- I don't have
47 good enough hearing to figure out whether -- which

1 of those it is.

2 MS. MORTON: It was marked for identification before
3 yesterday.

4 Q All right. But you know the -- that's the report
5 that's being referred to here in the report -- in
6 the blog, isn't it?

7 MS. MORTON: Yes, correct.

8 Q And then you go on and you state some things and
9 you state them as fact, and you'll see, at the
10 bottom of the page on the screen, it says:

11
12 A DFO scientist tasked to find out why
13 millions of sockeye are dying just before
14 spawning found evidence that a virus
15 associated with cancer is killing them -
16 fact.

17
18 That statement is wrong, isn't it?

19 MS. MORTON: It's a fact that she has found evidence.

20 Q You heard Dr. Miller's testimony last week, didn't
21 you?

22 MS. MORTON: Yes, I did.

23 Q And you heard Dr. Garver's evidence?

24 MS. MORTON: Yes I did.

25 Q And both of them said, "This is a work in
26 progress," and they are not making -- they have
27 not reached the conclusion that you put here?

28 MS. MORTON: I don't think "evidence" means a
29 conclusion; it means evidence.

30 Q I see. And over the page your blog says:

31
32 The only known place a virus like this occurs
33 is in the salmon farms on the dying sockeye's
34 migration route - fact.

35
36 You know that to be wrong, don't you?

37 MS. MORTON: No, I don't. I don't know anywheres (sic)
38 else where marine anaemia, salmon leukemia,
39 plasmatoid (sic) leukemia, parvo, any of those
40 things have ever been reported, other than the
41 papers from Dr. Kent, Dr. Stephens, Dr. Ribble,
42 and others.

43 Q Well, you know that the work that Dr. Miller is
44 doing is to do with a syndrome that she's
45 identified, correct?

46 MS. MORTON: You know, the word "syndrome" related to
47 marine anaemia did not arise until this

1 Commission, until several scientists were on the
2 stand. Back in the days when they were simply
3 writing about it, Dr. Kent actually named it the
4 salmon leukemia virus.
5 Q I'm talking about Dr. Miller's work. You know
6 that it's called a syndrome? She is the scientist
7 and that's what she's termed it as, correct?
8 MS. MORTON: No, I don't think she is calling it a
9 syndrome. In a lot of her work, like Exhibit
10 613G, she ponders salmon leukemia virus --
11 Q All right.
12 MS. MORTON: -- and she points to it as coming -- as
13 the only known source was the salmon farms.
14 Q I have your evidence, thank you. The next line
15 says:
16 DFO's response? Cut off the researcher's
17 funding.
18
19 You know that to be wrong? That's not what Dr.
20 Miller said, is it?
21 MS. MORTON: No, she did. She said --
22 Q No --
23 MS. MORTON: -- "I don't have any funding to go further
24 on sockeye."
25 Q And you know and you heard her evidence that her
26 staff are at work, being paid. The problem's been
27 identified as a rules-related problem, it's being
28 worked on, and a fix has to be found. You've
29 heard all of that evidence, didn't you?
30 MS. MORTON: I heard her say she no longer had funding
31 to work on sockeye.
32 Q And then you were blind to all of the rest of the
33 evidence I've just said?
34 MS. MORTON: I can only believe what she said. Now,
35 she is going to hopefully go look for parvo in
36 salmon farms --
37 Q Would it be more --
38 MS. MORTON: -- after the aquaculture hearings are
39 over, but what she said on the stand, and I'm sure
40 we can find her testimony, is that she had no
41 further funding to work on sockeye.
42 Q Would it be accurate to say you just don't pay
43 attention to what you don't what to hear?
44 MS. MORTON: I don't think you can hear me. We should
45 pull up her testimony right now and check that
46 out.
47

1 Q Yeah, I'll ask the questions, please. Now, this
2 blog --

3 MS. MORTON: Is that going to stand in this court?

4 MR. TAYLOR: Mr. Commissioner, this blog was done
5 contrary to the rules that are in place for this
6 inquiry, so I'm in your hands as to what to do
7 with it, at this point. I don't want to make an
8 exhibit that which is a violation of the rules of
9 this inquiry. I tend to think it should be an
10 exhibit for identification. I've read in what I
11 need to, and leave it at that.

12 THE COMMISSIONER: What's the next identification
13 number, Mr. Registrar?

14 THE REGISTRAR: GGG.

15 THE COMMISSIONER: Thank you.

16 THE REGISTRAR: Triple G.

17

18 MARKED GGG FOR IDENTIFICATION: Printout of
19 blog by Alexandra Morton, titled, On the
20 Stand at Cohen, dated 09/08/2011

21

22 MR. TAYLOR:

23 Q Now, let's continue with your blogging, if we may,
24 Ms. Morton. Mr. Lunn, may we have the blog that
25 is August 31st, please? You recognize that as
26 your blog of August 31st, Ms. Morton?

27 MS. MORTON: Yes, I do.

28 MR. TAYLOR: May that be the next exhibit, please.
29 Real exhibit.

30 THE REGISTRAR: A real exhibit, okay. 1838 (sic).

31

32 EXHIBIT 1839: Cohen Inquiry Aquaculture
33 Hearings August 31 - Alexandra Morton

34

35 MR. TAYLOR: A numbered exhibit. Thank you.

36 THE REGISTRAR: Sorry, 1839.

37 MR. TAYLOR: Thank you.

38 Q Now, this, Ms. Morton, deals with the evidence
39 that the veterinarians gave on August 31st,
40 doesn't it?

41 MS. MORTON: Yes, that's correct.

42 Q And if we go to page 3, please, this appears to be
43 a cartoon. That's something you put on the blog,
44 is it?

45 MS. MORTON: Yes, that's correct.

46 Q And this is a cartoon of what appears to be the
47 Commissioner speaking to those four witnesses; is

1 that what that is?
2 MS. MORTON: Yes, that's correct.
3 Q And the cartoon is showing flames coming from the
4 pants of the witnesses, correct?
5 MS. MORTON: Yes, that's correct.
6 Q And as we move from the left of the screen to the
7 right, that would be Mr. Swerdfager, Dr. -- I'm
8 going to get it mixed up. Is that Dr. Sheppard or
9 Last (sic), it's one or the other, and the other
10 one next to him is Dr. Sheppard or Last (sic), and
11 then the final one is Dr. Marty; is that right?
12 MS. MORTON: Yes, that's correct, I believe.
13 Q Was Dr. Last one of the witnesses there? In any
14 event, it's the four -- sorry?
15 MR. MARTLAND: Dr. McKenzie.
16 MR. TAYLOR: Dr. McKenzie.
17 MS. MORTON: Oh yes.
18 Q If I said "Last" I meant "McKenzie". So we've got
19 Swerdfager, Sheppard, McKenzie, and Marty, and the
20 cartoon is showing them with pants on fire. And
21 the words that the Commissioner says, in the
22 cartoon that is, pants on fire, what does that
23 mean?
24 MS. MORTON: Well, I'm going to leave that to you. It
25 just --
26 Q Well, you're familiar with the saying --
27 MS. MORTON: My -- the reason --
28 Q -- "Liar, liar, pants on fire"?
29 MS. MORTON: The reason that I put this up is because
30 Dr. Gary Marty is reporting symptoms of a disease
31 that's of enormous significance to this
32 Commission, and --
33 Q Okay, let me ask you this --
34 MS. MORTON: -- yet Dr. Sheppard does not acknowledge
35 that that disease exists.
36 Q Yeah, that's all fine, we've heard that, but let
37 me ask you this: Do you agree with me that that
38 cartoon is disparaging of those witnesses'
39 evidence? Yes?
40 MS. MORTON: I felt it was a representation without
41 saying the words.
42 Q Are you saying they lied?
43 MS. MORTON: How can you look at the symptoms of a
44 disease, have somebody like Gary Marty report
45 those symptoms --
46 Q My -- my --
47 MS. MORTON: -- as being the clinical signs of marine

1 anaemia, which a DFO scientist thinks the majority
2 of Fraser sockeye are being killed and weakened
3 by, and the vets above him, Peter McKenzie of
4 Mainstream, and Dr. Mark Sheppard, simply don't
5 recognize that that disease exists? That is --
6 Q Ms. Morton --
7 MS. MORTON: -- it cannot stand.
8 Q Ms. Morton, as Mr. Kelleher said, this is not - to
9 Ms. Stewart - this is not an opportunity for you
10 to make a speech.
11 MS. MORTON: Well, then --
12 Q And I ask, again --
13 MS. MORTON: -- don't ask me questions --
14 Q -- if you would respect the time limits that I am
15 under and the questions that I am asking, which I
16 would like you to answer, and my question was: Do
17 you agree that that cartoon is disparaging of
18 those witnesses' evidence?
19 MS. MORTON: No. I think that their jobs force them
20 into that position and I feel sorry for them.
21 Q Do you agree with me that it is against the **Code**
22 **of Conduct** for a registered biologist to speak
23 disparagingly of a colleague registered biologist?
24 MS. MORTON: It is, yes.
25 Q And can we equally apply that, then, to you should
26 not be disparaging of other professionals, such as
27 veterinarians?
28 MS. MORTON: Mr. Taylor, in my personal code of
29 conduct, is it when I see --
30 Q No, I'm asking about the biologists' **Code of**
31 **Conduct** --
32 MS. MORTON: -- an ecosystem being destroyed, I will
33 use what tools I can that are fair and legal to
34 try to represent that truth.
35 Q All right. Thank you, I have your evidence.
36 MS. MORTON: And if a cartoon was the only way I could
37 do it, that's what I was going to do.
38 Q Yeah. All right, we'll leave that part of the
39 evidence there. I think you have my questions and
40 I have your points.
41 I want to continue with the September 1st
42 blog, please. Now, you may recall, Ms. Morton,
43 that this is following evidence that was given by
44 what's called Panel 3, which included Kerra
45 Hoyseth and Brian Atagi and, I think it was,
46 Andrew Thompson. Were you here for that evidence
47 last week?

1 MS. MORTON: Yes, I was.

2 Q And you recall Kerra Hoyseth's evidence?

3 MS. MORTON: Yes, I particularly do recall that.

4 Q And you know who she is?

5 MS. MORTON: I hadn't met her until this Commission,
6 but I've corresponded with her by e-mail.

7 Q All right. And in that blog -- in that September
8 1st blog, if you move down, Mr. Lunn, to where you
9 see an e-mail being excerpted. No, it's below
10 that, that I'm interested in. Thank you. I think
11 we're at the right place. In that blog you're
12 referring -- actually, just back up, Mr. Lunn, for
13 a moment, please. You're firstly referring -
14 that's fine - September 24, 2008, e-mail that you
15 can see there on the screen. That's Exhibit 1721,
16 I'm told. And then, if you move down, Mr. Lunn,
17 we come to - yes, right there, that's fine, thank
18 you - there's a reference from Ms. Hoyseth to you,
19 Ms. Morton, December 13, 2010. I'm told that's
20 Exhibit 1722.

21 And you'll see there that you've repeated
22 what Ms. Hoyseth said in that e-mail to you:

23
24 During the three visits we collectively
25 undertook, there were no further bubbles
26 seen, nor any information we could find to
27 explain your observations.

28
29 And that's the e-mail that's Exhibit 1722. And
30 this concerns a report that you'd made about some
31 bubbles, and we've heard some evidence, I think,
32 yesterday about that. And if we keep going, we're
33 going to have to get beyond that word "doing", Mr.
34 Lunn, if we can roll to the next page without
35 losing this page, too. Thank you.

36 And you speak about everyone knows rotting
37 gases -- this is your blog, now. And then you
38 say:

39
40 I suspect Hoyseth's first instinct was to be
41 more truthful, but I think this painfully
42 illustrates DFO's relationship with fish
43 farms. How can I believe anything DFO says
44 about salmon farms after this? Hoyseth did
45 not tell me the truth and I feel badly for
46 her because I suspect this was what was
47 expected of her. How many others in DFO are

1 doing the same thing just to keep their job?
2

3 Now, again, you are accusing, as I read this, Ms.
4 Hoyseth of not telling the truth; do you agree
5 with me?

6 MS. MORTON: Yes, that's correct.

7 Q And why would you make that accusation against
8 someone?

9 MS. MORTON: Because in the series of e-mails, they
10 noted that they went to the place where the member
11 of the community had reported bubbles and they
12 found a pipe full of dead Atlantic salmon. And so
13 that does address my concerns. That was very
14 specific to my concerns.

15 Q All right. But you have no evidence that she was
16 not telling the truth, do you? You just don't
17 agree with what she was finding and/or her
18 interpretation of it? You have a different
19 interpretation?

20 MS. MORTON: Mr. Taylor, a pipe full of rotting salmon,
21 and Ms. Hoyseth, I'm sure, understood that that
22 could easily produce bubbles. But it was my
23 interpretation that she did not want to report
24 that to me, and so she glossed over the finding of
25 that entire mort pipe full of rotting fish.

26 Q Thank you. You've just answered it, because you
27 used the word "interpretation". Now, you say:

28
29 How many others in DFO are doing the same
30 thing to keep their job?
31

32 You have no evidence to support that accusation
33 that people in DFO do things just to keep their
34 job or don't tell the truth just to keep their
35 job, do you?

36 MS. MORTON: I actually do, but I'm not going to reveal
37 all my sources, because they're scared. So this
38 was one example that was documented, and I wanted
39 it to come before this Commission as a symptom of
40 what goes on. It's a very serious situation when
41 you have -- how could you look at a pipe full of
42 fish --

43 Q All right. We don't need to go --

44 MS. MORTON: -- and not think --

45 Q -- back over that.

46 MS. MORTON: -- that addresses someone's concerns about
47 bubbles?

1 Q I'm going to exercise --
2 MS. MORTON: But can you answer that?
3 Q Without meaning to be uncivil, I'm going to try
4 and exercise some fair constraint on your
5 evidence, because I'm under, as we all are, time
6 limitations and I --
7 MS. MORTON: Okay.
8 Q -- have material to cover. Do you believe that
9 DFO officials, and there's many of them who've
10 appeared before this Commission so far, and DFO
11 officials and scientists with whom you have
12 interacted on aquaculture issues, are honest and
13 of integrity?
14 MS. MORTON: I've had some experiences that have made
15 me doubt that.
16 Q On the whole, do you think they are?
17 MS. MORTON: On the whole I think they're uninformed.
18 Q I see. Do you think they're honest?
19 MS. MORTON: On the whole, I think they would be
20 honest, yes.
21 Q and of integrity?
22 MS. MORTON: I think they do put their job first.
23 Q Do you believe that sea lice are generated by
24 farms, then transmitted to wild, and then kill
25 wild stocks in sufficient numbers to have a
26 measurable and significant negative effect on wild
27 sockeye populations?
28 MS. MORTON: Yes.
29 Q So you disagree with the likes of Dr. Korman,
30 Noakes, Connors, Jones, Beamish, Hargreaves,
31 Johnson?
32 MS. MORTON: You're asking me if that is possible and I
33 said, "Yes." If there are enough lice on those
34 fish --
35 Q I see.
36 MS. MORTON: -- it would definitely kill them.
37 Q Thank you. So that's your belief. That's your
38 perspective, is it? Is that right?
39 MS. MORTON: Well, I mean, you put me on this panel as
40 a layman, but you don't recognize that I've done
41 over 20 papers on sea lice.
42 Q Well --
43 MS. MORTON: So I've done a lot of work where I've
44 actually viewed the impact of the lice on pink and
45 chum salmon, but also on sockeye. But I haven't
46 done the experimental work of the sockeye, holding
47 them as I did with the pink and chum.

1 Q All right. Thank you. I believe your
2 participation on this panel is important, but just
3 to be clear, I didn't put you on the panel, the
4 Commission Counsel, of course, did.

5 Do you believe that escapes of Atlantic
6 salmon from fish farms have had or are having a
7 significant negative effect on wild populations?

8 MS. MORTON: I think that they have in the past, but I
9 think that it's less so now.

10 Q Thank you. Ms. Stewart, I'm going to turn to you,
11 if I may. Are you aware that DFO has set about to
12 review the conditions of licence that are
13 currently in place?

14 MS. STEWART: I've been told that, yes.

15 Q And that DFO invites input?

16 MS. STEWART: Yes. They have an interesting way of
17 going about it. Sometimes we're on the recipient
18 list of information, and sometimes we're not.

19 Q Well, Mr. Swerdfager has told you about outreach
20 and wanting to receive input, hasn't he?

21 MS. STEWART: Yes. We've provided plenty of input
22 during the development of the Pacific Salmon
23 Regulations and after they were adopted.

