

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: Tenue à :

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

Wednesday, April 6, 2011 le mercredi 6 avril 2011

Cour fédérale 701, rue West Georgia

Vancouver (C.-B.)

Salle 801



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

Errata for the Transcript of Hearings on April 6, 2011

Page	Line	Error	Correction
8	30	CEAA Agency	CEA Agency
17	2	Lake Ells	Lakelse
67	23 and 29	legislature	legislator

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

Tel: 604 658 3600 Toll-free Tel: 1 877 658 2808 Fax: 604 658 3644 Toll-free Fax: 1 877 658 2809 www.cohencommission.ca



APPEARANCES / COMPARUTIONS

Brock Martland Associate Commission Counsel Lara Tessaro Junior Commission Counsel

Mitch Taylor, Q.C. Government of Canada ("CAN") Jonah Spiegelman

Boris Tyzuk, Q.C. 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")

Shane Hopkins-Utter B.C. Salmon Farmers Association

("BCSFA")

No appearance Seafood Producers Association of B.C.

("SPABC")

No appearance Aquaculture Coalition: Alexandra

Morton; Raincoast Research Society; Pacific Coast Wild Salmon Society

("AQUA")

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")

Don Rosenbloom Area D Salmon Gillnet Association; Area

B Harvest Committee (Seine) ("GILLFSC")

APPEARANCES / COMPARUTIONS, cont'd.

No appearance Southern Area E Gillnetters Assn.

B.C. Fisheries Survival Coalition

("SGAHC")

Christopher Harvey, Q.C. West Coast Trollers Area G Association;

United Fishermen and Allied Workers'

Union ("TWCTUFA")

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

of Drift Fishers ("WFFDF")

No appearance Maa-nulth Treaty Society; Tsawwassen

First Nation; Musqueam First Nation

("MTM")

No appearance Western Central Coast Salish First

Nations:

Cowichan Tribes and Chemainus First

Nation

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

Leah Pence First Nations Coalition: First Nations

Anja Brown 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.

No appearance 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")

No appearance Heiltsuk Tribal Council ("HTC")

TABLE OF CONTENTS / TABLE DES MATIERES

	PAGE
DAVE CARTER (Affirmed)	
In chief by Ms. Tessaro	1
Cross-exam by Mr. Taylor	35
Cross-exam by Mr. Harrison	55/58
Cross-exam by Mr. Rosenbloom	62
Cross-exam by Mr. Harvey	71
Cross-exam by Ms. Brown	74
Cross-exam by Ms. Robertson	81
Questions by the Commissioner	83
Cross-exam by Mr. Taylor (cont'd)	85
Re-exam by Ms. Tessaro	88

EXHIBITS / PIECES

No.	<u>Description</u>	<u>Page</u>
672	Curriculum vitae of Dave Carter	1
673	Habitat Monitoring Update	4
674	The Pacific Regional Marine Compliance Monitoring	
	Site Visit Form	14
675	Answering Guide for the Pacific Region Monitoring Form	14
676	Draft Habitat Monitoring Strategic Framework, 2010-2015	19
677	Draft Habitat Monitoring Strategic Framework, December	
	15, 2005	22
678	Pacific Regional Habitat Monitoring Framework, February	
	15, 2011	23
679	Habitat Monitoring Update, Presentation to Regional	
	Managers, November 25, 2010	25
680	Habitat Compliance Decision Framework Fisheries and	
	Oceans Canada - Version 1.1 2007	41
681	Discussion Paper: A Scoping of Aboriginal Implications	
	of Renewal of the <i>Fisheries Act</i> 1985, Russ Jones,	
	March 30, 2006	80

1 Vancouver, B.C. /Vancouver (C.-B.) 3 April 6, 2011/le 6 avril 2011 4 5 THE REGISTRAR: The hearing is now resumed. 6 Mr. Martland? THE COMMISSIONER: 7 MR. MARTLAND: Mr. Commissioner, Ms. Tessaro will be 8 leading the next witness, Dave Carter, so I'll 9 simply pass over to her. I'm going to continue to 10 wear the hat of timekeeper for today's purpose. 11 MS. TESSARO: Good morning, Mr. Commissioner. 12 addition to Mr. Martland, we also have Micah 13 Carmody here today with me. Today we'll be having 14 some more focused evidence on the topic of habitat 15 monitoring by DFO. I'm going to aim to complete our examination of Mr. Carter before the morning 16 17 break. 18 Mr. Bisset, on occasion I'll be referring to 19 our habitat management PPR, so you could just 20 generally have that document at hand, that would 21 be appreciated. Also, Mr. Bisset, could I ask you 22 to pull up Mr. Carter's c.v. Before we get into 23 that... 24 25 DAVE CARTER, affirmed. 26 27 THE REGISTRAR: Would you state your full name, please. 28 My name is David William Carter. 29 THE REGISTRAR: Thank you, sir. Counsel? 30 MS. TESSARO: Thank you. 31 32 EXAMINATION IN CHIEF BY MS. TESSARO: 33 34 Now, Mr. Carter, you'll see that there's a 35 curriculum vitae on the screen before you. 36 that yours? 37 Yes, it is. 38 MS. TESSARO: Could I have that marked as the next 39 exhibit, please? 40 THE REGISTRAR: Exhibit number 671 (sic). 41 42 EXHIBIT 672: Curriculum vitae of Dave Carter 43 44 MS. TESSARO: 45 I'm going to ask you some very long and leading 46 questions about your background, and if there's 47 any detail in what I say that you feel needs

```
1
            correcting or clarifying, I'll ask you to do that.
       Α
            All right.
 3
            I think you'll be aware of this process because --
 4
       THE REGISTRAR: Counsel that should be 672 for the
 5
            exhibit.
 6
       MS. TESSARO:
                     Thank you.
 7
       THE REGISTRAR: Thank you.
 8
       MS. TESSARO:
 9
            I think you'll be aware of this process because
10
            you were here on Monday for the habitat management
11
            panel's evidence and watched us zip through
            credentials then.
12
13
       Α
            That's correct.
14
            So you obtained an Honours Bachelor of Science
15
            degree in zoology from the University of British
16
            Columbia in 1986, and then went on to obtain a
17
            Master's of Science in biology with a specific
18
            focus on habitat analysis from Simon Fraser
19
            University in 1990?
20
            That's correct.
       Α
21
            And then between 1990 and 1996, you taught biology
22
            at both UBC and SFU, and in 1996, you left
23
            academia and joined DFO as a senior habitat
24
            biologist with the Oceans, Habitat and Enhancement
25
            Branch; is that correct?
26
            That's correct.
       Α
27
            Working for DFO for the next nine years?
       Q
28
       Α
            Correct.
29
            In 2005, you left DFO to take a position as Senior
30
            Program Officer with the CEAA agency in its
31
            regional office here in Vancouver?
32
       Α
            Correct.
33
            Oh, I should note for the record that CEAA agency
34
            is the Canadian Environmental Assessment Agency.
35
       Α
            Yes.
36
            And you returned to DFO in 2008 to commence your
       Q
37
            current role as Regional Team Leader, Habitat
38
            Monitoring, which is a position based in regional
39
            headquarters here in Vancouver.
40
       Α
            Yes.
41
       Q
            Do you recall what month in 2008?
42
       Α
            November. November the 11th, actually.
43
            Okay. An easy date to remember. So you've been
44
            in the role of regional Habitat Monitoring lead,
45
            then, for almost two-and-a-half years?
            Correct.
46
       Α
47
            So the Habitat Monitoring Unit is the unit that
```

you oversee. Could you explain how it's situated within OHEB, within the Oceans Habitat Enhancement Branch?

A The Habitat Monitoring Unit is structured much like the rest of the Habitat Management Program in Pacific Region where there is a regional headquarters, and then there are area offices. It's as Rebecca referred to it, a matrix model of direct and functional reporting.

So I have some monitoring staff in regional headquarters that report directly to me. There are monitoring staff, monitoring biologists and monitoring technicians in each of the areas and they report to me functionally with regards to monitoring. There are 12 individuals in the Habitat Monitoring Unit.

- Q And just to be clear, the fact that you have 12 staff in the Habitat Monitoring Unit, that's not exhaustive of all the biologists or habitat staff in DFO OHEB who would be doing habitat monitoring.
- A That's correct. The Monitoring Unit, their time is dedicated to monitoring. The Habitat staff in general, there's been, I guess, a goal of setting 20 percent of their effort towards monitoring, so we would have a role in coordinating those efforts as well.
- And as the regional monitoring lead, and the lead of the HMU, could you just very briefly summarize your primary duties?
- A I guess my primary duties are to oversee the, I guess, implementation and operation of habitat monitoring in the Pacific Region, so developing a plan for doing monitoring within the region, setting work plans. I also act on a national working group with my colleagues who are regional team leads across the country, working on developing national standards and a national implementation of monitoring as well.
- Q Do you currently have responsibility for any of the other elements of what is known as DFO's Habitat Compliance Modernization, or HCM initiative?
- A Well, the HCM or the Habitat Compliance Modernization has three elements.
- Q Mm-hmm.
- There's the protocol, which is the agreement between Habitat and CMP. There is the compliance

decision framework which is the policy document that lays out how we will evaluate and respond to incidents of non-compliance, and then there's the monitoring component.

My main role is in the monitoring component; however, I'm also the regional trainer on the habitat compliance decision framework, as well as I have been involved in, I guess, facilitating the development of the regional and area operational plans for the protocol, the agreement between CMP and Habitat.

- And on that last point of the regional and area operational plans, are you currently engaged in any drafting or redrafting efforts?
- A The national protocol between CMP and Habitat has been revised. There have been some meetings with regards to development of a revised regional protocol but, at this point, there's been no redrafting done.
- MS. TESSARO: Thanks. Mr. Bisset, can I ask that you pull up Tab 7 of Canada's list of documents? If you could just -- there you go.
- Q Mr. Carter, are you familiar with this document?
- A Yes, I am. I actually wrote it.
- And who was it presented to and for what purpose? This Powerpoint presentation was developed spring of 2010, and it was presented to the Regional Management Committee. Now, that would be the Habitat Management Committee which comprised the regional manager of Habitat as well as the area managers for Habitat. It was presented, I guess, in advance of our field season and it sort of laid out the structure of HCM and talked about some of our sort of objectives for that year.
- MS. TESSARO: Could I have this marked as the next exhibit, please?

THE REGISTRAR: Exhibit 673.

EXHIBIT 673: Habitat Monitoring Update

MS. TESSARO:

- Q And could we turn to page 5? Could you turn to page 5? Just to confirm, Mr. Carter, this is the, I suppose, governance structure that you explained a few moments ago?
- A Or this would be the organizational chart for the Habitat Monitoring Unit where the, I guess, solid

lines would be direct line reporting and then the 1 dashed lines would be functional reporting. 3 You mentioned that you have a few other staff in 4 regional headquarters who, outside of the area, 5 monitoring coordinators. 6 Mm-hmm. Α 7 You have a few line staff who also report to you. 8 They're not shown on this. Could you just 9 indicate who they are and what they do? 10 Yes. I have two other staff that report to me. Α 11 One is an inventory biologist, and the other is 12 the regional coordinator for the PATH, the Program 13 Activity Tracking system. 14 Thank you. You've also mentioned that you have, 15 as shown here, 12 HMU staff. My question is when 16 did the HMU get fully staffed? 17 It would have been the spring/summer following Α 18 when I came onto the Department, so I think the 19 unit was about 50 percent staffed when I arrived 20 The rest of the staffing occurred in November. 21 sort of spring/summer of 2009. 22 So we've heard that the HCM, the Habitat 23 Compliance Modernization initiative was introduced 24 in 2005, and you've said that habitat monitoring 25 is the third element of that. I'm wondering why 26

it took so long to staff the HCU?

A Actually, I think HCM was included or added to the EPMP initiative in 2006, I think, as the sixth element. There was a document in 2005 sort of, I guess, proposing a habitat monitoring initiative, but the actual addition to the EPMP was in 2006, I

believe.

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

Subsequent to that, are you asking sort of why it took so long? Yes.

Q That's the question.

Part of that had to do with there were other staffing changes going on at that time from 2007 onward. There also needed to be the development of, I guess, staffing plans and then those staffing plans needed to be improved, positions needed to be created, and then the staffing processes needed to occur.

I wasn't actually here for those various activities, but that's my understanding.

Q Has there been any challenge with staff turnover?
A To this point, we have had a minor number of staff turnovers. Technicians have changed, but we

haven't had any difficulties with staffing those positions.

- Q And pardon me if you're already explained this, but who is the manager within regional headquarters that you --
- A That I report directly to?
- Q Right

- A I report to an acting manager currently, Brad Fanos, who is the Acting Regional Manager for Habitat.
- Q And the final question I have around organizational structure is do you have a reporting relationship with national headquarters?
- A I do. I guess I have a functional reporting relationship with Chad Ziai, who is in the operations side in NHQ.
- Q And has he always been the person that you functionally reported to in the last two-and-a-half years, or have there been other individuals?
- A No, prior to Chad, there was Daria Langill. So I think Daria was in place for about 12 months, and then Chad has been in place subsequent.
- Q And you mentioned that there's a national habitat monitoring working group that you sit on. How many times has that group met approximately in the last two-and-a-half years? Is it routine, is it annual?
- A Approximately twice a year, and then there's been conference calls which sort of, again, two a year of those conference calls as well.
- Q Turning more now to the genesis of the Habitat Monitoring Unit, if you could turn to the next page of this deck. I'm only using the page of this deck because of the heading, "Strengthen HMP's capacity to monitor." Is that, in essence, the focus of HMU?
- A Very much so. Again, back to the HCM initiative, those three elements, the third of which was increasing the habitat management program's ability to do monitoring and put more effort towards that monitoring so, yes, the genesis of the Habitat Monitoring Unit in this region would be a response to that.
- 44 Q Are there other developments in the last decade or 45 two that strengthening monitoring capacity in the 46 region has been responsive to?
- 47 A Yes. I guess there's been a number of things that

have led to a desire to increase monitoring, or recognizing that doing more monitoring would be worthwhile. First of all, there was a survey done in 2005 prior to the development of the report that we alluded to earlier which looked at sort of monitoring efforts nationally.

There was also work done by Quigley and Harper looking at sort of rates of compliance associated with various projects, making recommendations about doing more compliance monitoring. There were the Auditor General's reports suggesting that more monitoring would be a good thing to do, so there've been a number of things that have led to this genesis.

- Q On that latter point of the Auditor General's monitoring reports, are you including, I imagine, the 2009 Commission of Environment Sustainable Development Report?
- 19 A Yes.

- Q And are you also including the 2004 Commission of Environment and Sustainable Development Report which was in the specific context of Pacific salmon habitat?
- A Yes.
 - Q Thank you. So just looking at this page here a little more closely, there is a line, I believe, that is very faint on our version because I believe it was a colour deck --
 - A Yes.
 - Q -- and I'm wondering if you're able to fill in the blank of what that line reads from your more legible paper copy?
 - A Yes. A lesson learned about not using a light green in a Powerpoint. I do believe it says -- I think it says "monitoring", and it talks about compliance monitoring underneath in the second line [as read]:

Compliance monitoring, effectiveness monitoring and occurrence tracking.

- Q And is there a percentage assigned to monitoring? A 20 percent. Now, to be clear, that is a goal that was set by managers in Pacific Region for the
- habitat program in this region.

 Were you one of the managers who set that goal?
- A No, this occurred before I showed up.

- Okay. Are you familiar -- are you aware if that is the same target for the percentage nationally?
 - A To be honest, I can't say for sure. I heard discussions about setting something, but I haven't seen something set out like this.
 - Q And do these percentages -- you said they're goals.
- 8 A Uh-huh.

- Q Are they in terms of staff time? Is that what the percentage reflects?
- A Staff time or effort.
- Q Okay. And over the time that you've been here in the last two-and-a-half years in this position, what approximately is the percentage of staff time that is actually spent on monitoring according to your best information?
 - A There have been a couple of regional surveys done where we've gone and asked staff about the time that they've spent involved in monitoring. Best estimates and observations would be more along the lines of five percent.
 - And just turning very quickly to the bullet that reads, "Policy and Science", five percent. Within that five percent, do you know what portion is targeted for the Wild Salmon Policy and what that Wild Salmon Policy refers to there?
 - A Well, I do know what Wild Salmon Policy refers to. In terms of that five percent, I'd be hard pressed. I don't know that it applies to every Habitat staff. I think it might be directed more specifically at key individuals who are involved in those things.
 - Q So would that be more along the lines of regional headquarters' officials?
 - A Mostly, though, there are staff in areas who have been involved in, I guess, supporting the development of status reports and other things, so there has been some area involvement in things like the Wild Salmon Policy and in engagement with Science as well.
- Q Okay. Before we turn to explaining the three basic types of habitat monitoring, I'm hoping you can just make this discussion a little bit more concrete.
- 45 A Sure.
- What purposes do we monitor fish habitat for? Why monitor fish habitat? What objectives does that

serve from the perspective of sustainability of salmon?

A There's a number of really good reasons or very good reasons to do monitoring. First of all, to support, I guess, compliance and, you know, manage compliance to ensure that when we do provide conditions or advice, that those conditions or that advice is adhered to. I think it's often beneficial that when people expect you to show up, there is, I guess, an incentive to be compliant. So that's one of the reasons.

Another reason would be to, I guess, continuously shoot for improvement, to measure performance and evaluate how effective we're being, and based on the information we gather, look to ways that we could become more effective or improve how we're doing.

Q Mm-hmm.

- A So there's an element of performance measurement as well.
- Q This might be an obvious question, but can you identify the link, if there is one, between monitoring activities and the principle of No Net Loss of productive capacity of fish habitat? How do those things relate to each other?
- A Well, one of the things with monitoring is we are looking at compliance, and compliance to the **Act** has a lot to do with whether there's an unauthorized harmful alteration to the habitat occurring. That compliance, if we are quantifying how frequently those unauthorized harms to habitat are happening, that does give us a window into the impacts that are occurring to fish habitat.
- Q Apart from compliance, though, is monitoring not also relevant to assessing the effectiveness of your -- of the advice you give aimed at achieving No Net Loss? Sorry to be so leading, but I'm hoping you can explain that a bit.
- A Yes, it is. I mean, we can use this monitoring to evaluate, I guess, the quality of the advice. First of all, we can look to see whether somebody did follow the advice, and if they did follow the advice, then we can evaluate whether it avoided impacts or not.
- Q Just to make this a little bit more concrete, we heard yesterday or the day before about the example of Shuswap Lake, trying to find a Fraser

1 River sockeye-specific example. 2

Α Sure.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23 24

25

26 27

28

29

30

31

32

33

34

35

36

37

39

40 41

42

43

47

- Can you provide the Commissioner an example of the types of projects or activities on, say, Shuswap Lake that might be monitored, and the types, more generally, of fish habitat that OHEB staff are monitoring?
- Right. I guess, now, the SLIPP program, or the Α monitoring that was done on Shuswap Lake was a program that some of the monitoring staff were involved in. They did some shoreline inventory They also looked at development activities work. along the shoreline and identified those and mapped those. So development of docks, shoreline modifications, walls, encroachment, boat launches, all of those various projects were inventoried.
- Apart from SLIPP, perhaps, just in a very basic Q way, assuming I'm a high school student, what are the kinds of projects -- you've mentioned some docks, foreshore development --

Α Right.

- -- that your staff monitor, and in what types of 0 Fraser River sockeye habitats across the province?
- Α Okay. In terms of how we conducted monitoring, we based our monitoring on the regulatory tools that the Department uses, so we looked at projects that were dealt with through authorizations, projects that were dealt with through letters of advice and projects that were dealt with through operational Those various regulatory tools were statements. used on a broad range of projects both in the marine environment, in the freshwater environment, everything from stream crossings, bridges, through docks, through log dumps, port developments, you know, a very broad range of project types.
- And this would obviously include monitoring in areas like Georgia Strait?

38 Α Yes.

- Q Queen Charlotte Strait?
- I'd have to look to see where projects were monitored but potentially, yes.
 - Is there a geographic endpoint where OHEB stops Q monitoring?
- 44 No. We looked at throughout the entire region, so 45 there was monitoring conducted throughout the 46 region.
 - And, from your perspective within the Q Thank you.

Habitat Monitoring Unit, is habitat monitoring less relevant or less important for Fraser River sockeye than it is for other salmon populations or other fish species?