24 Q Thank you. You've anticipated my next question,
25 which is whether you provided input and you've
26 answered, "Yes." Are you and your organization
27 prepared to work collaboratively with DFO and
28 others in a constructive, consultative process for
29 identifying useful and appropriate changes to the
30 licence terms?

31 MS. STEWART: I think that the member groups of CAAR
32 have amply demonstrated our willingness to attempt
33 to engage in a constructive process. I think, to
34 a large degree, it comes down to a question of
35 whether the process that is created by the
36 Department is designed to be constructive.
37 Sometimes there's a tendency for the Department to
38 come in with their minds made up and consultation
39 is more for show than it is for real engagement
40 and input and consideration. So it remains to be
41 seen what the process design is.

42 Q All right. Thank you. I think we've reached an
43 accord or agreement on the concept, and now it's a
44 matter of operationalizing it, and different
45 people might have different thoughts on that, but
46 you agree with the premise that I was putting
47 forward, I hear from your answer, so thank you for

1 that.

2 Ms. Morton, what about you, are you willing
3 to work collaboratively with others towards a
4 process that sees what useful and appropriate
5 amendments should be made or additions made to the
6 conditions of licence?

7 MS. MORTON: If the Fraser sockeye migration route was
8 cleared of salmon farms, I think we would have
9 time to take a breather and work collaboratively,
10 or try. But I've been trying that for 20 years.
11 I've worked with Brent Hargreaves, I've visited
12 with Dick Beamish, to bring him the findings that
13 I found from the pink and chum in the Broughton
14 Archipelago, before he published his reports, to
15 give him a courtesy heads up.

16 I, actually, see the collaborative, as it's
17 called, process as more of a process of delay,
18 because I've engaged in every single government
19 process, I have written scientific papers, and
20 when I see Dr. Miller's work, where she's finding
21 the majority of Fraser sockeye are weakened and
22 dying of a virus that appears to be coming from
23 salmon farms, and then I heard that the salmon
24 farmers don't believe that that virus exists, even
25 though they did 10 years ago, I don't want to work
26 on --

27 Q All right.

28 MS. MORTON: -- collaborating.

29 Q We've heard you on that. In terms of
30 collaboration, I take your evidence to be unless
31 your first condition, which is moving the farms,
32 is met, you won't work collaboratively; is that
33 what you're saying?

34 MS. MORTON: I just --

35 Q Yes or no?

36 MS. MORTON: No.

37 MS. STEWART: I'd just like to add that at the same
38 time that CAAR is willing to attempt to engage in
39 a constructive way with government officials and
40 with industry, we are also, parallel to that,
41 running campaigns in the marketplace, engaging
42 with retailers, and working to try and convince
43 the government that it's time to change practices
44 within the industry to, you know, try and mitigate
45 the damage that's currently underway, while
46 developing a transition strategy to get net cages
47 out of the water. We're seeking support for

1 closed containment pilots. We're working on
2 change, not just modifying regulations for open
3 net cages.
4 Q All right. Ms. Stewart, are you aware of the
5 annual budget assigned to DFO science in the
6 Pacific region?
7 MS. STEWART: No, not --
8 Q Approximately?
9 MS. STEWART: Not currently. I have looked at those
10 figures in the past, but not recently.
11 Q Well, if I told you that it's approximately 40
12 million dollars, is that in the range of what you
13 understand it to be, from what you previously saw?
14 MS. STEWART: It wouldn't surprise me.
15 Q And that's a significant amount of money, isn't
16 it?
17 MS. STEWART: Sure.
18 Q And a lot of that is for salmon?
19 MS. STEWART: Yes.
20 Q Salmon is the one species that gets probably more
21 money than any other fishery, isn't it?
22 MS. STEWART: I think that's a fair assessment. Well,
23 certainly on the west coast, yes. Yes. But mind
24 you, there could be a lot more put into that if
25 there weren't so many subsidies going to the
26 aquaculture industry and the marketing of
27 aquaculture products.
28 Q Well, I suppose that's a matter of balancing and
29 different things that need to be addressed, isn't
30 it?
31 MS. STEWART: It's a question of priorities, and I
32 think I know where most British Columbians would
33 put their priorities.
34 Q May we have Exhibit 1836, please? This is the
35 document that Mr. Leadem put to you. Now, under
36 Perspectives, which is the second heading there,
37 it says:
38
39 • Safeway did eventually respond to Greenpeace
40 questionnaire
41 • Do not plan to change purchasing decisions
42 based on Greenpeace recommendations, however,
43 they feel somewhat anxious about possible
44 repercussions of this decision.
45
46 It appears that Safeway didn't accept the overture
47 that you put to them; is that your understanding?

1 MS. STEWART: We've actually been working quite
2 constructively with Safeway, and last fall, at our
3 request, they wrote a letter to the Prime Minister
4 of Canada, supporting Federal Government
5 investment in closed containment pilot projects
6 and expressing their support for that program and
7 their interest in the availability of said
8 products on the marketplace.

9 Q Okay, good. That's very helpful. Thank you. If
10 we may have Exhibit 1594 now, please? This is the
11 Terms of Licence, Finfish Aquaculture. We should
12 go to the first page first, if we may.

13 Now, Ms. Stewart, you recognize that as the
14 form of licence for finfish aquaculture under the
15 Federal regime, do you?

16 MS. STEWART: Yes, that was a document made public,
17 yes.

18 Q And this is something you've looked at before?

19 MS. STEWART: Yes.

20 Q And Ms. Morton, are you familiar with this, too?

21 MS. MORTON: Yes, I've looked it over.

22 Q All right. And I'm not ignoring Mr. Backman and
23 Ms. Parker, but you can see that my questions are
24 for the others and I'm quite confident that both
25 of you are well familiar with this document, and
26 Ms. Parker in particular spoke to some of it
27 yesterday.

28 I'd like to go, if I may, to section 13,
29 which, depending on how you count the pages, and
30 rather inconveniently, the licence, itself,
31 doesn't seem to have page numbers, at least as
32 it's printed here, but it might be something
33 called page 16. Section 13. You're partway
34 through 13, now, I think.

35 This is Protection of Fish Habitat. You're
36 familiar with this area of the licence, are you,
37 Ms. Stewart?

38 MS. STEWART: Yes. I mean, I don't know the licence
39 off by heart, but I have certainly read all 90-
40 some-odd pages.

41 Q All right. And you're aware that DFO has the
42 power to inspect records on site at the fish
43 farms?

44 MS. STEWART: Yes.

45 Q And they have the ability to compel production of
46 records, in other words, to take a copy, correct?

47 MS. STEWART: Yes.

1 Q And do you know whether they've exercised that
2 power?

3 MS. STEWART: No.

4 Q Do you know, Mr. Backman?

5 MR. BACKMAN: We have been visited by the Fisheries and
6 Oceans inspectors.

7 Q All right. And they've looked at records?

8 MR. BACKMAN: Yes, when they come to the farm they
9 immediately look at the records that are being
10 kept.

11 Q And have they taken some records away, in some
12 cases?

13 MR. BACKMAN: I can't say for certain right now,
14 whether they've taken records away, but we have
15 had visits and we have had records inspected.

16 Q All right. Thank you. And we won't go through
17 them, Ms. Stewart, but there's a whole series of
18 things that fish farms have to keep records on,
19 here, to do with protection of fish habitat?

20 MS. STEWART: Yes, there's self-reporting by the
21 industry, yes.

22 Q All right. And you agree with me that that's all
23 useful information to have both for the industry
24 and for DFO in terms of monitoring and enforcement
25 as to habitat measures?

26 MS. STEWART: Provided that it's accurate.

27 Q Yes, of course, provided that it's accurate. But
28 assuming that, it's useful information, isn't it?

29 MS. STEWART: If you want to assume that. I mean, I'm
30 not necessarily going to assume that in all cases
31 the industry is reporting accurately on what
32 transpires on the farms. I think that there has
33 been incidences where things are perhaps
34 misrepresented or not accurately reported.

35 Q Well, without passing judgment on whether it is or
36 isn't, you're aware, or will you agree with me
37 that DFO has the power to do things to find out if
38 the information is accurate or not? They can
39 inspect, they can take the records, and so forth?

40 MS. STEWART: They can inspect, they can take the
41 records, but it's not always going to be evident
42 if there's been misreporting.

43 Q And more specifically -- well, DFO can look at the
44 actual goings on?

45 MS. STEWART: If a sea lion gets tangled in a net and
46 drowns and then the carcass is disentangled and
47 let go and the farm does not report the accidental

1 death, how is DFO going to have evidence if there
2 was an accidental death?
3 Q All right. Specifically, 13.10(c), which is
4 further down. For the witness, I think we should
5 let her see this. As we're going there, my
6 question is: Do you agree that this provision
7 allows the Department of Fisheries to require
8 habitat compensation where appropriate? It's at
9 the bottom of the -- or the middle of the screen
10 there.
11 MS. STEWART: Yes, I believe in the actual regulation
12 it says that it "may" be required, not that it
13 will be.
14 Q Well, the licence says, they "shall" do it.
15 MS. STEWART: Hold on.
16 Q But whether it's "may" or "shall", it's a power
17 that exists, isn't it?
18 MS. STEWART: It does, yes, the power does exist.
19 Q And you accept that DFO, Mr. Backman, DFO can
20 require compensation re habitat as appropriate?
21 MR. BACKMAN: Yes, that's commonly -- commonly carried
22 out by the Department.
23 Q All right. And these are all steps in s. 13
24 designed to deal with deleterious substance, HADD,
25 and any number of fish habitat issues, aren't
26 they, Ms. Stewart?
27 MS. STEWART: You'd have to show me where the
28 deleterious substances are addressed in this
29 section.
30 Q Well, I'm not -- I don't know if I want to take
31 the time to do that right now, but --
32 MS. STEWART: Well, it's my understanding that there's
33 no regulation in place. I mean, in conversations
34 with DFO they have admitted as much.
35 Q Well --
36 MS. STEWART: You heard Trevor Swerdfager --
37 Q That's fine --
38 MS. STEWART: -- testify that they don't have a
39 regulation.
40 Q Okay. Let's leave deleterious substance out of
41 the equation.
42 MS. STEWART: Well, you raised it.
43 Q Would you agree with me that this is a series of
44 provisions that allow Fisheries to require proper
45 fish habitat protection to occur?
46 MS. STEWART: Well, I think it depends on how you
47 define "proper" fish habitat --

1 Q All right.
2 MS. STEWART: -- protection, but --
3 Q Do you want to add anything to this, Ms. Parker or
4 Mr. Backman?
5 MR. BACKMAN: Well, I would say that for the previous
6 discussion there's a section in here, it is 90
7 pages long, so I can appreciate that it's
8 difficult to remember everything that is in it but
9 there's a section specifically for the recording
10 of chemicals and other substances used on the farm
11 site, and our -- all of our company's operating
12 sites are continuing to report and to record this
13 information.
14 Q All right. Thank you. Ms. Parker?
15 MS. PARKER: And if I could just add on the industry's
16 self-reporting, I think that in these economic
17 times, particularly, but in general, there is a
18 trend towards user-pay management in which
19 industry does do their own monitoring and report,
20 and then regulated resources are then applied to
21 auditing and investigation, and I think that
22 that's appropriate, because then you get a two-
23 tiered monitoring which allows both compliance
24 efforts and also verification of whether or not
25 mitigation measures are actually working. So you
26 have two sets of eyes on it regularly, so you can
27 confirm whether or not things are being done
28 properly and also whether or not your measures are
29 being effective.
30 Q All right.
31 MR. BACKMAN: I'll just quickly mention, too, that
32 marine harvest, for example, has been ISO-14000
33 certified for over 10 years, and the key point of
34 that certification is complying with all
35 regulatory aspects for the industry. That's a
36 third-party audit that occurs every year.
37 Q All right. Ms. Morton, am I correct that you
38 published a paper in 2007 with Professor Krkosek.
39 I mispronounce that, I'm sorry.
40 MS. MORTON: Krkosek.
41 Q Krkosek, thank you. Which I don't have that paper
42 at hand, I think. But do you recall that paper,
43 and was it one where you and the other authors
44 were predicting the extinction of the pink salmon
45 in the Broughton; do you recall that?
46 MS. MORTON: Yes, that's in the *Journal of Science*.
47 Q Thank you. And that's quite an alarming

1 prediction, isn't it?

2 MS. MORTON: Yes. We said, if nothing changed, that
3 the fish would remain on their trajectory towards
4 extinction.

5 Q And that hasn't happened, has it?

6 MS. MORTON: There was enormous change. When that work
7 was done, when I first found sea lice, there was
8 an average of 11 lice per juvenile salmon. But as
9 the salmon farming industry responded to the
10 pressure by CAAR and the various papers, the
11 average number of sea lice has gone down to .3.

12 Q All right.

13 MS. MORTON: And that had a profound effect.

14 Q Now, you're aware that Professor Brooks published
15 two papers to counter that paper; did he?

16 MS. MORTON: Yes, he did.

17 Q And those are exhibits, I think, for the record, I
18 think they are - we don't need to go to them - but
19 I think they are Exhibits 1778 and 1779.

20 Ms. Morton, I want to ask you about some
21 protests that you may have participated in against
22 fish farms, and there's nothing wrong with that,
23 of course. You have participated in protests
24 against fish farms at the farm site, haven't you?

25 MS. MORTON: Yes, I have.

26 Q And you did that in a way that you and others got
27 very close to the actual site and the pens and/or
28 may have gone into the site, itself; is that
29 right?

30 MS. MORTON: No, we never go into the pens.

31 Q I see. And you did that, despite there being some
32 signs that say "no trespassing", quite prominent
33 signs?

34 MS. MORTON: First of all, there were no signs at that
35 farm. Second of all, it's actually illegal to put
36 a "no trespassing" sign on a marine farm that has
37 a licence of occupation. Mainstream tried that
38 for a little while, but they were told to remove
39 those. So it was a temporary situation, because
40 it was unlawful.

41 Q All right. In one of these protests, not
42 yourself, but someone was swimming in the vicinity
43 of the net pens, weren't they?

44 MS. MORTON: Yes, that's correct.

45 Q And you're aware of the concept of biosecurity; is
46 that right?

47 MS. MORTON: I've heard the concept raised several

1 times -- actually, numerous times in these
2 hearings.
3 Q You've heard the concept but you're not familiar
4 with it?
5 MS. MORTON: Well, it's confusing to me how a farm
6 could consider a biosecure situation when the
7 reason that they use the nets is so that millions
8 of gallons of water will pass through the farm
9 from inside to the outside, so --
10 Q No, we're talking about --
11 MS. MORTON: -- the concept is confusing to me.
12 Q Well, all right, and you say that as a registered
13 biologist, do you?
14 MS. MORTON: Yes. Yes.
15 Q All right.
16 MS. STEWART: Well, I would agree that it's inherently
17 contradictory. You can't secure, biologically, an
18 open net pen that relies on tidal flushing and the
19 free flow of water. There's no securing
20 possible --
21 Q Well, Ms. Stewart --
22 MS. STEWART: -- which is why we're advocating for
23 closed contained systems.
24 MR. TAYLOR: Ms. Stewart, are you -- oh, it's 12:30.
25 Do you want me to stop or continue?
26 THE COMMISSIONER: I'd appreciate it, Mr. Taylor, thank
27 you.
28 MR. TAYLOR: Sorry?
29 THE COMMISSIONER: We'll take the lunch break now,
30 please.
31 MR. TAYLOR: All right.
32 THE REGISTRAR: The hearing will now adjourn until 2:00
33 p.m.
34
35 (PROCEEDINGS ADJOURNED FOR NOON RECESS)
36 (PROCEEDINGS RECONVENED)
37
38 THE REGISTRAR: Hearing is now resumed.
39 THE COMMISSIONER: Mr. Martland?
40 MR. MARTLAND: Yes, Mr. Commissioner, our timing is
41 such Mr. Taylor has six minutes remaining. We are
42 on track, but we need to conclude today's hearing
43 at 4:00 and so I'll just remind all counsel I'll
44 be doing hand signals or whatever it takes to
45 carry things on through the day.
46 Mr. Taylor?
47

1 CROSS-EXAMINATION BY MR. TAYLOR, continuing:
2

3 MR. TAYLOR: Before lunch, Mr. Commissioner, I was
4 referring to a blog and Ms. Morton gave some
5 evidence on it and I kept saying September 1st.
6 It's actually September 5th, so that's my mistake.
7 And I also omitted marking it as an exhibit. It's
8 up on the screen. May that be the next exhibit,
9 please?