- A I mean, less relevant? I think that fish are dependent upon habitat, so I think in all of them, there are -- you know, there was relevance. Different species have different levels of dependence on freshwater habitat versus marine, those sorts of things, so I think the relevance might change depending on which fish stock and which life history you're talking about. But I think it's relevant for all of them.
- Q Thank you. And I'm hoping we can turn to the PPR now, which I believe is PPR number 8.
- MS. TESSARO: Mr. Bisset, it's page 74 which I think is pdf page 79.
- Q Mr. Carter, I'm referring you to the PPR because I'm hoping it'll be an efficient tool to get in some evidence about the three general types of habitat monitoring contemplated by the Habitat Management Program.
- A Yes.

1

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

- Q Looking at paragraph 87 on the previous page, sorry, 187 and 188. Have you had an opportunity to read this?
- A Yes, I have.
- Q And do you agree with the general descriptions of compliance monitoring, effectiveness monitoring, ecosystem monitoring and do you have anything to add to those descriptions?
- A I would agree with those descriptions. I don't think I have anything to add.
- Q On the last one of ecosystem or fish habitat health monitoring, we see a lot of different names for this type of monitoring.
- A Yes.
- Q For the sake of the record, I'm going to rattle off some of those type of names --
- 40 A Sure.
- 41 Q -- and you're going to, I hope, tell me if any of 42 them are not in fact akin to each other. So we 43 hear "fish habitat health monitoring"?
- 44 A Yes.
- 45 Q Environmental monitoring?
- 46 A I wouldn't lump that in there 'cause environmental monitoring is often aimed at project monitoring.

1

Q Okay. Thank you. Aquatic health monitoring? 2 Α I think that would fall in that category. 3 Q And again, ecosystem monitoring. 4 Α Yes. 5 And in the context of the Wild Salmon Policy, 6 these types of monitorings are basically 7 monitoring CU habitat status. That's the 8 nomenclature of the Wild Salmon Policy. 9 By CU, you're talking about conservation units and 10 the status of conservation units? 11 And the status of their habitats. Q 12 Α 13 Q So that would effectively be akin to Strategy 2 14 monitoring. 15 Α Yes. 16 Thank you. You were here on Monday and Tuesday. 17 Did you hear Mr. LeBlanc refer to the Compliance 18 Monitoring Unit? 19 Α I don't recall him referring to it, but he 20 probably did. 21 Well, I'll ask it another way, sorry. Is the 22 Habitat Monitoring Unit described here in the 23 Pacific Region using that particular label? 24 Α No, we generally refer to it as the Habitat 25 Monitoring Unit. 26 Do you think it's fair to say that the national Q 27 perspective is more heavily focused on compliance 28 monitoring than the regional perspective is? 29 I think nationally there's a recognition that it's 30 going to be sort of a stepwise rollout of 31 monitoring in that initially there's a focus on 32 compliance monitoring but there's an expectation 33 that there will be development of effectiveness or 34 efficacy monitoring as well as fish habitat health 35 monitoring, but that that will come with time. 36 Just wrapping up a little bit on compliance 37 monitoring, can compliance monitoring serve as a 38 surrogate or a proxy for assessing whether there's 39 been a loss or gain in the productive capacity of 40 fish habitat? Is it suited to that task? 41 As a surrogate, it would not be a particularly Α 42 strong surrogate. When you ask general questions, 43 you get general answers, and that doesn't 44 necessarily tell you a lot. By going out and 45 identifying whether a particular project is 46 compliant or non-compliant as a yes/no, that 47 doesn't tell you how much of an impact it may have

1 caused, so that next level of monitoring where you evaluate the level of impact is important as well. And when you say "compliance", just to be really 3 Q 4 clear about nomenclature here, sometimes I hear 5 compliance monitoring described as evaluating 6 conformity, and sometimes I hear it described as 7

Can you explain those concepts?

Α No, they're actually fairly distinct concepts. Conformity has to deal with evaluating whether somebody followed the advice or followed the conditions that you provided them and to our regulatory tools. That would be conformity.

Compliance would be whether they are, I guess, compliant with the legislation. So, in most cases, we're looking at s. 35 of the legislation. Did they or did they not cause an unauthorized harmful alteration or destruction on habitat.

evaluating compliance. Are those the same things?

- So a proponent could not conform with DFO's advice, but that doesn't automatically mean that there is a so-called compliance issue?
- That's exactly correct. Α
- Q Okay. From the --
- 25 Α The --

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

26

27

28

29

30

31

32

33

34

35

36

37

38 39

40

41

42

43

44

45

46

- perspective of DFO.
 - -- alternative too is they could conform to our Α advice and end up non-compliant.
 - And would DFO deem that situation a compliance issue?
 - It would be a compliance issue, but it might have Α more to say about the quality of our advice.
 - Thanks. There's a couple of field forms that you use, and this may assist in demonstrating just what it is that is monitored in the field by HMU monitors and others.
 - MS. TESSARO: Mr. Bisset, if you could pull up Tabs 2 and 4 of our list, and if it's possible to put them side by side?
 - Mr. Carter, you have them in your binder there too, if you need them.
 - These would -- Tab 4? Α
 - Tabs 2 and Tabs 4. Could you just very briefly Q explain, if you're able to, what these documents are?
- Α These are the field monitoring forms that the Habitat Monitoring Unit uses when we do a site

1 visit. It lays out sort of the tombstone or general information about the project, where it's 3 located, what the coordinates of it are, who was the proponent, what was the water body involved. 5 Then it goes through in the lower section the 6 national questions regarding compliance 7 monitoring. 8 When you say "the lower section", do you mean page 9 2 of Tab 2? 10 Oh, sorry, I'm looking at the document on the Α 11 12 Q Okay. Okay, so this would be the field form, and 13 Yes. 14 then the document on the right is our answer guide 15 for that field form. And were you involved in creating these two 16 17 documents? 18 Α Yes, I was. 19 MS. TESSARO: Could we have Tab 2 marked as the next 20 exhibit, and that will be described as "The 21 Pacific Region Marine Compliance Monitoring Site 22 Visit Form". 23 THE REGISTRAR: Exhibit number 674. 24 MS. TESSARO: And then could we also have Tab 4 marked 25 as a second -- the next exhibit and that can be 26 described as the "Answer Guide for the Pacific Region Monitoring Form." 27 28 THE REGISTRAR: Exhibit 675. 29 30 EXHIBIT 674: The Pacific Regional Marine 31 Compliance Monitoring Site Visit Form 32 33 EXHIBIT 675: Answer Guide for the Pacific 34 Region Monitoring Form 35 36 MS. TESSARO: And as a seque into effectiveness 37 monitoring, if we could, Mr. Bisset, just turn back to the first page of the Marine Site Visit 38 39 Form, Tab 2, page 1. Thank you. Mr. Carter, can you comment on question number 6? 40 Q 41 Α 42 Were the mitigation measures effective in 43 preventing negative impacts to fish habitat? 44 45 Does that begin to get into effectiveness 46 monitoring? Do aspects of this form begin to --47 There is the beginnings of it, but again, it would Α

be almost at a physical level of evaluation, you know, were there impacts caused but not at an ecosystem sort of response to it.

This question, though, one of the things you'll see from the Answer Guide is we had to interpret these questions very specifically in order to ensure that they were answered consistently. So for that particular question 6, we only answered that question in relation to mitigation measures that were properly installed. So if we went there, identified a mitigation measure that was correctly installed, then we evaluated whether it was successful in preventing in the negative effects or not.

- So is it fair for me to say that the Department is really only at the beginning stages of conducting effectiveness monitoring in the Pacific Region?
- A That would be correct.
- Q Okay. Again, here I'm just paraphrasing, and if need be, we can find the transcript reference, but you were here. On Monday, Mr. LeBlanc suggested a few times that before DFO Habitat staff could really do effectiveness monitoring, that DFO would need to devise a methodology that it would need to go through a peer review. Do you recall that?
- A I do recall mention of that.
- Q And by methodology, I simply understand that term to mean what do you monitor and how. Is that a fair basic description of effectiveness methodology? We're looking at what do you monitor -- gauge effectiveness and how you --
- A And how you conduct that monitoring, yes.
- And isn't that quite well established? Aren't there already effectiveness monitoring methodologies that you would have studied in university? Isn't this something that DFO knows how to do?
- A There are field protocols out there for capturing different types of habitat variables. There are standards out there and this year we'll be using some of those standards or evaluating some of those standards to see how applicable and how well they work with some of the monitoring that we're doing.

But to develop a monitoring plan associated with any particular project, different projects have different types of impacts that might affect

different elements of the environment, and you do
need to develop your monitoring plan in relation
to what the potential impacts of the project might
be.
Are you aware, as part of a Quigley Harper

- Q Are you aware, as part of a Quigley Harper evaluation in the mid-2000s, effective monitoring methodologies were considered as part of that?
- A They were, and I guess one of the recommended methodologies was a before/after control impact sort of methodology where you would establish control sites prior to the impact and then evaluate your impact site versus those control sites, so yes, I'm aware of those.
- And my next question goes to a question that actually Mr. Harrison asked a couple of days ago, and that's in evaluation before/after and control sites, to really do effectiveness monitoring how important is it that you have that baseline information?
- A That pre-information or that inventory information? It's fairly key and at a number of different levels. There's broad or general inventory information about a watershed. There's also more specific baseline information in relation to a particular project. What type of habitat was at that site prior to the project? That's useful information as well.
- Q Okay. Thank you. Is there anything else that briefly we should understand about DFO's effectiveness monitoring efforts before we quickly look at ecosystem monitoring?
- A I guess the only thing would be the BACI methodology is one form of monitoring that could be applied. There are other forms of effectiveness monitoring such as a reference date approach where you would have a general condition or model that you monitored against. So there are a number of different ways that you could approach this effectiveness monitoring.
- Q Okay, thank you. In terms of the third type of monitoring, let's call it fish habitat health monitoring or ecosystem monitoring --
- A All right.
- 44 O -- is this currently being done by OHEB staff?
- 45 A I guess there are circumstances where inventory or baseline information is being captured. Habitat monitoring staff were involved in the Shuswap

 inventory work that was done. Similar work is being proposed for Lake Ells on the north coast. Work was done on the Cowichan on the Island. There's a number of places where habitat staff are collecting inventory information. That's part of that ecosystem evaluation, you know, what's there currently.

Then there's the other element of sort of what is the status or how healthy is it? There is some work being done under WSB. There are some status reports - what do you want to call them? - first versions or pilots that have been done in the region.

- Q Am I right, though, that neither of those two types of activities that you described are currently part of the HCM, Habitat Compliance Modernization initiative?
- I guess they're not currently included in our work plan as active monitoring projects. There is some effort being put towards developing tools or methods, but there isn't any current sort of habitat status monitoring being done other than the inventory work that I already mentioned.
- Right. There's a very quick visual synopsis of what I think you just described, page 7 of Exhibit 204. I'm going to ask you if this information in this deck is accurate. I should ask have you seen this document before?
- A Yes, I have.
- Q Okay. So looking at page 7 at the top there, under the heading, "WSP Disconnect with HMP", you've got "WSP" in one box, and "EPMP", in particular, Habitat Compliance Modernization in another. Does that describe the state of affairs currently?
- A In terms of the work plans, I would say that it does. I mean WSP is looking at environmental monitoring based on the watershed, on the status of the watershed. Under Habitat Compliance Modernization, we're mainly looking at project-by-project monitoring.

However, you know, the Habitat Compliance Unit, we have had some involvement in WSP. I have been working with some of the folks working under Strategy 2, looking at developing a monitoring framework for Strategy 2, so I have been engaged in that development, and that work is currently

ongoing. So again, building foundations. 1 2 We might return to that if I have time, but just Q 3 very quickly, are HMU monitoring coordinates and 4 monitoring technicians currently using the 5 Strategy 2 habitat indicators that were --6 Α No, they are not. 7 Maybe more importantly, could they? Would 8 habitat monitoring staff, including in your unit 9 and in OHEB generally, have the ability to monitor 10 some of those Strategy 2 habitat indicators? 11 Some of those physical status indicators, things 12 like temperature, turbidity, yes, we could. 13 think the vision is that sometime in the future, 14 we likely would be. 15 What about things like TSS, or dissolved oxygen, 16 water quality parameters, do you have the ability 17 -- would you in the future have the ability 18 potentially to monitor those? 19 Α Yes, we would. Capacity would be another issue. 20 And we've heard evidence on that. Right. 21 wondering if anyone has -- apart from the work 22 you're doing on assisting in the development of a monitoring framework under Strategy 2, have you 23 24 ever been asked by any regional or national 25 managers to incorporate WSP habitat monitoring 26 into the work of the Habitat Monitoring Unit? 27 I've had it identified to me in the region that Α 28 it's likely, would be desirable if we would and 29 that it's something that would be a future 30 development. It hasn't come up at the national 31 level, though there has been recent work at the 32 national level looking at a more ecosystem-based 33 approach, much of which sounds very familiar to some of the strategies within WSP. So I think 34 35 there is a shift at the national level as well. 36 Do you recall the WSP ever being raised in a 37 meeting with national DFO officials in the context 38 of habitat monitoring? 39 Α I guess I was at a meeting a couple of weeks ago 40 in Montreal, and it was. That had to do with a 41 meeting between Science and Habitat.

MS. TESSARO: Could you bring that Tab 15 of our list,

Mr. Bisset? I'm wondering if this might be in

Mr. Carter, is this a document that came out of

previously, no.

relation to the meeting.

the meeting a couple of weeks ago?

42

43

44

45

46

A No. This was a document that would have come out of a meeting in December. This would have been a meeting of that national working group of team leaders in monitoring. This was a framework document that was provided from national to the team leaders, and it just sort of outlines, I guess, goals and objectives and a path forward for monitoring nationally.

MS. TESSARO: Could we have this marked as the next exhibit, please?

THE REGISTRAR: Exhibit number 676.

EXHIBIT 676: Draft Habitat Monitoring Strategic Framework, 2010-2015

MS. TESSARO:

- And could we turn to the second page of this document? So here we see that nomenclature issue again. We've got something identified in this schematic as you see "Compliance Monitoring", then you see "Effectiveness Monitoring", and then you see a large pink box that has within it a smaller box called "Effects Monitoring". Is that the same thing that we're talking about, ecosystem monitoring, fish habitat health monitoring?
- A My understanding would be, yes, it is.
- Q And it is unclear to me from looking at this document who is contemplated to the be the lead on that kind of fish habitat health monitoring.
- A I think my understanding from this, the lead in terms of developing the methodology would be Science. But you can see from the sort of pointing at the screen here that you can't see the blue-dashed line, that outlines sort of the role of Habitat which would include the monitoring staff. We would have a role in those various elements, and you can see there's a smaller box with Habitat in the "Effects" monitoring or that ecosystem health monitoring. So I think there's a role envisioned for Habitat.
- Q Just going back to 2005 and the genesis of HCM, without questioning whether or not Science should or shouldn't have a role, was it not originally contemplated that Habitat, through the HCM, would be the lead on fish habitat health monitoring?
- A I'm not sure, to be honest, in terms of what the expectation was. I would think there would have

been an expectation that Science would be engaged. Thanks. This may be a stupid question, but is one type of these three types of habitat monitoring, in your perspective as someone who does habitat monitoring work, more important or more fundamental for ensuring sustainability of Pacific salmon, and specifically, Fraser River sockeye salmon?

- A To be honest, I think they're interdependent. In terms of sort of compliance monitoring, you need to -- you know, if you're going to improve your methodology, you need to go out and find out whether somebody followed your advice, and then once you've done that, then you need to evaluate whether that advice led to the outcome that you wanted with regard to that specific project, and then you need to take the next step of evaluation and how did the environment respond to that as well. So I think all three of them are interdependent. I wouldn't necessarily suggest that any one was more critical than the other.
- Thanks. I'm turning now to the issue of National Habitat Monitoring Framework and the Regional Habitat Monitoring Framework. While Mr. Bisset is finding Tab 1, specifically the draft National Habitat Monitoring Framework within Tab 1 of our documents, I'll ask you, Mr. Carter, can you explain the status, I suppose, of the National Habitat Monitoring Framework at DFO and what's been done with that framework?
- A Well, the diagram or the figure that you showed previously, that, in my understanding, is the draft national framework that outlines kind of the approach. I think it was titled as a framework.
- Q Okay. You're talking about the last document we looked at, Exhibit 676, for the record?
- A Yes. Yes. There was some discussion of creating a more fulsome sort of a framework document at the national level. However, I do not know how far that has progressed.
- Q In terms of the document that's on the screen, do you use this document? Does it provide guidance? What do you understand to be this document's purpose?
- A Yes, we use this document on a very regular basis.
 Oh, sorry, okay, you're looking at the 2005
 National Habitat Monitoring Framework. We use

this document as a bit of a guide for the development of a regional document.

- Q In terms of the National Habitat Monitoring Framework on the screen, do you understand -- it says "Draft December 15th, 2005".
- A Right.

- Q Do you understand this to have been finalized since 2005?
- A No, that's not my understanding. Sorry, I may have been a bit confusing there for a moment. Yeah, sorry, this is the early document that was developed in 2005 prior to the implementation of HCM.
- Q Right.
 - A This document was sort of a proposal or suggestion as to how things could go. Subsequent to that, this document has not been revised. The other document we were talking about previously, the picture --
 - Q Right.
 - A -- it also has been referred to as a framework and it's titled as a framework. Sorry for the confusion. But it does lay out sort of a set of objectives and an approach.
 - Q Is there any formal guidance from the National Habitat Monitoring Program offered to the regions on how to conduct habitat monitoring operationally?
 - A Operationally, there was the previous document that we looked at, those sort of goals and objectives. There has been some work done. If you look at the PATH system, the Program Activity system, there is some guidance with regards to answering of those compliance questions. That is captured there and that was developed at a national level with input from regions.

Beyond that, in terms of how to implement a regional sort of monitoring initiative, there's been a tremendous amount of flexibility offered. The reality is monitoring as a regional initiative is being rolled out in somewhat different fashions in the different regions.

MS. TESSARO: We're going to turn to the regional approach in a moment, but first I should probably mark this document here, the National Habitat Monitoring Framework draft, December 15th, 2005, as the next exhibit.

1 THE REGISTRAR: Will be marked as 677. 3 EXHIBIT 677: Draft Habitat Monitoring 4 Strategic Framework, December 15, 2005 5 6 MS. TESSARO: 7 Would DFO benefit from a National Habitat 8 Monitoring Framework? 9 There's pros and cons to that. It's always, I 10 quess, the pull between national level direction 11 versus regional flexibility. So a certain amount 12 of national direction would be useful and would be 13 helpful. But the reality is at the regional 14 level, often you need to be able to tailor your 15 program to your specific circumstances. 16 overly prescriptive could make things difficult. 17 So turning, then, to the regional approach --18 MS. TESSARO: Mr. Bisset, this is Tab 19 -- or, sorry, 19 Tab 18 of the Commission's documents. 20 Q Mr. Carter, you're familiar with this document? 21 Α I am familiar with this document. 22 Q And did you draft it? 2.3 I did. Α 24 And is this Pacific Region Habitat Monitoring 25 Framework finalized in the region? 26 It is very close to final. Regionally we held a 27 workshop with all of the monitoring staff as well 28 as all of the area managers and the regional 29 managers, running through this document in order 30 to ensure everybody's understanding was the same. 31 There was a general consensus towards the content 32 of this document. It has been revised moderately 33 but only to make the statements a little bit 34 bolder and to make it more concise. 35 Q Has it gone to the Regional Management Committee 36 yet? 37 It has not. Α 38 It has...? Q 39 Α It has not. 40 Q Okay. 41 Α Well, excuse me. I should say the Regional 42 Managers Committee was the committee that provided 43 the direction on making it bolder and making it 44 more concise, so they have seen this document, 45 obviously. 46 Q I think we might be talking about different

things. When you say the Regional Managers'

```
1
            Committee, you're talking about within OHEB?
 2
       Α
            Yes.
 3
       Q
            It hasn't yet gone to the --
 4
       Α
            To the Greg Savard --
 5
            -- Operations Committee?
                                       I'm getting things
 6
            wrong, sorry.
 7
            Yes. No, it has not.
       Α
 8
            Okay. And maybe just if you could describe very
            generally the purposes of your Pacific Region
 9
10
            Habitat Monitoring Framework, what it's intended
11
            to achieve, what it's intended to guide.
            A number of things. It lays out goals,
12
       Α
13
            objectives, governance, basically how we would go
14
            about doing monitoring in this region and why we
15
            would do that monitoring. So it talks about our
            development of priorities, our work planning, our
16
17
            timing during the year, who would be involved,
18
            what our linkages with the rest of the program
19
            would be.
                       So it really does lay out how we would
20
            do monitoring in this region.
21
            Does it differ in any material way from the Draft
22
            National Monitoring Framework?
23
            The 2005 document?
       Α
24
       Q
            Right.
25
            Not in any dramatic fashion that I can think of,
26
            'cause we did use that 2005 document as a guide,
27
28
            Does it envision a different role for Science, for
       Q
29
            DFO Science and DFO Habitat management program, or
30
            does it --
31
            I think the regional document assumes an
32
            engagement with Science and perhaps that wasn't
33
            necessarily identified in the 2005 document, but
34
            is identified in the regional document.
35
       MS. TESSARO: Okay. I know that a lot of work's gone
36
            into this, and I'm sorry to skip over it, but if I
37
            could just mark it as the next exhibit and move on
38
            to the 2010 --
39
       Α
            Sure.
40
                     -- field season.
       MS. TESSARO:
41
       THE REGISTRAR: Exhibit number 678.
42
                 EXHIBIT 678:
43
                               Pacific Region Habitat
44
                 Monitoring Framework, February 15, 2011
45
       MS. TESSARO:
46
47
            So my understanding is that 2010 was the very
```

first complete full field season conducted by the HMU?