10 THE REGISTRAR: That document will be marked as 1840.
11

12 EXHIBIT 1840: Blog entitled Unwanted
13 Trespass!!!! Dated September 5, 2011
14

15 MR. TAYLOR: And for the record, there was reference in
16 the evidence this morning, as I understand it,
17 that Ms. Morton was referring to Dr. Miller
18 speaking about salmon leukemia. That might be in
19 reference to an old deck that Dr. Miller had, but
20 that's not her current evidence. I don't need to
21 go further into that. The evidence speaks for
22 itself on the record.

23 Could I have Tab 18, please, of Canada's book
24 please, Mr. Lunn? This is a report on closed
25 containment that was commissioned by the
26 Department of Fisheries and Oceans. It's dated --
27 I'll get it mixed up slightly, but it's September
28 or November of 2010. It's on the next page, Mr.
29 Lunn. September. And that's something, as I say,
30 that was commissioned. It's a feasibility study.
31 I'm not going to ask any questions of it but I'm
32 going to ask that it be marked as an exhibit,
33 please.

34 THE REGISTRAR: 1841.
35

36 EXHIBIT 1841: Feasibility Study of Closed-
37 Containment Option for British Columbia
38 Aquaculture Industry
39

40 MR. TAYLOR:

41 Q I will point out that on the second page, little
42 Roman numeral vii, there's a reference there to
43 economic feasibility, near the top. Mr. Backman,
44 maybe I'll ask you. Are you familiar with the
45 relative cost of closed containment versus open
46 net pens?

47 MR. BACKMAN: Yes.

- 1 Q To set up the facility, that is?
2 MR. BACKMAN: I am.
3 Q And what is it?
4 MR. BACKMAN: It's roughly ten times greater for --
5 well, yeah, about ten times greater. The figures
6 are roughly three million for the open net and
7 about 30 million for a comparable facility using
8 the RAS technology.
9 Q And maybe you could just say what RAS is?
10 MR. BACKMAN: Recirculating Aquaculture System, so it's
11 fully closed. Everything is recirculated.
12 Q Thank you. And Mr. Backman, is it fair to say
13 that the state of affairs in play with regard to
14 closed containment right now is that there are
15 studies that are underway, pilot projects
16 underway, more study and pilots should be done but
17 it's early days and too early to draw conclusions?
18 MR. BACKMAN: Yeah. There's been some work done in
19 this area in B.C. Marine Harvest has been
20 involved with it in the past, floating bags that
21 weren't closed. But moving to fully-closed
22 systems, it's currently under development in terms
23 of full-size harvest growing.
24 Q Ms. Stewart, would you agree that it's still early
25 days in terms of the development of technology and
26 agree further that study pilots should -- study
27 and pilots should continue?
28 MS. STEWART: I would agree that it's early days in the
29 development of the technology for salmon. It has
30 been applied to other species elsewhere. It is in
31 use for salmon in other jurisdictions and I
32 believe that B.C. needs to move forward rapidly on
33 work in this province for salmon.
34 Q So you're saying in short keep going. You might
35 differ with some others in terms of the pace, but
36 keep going is what you say.
37 MS. STEWART: I'd say start going.
38 Q All right.
39 MS. STEWART: I mean, there's a couple of very
40 preliminary pilots underway, but we need to do a
41 lot more.
42 Q All right. Thank you. Next, there's a letter to
43 Ms. Morton from CFIA, Mr. Lunn, I'm interested in,
44 but I regret to say I can't point you to where it
45 is.
46 MR. LUNN: Can you just describe it?
47 MR. TAYLOR: Yes, it's May 20, 2011, hopefully came to

1 you earlier today. Letterhead is Canadian Food
2 Inspection Agency addressed to Ms. Morton. And
3 it's from a Ms. Swan.

4 MR. LUNN: (Indiscernible - away from microphone).

5 MR. TAYLOR: If it's not going to work within my
6 allotted 1.5 minutes, I'll just leave it.

7 Q Ms. Morton, do you recall getting a letter in May
8 from the Canadian Food Inspection Agency?

9 MS. MORTON: I did get one letter from them. I've
10 gotten several emails however. Are you referring
11 to an email?

12 Q No, I'm referring to a letter that thanked you for
13 your report of April 28th and pointed out they
14 will fully consider the information that you
15 provided and will take appropriate steps. I can
16 show you the letter, if you like. Did you receive
17 that letter? Does that refresh your memory?

18 MS. MORTON: I probably did.

19 MR. TAYLOR: Okay. Thank you. We'll sort out where
20 that letter is in the computer later and I'll ask
21 that it be an exhibit at that point. Oh, it's up
22 now. May that be the next exhibit, please?

23 MS. MORTON: Oh, yes, I did receive this, where they
24 requested the third email. That's right.

25 THE REGISTRAR: It will be 1842:

26 MR. TAYLOR: Thank you.

27

28 EXHIBIT 1842: Letter from Carole Swan,
29 Canadian Food Inspection Agency to Alexandra
30 Morton stamp dated May 20, 2011

31

32 MR. TAYLOR:

33 Q And that letter is just what it says in response
34 to the report you made that is the result of some
35 information you got in this inquiry, isn't it?

36 MS. MORTON: Yes.

37 Q Finally, and I've got about 30 seconds probably,
38 if we could go to Exhibit DDD, page -- mine prints
39 a little differently than some of the copies I've
40 seen, so it's page 59 or 60. I spoke to this
41 yesterday when this report came up in the context
42 of whether it would or wouldn't be an exhibit
43 proper. We're in the right place. Thank you.

44 Now, under "Conclusion" in the second
45 paragraph at the end of that paragraph you say:

46

47 What Miller found ran deeply against DFO

1 policy. The sockeye appear to be dying of a
2 cancer-causing virus that originated in
3 salmon farms on the narrowest portion of the
4 Fraser sockeye migration route.
5

6 I'm going to put it to you that that statement
7 that you make there is contrary to Dr. Miller's
8 evidence and ask you to say you agree with me or
9 you don't. I don't need anything more than that.

10 MS. MORTON: I don't agree with you because she said
11 she had no further place to go with salmon
12 leukemia because nobody had done the work to
13 sequence the virus.

14 Q All right. And the evidence, of course, will
15 speak for itself. At the bottom of that page you
16 say:

17
18 Canada has no mechanism to react to the
19 threat of exotic viruses that are travelling
20 in farmed salmon eggs worldwide.
21

22 You know full well that there's quite a rigorous
23 egg importation protocol and regime in place in
24 British Columbia, don't you?

25 MS. MORTON: No, sir, there is not.

26 Q All right.

27 MS. MORTON: The fish health certificate does not have
28 infectious salmon anaemia on it.

29 Q All right. Thank you. I have your evidence on
30 that.

31 And then you say over my next page - I'm in a
32 paragraph that begins:

33
34 Canada has no mechanism...
35

36 The one we were in. Yes. Right there. And
37 you'll see there as you go partway through the
38 paragraph there it says:
39

40 DFO policy is to promote salmon farms. They
41 are being pressured --
42

43 I think that means pressured.
44

45 -- by the salmon farming corporations to do
46 so and field staff seem unable to communicate
47 accurately about salmon farm impacts.

1

2 That's your interpretation of DFO policy I take
3 it, is it?

4 MS. MORTON: That's my personal experience.

5 Q All right. But that doesn't accord with the
6 evidence in this inquiry from people such as Mr.
7 Thomson or Mr. Swartfeger, does it?

8 MS. MORTON: Well, if you would allow my 60-page
9 document to go in as evidence, there is evidence
10 there. I was also a reviewer for Dr. Beamish's
11 paper with the *ICES Journal of Marine Science*. I
12 also viewed Dr. Jones' laboratory experiment on
13 juvenile pink salmon sea lice, so I actually have
14 enormous experience and I'm sorry that we weren't
15 able to talk to that, speak to that.

16 MR. TAYLOR: And at this point my time is up, as well.
17 So I will sit down.

18 MR. MARTLAND: Mr. Commissioner, counsel for the
19 Province with 30 minutes.

20 MR. PROWSE: Yes. Mr. Commissioner, Cliff Prowse for
21 the Province of British Columbia.

22

23 CROSS-EXAMINATION BY MR. PROWSE:

24

25 Q I have a few miscellaneous points that have
26 arisen. My first one, Mr. Backman -- Mr. Lunn,
27 can we have I think it's Exhibit 1838 on the
28 screen? Yes. Mr. Backman, Mr. Leadem ran out of
29 time and you've had your hand up with respect to
30 some evidence that was being given about this
31 particular document; is there something that you
32 wanted to say to address it? I believe it was on
33 different -- it was on processes and substance of
34 certifications.

35 MR. BACKMAN: Yes. Thank you. The point that I wanted
36 to bring up was that the testimony that was
37 brought forward was suggesting that the most
38 important certification schemes were those that
39 are, you know, aligned with the ENGOs working with
40 Monterey Bay Aquarium and that sort of thing and
41 whereas we're aware of these programs, these
42 purchasing standard style of programs, industry is
43 also hard at work on wide-ranging and very
44 comprehensive certification programs that are
45 internationally recognized. I've had an
46 opportunity to mention that the marine harvest is
47 currently certified under the ISO 14000 which is

1 an international standards organization program
2 which has -- its cornerstone is an environmental
3 management system. But beyond that there are --
4 currently there are existing certification systems
5 that are specifically designed for farmed salmon.
6 They cover both the practices that occur on the
7 farms and they cover the environmental impacts.

8 There are a number of these that are in place
9 today and have been in place for some time. A
10 couple are the Certified Quality Salmon program
11 and the Global GAP or Good Aquaculture Practices
12 programs. So these have many years, ten or 15
13 years of operation and they tend to be the
14 foundational piece upon which some of these other
15 certification programs are currently being
16 developed, and I'm thinking of the World Wildlife
17 Fund, salmon aquaculture dialogue and the ASC
18 program that they are putting together and the
19 Global Aquaculture Association Alliance is also
20 putting together another certification. These are
21 focusing almost entirely on the environmental
22 aspects, the impacts of salmon farming, and so
23 there's -- what I'm trying to say, Mr.
24 Commissioner, it's a very busy area. There is a
25 lot of work going on and it's in flux, both of
26 those last two ecolabels that I mentioned are not
27 available at this point in time and so, for
28 example, Marine Harvest is currently pursuing our
29 Global GAP or Global Good Aquaculture Practice
30 certification, which is an internationally
31 recognized certification for salmon farming.

32 MS. STEWART: Just a correction. I want to emphasize
33 that the Monterey Bay program and the Sea Choice
34 program are not certification systems. They are
35 ranking and consumer advisory systems. And CAAR
36 is also participating in the salmon aquaculture
37 dialogue, but many of the certification standards
38 that are out there right now are based on food
39 quality health and safety and are very thin when
40 it comes to environmental standards, which is why
41 it will be interesting to see where the SAD
42 standards go. Marine Harvest and CAAR are both
43 engaged in that and have been since its inception.

44 Q Thank you. Ms. Stewart, I was intrigued this
45 morning with respect to the back and forth, if I
46 can use that expression, with respect to Safeway
47 in California and also with respect to the funding

1 that had been obtained from the Moore Foundation
2 with respect to one proposal that unfortunately
3 has yet to go ahead. I'm going to read you a
4 statement from the Moore Foundation and ask
5 whether you agree with it and it's really to do
6 with money and we've heard from many scientists
7 and many others that -- about things that could be
8 done with money for research and other things and
9 here's the statement [as read]:

10
11 With governments and public institutions
12 around the world struggling with severe
13 funding constraints, the not-for-profit
14 sector is in a position to have unprecedented
15 influence in tackling complex and
16 inordinately challenging but tractable social
17 problems.

18
19 Do you agree with that?

20 MS. STEWART: I think that if philanthropic funding can
21 assist the government in fulfilling its
22 obligations, then that is probably beneficial to
23 society as a whole. I just want to point out that
24 you reference the Moore funding that was available
25 for one specific proposal. That was not the case.
26 Moore committed \$5 million to the development of
27 closed containment in British Columbia and that
28 was not necessarily associated with a Marine
29 Harvest pilot or any other pilot. It was to try
30 and move forward the technology.

31 Q And thank you for that. And the president then
32 says:

33
34 To effect major change will require a
35 combination of unbridled aspiration and
36 creativity, a relentless commitment to
37 execution and a disciplined will to monitor,
38 learn and improve.

39
40 Do you agree with that? And he's obviously
41 speaking from the point of view of the -- his
42 foundation and the people that they fund. Do you
43 agree with that statement?

44 MS. STEWART: Could you read it again?

45 Q
46 To effect major change will require a
47 combination of unbridled aspiration and

1 creativity, a relentless commitment to
2 execution and a disciplined will to monitor,
3 learn and improve.
4

5 MS. STEWART: Sure. It sounds reasonable.

6 Q Thank you. The third I'll call miscellaneous
7 point is when -- for you, Ms. Morton, and it has
8 to do with your undergraduate education. So I
9 concede that it's not an important topic perhaps,
10 but it's one that's piqued curiosity. You have a
11 bachelor's degree in science from 1977?

12 MS. MORTON: Yes, I do.

13 Q And what was the discipline?

14 MS. MORTON: Interdisciplinary.

15 Q And did you do a thesis?

16 MS. MORTON: No, I did not.

17 Q All right. So I'm now going to ask some questions
18 about relative expertise and then I'm going to ask
19 you a few questions about some of your research.
20 So we've -- first of all, you don't have a
21 Master's degree or a Ph.D. or veterinary degree or
22 pathology specialty; is that correct?

23 MS. MORTON: That's correct. I simply have an Honorary
24 Doctorate.

25 Q And you don't have an advanced degree in
26 mathematics or epidemiology?

27 MS. MORTON: No.

28 Q In your c.v. and again this may not be an
29 important point, but I think I'll ask it anyway,
30 it shows - at least the copy that I have - as --
31 it has a discrepancy date. It says 1988,
32 registered professional biologist and then it says
33 2002 certified as a registered professional
34 biologist number 1414. Can you explain the
35 difference in dates there?

36 MS. MORTON: No, I can't. I'd have to -- I'd have to
37 review that. But I am registered professional
38 biologist number 1414.

39 Q All right. And as a registered professional --
40 that was Exhibit 1798 for the record, Mr.
41 Commissioner.

42 As a registered professional biologist,
43 you're under an ethical obligation to undertake
44 only those assignments for which you are
45 qualified?

46 MS. MORTON: I don't have assignments. I just have
47 personal interest.

- 1 Q So as a registered professional biologist, does
2 that mean that you can undertake any assignments,
3 whether they're qualified or not -- whether you
4 are qualified or not?
- 5 MS. MORTON: I'm sorry, but I've forgotten your name.
6 When you do a scientific study, the bar that you
7 pass is whether it's accepted by the journal. And
8 what the journal does when you do a scientific
9 article is they send it out to the people they
10 think are going to oppose you. And if it passes
11 review with the journal, you really need to take
12 this up with the journals who have published me,
13 the *ICES Journal of Marine Science*, the *Journal of*
14 *Science*, the *American Fisheries Journal*
15 *Transactions*. You could go on on this point
16 forever, but that's the bar, just so as you know.
- 17 Q All right. You have published peer-reviewed
18 research, as you've just told us?
- 19 MS. MORTON: Yes, that's correct.
- 20 Q And with respect to the peer review process, isn't
21 the purpose of the journal to review it generally
22 with your -- with peers, rather than finding
23 people that are going to oppose?
- 24 MS. MORTON: Oh, no, quite to the contrary. They want
25 -- they don't want to make the error of publishing
26 something that's wrong or political or for
27 purposes other than the science itself, so for
28 example, Dick Beamish's paper was sent to me. So
29 we -- we publicly held opposing opinions and they
30 sent it to me. So, no, they're looking for a
31 broad opinion.
- 32 Q All right. Ms. Parker, did you have a comment?
- 33 MS. PARKER: I just wanted to -- I will agree with Ms.
34 Morton's last statement, that they're looking --
35 that during peer review, it's about having a broad
36 -- a broad perspective, but I would say that
37 looking for opponents is inconsistent with the
38 academic integrity of peer review.
- 39 Q Did you want to respond to that, Ms. Morton?
- 40 MS. MORTON: No, not really.
- 41 Q You agree that research involves the generation of
42 hypotheses?
- 43 MS. MORTON: It's the testing of hypotheses. So you
44 start with a hypotheses (sic) and then you go out
45 and you try to understand the validity of it as
46 best you can.
- 47 Q And --

1 MS. PARKER: Excuse me. I'm sorry to interrupt, but
2 research begins with a null hypothesis and then
3 you go out and try to disprove it.

4 Q Do you want to respond to that, Ms. Morton?

5 MS. MORTON: No.

6 Q Now, as we've seen in this commission, there may
7 be peer-reviewed responses and peer-reviewed
8 counter-responses?

9 MS. MORTON: Yes, that's correct.

10 Q And as a scientist, you are aware there's a
11 significant difference between hypothesis and
12 proof?

13 MS. MORTON: Yes.

14 Q And you'd agree that peer-reviewed research is
15 generally entitled to more weight than other
16 scientific articles which have not been peer
17 reviewed?

18 MS. MORTON: Yes, that's correct.

19 Q You have been in this courtroom sitting with your
20 counsel for the aquaculture and disease evidence
21 since August 22nd of this year?

22 MS. MORTON: Yes, that's correct.

23 Q And you published with Dr. Larry Dill?

24 MS. MORTON: Yes, I've co-published with him.

25 MR. PROWSE: Now, Mr. Lunn, could we have Exhibit 1540,
26 summary page 34 in the ordinary numbering?

27 MR. LUNN: Exhibit 1540.

28 MR. PROWSE: Thank you.

29 Q So in the end of the first paragraph at Exhibit
30 1540 Dr. Dill attempts to narrow the issue for the
31 commission with respect to the cause of the long-
32 term decline in the -- especially returns in 2009.
33 And he specifically says that there's no evidence
34 to support the following items with respect to
35 those declines, namely lice, benthic and pelagic
36 impacts and escapes and he says that they're --
37 none of them:

38
39 ...are likely to be sufficient, alone or in
40 concert, to cause either the long-term
41 population declines or the especially low
42 returns in 2009.

43

44 Do you agree with that statement?

45 MS. MORTON: I would add to that list pathogens and
46 then lice and pathogens in concert could be a
47 large factor in the declines.

1 Q All right. So you agree with the statement as
2 written but you would add the factor of pathogens?

3 MS. MORTON: Yes. Because lice are such an effective
4 vector and so, yeah, they definitely, in my mind,
5 play a role because they move between the farmed
6 fish and the wild fish.

7 Q All right. Now, until the year 2000 your
8 publications were largely on killer whales?

9 MS. MORTON: Yes, they were. And dolphins.

10 Q And I want to turn to the question of fallowing.
11 Mr. Lunn, could we have Exhibit 1557, please? So
12 this is a paper that you were a co-author of with
13 respect to sea lice dispersion and salmon survival
14 in relation to salmon farm activity in the
15 Broughton Archipelago?

16 MS. MORTON: Yes, that's correct. Enormous amount of
17 work went into this paper.

18 Q Mr. Lunn, if we could have page 155, the second
19 column in the middle. Yes. So this is on the
20 left-hand side of the page in the middle:

21
22 Based on escapement data...

23
24 So this statement says:

25
26 Based on escapement data, there were no
27 significant differences in survival that
28 corresponded to sea-louse abundance and
29 juvenile salmon mortality on the migration
30 route containing active farms relative to
31 unexposed populations north of the Broughton
32 Archipelago.

33
34 MS. MORTON: Yes, that's correct.

35 Q And then on page 149 under the heading "Escapement
36 and Survival Analysis", so the first sentence
37 there:

38
39 Survival among rivers, based on escapement
40 data, was highly variable, and there was no
41 detectable difference in mean survival for
42 the Broughton Archipelago relative to the
43 central Coast. ...only the Embly River
44 clearly corresponds to the fallow migration
45 route. That population experienced very poor
46 survival, with a 90% decline, although it was
47 subject to fallow intervention.

1 So that -- is it correct?

2 MS. MORTON: Yes. And I really appreciate you bringing
3 up this paper, because this speaks to the
4 integrity of my work. I found a finding here that
5 runs contrary to what I generally have found and
6 put out, but you need to understand that when I
7 began studying sea lice, the salmon farms were not
8 treating prophylactically. They were not treating
9 to protect the pink salmon and the chum salmon of
10 the Broughton. And the average number of lice was
11 11. And in the years after that, it was still
12 extremely high. By the time I did this work,
13 which included 87 plankton tows in the dead of
14 winter, 20 minutes for each, I looked at 9000 fish
15 live in the months between March and May, and the
16 average number of lice was .3. And so what the
17 farms had done is they had used a chemical to
18 drive the lice numbers down. If I felt that that
19 chemical was going to work forever on lice and if
20 I felt that was the only problem with salmon
21 farms, then I would be relieved and be able to go
22 back to studying whales.

23 But this paper should bring to this court the
24 fact that when I find something that does not
25 support my basic belief about this industry, I
26 will publish it, as well.

27 Q So in your peer-reviewed publications you're
28 making a -- research indicating that fallowing did
29 not have any effect on wild salmon survival under
30 that --

31 MS. MORTON: Now you are cherry-picking, because the
32 previous paper I did on fallowing, which looked at
33 the years 2003, '02 and '04, I found a different
34 result because at that time the lice were not
35 being controlled by the salmon farming industry
36 and the fallowing, the removal of the fish, not
37 only dropped the number of lice enormously, but
38 Dr. Beamish published on the year class that was
39 treated to the fallow and those pink salmon
40 survived better than in the history ever of pink
41 salmon. So you really just -- you can't latch
42 onto one detail. There was an enormous amount of
43 drugs used to accomplish this result and the First
44 Nations of the Broughton Archipelago for one are
45 not comfortable with that drug being used. So
46 this speaks to the fact that when the salmon farms
47 deal with the issues that are affecting the fish,

1 the fish respond.

2 MR. BACKMAN: I think it's important to bring up a
3 point, if I may, that, you know, Ms. Morton has
4 made several -- several references to the paper
5 with Dr. Beamish here that was done looking at the
6 2004 return of salmon to the archipelago, and from
7 the perspective -- my perspective on this in my
8 speaking with Dr. Beamish was that yes, some
9 wording was added to that document but the thrust
10 of that document is about changes in the regime of
11 the ecosystem of the Broughton Archipelago. And
12 it's consistently misrepresented here that it's
13 all about whether some farms were operating or
14 not. And it's true that Ms. Morton was a peer
15 reviewer. I think it's also true that the peer
16 review process went on a very, very long time and
17 was finally -- at very great length between the
18 two of them before it could be worked out that he
19 would add a few more words to the credit, that
20 there were some farms that were operating, some
21 that weren't. But the focus of his work was on
22 the regime change and the ecosystem change in the
23 Broughton Archipelago.

24 MS. MORTON: Okay. I was not going to discuss this,
25 but this has to brought up now. Dr. Beamish, for
26 a period of months --

27 Q Well, I'm sorry, Dr. Morton --

28 MS. MORTON: -- refused to acknowledge that the
29 farms --

30 MR. PROWSE: Sorry, Mr. Commissioner, I would like
31 to --

32 MS. MORTON: -- on the fallow route were empty.

33 MR. PROWSE: I would like to move. I obtained the --

34 MS. MORTON: And the words that were added were to
35 say --

36 MR. PROWSE: I didn't --

37 MS. MORTON: -- that those farms were empty.

38 MR. PROWSE: I didn't ask this question. I didn't ask
39 for the intervention. I'm not asking for a
40 response. I'd like to move on, Mr. Commissioner.

41 MS. MORTON: I'm sure.

42 MR. PROWSE:

43 Q Now, Ms. Morton -- sorry, do you prefer to be
44 called Dr. Morton?

45 MS. MORTON: Yes, I do.

46 Q Dr. Morton, in addition to doing your scientific
47 research, you also campaign publicly?

- 1 MS. MORTON: After doing ten years of research I began
2 to campaign publicly.
- 3 Q Well, I suggest that your public campaigning has
4 got -- sorry, so starting when are you identifying
5 your campaigning?
- 6 MS. MORTON: Well, it depends how you define public
7 campaigning, 'cause it started with 10,000 letters
8 to DFO and then it went into doing ten years of
9 research on sea lice. There was engaging in the
10 salmon aquaculture dialogue and review and the
11 CRIS study and the special legislative committee,
12 so there's been a lot of participation in public
13 processes, and when my -- when I began to see that
14 the archipelago that I was living in was still
15 suffering from this industry, I figured that the
16 next step was to go to the public and so that --
17 you know, that really got started about two years
18 ago.
- 19 Q As a scientist, when you speak publicly, do you
20 find it necessary to simplify complex issues?
- 21 MS. MORTON: Yes, I do.
- 22 Q And as a campaigner it's important to you to get
23 your message out and to communicate effectively?
- 24 MS. MORTON: As someone who's trying to protect her
25 home, yes, I do find it's helpful to communicate
26 clearly.
- 27 Q So you not only simplify, but you present your
28 message in the most effective way?
- 29 MS. MORTON: I like to communicate things as clearly as
30 possible.
- 31 Q When you present as a campaigner and not as a
32 biologist, you do not have to confine yourself to
33 your expertise?
- 34 MS. MORTON: The biologist is underlying everything.
35 If the government had reacted to my concerns, I
36 would never be talking publicly.
- 37 Q And, in fact, campaigners have great freedom in
38 what they say to media?
- 39 MS. MORTON: There's nobody restraining my freedom. I'm
40 not paid by anybody, so I try to communicate as
41 clearly and as fairly as I see possible.
- 42 Q And if you have to choose between clear and fair,
43 what choice do you make?
- 44 MS. MORTON: I choose fair as often as possible, yes.
- 45 Q And effective media statements encourage simple,
46 startling messages?
- 47 MS. MORTON: Sorry? Could you repeat that?

- 1 Q Effective media statements encourage simple,
2 startling messages?
- 3 MS. MORTON: The issue is startling and clear is
4 required to communicate it.
- 5 Q So media messages do not involve the peer review
6 processes that restrict what scientists say in
7 peer-reviewed literature?
- 8 MS. MORTON: The media messages that I use are based on
9 my experience and peer-reviewed science.
- 10 Q And --
- 11 MS. STEWART: I believe DFO's communication plan
12 indicated that they were trying to find the most
13 effective, clear and informative and impressive
14 way of communicating, as well. It's standard
15 across the board, I believe.
- 16 Q And you do not have to follow governmental
17 restrictions preventing you from talking to the
18 media about commission matters?
- 19 MS. MORTON: No, I'm -- I can say whatever I feel is
20 right to say.
- 21 Q And since you're not a veterinarian you do not
22 have to be restricted by obligations of
23 veterinarian ethics.
- 24 MS. MORTON: I am not a veterinarian.
- 25 Q And you feel free to attack those who disagree
26 with you?
- 27 MS. MORTON: I feel free to defend the home that I love
28 and want to see thrive.
- 29 Q And Dr. Miller, whom you are supporting and want
30 to see her research supported?
- 31 MS. MORTON: I do want to see her research supported,
32 yes.
- 33 Q And she's gone through several different
34 hypotheses with respect to her genomic research?
- 35 MS. MORTON: She's gone through an evolution of
36 hypotheses, yes.
- 37 Q And that's not unusual in science?
- 38 MS. MORTON: No, that's not unusual.
- 39 Q And so in -- and your peer-reviewed research is in
40 sea lice, as we were discussing earlier?
- 41 MS. MORTON: Sea lice, whales, escaped Atlantic salmon.
42 I'm also working on creeping antibiotic resistance
43 coming out from the salmon farms and I've worked
44 on predation in whales.
- 45 Q All right. A question for Ms. Stewart. Do you
46 believe the 2010 Fraser River sockeye salmon run
47 was healthy?

1 MS. STEWART: I'm not a scientist. I would hesitate to
2 speculate on that. I'd leave it to those who are
3 qualified.

4 Q Do you -- does the fact that there was a record
5 run in 2010 give you any hope or optimism for the
6 future of the Fraser River sockeye salmon?

7 MS. STEWART: Yes and no. I believe that sockeye are
8 exposed to a host of pressures from shifting ocean
9 regimes and climate change right down to land-
10 based sources of point pollution, and that it's
11 incumbent upon us as British Columbians, as
12 Canadians, to do what is within our power to
13 enable their survival as best we can. I wish our
14 government federally was doing more to address the
15 issue of climate change, but certainly it is a
16 global issue that is going to take a global effort
17 to combat. It is within our jurisdictional power,
18 however, to address immediate threats such as bad
19 logging practices, land-based sources of pollution
20 and the impacts of open net cage salmon farms, and
21 we should be doing that.

22 Q Do you believe that First Nations, commercial and
23 sports fishing can coexist with healthy wild
24 salmon populations?

25 MS. STEWART: If they're properly managed, yes.

26 Q If so, why not aquaculture, which despite
27 intensive study cannot be associated with any
28 population effect on wild salmon for the past five
29 years?

30 MS. STEWART: Well, I'm not sure that it can't be. And
31 again, I'm not a scientist. I can't speak to
32 areas outside my expertise. But I have travelled
33 to Norway, I've travelled to Chile and other
34 salmon farming jurisdictions, the East Coast of
35 Canada. I have spoken to a lot of scientists who
36 believe that the weight of evidence is very clear
37 and just because the Canadian Department of
38 Fisheries and Oceans refuses to accept it, doesn't
39 mean it doesn't exist.

40 Q And finally, with respect to questions of disease,
41 it's fair to say, Dr. Morton, that you have not
42 published peer-reviewed publications on the topic
43 of disease?

44 MS. MORTON: I have not -- well, sea lice are a
45 disease. They're actually classified as a
46 pathogen and they cause a disease. But what is
47 astonishing me here is we have evidence that the

1 majority of Fraser sockeye have been weakened and
2 killed by something that a DFO scientist thinks is
3 a virus and simply because it hasn't been
4 published, why don't we explore that? I mean, it
5 seems we have an enormous lead here. The pattern
6 fits so well. That is really what the subject of
7 this inquiry and line of questioning should be.
8 Q And I submit to you that you would agree that with
9 respect to the genomic research, you would rely on
10 Dr. Miller?
11 MS. MORTON: Absolutely, yes.
12 Q And with respect to the questions of virology, Dr.
13 Miller and Dr. Garver would be good people to rely
14 on?
15 MS. MORTON: I'm not going to rely on them. I will
16 read their research. That's why they publish in
17 journals. That's why there's a method of
18 publishing, so that a person like me can read it
19 and put things together and get an idea of the
20 full story. I feel honestly that DFO scientists
21 are under constraints that aren't allowing them to
22 explore things as fully as they want. And that's
23 one of the recommendations that I would make to
24 this commission, is to free these people so that
25 we could actually hear what they -- allow them to
26 fully develop their thoughts.
27 Q But you would agree that on topics of science, on
28 virology and genomics that the commissioner in the
29 end will have to rely on the expertise before him
30 that he is best relied on peer-reviewed scientific
31 publications?
32 MS. MORTON: He's not going to be able to rely on peer-
33 reviewed science when it comes to parvo virus. I
34 mean, she's in the middle of that test right now.
35 She's trying to figure out what it is. The fish
36 farm industry has prevented or somebody has
37 prevented her from testing fish. That protocol
38 won't be discussed till after this aquaculture
39 hearing, so Justice Cohen, you're not going to be
40 able to rely on peer-review science for a lot of
41 this.
42 Q And with respect to -- would you not agree with
43 Dr. Korman that on the disease topics, that the
44 commissioner should rely on those with expertise
45 in disease?
46 MS. MORTON: I would be very careful. Because, you
47 know, Kyle Garver is saying the IHN epidemics were

1 not seen -- that the farm epidemics, there was no
2 response seen in the sockeye. But when I look at
3 his graph of what years IHN was in the Nadina
4 sockeye, it matches up very, very closely with the
5 St-Hilaire paper about IHN in the early '90s and
6 the Sonja Saksida paper in the early 2000s.

7 Q So I suggest to you that -- would you not agree
8 that at the end of the day, the commissioner
9 should place more reliance on your peer-reviewed
10 scientific publications than on your statements
11 going beyond your field of expertise?

12 MS. MORTON: No, I disagree. He's faced with an
13 enormous task of weighing this evidence out and I
14 don't envy the job.

15 MR. PROWSE: Me neither. Thank you very much.

16 MR. MARTLAND: Mr. Commissioner, next I have counsel
17 for Areas D and B with 15 minutes.

18 MS. PACEY: Thank you, Mr. Commissioner. Good
19 afternoon, Panel. Katrina Pacey, P-a-c-e-y,
20 initial K., counsel for Area D Gillnet Association
21 and the Area B Seiners.

22 Mr. Lunn, if I could ask you to please pull
23 up Exhibit 1561. It should be the Salmon
24 Aquaculture Dialogue Working Group Report. Thank
25 you. And if I could get you to scroll through to
26 page 41, please, and you'll see Table 6 there.

27
28 CROSS-EXAMINATION BY MS. PACEY:

29
30 Q Mr. Backman, I'm going to direct my questions to
31 you, so if I could ask you to have a look at Table
32 6, please, and I'll take you a minute to -- give
33 you a minute just to read through.

34 MR. BACKMAN: Okay.

35 Q Could you tell me if this accords with your
36 understanding of the range of methods used for
37 disease control on specifically, of course, on
38 your farms?