A Yes.

- Q And I will take you to a couple of documents that we've received recently to pin some of your results down, but maybe, before we do that, could you just describe, in summary, what were the results of the 2010 field season? What were some of the observations that were made?
- A All right. I would say that this field season was very much a learning opportunity. There were a number of observations made, observations that we will take to try and improve the monitoring that we do in the future, or to enhance the monitoring we do in the future.

We identified a number of issues, some of which were sort of outstanding issues. The availability of information to do monitoring upon was identified as an issue. Sometimes how carefully conditions were worded as to whether those conditions are measurable or not was identified. So some recommendations with regards to clarity and wording of conditions, and that those conditions include measurable sort of indicators of success.

So there were a number of things that we learned. I think we learned that from the compliance side -- like I said before, when you ask general questions, you get general answers. Right.

- Q Right.
 A We also learned that there's a lot of work to be done when it comes to the impact evaluation side of it to ensure that there's consistency in how those impacts are quantified and how they're measured or estimated so that it can be done consistently across the region.
- Q Just to follow up on one thing you just said, you mentioned the necessity, I think, for clear authorization, so that was a --
- A Clear conditions.
 - Q Clear conditions. And you're talking about conditions there in s. 35 authorizations?
- A Authorizations or advice provided in letters of advice or even conditions included in operational statements.
- And is that because if the advice that's given isn't clear, then you can't actually monitor and

```
1
            assess whether or not it was conformed with?
 2
       Α
            Whether somebody successful met that condition.
 3
       Q
 4
       Α
            I can give -- you know, I can pose a good example.
 5
       Q
            Sure.
 6
            We ran into a lot of circumstances where a
       Α
 7
            particular condition said, minimize this effect,
 8
            or minimize the amount of riparian clearing.
 9
            Well, from a monitoring perspective, it's
10
            difficult to determine what was the minimum that
11
            should have been met.
12
            And that problem of the need for advice to be
13
            measurable, is that a recent observation that DFO
14
            has learned, or is that -- has that problem been
15
            recognized for some time?
16
            I think there's a balance between trying not to be
       Α
17
            overly prescriptive and give proponents
18
            opportunities to come up with creative solutions
19
            to issues, versus being prescriptive and including
20
            very measurable sort of outcomes. So it's been
21
            seen as an issue to be balanced, but with the
22
            onset of doing more dedicated monitoring -
23
            especially from the Monitoring Unit's perspective
24
            - it's been identified as a fairly key issue.
25
       MS. TESSAR:
                    This is largely to get these documents on
26
            the record, but if we could pull up Tab 16.
27
       Q
            Do you recognize this document?
28
       Α
            Yes, I do.
29
       Q
            And did you create this?
30
       Α
            Yes, I did.
31
            And it was presented to whom and for what purpose?
       Q
32
       Α
            Again, it would have been presented to the Habitat
33
            Managers' Committee which would have been the
34
            regional manager of Habitat as well as the area
35
            managers.
36
       MS. TESSARO:
                     Could we mark this as the next exhibit,
37
            please?
38
       THE REGISTRAR: Exhibit 679.
39
40
                 EXHIBIT 679: Habitat Monitoring Update,
41
                 Presentation to Regional Managers, November
42
                 25, 2010
43
44
       MS. TESSARO:
45
            And could we turn to page 6 very quickly?
46
       Α
            Actually, can I just -- this presentation was
```

provided in November.

1 Q Right. 2 Α Right at the -- sort as the field season was 3 beginning to wrap up. But in terms of data entry 4 and other things, there was still a lot of data 5 going into the database, so this was a very 6 preliminary sort of update on how the field season 7 8 I think if we turn to page 6, preliminary -- very 9 preliminary results. 10 Α Yes. 11 I just want to understand one thing about this table that I don't understand. You've got 12 13 "Conformed to Advice" - you may have addressed 14 this already - but "Conformed to Advice", 36 15 sites. 16 Mm-hmm. Α 17 Q Is that right? 18 Α Okay, yes. 19 Q That seems --20 And that's actually a percentage, 36 percent. Α 21 36 percent? Q 22 Now, to be clear, though, the answer to that 23 question, there were a number of possible answers. 24 There was a yes, a no, a partial or not 25 applicable. 26 So roughly half of the sites that you monitored 27 had partial conformity to DFO's advice? 28 Α Exactly. So in terms of total conformity to 29 advice, 36 partial. If you combined partial with 30 total, you're up somewhere around, I think, almost 31 80 percent. 32 How would you assess that rate? Is that good? Q 33 that expected? Is that surprising? 34 Α Not surprising. I think partial conformance to 35 advice was expected. 36 In the interest of time, I'm going to skip Q Okay. 37 If we could just really quickly go to page ahead. Now, I think this is the point that you were 38 39 making already about the need for authorizations 40 to be clear and measurable. 41 Yes. Α 42 So turning to page 9, then, we've got a second 43 observation here about a lack of consistency in 44 DFO and proponent documents. And my question is 45 actually about one of the blue comments at the 46 bottom, "ROS were easy". Regional operational

statements?

A Yes.

 Q And why were they easy?

- Regional operation statements were relatively easy to monitor because the conditions were specific and they were the same because we were looking at one type of project, so you had a set of conditions that you could go out and evaluate against. The point above had to do with the fact that -- especially with authorizations where you've got our authorization document where there may be a series of conditions included.
- Q Mm-hmm.
- You would also have proponent documents and plans that might include a series of, I guess, commitments and sometimes there was difficulty because the commitments that the proponent was making versus the conditions that were included in the DFO document didn't line up or, in some cases, weren't even compatible.

It was also sometimes very difficult to know when a particular condition was in play. Was that a condition that applied to construction or was that a condition that applied post-construction?

So the clarity of the regional operational statements, one type of project, one set of conditions, made the monitoring of those projects relatively simple. So, I guess, the observation or the recommendation that sort of came out of here was we need to see about trying to be more consistent in how we format and pose those conditions.

Q Thank you. Just turning to the final observation in this deck which is the next page:

File management/data entry is still a problem — too much time had to be allocated to finding the information necessary to conduct monitoring and in many cases it limited the number of projects that could be monitored.

Is this a surprising observation or one that you expected?

A No. As it's come out previously, observations from Quigley and Harper and others, there was an expectation - the Auditor General reports as well - that records management is a difficult issue and that there are, I guess, issues and what we were

pointing out is that records management also had implications on the effectiveness and the monitoring capacity.

- Q You just mentioned the Commissioner's report. You're talking about 2009?
- A Yes.

2.3

- Do you know, since that report, what has been done to bring more rigour, if I could dare use that word, more rigour to national file management protocols?
- A I know there's been work done on the PATH, the Program Activity Tracking system to try and make it more user friendly, to increase the capacity. I know there's been a lot of capacity added to the system in terms of uploading of documents so that those documents can be available electronically. So there has been work done to our tracking system to help support that. However, it hasn't addressed all of the issues.
- I'll read you the very specific recommendation and response from the 2009 report without taking you there, because I have about 15 minutes left here.
- A Sure.
- MS. TESSARO: So the recommendation -- and for the record, this is Exhibit 35, ringtail page 16, and if Mr. Bisset has time to pull that up, that would be great.
- Q The recommendation is:

In order to make consistent decisions on project referrals in accordance with Departmental expectations, Fisheries and Oceans Canada should ensure that an appropriate risk base quality assurance system is in place for the review of these decisions.

And then DFO's response, in part, is as follows:

Although much progress has been made, the Department recognizes that there is still much work to be done with respect to documentation standards. With that in mind, by 31st of March, 2010, DFO will implement a risk-based quality assurance system to verify that documentation standards are being applied consistently by staff.

A Mm-hmm.

2.8

- Q Are you aware of any such implementation of a new risk-based quality assurance system to verify documentation standards?
- A I'm sorry, I'm not.
- Q Regionally, however, I understand that there's been some effort made through your Unit to come up with file management protocols. Can you explain a little bit about that?
- A Well, out of Monitoring, I guess there were a number of documents that were identified as being fairly key to allow monitoring to occur, and to support monitoring, things like project designs, the set of conditions, the commitments from the proponent, those necessary documents were identified.

In one of the areas in the south coast area, that area, the area manager took it upon themselves to develop a bit of a file management protocol that included not only the necessary information from monitoring, but also other information that they felt was important to be included in the file. They laid out, I guess, an approach or a method to capturing that information, whether it was captured electronically or through centralized filing.