39 MR. BACKMAN: It does represent the range of controls,
40 and this document was for international purposes
41 so it's generalized for international, but yes, it
42 does represent the range of controls.

43 Q Okay. So I'm going to take you through it and ask
44 you some questions on each level of intervention
45 and starting with mass slaughter, which is at the
46 top of the table. This is, of course, where --
47 involving the mass slaughter of an entire pen of

1 salmon; you'd agree with that?

2 MR. BACKMAN: Correct.

3 Q And would you agree that that's the method of last
4 resort?

5 MR. BACKMAN: Generally, yes.

6 Q Yeah. And in terms of your experience and your
7 time working within the industry, do you agree
8 with me if I said that this really has only --
9 this intervention has only been used once and that
10 was in relation to the IHN outbreak a decade or so
11 ago?

12 MR. BACKMAN: No, I would disagree. It happens more
13 frequently than that. It has occurred both times
14 in -- with the IHN, both in the '90s and in the
15 thousands, there's been examples of farms entirely
16 removed. It's also occurred at hatcheries when
17 there's been a situation with a disease that's
18 cropped up in a hatchery, so that those animals
19 have been removed. So it does happen
20 occasionally, not terribly frequently.

21 Q And it occurs in situations where you have a very
22 serious outbreak of disease; is that correct?

23 MR. BACKMAN: That's correct.

24 Q And would you agree with me if I said that when
25 this intervention is used, because of the degree
26 of the outbreak, it's likely that disease will
27 have already spread beyond the farm?

28 MR. BACKMAN: The -- there will be a number of diseased
29 animals in the cages. The likelihood of the cage
30 of animals surviving is fairly low, so the
31 potential for pathogens to have exited the cage is
32 always there, yes.

33 Q So would you agree with me then that this is a
34 reactive measure, as opposed to anything -- or a
35 preventative measure?

36 MR. BACKMAN: Well, at this point it's reactive because
37 if you're going to go through the entire list,
38 we're going to see that the majority of the
39 actions, the vast majority of the actions, are in
40 the bottom half of the list, whereas preventative
41 actions taken, and that's why the majority of the
42 fish in the cages are quite healthy and the
43 frequency of this having to occur is very, very
44 rare.

45 Q Okay. We'll move our way down the list and talk
46 about the bottom five, which I understand are the
47 most frequently used. But moving to the next line

1 is test and slaughter. Would you agree with me
2 that the notion of testing and slaughtering is
3 challenging because really, it's going to be very
4 difficult to test an entire pen worth of fish to
5 know which fish are actually carrying pathogens
6 and which are not?

7 MR. BACKMAN: You don't have to test the entire group
8 of -- the entire pen of fish. This level would
9 occur at a point in time when there's other
10 indicators besides laboratory testing or
11 histopathological testing. This would occur at a
12 point in time when there's a lot of on-the-farm
13 level information about fish that are not behaving
14 well, they're not eating any longer, they're not
15 -- their behaviour of swimming is not what it
16 should be. Anybody who's worked with fish for
17 more than a year or so will understand when fish
18 are compromised, and so this would be the -- the
19 testing would be confirming what is going on with
20 the fish, but it wouldn't be -- the other elements
21 would be available to the fish technician and the
22 fish health professional.

23 Q So the slaughter of fish would relate to those
24 which are demonstrating that they're compromised;
25 is that correct?

26 MR. BACKMAN: It would -- it would relate to the pen or
27 the farm, depending at which -- at what level the
28 decision is made.

29 Q Would you agree with me that it's possible that
30 there would be fish within the pen or on the farm
31 that are carrying the pathogen that are not yet
32 demonstrating that they're compromised, not yet
33 showings symptoms and therefore not a target for
34 the slaughter or killing of those fish?

35 MR. BACKMAN: Well, there would be a portion that
36 wouldn't show symptoms of a disease. I think the
37 veterinarian panel mentioned that a lot of the
38 testing that they do on a routine basis may
39 actually show existence of a pathogen, but there's
40 no expression of disease within the fish or at the
41 farm site, so there are those animals, as well.

42 Q And fish in those circumstance would be in a
43 position where they may be transmitting that
44 pathogen or disease; is that correct?

45 MR. BACKMAN: Well, if it's a mass slaughter, all the
46 animals in the pen or in the farm would be
47 removed. It wouldn't -- you don't just go through

1 and try and remove the animals which appear to be
2 affected. A mass slaughter is simply that, mass
3 removal.

4 Q Perhaps I'm not understanding but the second line
5 I understood to be that just those fish that are
6 testing positive are the ones that are killed or
7 destroyed. So specifically referring to that
8 second line.

9 MR. BACKMAN: The second line refers to that part of
10 the process where you've moved from the
11 observation of a problem and you're actually doing
12 the tests that is elucidating the concern that
13 leads to the slaughter. So it's determining how
14 widespread the issue is within the cage and within
15 the farm.

16 Q And I'm going to suggest to you that in terms of
17 being able to identify which fish are actually
18 carrying the pathogen, that the same problem would
19 arise in the next intervention, or the next method
20 for disease control, which is quarantine or
21 isolation, that you may encounter a situation
22 where you're attempting to quarantine or isolate,
23 but in fact it's very difficult to tell which fish
24 are carrying the pathogen and which are not,
25 because they may not all be demonstrating that
26 they're compromised or showing symptoms.

27 MR. BACKMAN: Well, I'd say that what occurs is, you
28 know, if you've identified the existence of the
29 pathogen on the farm and you're undergoing a
30 treatment on the farm because the fish may well
31 respond to antibiotic treatment and they may no
32 longer be suffering from the disease, it's
33 appropriate at that point in time to have
34 quarantine or isolation, depending on the
35 particular pathogen that you're working with.

36 Q And do you agree with the table where it says that
37 this is only available in certain contexts:

38
39 Open netpen systems or closed pens that do
40 not have capacity to treat water are not
41 conducive to this intervention.
42

43 MR. BACKMAN: You want to jump in?

44 Q Yes, Ms. Parker?

45 MS. PARKER: I'm sorry. I think there's a little bit
46 of confusion over test and slaughter, because I'm
47 looking at the text and it says that only the fish

1 that test positive are killed and destroyed, and
2 that's not the practice in British Columbia. In
3 British Columbia the practice is that if you test
4 a representative sample of fish, whether it's a
5 tank or a pen, and if you find a pathogen that
6 can't be treated that should result in the culling
7 of those animals, then the entire cohort is
8 culled. So I think -- and when I look at the
9 text, I think that there's a sort of confusion
10 with the idea of lethal sampling, which is
11 obviously there are some tests that can only be
12 done by killing the fish. So the practice in
13 British Columbia is if you have that kind of
14 result and that's the action that has to be taken.
15 It's not just the fish that you think are sick;
16 you cull the cohort.

17 Q And just so I understand your evidence, Ms.
18 Parker, are you indicating that there's a
19 threshold that is reached or is it a threshold in
20 terms of numbers within the pen or is it specific
21 to the virus or both?

22 MS. PARKER: It would be a combination of what you're
23 saying, so it depends on the -- it depends on the
24 pathogen that's found. For example, certain
25 pathogens would require immediate culling. It
26 could be ordered by the Canadian Food Inspection
27 Agency, it could be ordered by the DFO, it could
28 be ordered by the company vet. Those are the
29 sorts of actions that are inviolate. The company
30 can't -- the company management can't override
31 that kind of order for destruction. And the same
32 with quarantine, if you see signs but you have not
33 yet, for example, received a definitive diagnosis,
34 you may quarantine the site, restrict travel to
35 and from. You can also do that in case of
36 environmental stressors for the fish to reduce
37 activity, to prevent a disease outbreak while
38 you're discovering the appropriate treatment.

39 Q Thank you, Ms. Parker. And I'll ask you the same
40 question I asked Mr. Backman, which is whether or
41 not at that stage it's very likely that a pathogen
42 has already been transmitted from the net pen to
43 the wild stocks.

44 MS. PARKER: As the diseases that are experienced in
45 salmon farming in British Columbia are endemic, in
46 fact, the likelihood is that the disease pathogen
47 came from the wild and the control is to prevent

1 amplification.

2 Q And if the control is to prevent amplification,
3 would you agree with me that at the point at which
4 it's -- the farm is alerted and aware that this is
5 taking place, that it's very likely that it has
6 already been transmitted back to the wild?

7 MS. PARKER: I wouldn't actually say that, because I
8 would say that farmed fish are observed more
9 regularly and more routinely than you might see --
10 than you would within our wild stock period. So
11 the fish are observed daily and some of the signs
12 are as simple as going off feed and farms would be
13 able to quickly know whether that was due to
14 environmental condition like low DO or harmful
15 algae. And so it's a fairly rapid response.

16 MR. BACKMAN: Perhaps I could add to that -- oh, I
17 mentioned that the pathogen or the viral particle
18 could pass through the nets, if that -- before
19 that point in time. What I was getting at there
20 though was that as we heard from the veterinarian
21 panel, the presence of a virus doesn't indicate a
22 disease. There's an interplay between the actual
23 presence of a virus, the receptivity of the fish
24 and that can lead to a disease. It may -- or it
25 may not. There are literally billions of viruses
26 in the ocean at any given time. Some are harmful.
27 Some are not. And fish are constantly dealing
28 with this challenge of viruses. So when -- when
29 those endemic viruses, whether they're from a
30 salmon farm at that particular point in time or
31 whether they're from other wild fish, it doesn't
32 necessarily indicate there's immediately going to
33 be a disease and then a die-off of an animal.

34 Q Yes, please?

35 MS. STEWART: I just wanted to respond to Mia in terms
36 of the rapid response by the farms, because we
37 encountered this on the issue of treating with
38 SLICE and this is one of the steps that we were
39 able to negotiate with Marine Harvest in terms of
40 proactive treatment. But the standard has been
41 that when the farms reach the level of three
42 motile lice, it's at that point that they obtain a
43 prescription from a vet and order the medicated
44 feed. The medication has to be milled into the
45 feed and then shipped to the farm. And often
46 these farms are in quite remote locations.

47 So in the case of the Marine Harvest farms in

1 the Broughton, what we're seeing is when the lice
2 start trending towards the three motile level,
3 it's at that point that they will order the feed
4 in order to try and basically nip the infestation
5 in the bud before it gets too high. In other
6 locations on the coast where Marine Harvest, to
7 their credit, is actually reporting lice levels,
8 we see that the feed is ordered when the three
9 motile level is reached and by the time the
10 medicated feed is actually administered to the
11 fish, the levels of lice can escalate quite
12 quickly.

13 So I would question how rapid the response is
14 if the disease -- if a disease is being treated
15 with medicated feed, as well.

16 Q And --

17 MR. BACKMAN: If I can point out, this example on sea
18 lice, it was mentioned by the veterinarian
19 community that the sea lice on Atlantic salmon are
20 being treated before they're showing any level of
21 harm to the Atlantic salmon themselves. So it's a
22 little different than disease, where I mentioned
23 before the vets would already have seen animals
24 that were compromised on the site. They would
25 stop swimming. So there would be a lot of
26 information that they would have at their disposal
27 that would speed up that process of getting the
28 medication to the animals that was required.

29 Q Thank you. So I just have two more questions I'm
30 going to ask and I think I'm out of time. The
31 first is just to confirm, and I will ask the
32 panellists to agree if they do, in fact, agree
33 with me that the measures that are on this board
34 are reactive measures, they're not ones which are
35 preventive in terms of stopping disease from being
36 transmitted from farms outward?

37 MS. MORTON: I would say they don't work. When the IHN
38 epidemic hit the Broughton Archipelago in 2001
39 they culled the first farm in Birdwood, but it
40 already spread to Sir Edmund and there were
41 eyeballs and pieces of guts flowing out of that
42 farm into the herring of Kingcome Inlet and then
43 the farm jumped to the Birdwood farm, which they
44 never culled at all. And I don't think they can
45 treat for IHN. So I don't think it works.

46 MR. BACKMAN: I think it's important to point out that
47 the majority of these from mass vaccination on

1 down are proactive. They're part of the fish
2 health management that goes on. The fact that all
3 of the fish now in B.C. are receiving -- all of
4 the Atlantic salmon are receiving a vaccination
5 for IHN demonstrates the kind of adaptive change
6 also, adaptive management is going on in response
7 to these kinds of endemic viruses that are already
8 here in British Columbia.

9 MS. STEWART: Which is a cost saving that could be
10 accounted for in closed containment, because the
11 operators of closed containment farms are using
12 generally pure water sources and don't have to
13 vaccinate their fish, and it's a significant cost
14 to the operator.

15 MS. PARKER: Respectfully, I will disagree with both
16 points. In fact, surveillance is a proactive --
17 or an active frontline response. So is
18 environmental management, so is mass vaccination.
19 And quarantine is also considered a proactive
20 response.

21 MS. PACEY: And that's my time. Thank you.

22 MR. MARTLAND: Thank you. Mr. Commissioner, I have
23 next counsel for the First Nations Coalition with
24 15 minutes.

25 MS. GAERTNER: Thank you, Mr. Commissioner. Brenda
26 Gaertner for the First Nations Coalition. I
27 regret that I have to start with some opening
28 comments directly to you, Mr. Commissioner, about
29 where we are in this inquiry but that's my
30 instructions.

31 As you just heard, I've been given 15 minutes
32 on this perspectives panel. At the beginning of
33 this topic of this small part of the large complex
34 hearing, I raised with you concerns about Policy
35 and Practice Report and how First Nations and
36 First Nations Fisheries Council's efforts on
37 aquaculture were not included in the Policy and
38 Practice Report. And I did my best last week to
39 get to you some of the basic historical facts and
40 I played catch-up most of the week in terms of
41 time and topic.

42 And then secondly, I raised in a letter to
43 Brock Martland after receiving the Policy and
44 Practice Report and obtaining an indication of the
45 topics, that there would be very tight time
46 allocations and there would be unlikely -- there
47 would likely be insufficient time for the First

1 Nations Coalition to do their work.

2 And the third issue, which is the issue that
3 was so pressing for my client at the end of the
4 day yesterday in the hearing was that here we have
5 a perspectives panel on management, risks and
6 finfish aquaculture and there is not a First
7 Nations representative here to speak from their
8 perspective. It was offensive and I want to let
9 you know that it was offensive to hear members of
10 the panel asserting that they understood First
11 Nations issues and that they could explain those
12 to you. It's not appropriate in this inquiry or
13 otherwise for anyone other than First Nations
14 representatives to be providing to you their
15 perspectives on these issues.

16 I'm not here for any other dialogue except
17 with you, Mr. Commissioner, on this matter and
18 rest assured on that. We spent the evening last
19 night considering our options. We are proceeding
20 with this panel. We're going to proceed with our
21 15 minutes. We're going to do our best as we can,
22 but it is difficult. It is extremely difficult to
23 operate under this situation and so we needed to
24 let you know that and to let you know that there
25 has to be room at the table for First Nations on
26 these issues. And this is an example where the
27 conflict might just be too much for people. There
28 may not be a single issue or a single perspective
29 for First Nations but that does not mean that they
30 are not part of this table and they need to be.
31 And they need to be heard and you need to hear it
32 from them directly.

33 I'm here. I'm doing my best as their legal
34 counsel, but I will not be through this panel
35 educating you on the perspective of First Nations.
36 I am going to ask questions only of industry in
37 these questions. Those are my instructions. I'm
38 hoping that we can have some dialogue here on
39 that. And I'll proceed as best I can.

40 And then I was asked to tell this story
41 because it's a story that's inspired my work for a
42 very long time and it's a story from an elder in
43 the Stl'atl'imx territory and she said unless we
44 stop fighting about these matters and start
45 listening to the fish, this salmon will never
46 return. And we must make our efforts in that way
47 and so I am going to make my efforts in that way

1 today. I am not encouraging a fight with any of
2 you. I am not intending to insult any of you. I
3 regret that this is the first time that I'll have
4 an opportunity to speak to you directly, Mr.
5 Backman. I hope there will be other opportunities
6 and we'll do our best in these 15 minutes.

7 THE COMMISSIONER: Thank you, Ms. Gaertner.

8

9 CROSS-EXAMINATION BY MS. GAERTNER:

10

11 Q Could I have PPR1 page 161 and at the same time
12 can I have Exhibit H for identification?

13

 Mr. Backman, I'm going to try to do a couple
14 of things preliminary in nature and then we're
15 going to talk about how industry, the Crown and
16 First Nations might be able to move forward in
17 this rather difficult time.

18

MR. LUNN: I'm sorry, did you say document H?

19

MS. GAERTNER: I did. And then I want PPR1.

20

Q And I'd like to go to page 161 -- sorry, paragraph
21 161 of PPR1 which is page 55. Mr. Backman, I'm
22 not going to ask you for a legal opinion on
23 anything.

24

MR. BACKMAN: Good.

25

Q I'm going to -- I appreciate those are the jobs of
26 mine and other lawyers in this room, but this PPR
27 was an outline of the duty to consult that's
28 already established in law. It was the work of
29 the commission in putting forward the
30 uncontroversial issues and left -- they left it to
31 us as participants to raise the more controversial
32 issues. But this is the work that is pretty
33 straightforward.

34

 And I want to take you to paragraph 161 and
35 then I'm going to take you to paragraph 160. And
36 paragraph 161 frames when the duty to consult
37 arises and the duty arises when the Crown has
38 knowledge, either real or constructive, of the
39 potential existence of the aboriginal right or
40 title and contemplates conduct that might
41 adversely affect it.

42

 Now, given the context of these hearings and
43 I know you've been paying active attention to
44 what's going on in these hearings. We've heard a
45 lot about needing to find the smoking gun or not
46 finding a smoking gun and needing to find direct
47 causation or correlation or all those things, and

1 you'll agree with me that "might adversely affect
2 it" is a slightly different test than all of
3 those, isn't it?

4 MR. BACKMAN: Okay. Mm-hmm.

5 Q Yes, you will agree --

6 MR. BACKMAN: Yes.

7 Q -- with me on that? And so let's stay with that
8 test, shall we, as we continue our conversations
9 and see how we can work forward together on that
10 test. And then you'll see in paragraph 160 the
11 commission describes some of the challenges
12 associated with the duty to consult, in particular
13 that stems from the honour of the Crown and that
14 the Crown alone remains legally responsible for
15 its actions and interactions with third parties
16 that affect aboriginal interests. But it goes to
17 the last line:

18
19 Third parties, such as businesses or
20 nongovernmental agencies, may also choose to
21 consult with First Nations, but they will not
22 be held to a constitutional duty to do so.
23

24 Now, you'll agree with me that in British Columbia
25 the relationship between First Nations, the Crown
26 and business is a complex relationship. It's not
27 a straightforward relationship; will you agree
28 with me on that?

29 MR. BACKMAN: I would agree with you.

30 Q And you'll agree with me there are significant
31 challenges associated with business when certainty
32 are associated with First Nations rights is not
33 clear when you want to proceed in their
34 territories or potentially do things that may
35 impact their rights? Certainty --

36 MR. BACKMAN: Yes.

37 Q And it costs you business, doesn't it?

38 MR. BACKMAN: That is correct.

39 Q Yeah. And so as a company in British Columbia are
40 you interested and willing to work with First
41 Nations and the Crown to see what we can do to
42 bring certainty around these issues?

43 MR. BACKMAN: Yes, we're willing to do that and I think
44 some of the testimony that I brought forward
45 yesterday demonstrates the actions and the success
46 in that regard.

47 Q All right. We're going to go to some of those

1 things yesterday and then we're going to go
2 forward. Can I go to paragraph 31 of Exhibit H, I
3 think it is? I can't read my own handwriting. Is
4 that my -- the submission of the First Nations
5 Coalition?

6 Now this is our written submissions that were
7 part of the discussion on the application of s. 35
8 rights in the context of this inquiry, in the
9 context of the complexities associated with
10 fisheries matters. And you'll see at paragraph 31
11 of that:

12
13 First Nations of the Fraser watershed and
14 marine areas --

15
16 And you'll agree that there's a lot of First
17 Nations of the Fraser River watershed and the
18 marine areas, yes?

19 MR. BACKMAN: Yes.

20 Q

21 -- assert as part of their rights --

22
23 That list and that list includes the
24 responsibility to protect, conserve and sustain
25 the fishery. You'll see that and you agree that
26 that's not something new. You haven't learned
27 that for the first time today, have you? You know
28 that First Nations assert that responsibility to
29 protect, conserve and sustain the fisheries for
30 this and future generations?

31 MR. BACKMAN: I'm aware of that, yes.

32 Q

33 Great. Okay. Thank you. Now, I do want to take
34 you first, because I want to give you an
35 opportunity right from the get-go, 'cause I want
36 to make sure we start this conversation and
37 continue with it long past my 15 minutes on the
38 right footing. And so Exhibit 1366 is the paper
39 that you -- that -- I don't think it was put into
40 evidence yesterday, but you spoke of it. It's the
41 paper that was prepared by Dr. Tom Watson,
42 Questions and Answers on Salmon Aquaculture in
43 British Columbia. Remember that paper, you spoke
44 of it yesterday?

44 MR. BACKMAN: It was referred to yesterday, yes.

45 Q

46 And if we go to page 11, I believe it is, Section
47 11, double 11, we see the -- what is the
relationship between finfish aquaculture and First

1 Nations in British Columbia. And perhaps
2 actually, sorry, can I go to page 7 of this
3 document first? I want to remind Mr. Commissioner
4 of the purpose of this document. The purpose of
5 the document is to assist people outside of the
6 industry and those involved in the Cohen
7 Commission of Inquiry in developing a better
8 understanding of salmon farming in B.C. That was
9 the purpose that this paper was commissioned; is
10 that correct?

11 MR. BACKMAN: Yes.

12 Q And that's what your hope with this document is?

13 MR. BACKMAN: Okay. Yes.

14 Q Now I'm going to take you to that section on page
15 11 of 11. And I just need to ask you this broad
16 question and then I'll go into the details if I
17 have the time. The commissioner has heard that in
18 2006 when the B.C. First Nation Action Plan was
19 developed and has seen it - and that's Exhibit
20 1189 - that progress needed to be made on three
21 levels: government to government; between First
22 Nations intertribally; and with third parties.
23 And that -- and then you heard about resolutions
24 from the Union of B.C. Indian Chiefs, the summit
25 and the AFN after the Morton decision on the need
26 to engage in deep consultation with respect to
27 many issues, including siting. And then there are
28 numerous reports and I am going to take you to a
29 few of them if I have time, that the First Nations
30 Fisheries Council has done.

31 You're familiar with the First Nations
32 Fisheries Council? Could you tell me why, when I
33 read this page 11, that there was nothing about
34 all of that work in your description of the
35 relationship between finfish aquaculture in B.C.
36 and First Nations in British Columbia and that
37 what you chose to select was one quote that talks
38 about differing competing stances on aquaculture
39 department and then the success story. You are
40 absolutely aware as an industry that First Nations
41 expect deep and substantive consultation on the
42 impact of your farms on their rights; is that
43 correct?

44 MR. BACKMAN: That's correct. Our --

45 Q So why isn't it here in this report? Why was that
46 not here? You wanted a balanced opinion --

47 MR. BACKMAN: Yes.

1 Q -- I need to give you that opportunity, but I'm
2 struggling.

3 MR. BACKMAN: Sure. The focus of this document was to
4 bring forward the relationships and the
5 communications and the consultation that has been
6 engaged with by the companies in British Columbia
7 within the territories with First Nations within
8 the territories where they're operating, which is
9 the primary place where we interact with the First
10 Nations communities on the coast of British
11 Columbia.

12 I think what you're referring to, and I, with
13 due respect to the Aboriginal Fisheries Commission
14 working at a different level and generally working
15 with the responsibilities and reflecting the
16 aspects of the governments of British Columbia and
17 Canada in the more broad sense. So at this point
18 in time, you know, we have not had a great deal of
19 interaction at that level.

20 Q So are you prepared to acknowledge that finfish
21 aquaculture has the potential to infringe the s.
22 35 rights of all First Nations along the migratory
23 route of the Fraser River sockeye salmon, the
24 potential to infringe the exercise of their
25 rights?

26 MR. BACKMAN: Not --

27 Q Can we go -- can we get past that gate, Mr.
28 Backman?

29 MR. BACKMAN: I'm not an expert on the issues of
30 aboriginal rights as they relate to First Nations
31 communities up the coast, up the Fraser River. I
32 think what you're asking is if the stocks of
33 salmon that are moving back and forth, of which
34 there is a right over can be infringed by our
35 operations, so in that case there's -- I'd have to
36 agree that there's an area there that has to be
37 looked at.

38 Q There's a potential to infringe those First
39 Nations who exercise rights to the Fraser River
40 sockeye by the farms, correct? You're nodding.
41 Okay. Let's move on then.

42 MR. BLAIR: Alan Blair for the B.C. Salmon Farmers. I
43 think although my friend indicated she wasn't
44 seeking legal opinion, that is a classic legal
45 question and really beyond the scope of Mr.
46 Backman, who's not a lawyer.

47 MS. GAERTNER: It's an application to the facts of this

1 commission. I'm asking him whether his fish farms
2 have the potential, not whether they cause,
3 whether they have the potential.
4 MR. BLAIR: You started talking --
5 MS. GAERTNER: And he's acknowledge that, and let's
6 just move on.
7 MR. BLAIR: You started talking about s. 35, potential
8 of infringement, that seems like a legal question.
9 I've registered my objection.
10 MS. GAERTNER: All right.
11 Q Well, let's move on. Would you agree that having
12 a protocol, a written protocol between industry,
13 First Nations and the federal government as to how
14 to do necessary research, ask the questions,
15 assess the risks and apply those risks to
16 management decisions would be a useful next step
17 to creating certainty for your industry and for
18 First Nations in this province?
19 MR. BACKMAN: I think that would be a useful first step
20 to bring some certainty to this area, yeah.
21 Q Thank you. And would you be prepared to fund the
22 necessary studies that First Nations need in order
23 to understand from their own perspective the
24 implications of fish farms to the exercise of
25 their rights --
26 MR. BACKMAN: I think --
27 Q -- so they don't - sorry, let me just finish - so
28 they don't have to rely on the duelling scientists
29 that we've seen and heard? Let's get a study done
30 that they can rely on.
31 MR. BACKMAN: I think the model to this point has been
32 collaborative funding by the agencies involved and
33 this is a key -- this is a key area that would
34 involve senior levels of government. I think that
35 we would, as a company, be willing to participate
36 in --
37 Q So you're willing to participate and assist the
38 federal government in ensuring that those studies
39 are paid for and executed?
40 MR. BACKMAN: Well, we're willing to participate in
41 moving forward this agenda that would move us into
42 a place where we have better understanding around
43 these protocols.
44 Q Are you prepared to experimentally remove farms
45 along the Fraser River sockeye migratory route
46 while these studies are underway, if that's a
47 necessary way of assessing the impact of the

1 farms?

2 MR. BACKMAN: I think that's -- what we've said to this
3 point is that the farms are meeting the
4 requirements of the existing conditions of
5 licence, they're meeting the requirements as we
6 understand them today. I'm not aware that that
7 would be a new requirement for us to move into a
8 group understanding around --

9 Q So I've heard you right that that would have to be
10 a term of the licence before you were prepared to
11 do that?

12 MR. BACKMAN: I'm saying that it would have to be
13 reflected in that term, yes.

14 Q Are you prepared to accept one-year renewals as
15 distinct from longer-term licences until these
16 issues are resolved?

17 MR. BACKMAN: We're currently operating under --

18 Q Are you prepared to continue to operate under one-
19 year renewals until these matters are more
20 appropriately resolved to the satisfaction of the
21 Crown, First Nations and industry?

22 MR. BACKMAN: I think that we're looking for multiple-
23 year --

24 Q Are you prepared to wait? Are you prepared to
25 wait and have one-year renewals until this
26 outstanding issue as it relates to the siting of
27 these farms?

28 MR. BACKMAN: I think we're willing to enter into an
29 agreement that works for all parties in order to
30 work out this particular issue with the First
31 Nation groups and if that means adjusting the
32 length of tenures and if some of them are going to
33 be at one year, we would recognize that.

34 Q I understand my time is up but I'm going to ask
35 one final short question. Are you prepared to
36 collaboratively develop a management board that
37 would include First Nations as decision-makers,
38 government and industry as -- in order to manage
39 aquaculture and to meet the First Nations'
40 interests? Are you prepared to sit at a
41 management board that includes First Nations and
42 government as the decision-makers and that you
43 participate to advise us of your concerns and
44 interests?

45 MR. BACKMAN: I think it's appropriate that industry
46 would be participating at a --

47 Q To advise us of your concerns and interests?

1 MR. BACKMAN: Correct.

2 MS. GAERTNER: Those are my questions, Mr.
3 Commissioner. I have not finished in any kind of
4 way the kinds of questions that I could usefully
5 have done with this panel.

6 MR. MARTLAND: Mr. Commissioner, I'll just update you
7 with respect to the timing of our day. I have two
8 remaining participants with -- each with a 15-
9 minute allocation. We don't have the ability to
10 sit past 4:00 to my understanding and so that puts
11 us in a position where we're tight, although I
12 haven't had requests for re-examination. We don't
13 expect any for our part. So I think we can do it.
14 I'm at your disposal as to whether we perhaps take
15 a shorter break or not or whatever you'd prefer to
16 do in terms of our sequence. The next on the list
17 is Ms. Robertson, 15 minutes. But I'm at your
18 disposal as to our next step.

19 THE COMMISSIONER: Yes. Thank you, Mr. Martland.
20 We'll take a ten-minute break and then whatever
21 time is remaining can be divided between the two
22 remaining participants.

23 MR. MARTLAND: Thank you.

24 THE REGISTRAR: Hearing will now recess for ten
25 minutes.

26
27 (PROCEEDINGS ADJOURNED FOR AFTERNOON RECESS)
28 (PROCEEDINGS RECONVENED)

29
30 THE REGISTRAR: The hearing is now resumed.

31 MS. ROBERTSON: Mr. Commissioner, Krista Robertson for
32 the Musgamagw Tsawataineuk Tribal Council.

33 Mr. Lunn, if you could please pull up MTTC
34 document number 1, and the document is entitled
35 "Technologies for Viable Salmon Aquaculture", and
36 "Examination of Land-Based Closed Containment
37 Aquaculture."

38
39 CROSS-EXAMINATION BY MS. ROBERTSON:

40
41 Q Ms. Stewart, can you identify this document?

42 MS. STEWART: Yes, I've read this report by Andrew
43 Wright. It was done for the Save Our Salmon
44 organization, sorry.

45 Q For the Save Our Salmon Marine Conservation
46 Foundation?

47 MS. STEWART: That's correct, yes.

1 MS. ROBERTSON: Okay. And, for the record, Mr.
2 Commissioner, this foundation is described at page
3 114 of the PPR.

4 Q If we could please go to page 4, and if we could
5 look at that second-to-last paragraph there.

6
7 The report concludes that land-based closed
8 containment is technically and economically
9 feasible. Moreover, the design presented if
10 refined would allow for substantial
11 reductions in both capital and operating
12 expenses.

13
14 So I was going to mark this as an exhibit. My
15 friend, Mr. Blair, has advised me over the break
16 that he would object to that on the basis of short
17 notice, so I'm just, to avoid taking time on that
18 issue now, I'll just ask to mark it for
19 identification, please.

20 THE REGISTRAR: It'll be marked as HHH, triple H.

21
22 MARKED HHH FOR IDENTIFICATION: Document
23 titled "Technologies for Viable Salmon
24 Aquaculture" by Andrew Wright
25

26 MS. ROBERTSON: And I've raised this document because
27 the issue closed containment has come up on this
28 panel a fair bit, and I think it's important to
29 have sort of as full a record as possible.

30 Q So, moving on, I have some questions around the
31 First Nations' relationship to aquaculture. Mr.
32 Backman, yesterday you were asked to give some
33 examples about what you would characterize as a
34 positive and beneficial relationship between First
35 Nations and the salmon farming industry, and you
36 did that. I just want to acknowledge the comments
37 of my friend, Ms. Gaertner, that we are very
38 disadvantaged in terms of this panel because we
39 don't have First Nations representation on it.

40 I will note for the record, one of my
41 clients, Chief Robert Mountain, did give evidence
42 on the aboriginal perspectives panel, and he did
43 touched on, somewhat, my client's views on salmon
44 farming in their territory. But, for the time
45 being, I'll have to work with what we have on this
46 panel.

47 So, to be fair, Mr. Backman, would you agree

1 there are a number of First Nations groups who are
2 opposed to salmon farming in their territory?
3 Have you...?

4 MR. BACKMAN: I think that's a fair representation.

5 Q And is that because they don't see their concerns
6 being addressed?

7 MR. BACKMAN: It varies from group to group. When
8 we're able to sit down and speak, I think it's
9 primarily that they have concerns about potential
10 impacts on their resources, they're of importance
11 to them, and their traditional practices within
12 the area.