- And has that file management protocol done by the south coast area office, have there been any discussions about trying to adopt that as a regional file management protocol?
- There have been and there has been some work done at the RHQ level to see about taking that and developing it into a more regional type of a document. The reality, though, is there are, I guess, different capacities amongst the areas in terms of that document management. So I can give an example: On south coast, their protocol refers to particular files being stored on a share drive that could just be linked to in PATH. That capacity isn't necessarily the same in all of the areas, so you would have to have a somewhat different solution to that issue for some of the areas.
- Q Who's responsible for improving file management within the Habitat Management Program?
- A Well, it would be Dale Paterson's group, but I'm trying to think of what that support -- I think it

- would fall on the administration side, but I'm not sure exactly of the name.
 - Q Is it a national responsibility, a regional responsibility?
 - A I know it's being worked on at the regional level. I suspect it's being worked on at the national level as well.
 - Q I understand that you are the supervisor of the PATH coordinator.
- 10 A I am

- Q So if there were national initiatives underway, would you be made aware of those?
 - A Yes, I would. And, to be clear, there is continuously work being done on the PATH program, so there are continuous improvements that are occurring on that program. So it is involving (sic) and improving. However, document management goes beyond just project documents. There's a lot of other documents that this department generates that would be included in that document management issue as well.
 - Q Have you read s. 6.1.1 of our PPR regarding information management?
 - A I suspect I have, since I read the document, but...
 - Q Do you recall any -- do you have any reactions to our discussion in that document of information management challenges or file management challenges? It may be that you go over this with your counsel as well, but --
 - MR. TAYLOR: Well, maybe you could point the witness to it --
 - MS. TESSARO: Fair enough.
- A Please.
 - MS. TESSARO: Fair enough. It's the PPR and starting at paragraph 213, which, I'm sorry, is around page 84, I believe.
 - Q I think in fact we've covered some of this. My question is more about the next page. There's a discussion in the PPR about the PATH database.
- 41 A Mm-hmm.
 - Q Did you have any comments or clarifications or corrections to make to the discussion of the PATH database, having read this document?
 - A No. I would concur with what's stated there.
- There was a comment yesterday or the day before from Monsieur LeBlanc about species specific

information in the PATH database. My question is can PATH be searched directly for species-specific information?

- A My understanding is that you can do keyword searches on some of the comment boxes and some of the fields within PATH, so if that information was included, I expect that you could do a search along those lines.
- Q Okay. I think that's it on information management and record management. Let me just quickly check here.

I have just a couple of questions about arrangements with the province on habitat monitoring side.

A Sure

2.8

- Q Ms. Reid was asked if the BC/Canada Fish Habitat Management Agreement is defunct, and I'm going to ask you if the agreement has ever informed your habitat monitoring work.
- A I guess in terms of some of the principles within the agreement. We've made efforts to contact provincial agencies that we know do monitoring in various forms, and we have had conversations and meetings with them to look at integrating our monitoring. So I guess the spirit would be there. The specifics, I would have to say no.
- Q How often would you have had cause to refer to it in the last two-and-a-half years?
- A Once or twice.
- Q Are you aware of any joint DFO/BC habitat management groups or joint committees that have a specific mandate around habitat monitoring?
- A Well, there's things like the SLIPP program where inventory work is being done. That is occurring in a number of places. There are a number of sort of area-based committees looking at compliance monitoring or monitoring that Habitat staff in the various areas are party to or could be party to. So there is some engagement. I would sort of categorize it more ad hoc.
- Q Do you sit on any committees with the Province of B.C. that look at collaborating on habitat monitoring?
- A No, though I have had meetings with the biomonitoring group out of what used to be Ministry of Environment talking about for our next field season how we might collaborate.

- 1 Q And maybe I'll just leave it at that, and turn to my very last area of questioning.
 - A Sure.

- Q That's turning back to the Commissioner of Environment and Sustainable Development's 2009 report, which is Tab 22 of our binder there, if that assists, and Exhibit 35.
- A Sure.
- Now, of course I don't have the document in front of me, sorry. If I could ask you to turn to ringtail page 16, and that's 16 at the bottom of the document as opposed to the real pagination. Actually, I think we've already covered this, so skipping ahead, there's a heading, "There's little monitoring of compliance and evaluation of effectiveness," halfway down the page on ringtail page 16, and the discussion continues. Have you had the chance to review this document and this discussion?
- A Yes, I have.
- Q So turning to the recommendation that's made which is at page 19, I'm going to just read part of the recommendation which is the last sentence in paragraph 1.4.1:

The Department should also determine whether the required mitigation measures and compensation are effective in meeting the no net loss principle.

My question is does that language suggest that the No Net Loss principle is a performance standard to be met?

- A Well, I think as was mentioned yesterday, I think it was more of a goal that was outlined in the policy as opposed to a performance measure. I think the No Net Loss principle, if you're talking about productive capacity, is a fairly difficult thing to measure dependent upon a number of things. I can think of performance measures that might be more easily measured and evaluated.
- Q Just to make sure we're all clear about what is meant when we talk about performance measures, how does that differ from a goal? It's a way of achieving that goal or...?
- 46 A It would be an indicator associated with how you were doing towards that goal.

Q Okay, thank you. Looking at DFO's response to that recommendation, in particular the last sentence of the first paragraph of the response, it says:

...the Department commits to fully implement the Habitat Compliance Decision Framework and report on the results of project monitoring activities by the 31st of March, 2010, and annually thereafter.

Has your Unit submitted a report prior to March 31st, 2010, on the results of project monitoring? My understanding is that the reporting done in relation to this would be gathered from data that's contained within the PATH system. So all of our results from the compliance monitoring were put into the PATH system so that reporting would be done at a national level, and that they would be basing it upon the data that's included in the PATH system.

So we didn't write the report, per se, but we did provide data that would be utilized at the national level for development of that report.

- And have you, yourself, seen that report that you're talking about, and do you know what its title is?
- A No, I have not.
- Q Are you working -- apart from simply reporting into PATH and expecting that the national headquarters are going to take out that data and report on it, are you, in Pacific Region in the HMU working specifically on implementing that recommendation, that response in any way?
- A In terms of developing a regional report on our monitoring results?
- Q Right.
- A Yes, we are currently working on a regional report and, to be honest, if I wasn't sitting here, that's what I would be working on right now.
- Q We'll get you back to it as soon as we can.
- A Thank you.
 - Q In that spirit, I think I have two last questions. One is page 25 of this document. This is a fairly important recommendation, I think, in light of the habitat management hearings. The top of this page says, "Habitat loss or gain is not being

measured." The recommendation made at paragraph 1 1.7.4. is that: 3 4 Fisheries and Oceans Canada should develop 5 habitat indicators to apply in ecosystems 6 with significant human activity. 7 8 DFO's response is that it accepts and agrees with 9 this recommendation. 10 Do we not have those indicators for salmon in 11 Pacific Region already? 12 Under the WSP? Α 13 Q I'm asking you. 14 Yeah, under WSP, there have been a set of 15 indicators that have been developed and have gone through a peer-review process, so those indicators 16 17 would be specific to salmon habitat in this 18 region, so yes. 19 Q But those are not yet being used? 20 Well, are you asking are they being used at a Α 21 national level, or are they being ...? 22 No, I'm asking you if they're being used by Pacific Region in monitoring habitat? 23 24 Α My understanding is from the work of the 25 Monitoring Unit, we are not gathering that data 26 currently. 27 And, my apologies, I think I've asked you that Q 28 question already. 29 Yeah. Α 30 So my final question, unless you have anything Q else to say about how the DFO in the Pacific 31 32 Region is responding to that response and 33 recommendation. Out of fairness, is there any 34 other thing that you're aware of that DFO here is doing? 35 36 I think it's key to point out that we are 37 implementing a monitoring program in this region. 38 There are people actively out doing compliance 39 monitoring now. We did conduct, I think, 614 40 compliance monitoring site visits this year, so 41 monitoring is -- at least compliance monitoring is 42 being conducted and we are working towards 43 developing effectiveness and longer term goals 44 with regards to ecosystem health monitoring as 45

My last question is simply whether you

have any comments or corrections to make upon

well.

Thank you.

46

47

Q

35
Dave Carter
Cross-exam by Mr. Taylor (CAN)

reading our Policy and Practice Report 1 2 specifically with respect to habitat monitoring. 3 Not right now, no. MS. TESSARO: Thank you. 5 THE COMMISSIONER: We'll take the morning break. 6 7 (PROCEEDINGS ADJOURNED FOR MORNING RECESS) 8 (PROCEEDINGS RECONVENED) 9 10 THE REGISTRAR: Order. The hearing is now resumed. MR. MARTLAND: Mr. Commissioner, I have Mr. Taylor with 11 12 a 45-minute estimate. 13 MR. TAYLOR: Mitchell Taylor for the participant Government of Canada and with me is Jonah 14 15 Spiegelman. 16 17 CROSS-EXAMINATION BY MR. TAYLOR: 18 19 Mr. Carter, let me begin by turning your 20 attention, if I may, to Exhibit 35, which is the 21 209 report of the Commissioner for Sustainable 22 Development. That's Tab 22, which has come up on 23 your screen there. 24 MR. TAYLOR: And if you, Mr. Bisset, would be so kind 25 as to turn to a page that I can't give you but it 26 has "Recommendation 1.41" on it. Actually, I can, 27 25 in the real page numbering on the document. 28 Now, Mr. Carter, you'll see, and I think Ms. Q 29 Tessaro took you to this as well, "Recommendation 30 1.41" at the top, which says that, as a 31 recommendation: 32 33 Fisheries and Oceans should accelerate 34 implementation of its Habitat Compliance 35 Decision Framework to ensure there is an 36 adequate risk-based approach to monitoring 37 projects and providing assurance that 38 proponents are complying with the Act and all 39 terms and conditions of Departmental 40 decisions. 41 42 And you're familiar with that recommendation, of 43 course? 44 Α Yes, I am. 45 And that recommendation is similar to

recommendations that had been made prior to that,

isn't it?

46

36
Dave Carter
Cross-exam by Mr. Taylor (CAN)

1 Α Yes, it is. 2 Now, you're the team leader for the Habitat 3 Monitoring Unit. Is your role and your unit 4 essentially a response to that recommendation? 5 Α Yes, I would say that it is. 6 And others like it as well? Q 7 Α Yes. 8 Q And what can you say about the Department's 9 approach and response to that recommendation and 10 whether they embraced it and took it seriously? 11 And what have they done, just at an overview level 12 for the moment? 13 Α At an overview level, the Habitat Compliance 14 Decision Framework, as a Policy document, has been 15 created and it does exist. And it lays out the 16 Department's approach to when an identified occurrence or a non-compliance is found, how to 17 18 respond to it in a risk-based approach, and also 19 there has been the implementation of habitat 20 monitoring staff across the country. So I think 21 the response has been fairly substantive. 22 Summing up then, is it fair to say that your unit 23 and the work that you do is in the Pacific region 24 and there's others like you elsewhere in the 25 country, is operationalizing the recommendation 26 that we just looked at? 27 I would say so, yes. Α 28 Now, the Monitoring Unit that you have in the Q 29 Pacific region is something that's part of a 30 national initiative to achieve improved monitoring 31 and some national consistency, is it? 32 Yes, it is. Α 33 And why is it that national consistency is 34 important? 35 Α I think it's important to have the consistency so 36 that information that's gathered across the 37 country can be combined or compared and can be 38 used and also the opportunity that when you learn 39 something in one region it can be applied to other 40 regions as well. So I think that consistency is 41 important. 42 And at the same time, what's your assessment as to Q 43 whether you've got, speaking at an overview for 44 the moment, sufficient flexibility to do in this 45 region what you think needs to be done to adapt to 46 local circumstances?