13 MS. ROBERTSON: If we could pull up Exhibit 1649? This
14 has already been identified. It's a summary of a
15 meeting - and this is early days of DFO taking
16 over aquaculture - of DFO representatives and you
17 can see from the attendee list there, a fairly
18 diverse group of First Nations' representatives.
19 If we could please go to the first page of that
20 document? So if we could just highlight the third
21 bullet there. Thank you.

22 Q So we have there, "Questions/Comments/Concerns",
23 so these were the first comments that came out in
24 this meeting. The first one is:

- 25
- 26 • Protection of wild fish stocks should be
 - 27 DFO's first priority - First Nations rely on
 - 28 annual salmon returns for food, social and
 - 29 ceremonial purposes.
- 30

31 The first question there is:

32

33 How will DFO protect wild fish?

34

35 Now, I realize, Mr. Backman, you're not DFO and
36 you weren't present at this meeting, but you do
37 engage in consultation with First Nations in your
38 capacity as a representative from Marine Harvest;
39 is that correct?

40 MR. BACKMAN: Yes, that's correct.

41 Q And would you agree that these are, again and
42 again, most often the primary concerns that First
43 Nations bring to the table when you consult with
44 them?

45 MR. BACKMAN: Yeah, I just mentioned that, that
46 fisheries-related issues and resources, important
47 resources are what they bring to the table quite

1 frequently, yeah.

2 Q Okay. And if you could speak a little bit more
3 about the Kitasoo First Nation? You talked about
4 them yesterday. I note there, there's a bullet
5 there, in the meeting notes. It says:

6
7 How many First Nations are in partnerships
8 with fish farm companies?

9
10 DFO says:

11
12 Kitasoo.

13
14 So just one. Now, Kitasoo have quite a different
15 relationship with Marine Harvest than other First
16 Nations; is that right?

17 MR. BACKMAN: Yes, but before I mention that, it's not
18 correct. There are, at this point in time, about
19 14 different relationships, positive supported
20 relationships between individual First Nations and
21 salmon-farming companies in British Columbia.

22 To speak specifically to the Klemtu
23 relationship, it is the longest standing of those.
24 It's in its eleventh year now, and it involves
25 both the protocol agreement with the First Nation
26 which captures their interests and concerns around
27 the monitoring of their resources to ensure that
28 there's no damage, no impacts that are
29 irreversible or problematic for their ongoing
30 enjoyment of the area.

31 But the other component to that is that they
32 have employed the operation of the salmon farm to
33 ensure full operating of their processing plant
34 located in the Kitasoo village.

35 Q So would you describe it as a joint venture?
36 Would it be that nature of a partnership?

37 MR. BACKMAN: It comes close to a joint venture nature,
38 that's correct. They own the plant there. They
39 own the tenures, they're in their names. We raise
40 the fish on those tenures and we put the fish
41 through the processing plant that's on their
42 property, or on their village.

43 Q So would you say that part of the success in that
44 relationship is the Kitasoo have particular
45 decision-making rights as owners of the company,
46 as owners of the tenure? For example, if Marine
47 Harvest or DFO was proposing to put more farms in

1 the territory, they would have potentially veto on
2 that decision; is that correct?
3 MR. BACKMAN: It's correct that the tenures are in
4 their name, that's right, and they have the
5 ability to choose who operates on those tenures.
6 Additional tenures that we've been successful in
7 getting in the Klemtu area over the last 10 or 15
8 years have also gotten into their names (sic).
9 Other groups that we have relationships with
10 are also pursuing that same model, that's correct.
11 Q So you have relationships with 14 other groups,
12 you said, but that's the only group that you have
13 that level of relationship with; is that correct?
14 MR. BACKMAN: That's correct.
15 Q Thank you. Ms. Parker, I'd like to turn to you
16 now, please, and look a little bit in more detail
17 at a document Mr. Blair put to you yesterday.
18 MS. ROBERTSON: Mr. Lunn, could you pull up Exhibit
19 1803, please? This document is called - well,
20 it's coming up - it's called "Protection,
21 Restoration and Enhancement of Salmon Habitat
22 Focus Area Report" and it references Norway.
23 Q Now, you identified this document yesterday, but
24 you didn't identify an author or a date. It's not
25 a criticism of you or your counsel at all. We're
26 all racing through this evidence here, but I think
27 it is important that we can contextualize this a
28 little bit further and look into it a little bit
29 more. Would you be able to give it an author or a
30 date?
31 MS. PARKER: No, it came from the web.
32 Q All right. So Mr. Blair took you to the bottom --
33 MS. ROBERTSON: It's pdf page 7, Mr. Lunn.
34 Q -- of the page there, so at 2.1.3 you highlighted
35 this paragraph and then we went quickly over it.
36 That paragraph basically, would you agree,
37 summarizes the process of identifying national
38 salmon rivers and national salmon fjords?
39 MS. PARKER: Yes.
40 Q Okay. And then we very quickly kind of flashed up
41 the map on the next page, if we could go to that,
42 and you looked at that.
43 MS. PARKER: Actually, I think the map went up in
44 error. We didn't really speak to the map.
45 Q Okay. Yeah, there wasn't much said about the map,
46 but I'm just going to -- what I'm going to say
47 about the map - and it goes to your comments after

1 - on the left side of the map there are the names
2 of the salmon rivers that have been identified,
3 and on the right-hand side of the map are the
4 names of the salmon fjords that have been
5 identified by the government as these national
6 salmon rivers and fjords.

7 So my recollection is you went on to talk
8 about who you were impressed with in the Norwegian
9 system, and then you went on to say that in B.C.
10 we in fact do better than Norway does because of
11 our siting criteria prohibiting farms from being
12 one distance within a salmon stream. Is that what
13 you said?

14 MS. PARKER: Our application of the precautionary
15 principle is better, yes.

16 Q Right, and you spoke quite a bit about the
17 precautionary principle in that context. Now, I
18 read this document in its entirety now, and I saw
19 three references to salmon farms. I note that you
20 did say this was more primarily about other
21 initiatives, hydroelectric development, et cetera.

22 But if we go to page 7, again, please, I
23 bring this up because earlier we'd heard evidence
24 about the international context and at 2.1.2
25 there, the last sentence there, it says quite
26 specifically:

27
28 In the national salmon fjords no additional
29 salmon aquaculture plants will be established
30 and existing installations will be subject to
31 more stringent standards for preventing
32 escapes and controlling sea lice and other
33 diseases.

34
35 And then it says:

36
37 The salmon stocks included will also be
38 prioritized for other measures aimed at
39 strengthening the wild salmon.

40
41 So we have no further farms in these areas, more
42 stringent controls. I realize we can't get into
43 comparing controls relative to B.C. and Norway.
44 Then we have salmon stocks having enhanced
45 measures of protection. So you'd agree that
46 that's what that says?

47 MS. PARKER: Yeah, what the report says is that they

1 look at I think it's - off the top of my head -
2 seven different risks to the fjords, starting with
3 acidification and I think they have habitat
4 restoration is above that, and then I think -- I
5 want to say fifth is salmon farming.

6 Q Right. They do identify salmon farms as being a
7 risk and that's why they've dealt with it.

8 MS. ROBERTSON: So if we could go to page 9, Mr. Lunn,
9 of the report, please.

10 Q If we look at the table there, the status of
11 protection of Atlantic salmon in point 3, it
12 specifically says:

13
14 Remove salmon farms from three National
15 Salmon Fjords.
16

17 And it names those fjords. It's not a criticism
18 at all of you; I bring you that because we're
19 racing through these documents and we can
20 sometimes leave an impression, a different
21 impression.

22 We're going back to this one-kilometre siting
23 criteria and your comments that B.C. is kind of
24 ahead, in a way, with Norway because of that, but,
25 I mean, I'm trying to understand how you can say
26 that a one-kilometre criteria -- or one-kilometre
27 distance, which I think you basically said
28 yourself is kind of an arbitrary distance, is
29 preferable to this kind of area management. Could
30 you explain how you came to that conclusion?

31 MS. PARKER: I didn't say a one-kilometre setback was
32 preferable to area-based management. In fact I
33 think I said in earlier testimony that I thought
34 that IMAP process would help set geographical
35 management so that we would have area-based
36 management. I in fact support the concept of
37 area-based management.

38 I think one of the things to notice is, in
39 the Trondheim Fjord system, part of the reason the
40 Norwegian government is looking at removing salmon
41 farms from there is the farms are very rarely
42 operated due to poor environmental conditions, and
43 it's part of a long-term research program.

44 Q But you did specifically bring up the one-
45 kilometre distance, did you not?

46 MS. PARKER: I still think the one-kilometre distance
47 for -- this is on a large scale. It's fjordal,

1 and it doesn't actually reflect the benefit of
2 things like ephemeral coho reproductive habitat
3 'cause they're only focusing on major, or what you
4 might call keystone rivers, and we protect more
5 than that at a much finer scale.

6 Q Okay. So in terms of the one-kilometre siting
7 criteria, can we agree that there are no fish
8 farms within one kilometre of the Fraser River?

9 MS. PARKER: Yes, we can agree.

10 Q We can all agree with that. But we're here,
11 regardless. We've been here for three weeks
12 discussing all the potential risks and issues and
13 uncertainties around salmon farming. You did talk
14 about the precautionary principle. Wouldn't you
15 agree -- and this has been canvassed this morning
16 already, but I think it's such an important point.
17 Wouldn't you agree that -- I'm going to put it to
18 you that the use of the precautionary principle in
19 light of what we've heard about disease risks,
20 that we should look at what is the furthest
21 distance that pathogens can travel in the water,
22 taking into account sea lice and currents, et
23 cetera, and not site salmon farms within the
24 distance of what we know to be the Fraser River
25 salmon migration route. Would you agree with
26 that?

27 MS. PARKER: No, I wouldn't agree with that. I don't
28 think that that's -- that's a one-solution answer
29 to an issue, and the precautionary principle
30 specifically says you should use a suite of
31 management measures. If you look at the Hammell
32 report for the salmon aquaculture dialogues, he
33 actually holds British Columbia up as a good
34 example because we also put fish health protection
35 measures in place.

36 MS. ROBERTSON: My time is up, but I'll also say that
37 we do have on record an audit of an external
38 individual, Mr. Gareth Porter, who has quite a
39 different view of the B.C. criteria in relation to
40 other countries. So I'll have to leave it there.
41 Thanks.

42 MR. MARTLAND: Mr. Commissioner, counsel for the
43 Heiltsuk Tribal Council with 15 minutes.

44 MR. RALSTON: Benjamin Ralston for Heiltsuk Tribal
45 Counsel, and with me today is my co-counsel, Lisa
46 Fong.

47

1 CROSS-EXAMINATION BY MR. RALSTON:
2

3 Q Okay. I would like to begin by expressing
4 Heiltsuk Tribal Council's support and adoption of
5 the First Nation Coalition statements regarding
6 the lack of a First Nation voice on today's panel,
7 as well as the lack of time allotted to this
8 topic. Heiltsuk Tribal Council echoes their
9 disappointment.

10 I'll start off with questions for Mr.
11 Backman.

12 MR. RALSTON: Mr. Lunn, could you bring up the document
13 marked for identification as EEE?

14 Q So, Mr. Backman, you testified yesterday that you
15 read this report?

16 MR. BACKMAN: Correct.

17 Q And, just for clarity, you're not the author of
18 this report, are you?

19 MR. BACKMAN: No.

20 Q Okay. Furthermore, you have not reviewed the
21 underlying data on which the author of this report
22 relies?

23 MR. BACKMAN: I have not.

24 MR. RALSTON: Mr. Lunn, could you bring up page 4 of
25 this document, and if you could just zoom in on
26 paragraph 3.1.

27 Q Okay. In reviewing paragraph 3.1 on this page,
28 Mr. Backman, you would have seen by the list 28
29 First Nations, all of which have commercial salmon
30 hatcheries and/or net-pen salmon farms within
31 their territories. Would you agree that not all
32 of the listed First Nations have consented to the
33 presence of these operations within their
34 territories?

35 MR. BACKMAN: Some of these groups are in opposition to
36 net-pen salmon farming, yes.

37 Q Okay. To the best of your knowledge, could you
38 list for us which of these First Nations are
39 opposed to net-pen salmon farming in their
40 territories?

41 MR. BACKMAN: To the best of my knowledge, I would
42 start in the centre column. I think the
43 Gwawaineuk band, the Namgis band. I would -- oh,
44 in the first column also the Kwicksutaineuk-ah-
45 kwaw-ah-mish band. So there's those. In the last
46 column, the Tsawataineuk and, I believe, the
47 Heiltsuk for sure, and I believe the Klahoose is

1 also at this point in time in opposition to salmon
2 farms.

3 Q Okay. Thank you for that. I'd like to start with
4 the Heiltsuk which would be the last nation on
5 this list. You've testified that you're familiar
6 with the net-pen salmon farms that operate in
7 partnership between Marine Harvest and the
8 Kitasoo; is that right?

9 MR. BACKMAN: Yes.

10 Q Okay. Are you aware of concerns that the Heiltsuk
11 had expressed in relation to the licensing of
12 salmon farms within their traditional territory?

13 MR. BACKMAN: I am aware.

14 Q Okay. Are you aware of the commercial salmon
15 hatchery in the town of Ocean Falls within
16 Heiltsuk traditional territory?

17 MR. BACKMAN: I'm aware, yes.

18 Q Are you aware of the lawsuit brought by the
19 Heiltsuk seeking to quash the water and occupation
20 licences for this fish hatchery?

21 MR. BACKMAN: I am aware that there's been action taken
22 in the past, yes.

23 Q Okay. So you would know that Heiltsuk Nation has
24 a zero tolerance position towards the net-pen
25 farming of salmon in their territory?

26 MR. BACKMAN: And our most recent visits to the chief
27 and council a couple of years back, they did
28 reflect that.

29 Q Okay. And so you would also be aware that the
30 Heiltsuk Nation's concerns with net-pen salmon
31 farms come from their perspective that the
32 potential risks these pose to wild salmon stocks
33 make them undesirable, correct?

34 MR. BACKMAN: Yes.

35 Q Okay. Thank you. I also want to deal with the
36 Kwicksutaineuk, the fifth nation on this list.
37 You're also aware of the litigation being pursued
38 by the Kwicksutaineuk over concerns with Atlantic
39 salmon farming in their territory?

40 MR. BACKMAN: I am aware of their actions at this point
41 in time, yes.

42 Q Okay. All right. That's great. Thank you.

43 MR. RALSTON: Mr. Lunn, could you pull up page 9 of
44 this document?

45 Q This report concludes by saying that salmon
46 aquaculture has benefited First Nations in a
47 variety of ways including socially and culturally,

1 and in terms of prosperity, community self-esteem
2 and health.

3 Now, given the objections of Heiltsuk Nation
4 as well as the other nations that you listed,
5 would you agree -- or, sorry, would you disagree
6 with this report, that Heiltsuk and the other
7 nations that oppose net-pen salmon farming in
8 their territory have benefited, for example,
9 socially and culturally, or in terms of community
10 esteem from this industry?

11 MR. BACKMAN: I would disagree that they haven't
12 benefited because there are individuals from
13 almost all of those First Nations that I just
14 mentioned on the list previously who are actually
15 employed with some of the salmon farming
16 companies. The chiefs and councils, on the other
17 hand, are in opposition politically at this point
18 in time. We hope that that can be changed in the
19 future, but individually there's people that are
20 benefiting.

21 Q As a community, you'd say that they've benefited
22 socially and culturally, then?

23 MR. BACKMAN: There are community benefits when the
24 individuals are benefiting.

25 Q Okay. Perhaps I can turn to Ms. Stewart for a
26 moment. You said that you were familiar with the
27 Kitasoo situation; is that correct?

28 MS. STEWART: Yes, I've spent quite a bit of time in
29 Klemtu before the farms went in and during the
30 process of Kitasoo making the decision. I
31 certainly can't speak on behalf of the Kitasoo in
32 any way, shape or form. I can only give my
33 opinions on what I saw transpire.

34 Q Of course. Are you aware of any dissidence that's
35 taken place between the Kitasoo and some of their
36 neighbouring nations due to their work with Marine
37 Harvest on salmon farming?

38 MS. STEWART: I am aware. I've also spent time in
39 Bella Bella and have been made aware of
40 overlapping territorial claim issues and concerns
41 around impacts within Heiltsuk territory from the
42 Kitasoo farms.

43 Q Mm-hmm. Would you agree, then, with Mr. Backman's
44 evidence that Heiltsuk, for example, as a nation
45 that opposes net-pen farming in their traditional
46 territory, has benefited somehow socially and
47 culturally from the aquaculture industry?

1 MS. STEWART: That's a very tough one. It's getting
2 into areas beyond my expertise. Does benefit to
3 an individual within a community constitute
4 benefit to the community as a whole, socially and
5 culturally? I would venture to opine that it does
6 not. I see a community as a whole, not as just
7 the individuals within it, and what benefits one
8 necessarily does not benefit all.