I would say we are being provided with an adequate

47

Α

amount of flexibility to try and tailor the
monitoring that we're doing in this region to
what's been identified as the priorities of this
region. So we are being afforded a certain amount
of flexibility.
You've outlined for Ms. Tessaro, in answers to her

- You've outlined for Ms. Tessaro, in answers to her questions, something of the structure in the Pacific region and where and how your unit situates within the regional structure and your reporting relationships with headquarters and your role and the number of staff, which essentially is 12 staff in your unit?
- A That's correct.
- Q And in addition to your 12 staff, you have a certain directive function with regard to other habitat staff who are doing monitoring; is that right?
- A I think I would call it a coordination function rather than a directing function.
- Q Okay.

- A You know, but yes, we do coordinate the efforts that are being done by other Habitat staff as well as the Monitoring staff.
- Q And that would be other staff in the five area offices?
- 26 A That's correct.
 - Q And am I correct that your 12 staff, some of those, are in the five area offices, aren't they?
 - A Yes, most of them are.
 - Q All right. And do those 12 or the number of those 12 in the area offices, do they work alongside with these other habitat officers, who are also doing some habitat work --
 - A Yes, they do.
 - Q -- or doing some monitoring work?
 - A Yes, they do. They work actively with the other staff and, you know, they are actually conducting monitoring jointly very often. And part of that is beneficial because it ensures that, you know, the standards and the approaches that are being used by the Monitoring staff can be conveyed to the Habitat staff in general so that the monitoring, when it's done, is done again in a consistent fashion within the region.
 - Q Do you have a sense of the number of staff in addition to the 12 that report directly to you? Do you have a sense of the number of Habitat staff

1 in addition that do monitoring work and how much of their time is spent on that?

- I don't know that I could pull out an exact number for the Habitat staff in the region. I'd have to It's, you know, look at an org chart for that. going to be in the neighbourhood of 60, 70, above that probably.
- Did you say "six or seven" or "six zero and --
- Six zero. But to be honest, I would have to look Α at the org chart to be sure of that number.
- But that's kind of a range you're talking about, is it?
- Α Yes.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21 22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38 39

40

41

42

43

44

45

- Q All right. And do you know how much of their time, that staff time, is spent on monitoring?
- The goal is 20 percent. What we have found is Α that the number tends to be lower. I think more in the neighbourhood of 5 percent, somewhere in there, but there are continuing efforts to try and increase the amount of monitoring that's done by Habitat staff and we're trying, as part of the Monitoring Unit, to facilitate that.
- Can you explain for the Commissioner the Q qualifications or skill sets that your 12 staff have and any further training that they're given internally to do the work that's underway?
- The Habitat biologists that are involved, most of Α them are experienced Habitat biologists that have been conducting referrals and reviewing projects for a number of years. So they have field experience in evaluating impacts, evaluating projects, quantifying habitat variables. And then there are a number of Monitoring technicians, who are experienced in field skills, doing the measurements, capturing samples, those sorts of skills. So they are a fairly skilled group, though we have a range. We have some staff who are relatively new to it, some staff who are very experienced. Most of them have been involved in project reviews.
- Now, are you speaking of the 12 that report to you or both those --
- Α Yes.
- Okay. And is there a different skill set in the Habitat staff who also do monitoring in addition to the 12, or are they largely the same kind of 47 skill set?

- I would say very similar skill sets. Within the 1 Α Monitoring Unit, we did a lot of work this year as 3 a group where we went out and did case studies as a group and looked at how we would evaluate a 5 particular situation or condition and how we would 6 capture the information in order to build sort of 7 consistency. So internally, we did a lot of work 8 together. The intent is that then that work or 9 the benefits of that work would be conveyed to 10 Habitat staff in the areas through the Monitoring 11 staff in the area. 12
 - When you say biologist and technician, am I correct that those are words that relate to federal government classifications?
 - A That's correct.
 - Q And biologists, I take it, have biology degrees?
 - A Yes.

13

14

15

16 17

18

19

20

21

22

23

2425

26

27

28

29

30

31

32

33 34

35

36

37

38

39

40

41

42

43

44

45

46

- Q Am I also correct, though, that technicians, some or all of them have biology degrees?
- A Currently for the technicians working in the Habitat Monitoring Unit, most have degrees. There are some that just have diplomas or certificates.
- Q And what kind of diploma or certificate would that be?
- A Would be a college diploma or certificate in environmental studies of one form or another.
- Q All right.
- THE COMMISSIONER: Mr. Taylor, I apologize for interrupting but before I forget, you mentioned to the witness the Habitat Compliance Decision Framework has been created. Has that already been marked as an exhibit?
- MR. MARTLAND: I don't believe that has been marked. I think it was referred to but not brought up on the screen. It's one of the documents I think we have in our list of exhibits.
- MR. TAYLOR: Is this what Mr. Carter at one point referred to as the picture? I don't recall myself speaking of it so that's why I might sound...
- THE COMMISSIONER: Well, I apologize, sir. At the very outset of your questions, you took him to Exhibit 35 and 1.41 on page 25. And you read him the Habitat Compliance Decision Framework that's mentioned.
- MR. TAYLOR: Oh, right, yes. I'm being told it's Tab 2 of our binder. Let me just see what that is.
- A I do believe I mentioned that it was a Policy

document that had been created.

- MR. TAYLOR: Mr. Bisset, are you able to bring up Tab 2 of -- thank you.
- Mr. Carter, I see what Mr. Commissioner is speaking of now. In 1.41, that recommendation from the Commissioner of Sustainable Development, it says:

To implement the Habitat Compliance Decision Framework.

Is that the document that's now on the computer screen?

- A Yes, it is.
- MR. TAYLOR: That is not an exhibit, Mr. Commissioner. I'm happy to have it marked as an exhibit. Recommendation 1.41 keeps coming up and since it does refer to it, it's probably useful to have the document that the recommendation is referring to put in as an exhibit.
- THE COMMISSIONER: All right. And if I may just impose on you just for a moment, and I apologize again for interrupting, but I just want to make sure I understand. There was Exhibit 677. I'm just a little confused as to how these documents relate, if they do at all.
- MR. TAYLOR: And this is 677 up on the screen now. Can you, Mr. Carter --
- A I can probably explain the relationship between the two.

THE COMMISSIONER: All right.

And there is a little bit of confusion caused by the wording of that 1.41 because the wording of 1.41 suggests that the Habitat Compliance Decision Framework will sort of lay out the Monitoring initiative but in reality, the Habitat Compliance Decision Framework is a Policy document that lays out sort of a risk-based approach to an incident of non-compliance.

So when non-compliance is identified, the Compliance Decision Framework lays out an approach to evaluating the risk associated with that non-compliance and then coming up with a response from the Department, whereas the National Habitat Monitoring Framework was a document talking more about developing a habitat and monitoring initiative and what would be involved in

41
Dave Carter
Cross-exam by Mr. Taylor (CAN)

monitoring. So I guess, you know, the results of 1 habitat monitoring would then feed into a 3 Compliance Decision Framework where, when you 4 identified non-compliance, now what do you do 5 about it. 6 MR. TAYLOR: 7 I think you're saying that the monitoring work and 8 the left side of the computer screen is a document 9 relating to that? 10 Yes. Α 11 The monitoring work is done and feeds into 12 allowing compliance decision-making to occur? 13 Α 14 Q And compliance decision-making is within the 15 context of the right side of the computer screen? That would be correct. 16 Α 17 The left side of the screen is currently an 18 exhibit, although the number escapes me --19 MR. BISSET: 677. 20 MR. TAYLOR: 677. And the right side of the screen is 21 not yet an exhibit so I think it should be an 22 exhibit at this point, if it could be the next 23 one, that is, the Habitat Compliance Decision 24 Framework. 25 THE REGISTRAR: Marked as Exhibit Number 680. 26 27 EXHIBIT 680: Habitat Compliance Decision 28 Framework Fisheries and Oceans Canada -29 Version 1.1 2007 30 31 MR. TAYLOR: 32 And that is a 2007 document, isn't it? 33 That's correct. 34 And then just further on this, hopefully to assist 35 the Commissioner, I'm getting the sense, and I'll 36 put it to you but you correct it, or correct what 37 I say, that Recommendation 1.41 in the 2009 Report 38 of the Commissioner of Sustainable Development, 39 Exhibit 35, when Recommendation 1.41 uses the term

monitoring?
A That's correct.

MR. TAYLOR: Okay. Does that assist, Mr. Commissioner? THE COMMISSIONER: It's very helpful, Mr. Taylor, thank you. And there's just one other, and I apologize

exactly the framework that is speaking to

" Habitat Compliance Decision Framework", he or

she has not quite got it right because that's not

40

41

42

43

44

45

46

1 again but I take you back to 1.41. MR. TAYLOR: No, that's fine. 3 THE COMMISSIONER: Under the Fisheries and Oceans 4 Canada's Response, there's just another reference 5 there to something. I just want to make sure I 6 understand. The Habitat Compliance Modernization 7 Initiative, is that something that the witness 8 could just explain in terms of its relationship to 9 these other exhibits? 10 Yes, I can. Α 11 MR. TAYLOR: 12 Yes, can you outline for that and meanwhile, while 13 you're explaining it, I'll see if we find it. 14 The Habitat Compliance Modernization 15 Initiative, which has been referred to as HCM fairly repeatedly, that was the sixth initiative 16 17 under EPMP. 18 THE COMMISSIONER: Oh, okay. 19 It was the last initiative that was added and 20 under that HCM Initiative there are three elements 21 and they mainly have to do with compliance 22 management. The first element was the protocols, 23 which is the working relationship between C&P and 24 Habitat, the roles and responsibilities document. 25 The second element of HCM was the compliance 26 management or the compliance decision framework, 27 and that was how you would make decisions about 28 how to respond to non-compliance, the Policy 29 document. And then the third element of HCM was 30 increasing capacity to do monitoring. And you 31 know, my main role falls in that third initiative 32 of doing the monitoring. 33 MR. TAYLOR: All right. Thank you. 34 THE COMMISSIONER: Thank you very much. 35 MR. TAYLOR: 36 We hear a fair bit about modernization in the 37 context of Habitat work. Can you briefly say what you understand to be meant by "modernization"? 38 39 It's both something to be done and it seems to be 40 a term of art as well but what's your 41 understanding of what it's all about? 42 Well, with regard to, I guess, the Habitat 43 Compliance Modernization, the main element with regards to compliance had to do with the Habitat 44 45 Compliance Decision Framework in that it basically 46 includes risk-based approach to compliance

management where, depending on the level of risk

43
Dave Carter
Cross-exam by Mr. Taylor (CAN)

associated with a non-compliance, it would influence sort of the level of response. So in that Compliance Decision Framework, there's what's been called the "Compliance Continuum" where at one end of the spectrum there's assist, you know, educate, those forums trying to get somebody into compliance, tending towards the other side of the spectrum where you might be compelling or enforcing, as the risk of non-compliance gets higher. So that would be the modernization would be applying a risk-based approach where you're putting your emphasis where the greatest risk would be.