9 Q Okay. Maybe I can turn briefly to Ms. Morton as
10 well. Could you tell me, are you aware of any
11 circumstances where involvement of First Nations
12 in the aquaculture industry - sorry, with
13 particular respect to net-pen salmon farming - has
14 led to divisions between First Nations?

15 MS. MORTON: It's really tough to speak of this with
16 the chiefs in the room, and hopefully they're all
17 right with me talking about this. But, yes,
18 there's divisions within the community. There was
19 a very recent event. I would say there's very
20 strong feelings in the Broughton Archipelago
21 against this industry.

22 Q Okay. Well, I'll leave that at that, and I'll
23 just turn back to Mr. Backman for a moment.

24 So earlier this week we heard evidence from
25 the witnesses, Dr. Jones and Dr. Saksida. I asked
26 Dr. Jones to give a list of potentially relevant
27 salmon farm fish health data that a First Nation
28 should have access to in order to assess the risk
29 of having salmon farms in their territory. Now,
30 Dr. Jones listed information on production data,
31 the number of fish stocked, the time of stocking,
32 the treatment histories, the lice counts, the
33 species of lice, the stages of development of the
34 fish and the mortalities, with particular respect
35 to the mortalities from the fresh silver category.

36 When I asked the panel if anyone would add or
37 subtract from this list, Dr. Saksida stated that
38 she also thinks it's important that environmental
39 data is also accessible.

40 Now, Mr. Backman, would you agree that it's
41 important for this information to be shared with
42 First Nations so that they can assess for
43 themselves the risk of having that penned salmon
44 farming in their traditional territories?

45 MR. BACKMAN: That suite of information and more is
46 shared with our First Nations, which we have
47 protocol agreements with right now, as much as

1 they're interested or willing to look at, and as
2 frequently as they're interested to look at it, so
3 that's already occurring is what I'm trying to
4 say.

5 I think that through the new conditions of
6 licence and the DFO deciding to place all this --
7 a lot of this information - maybe less than what
8 we share as a company - but a lot of this
9 information on their website, some of what you've
10 mentioned is already going to be achieved. If
11 individual First Nations want to learn more, I
12 think they just need to approach the companies
13 that they're either in partnership with, or
14 they're having dialogue with and --

15 Q Okay. So stepping --

16 MR. BACKMAN: -- seek that.

17 Q -- out of the circumstances of a partnership, I'm
18 talking about during a process of consultation,
19 which you have done some work in the past. Would
20 you agree that this is the type of information --
21 or, actually, sorry, would you adopt this list of
22 information as being useful information to share
23 with First Nations through a consultation process.

24 MR. BACKMAN: I think information demonstrates our
25 superior fish health, or times when we were having
26 problems with -- on the fish farms is important to
27 share. So, yes, I would agree.

28 Q Okay. Thank you. Now, I'm going to turn to Ms.
29 Stewart again for one moment. I want to briefly
30 discuss the issue of bloodwater effluent
31 management with you.

32 MS. STEWART: Mm-hmm.

33 Q Maybe you could tell us about your understanding
34 as to what the disease concerns are for bloodwater
35 management as well as how it's regulated both with
36 respect to net-pen salmon farms and salmon
37 processing facilities.

38 MS. STEWART: Sure. Well, again, I'm not a scientific
39 expert, but the documents I've read and the
40 scientists I've consulted with have assured me
41 that viral particles and pathogens can definitely
42 be present in bloodwater and can enter into ocean
43 ecosystems from bloodwater either through bleeding
44 at a farm or through the processing plant.

45 Now, my understanding is that under the
46 Pacific Aquaculture Regulations, the farms are
47 required to contain bloodwater and to dispose of

1 it on land. My understanding is also that while
2 some plants - the Walcan plant, for instance - got
3 an AIMAP grant to investigate UV treatment of
4 wastewater discharge, that the current regulations
5 administered by Environment Canada -- well, there
6 aren't regulations, there are guidelines.

7 Now, I could be wrong, I'm not an expert in
8 this area, but what I have found to be publicly
9 available in the way of documentation about
10 requirements suggests that there are Environment
11 Canada guidelines that recommend containment or
12 treatment of bloodwater from the processing
13 plants, but there aren't regulations requiring it.

14 Q Ms. Parker, you had a comment?

15 MS. PARKER: I just wanted to add that it's correct
16 that the new conditions of licence require that
17 blood be contained and put through -- from the
18 farm, be put through -- on land, and that could
19 include through a processing plant, and that the
20 British Columbia processing plants for cultured
21 fish are looking at -- are moving towards UV
22 sterilization. However, that's not a requirement
23 for any other processing plant, not for shellfish
24 nor for commercial finfish from commercial
25 capture.

26 Q So maybe, Ms. Parker, you could give your evidence
27 on what the current standards are for salmon
28 processing plants.

29 MS. PARKER: I don't have exact details, but there is a
30 drum filtration required, separation of solids, a
31 resident time in a sump and then there is the --
32 then the resulting effluent is discharged at depth
33 in the marine environment.

34 MS. STEWART: And there is particulate screening at the
35 end of the pipe, but that doesn't address the
36 issue of pathogens or viral particles.

37 Q Okay. Ms. Morton, you had a comment?

38 MS. MORTON: Yes, I've examined several plankton nets
39 that were put over the end of the pipe at Walcan
40 and brought up to the surface and shipped up to me
41 and they had a high concentration of living sea
42 lice and also pieces of fish, scales and pieces of
43 fins and heart. So there was no screen on the end
44 of it.

45 Q Thank you.

46 MS. STEWART: If I could just add one comment? This
47 has been an ongoing issue for a very, very long

- 1 time, the issue of processing plants and the
2 discharge of bloodwater and contaminated water.
3 It came up during the Salmon Aquaculture Review.
4 Quite frankly, when I hear about responsible
5 management on the part of the Department of
6 Fisheries and Oceans or the province, it's
7 shocking to me that in 2011, we are still
8 addressing the question of whether or not there
9 will be regulations and effective treatment at the
10 plants that process commercial fish, wild-caught
11 fish, and aquaculture products.
- 12 Q Okay. Thank you. And again, Ms. Stewart, could
13 you tell me, are you familiar with views expressed
14 by a Dr. Mark Sheppard on the regulation of
15 bloodwater effluents with respect to salmon
16 processing facilities?
- 17 MS. STEWART: I am not. Ms. Morton may be. No?
- 18 Q Are you, Ms. Morton?
- 19 MS. MORTON: Not exactly on bloodwater, but he did
20 disagree. He didn't see how there could be living
21 sea lice coming out of the end of the pipe, but
22 there were in my sample.
- 23 MR. RALSTON: Okay. Maybe, Mr. Lunn, could you please
24 bring up Tab number 36, the Conservation
25 Coalition's documents?
- 26 MS. STEWART: Okay, I have read emails on this issue,
27 but didn't remember exactly who was involved. I
28 do remember that there were comments from Dorothy
29 Kieser.
- 30 Q Okay. So are you familiar with this email chain?
- 31 MS. STEWART: Yes, I recognize this.
- 32 MR. RALSTON: Okay. Could I have this document marked
33 as the next exhibit?
- 34 THE REGISTRAR: It will be Exhibit 1843.
- 35
- 36 EXHIBIT 1843: Email chain re "Effluents and
37 New CFIA and/or DFO regulations"
38
- 39 MR. RALSTON: And, Mr. Lunn, could you then bring up
40 Tab number 42 of the Conservation Coalition's
41 documents?
- 42 Q Are you familiar with this email chain?
- 43 MS. STEWART: Yes, I am.
- 44 Q Okay. Could you tell me -- could you briefly
45 identify the topic of the exchange?
- 46 MS. STEWART: Well, in the first one, it was a
47 discussion that involved Dorothy Kieser who worked

1 for the province, around the issue of bloodwater,
2 and it was -- if we can scroll down, I think we
3 can see the date when the email chain began. No,
4 well, maybe it's not Dorothy Kieser. Okay, sorry,
5 this is not the one I thought it was.

6 But, yes, both documents are getting into
7 extensive discussion around the issue of
8 bloodwater, and in the second document, March
9 Klaver from DFO points out that Environment Canada
10 was conducting a three-year assessment of fish
11 processing plants across the country and looking
12 at how to deal with effluent issues, and then Andy
13 Thomson responds basically just saying let's
14 recommend that people get in touch with the
15 Environment Canada rep on this issue.

16 So a three-year process was underway from
17 2006 to 2009. We're now in 2011, and the latest
18 web searches I've done show that all that exists
19 is guidelines.

20 MR. RALSTON: Okay, thank you. Could I have that made
21 an exhibit as well?

22 THE REGISTRAR: Exhibit 1844.

23 MR. RALSTON: Okay. Those are my questions. Thank
24 you.

25
26 EXHIBIT 1844: Email chain re "Effluent
27 Processors and Vessels"
28

29 MR. MARTLAND: Mr. Commissioner, I don't believe that
30 there is any re-examination. I had a very brief
31 final remark and Mr. Blair, I think, had an
32 additional point he wished to make as well, a
33 final point.

34 MR. BLAIR: Alan Blair for the B.C. Salmon Farmers.
35 Just by way of assistance, Ms. Robertson raised
36 the question of EEE for identification, Mr. Lunn,
37 if you could put that on the screen. Thank you to
38 my youthful and compute savvy assistant, Mr.
39 Hopkins-Utter, who -- not that one. It was the
40 Norway one. I thought that was EEE, the one with
41 the date that said it was Norway. Oh, thank you,
42 1803. That wasn't my useful assistant's fault;
43 that was mine.

44 We went on the web because the answer from
45 Ms. Parker with respect to the question of when
46 and where she got it, and her answer a moment ago
47 was she found it on the web. If this assists

1 counsel, I've sent the link to Mr. Martland. No
2 guarantee that I'm correct on this, but just for
3 the record, I think it's a report and this may
4 refresh Ms. Parker's memory.

5 It's from a site called NASCO, which is an
6 international organization established in 1984.
7 From a quick read of the report online in the last
8 two minutes, we think it was 2008 to 2010, but we
9 can provide the link through Mr. Martland and
10 others can search that. So the Norway document is
11 from that organization. We sent it to Mr. Lunn as
12 well. We think the date - and we couldn't tell in
13 the quick time we were searching - was in the
14 range of 2008 to 2010, so if that assists
15 everybody. If we learn anything more, we can send
16 that through Mr. Martland's office.

17 I did have, if I have a minute, and I believe
18 I might, a question just on HHH for
19 identification, Mr. Lunn. Just to explain, Ms.
20 Robertson indicated that she was prepared to mark
21 it for identification because of an objection I
22 let her know during the break. Just to be clear
23 on that objection, the lateness of time wasn't the
24 only issue because we're all guilty of that, but
25 it did come last night in the middle of a two-day
26 panel, and so the panel, none of them had an
27 opportunity to look at this report.

28
29 CROSS-EXAMINATION BY MR. BLAIR, continuing:

30
31 Q Is that correct, Mr. Backman, you did not see this
32 report in your preparation?

33 MR. BACKMAN: Not in my preparation, no.

34 Q Thank you. Counsel took you, Mr. Backman, to page
35 4 and made reference to being technically and
36 economically feasible. Do you recall that
37 reference?

38 MR. BLAIR: Mr. Lunn, can you perhaps go to page 4?

39 MR. BACKMAN: I do.

40 MR. BLAIR:

41 Q Thank you. And on page 5, there's a reference to
42 the reviewers. There appears to have been some
43 debate amongst the reviewers and there's a note
44 there:

45
46 Accordingly, the findings of this report are
47 to be perceived as those of the authors

1 alone.

2

3 Do you see that reference, sir?

4 MR. BACKMAN: I do.

5 Q Do you know this report from having read it in
6 some earlier --

7 MR. BACKMAN: I have, I'm familiar with the report from
8 earlier times.

9 Q A number of business case assumptions were made in
10 this report; is that correct?

11 MR. BACKMAN: Correct, yeah.

12 Q Some of those business case assumptions were with
13 respect to the growth, the rate of fish -- the
14 density of fish, cost of feed, cost of oxygen into
15 a closed containment system and operating costs.
16 Is that your recollection?

17 MR. BACKMAN: Yes, it is.

18 Q And do you share the view of the authors that it's
19 technically and economically feasible or not?

20 MR. BACKMAN: This report had a number of errors
21 involved with it. We would have found a number of
22 different outcomes, so I would have to say, no, I
23 couldn't agree with this particular one.

24 MR. BLAIR: Thank you. Thank you, Mr. Commissioner.

25 MR. MARTLAND: I think Ms. Robertson was asking whether
26 that changes Mr. Blair -- she's whispering to me
27 whether that changes Mr. Blair's view. I take it
28 his objection remains? If I recall the documents
29 correctly, Ms. Stewart may have indeed spoken, but
30 I may be confusing the documents.

31 MS. STEWART: No, but as Mr. Backman has confirmed,
32 we're both quite familiar with this report and I
33 know that he's reviewed it in the past.

34 MR. BLAIR: Yes, I was merely wanting to be sure that I
35 had the opportunity to have at least a minute of
36 re-examination. Now that I've had that and it's
37 on the record that Mr. Backman's familiar with it
38 and disagrees with the conclusions, I'm prepared
39 to remove my objection, and if counsel wishes to
40 have it marked...?

41 MS. ROBERTSON: May we mark it as the next exhibit,
42 please?

43 MR. BLAIR: Mr. Commissioner, that may not be the
44 fastest an exhibit has ever been marked as a full
45 exhibit, but it maybe the fastest that an
46 objection has been ruled upon -- rather, agreed
47 upon by counsel.

1 THE REGISTRAR: The "for identification" caveat HHH
2 will be removed and that will be marked as Exhibit
3 1845.

4 MS. ROBERTSON: Thank you.

5
6 EXHIBIT 1845: Document titled "Technologies
7 for Viable Salmon Aquaculture" by Andrew
8 Wright, formerly marked as identification
9 exhibit HHH

10
11 MR. MARTLAND: Mr. Commissioner, we're at the
12 conclusion of the evidence on the topic of
13 aquaculture, and I just wanted to, from Commission
14 counsel's perspective, thank these witnesses who,
15 because we have air-conditioning problems,
16 literally and metaphorically both were in the hot
17 seat for a long two days. We're grateful for
18 their involvement. We're also grateful for the
19 hard work and the discipline and the cooperation
20 of all counsel in allowing us to put this evidence
21 before you. The hearing can now, I believe, be
22 adjourned. Thank you.

23 THE COMMISSIONER: Thank you, Mr. Martland. I wanted
24 to thank Dr. Morton and Ms. Stewart, Ms. Parker
25 and Mr. Backman for your attendance at these
26 proceedings, in your case, Dr. Morton, for more
27 than just the last two days, and perhaps others of
28 you as well, I don't know, and to thank you for
29 participating here over the two days that you
30 have.

31 I wanted to thank Commission counsel who have
32 had a long session to prepare for and to undertake
33 and to process. I'm grateful to them for the work
34 that they did, and to all counsel, as Mr. Martland
35 said, who were very cooperative, and I'm certainly
36 very grateful to all of you and to all the members
37 of the public who took their time from their
38 families, their jobs, their recreation, to attend
39 here. Thank you very much.

40 We're now adjourned, I believe, until the
41 15th; is that correct, Mr. Martland?

42 MR. MARTLAND: Sorry, I'm looking to someone else for
43 guidance.

44 THE COMMISSIONER: I think it is.

45 MR. MARTLAND: Mr. Lunn is nodding yes.

46 THE COMMISSIONER: It is. It's Thursday, September the
47 15th at 10:00 a.m. Thank you very much.

1 THE REGISTRAR: The hearing is now adjourned to
2 Thursday, September 15th at 10:00 a.m.
3

4 (PROCEEDINGS ADJOURNED TO SEPTEMBER 15, 2011
5 AT 10:00 A.M.)
6
7
8

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

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18 _____
19 Pat Neumann
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21 I HEREBY CERTIFY the foregoing to be a
22 true and accurate transcript of the
23 evidence recorded on a sound recording
24 apparatus, transcribed to the best of my
25 skill and ability, and in accordance
26 with applicable standards.
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30 _____
31 Karen Hefferland
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33 I HEREBY CERTIFY the foregoing to be a
34 true and accurate transcript of the
35 evidence recorded on a sound recording
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37 skill and ability, and in accordance
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43 Susan Osborne
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I HEREBY CERTIFY the foregoing to be a true and accurate transcript of the evidence recorded on a sound recording apparatus, transcribed to the best of my skill and ability, and in accordance with applicable standards.

Diane Rochfort

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