- All right. Now, if I could take you, please, to Tab 7 in Canada's book of documents, which is Exhibit 673 now, which is up on the screen, this is something that Ms. Tessaro asked you some questions about. And I'd just like to flush out a couple of things, if I may. First, as we turn to page 2 of the document, there's reference under the second bullet to the role of both Habitat Management and C&P in Habitat Compliance Activities and Decisions. And I realize we're on monitoring at the moment but it's there. This is a document you wrote, as I recall?
- A Well, I wrote this PowerPoint presentation, yes.
- Q That's what I mean.
 - A Yes.

- Q Yeah. Can you just, in brief, say and explain the role of Habitat Management and C&P in compliance?
- A Sure. Within the national protocol, in terms of roles and responsibilities, the national protocol identifies who would be the lead under those various compliance management activities. For many of the activities, such as education, promotion, evaluation, most of those, the lead falls to Habitat. The clear, I guess, separation is that when it comes to compel and enforce, that would be the role of C&P.
- Q All right. And there is a national protocol about that as well, which has been now made Exhibit 657 and is also at Canada's Tab 12. And I may come back to that. Continuing with the document we're in, though, Mr. Carter, if you look at page 3 of this deck, the second bullet there says:

Modernizing the approach really doesn't

1 change the manner in which DFO approaches compliance. 3 Can you just elaborate on that? There are some 5 changes but at the same time that's saying it's 6 not completely different from what was before. 7 That's correct. And I mean this deck was 8 presented within this region sort of explaining 9 things or pointing things out and in this region 10 there has been a good working relationship between 11 the C&P staff and the Habitat staff in terms of 12 collaborating on these. And you know, I think as 13 the previous Panel put out, that this region 14 already has been trying to emphasis and work on 15 issues of greatest concern or higher risk. 16 there's already been some of that approach 17 incorporated into sort of compliance management in 18 the region. So this document, I think, put in 19 black-and-white some of those things that were 20 already occurring in this region. 21 All right. If you turn to page 7, it there sets 22 out the kinds of monitoring, the types of 23 monitoring and --24 Α Well, two of the three, yes. 25 Yes, right. So it doesn't include the fish 26 habitat health monitoring? 27 That's correct. Α 28 And there's the three types: compliance, Q 29 effectiveness and fish habitat health? 30 Α That's correct. 31 Can you explain and we can also at the same time, 32 if it's possible to bring up on the screen 33 alongside this, Tab 15, I think it is, of the 34 Commission's binder, yes, 15, which is now Exhibit 35 676, can you explain how and in what stage fashion 36 DFO in this region is going about developing its 37 monitoring strengths? 38 Well, I think you can see from the PowerPoint Α 39 presentation on the left that in terms of 40 compliance monitoring that's currently what we're 41 doing and that was the emphasis of last year. 42 So that's the leftmost set of columns there? Q 43 Α Yeah, under "Types of Monitoring". 44 Q Yeah.

And then in terms of effectiveness monitoring,

that's something that we are building foundations

and tools to do but that wasn't our main focus in

45

46

47

Α

that we're working with Science on that. 1 Q And that's the medium --3 Α 4 Q The middle column on the right side of the screen? 5 Α Exactly. 6 And then next? Q 7 Then in the longer term, and this is in the 8 national document, you're looking at Science 9 Development of Ecosystem Indicators to Determine 10 whether Communal Effects or Other Ecosystem Issues 11 are being Addressed. So that's in the sort of, I quess, the four or five-year term as identified in 12 13 the national document. 14 All right. And you just referenced, we can see 15 the years when you're going to be doing the 16 various monitoring. You're doing the compliance 17 monitoring now and you're starting to move to the 18 effectiveness monitoring, are you? 19 Α Well, or development of the tools to do it. 20 Q All right. Right. And then obviously there has to be a fair 21 Α 22 amount of engagement with Science in the 23 development of those tools. 24 All right. And we can probably, without losing 25 the left side of the screen completely because 26 we'll come back to it, but we can focus on the 27 right side of the screen and there's a second page 28 to the right side of the screen, Exhibit 676. 29 Ms. Tessaro took you to this as well. 30 correct that what this page is trying to do is 31 show pictorially the level of involvement of 32 different branches within Fisheries in the various 33 stages or steps in your monitoring rollout? 34 Yeah, the three groups, the C&P, the Habitat and Α the Science, yes. 35 36 And it appears from this that Science has got a 37 very heavy component when it comes to 38 effectiveness monitoring and fish habitat health? 39 Α That would be correct. 40 And can you briefly describe what is underway now 41 to ready things so that Science will have the time 42 and the resources to do this big pink box that's

here?

Well, a couple of things.

on regionally. There have been a set of

guidelines developed for a specific type of

project that Science is being asked to peer

There are things going

43

44

45

46

review, the monitoring methodology outlined in those guidelines. So there is some regional work being done on developing effects monitoring or effectiveness monitoring that would be done by proponents mainly. So there is some engagement with Science there regionally. And at the national level, there have been meetings that have gone on between Habitat and Science looking at what the sort of Science priorities for the next five years might be. And my understanding is that some of those indicators or standards have been identified as a priority for Science.

- Q All right. If we turn now to Tab 12 in Canada's binder, which is Exhibit 657, this is the national protocol as between Habitat and Conservation and Protection. And you're familiar with this document, are you?
- A Yes, I am.

- Q Are there any aspects of this document that are important to point to as they bear on your work and the work of your Unit?
- A Well, I guess the one piece in this document does identify that monitoring is the responsibility of Habitat, though there is support from C&P in that. Beyond that, there's not a lot because this document mainly refers to compliance management.
- Q Okay. Ms. Tessaro asked you early on in her questions about why monitor. And you gave an answer, which I took to be the start of an answer, and then the questions and answers moved on to some other points. And in answering Ms. Tessaro's question, you said that, in answer to why monitor, one thing is to support compliance. And you also said to continuously shoot for improvement. Are there other reasons that you think are important to list for the Commissioner as to why monitor habitat?
- A Well, I mean those two are the main ones, I think. You're supporting the compliance to ensure or elevate the levels of compliance and avoid impacts to habitats. So I guess through higher rates of compliance, the hope is that you're avoiding impacts to fish habitat, which would be in tune with the policy. And then yes, I mean the continuous improvement and evaluation of the work that we're doing and how effective it is and how can we improve the effectiveness. I think those

```
1
            really are the two key issues.
            Okay. If we could turn now to Exhibit 679, which
       Q
 3
            is Tab 16 in the Commissioner's binder, this is
 4
            another PowerPoint presentation.
                                               It's from
 5
            November of 2010. And in answering Ms. Tessaro's
 6
            questions, I understand that this is something you
 7
            authored?
 8
            Yes.
       Α
 9
            And this is a PowerPoint that sets out some of the
10
            preliminary findings of your 2010 fieldwork?
11
            Yes, very preliminary findings, yes.
       Α
12
            And as I understand it, 2010 was your first
13
            operational year, if I could put it that way?
14
       Α
            Where there was staff in all areas doing
15
            monitoring, yes.
16
            So you've now got a region-wide set of data that
17
            you are taking in hand, assembling and analyzing,
18
            I gather?
19
       Α
            That's correct.
20
            And I think you indicated that there will be a
       Q
21
            final report on the results of your 2010 work?
22
            There will be a regional report, yes.
23
            And that's at the point where you indicated, if
24
            you weren't here, you'd be doing that?
25
       Α
            Yes.
26
            With that, though, do you have an estimate when
27
            that will be done and available?
28
       Α
            It will be done this spring, I would hope within
29
            the next couple of months.
30
            All right. So by summer, roughly?
       Q
31
       Α
32
            Now, on page 6, you've got percentages there for
       Q
33
            the findings, the results by yes/no in terms of
34
            compliance?
35
       Α
            Yes.
36
            "Partial", "unknown" and the last one's "not
       Q
37
            applicable", I take it?
38
       Α
            Right.
39
       Q
            What's meant by "partial"? Does partial mean they
40
            met it a little bit or complied a little bit, or
41
            does it mean substantial compliance, or can you
42
            just elaborate on what's referred to?
43
            We answered those questions in a very specific
       Α
44
            fashion in order to ensure that people were
45
            answering them in a consistent manner. So you
            know, there might have been a series of conditions
46
47
            associated with a particular project. If they met
```

```
one of those conditions and they didn't meet the
 1
            rest, we would have said "partial". If they met
 3
            all of the conditions, we would have said "yes".
            If they met none of the conditions, we would have
 5
            said "no".
                        So we were very specific in how we
 6
            approached the answering to those questions.
 7
            All right. So we know then from this information,
            recognizing it's very preliminary data, but as it
 8
 9
            stands, we know that, for example, in terms of
10
            "built as proposed", about 44 percent complied?
11
            Well, sorry, this is "were built as proposed".
12
       Q
            Yes.
13
            Yes, okay.
       Α
14
       Q
            If I said something different, you've kindly
15
            corrected me.
16
       Α
            Yes.
17
       Q
            But 44 percent built as proposed, and then another
18
            16 percent had some level of compliance but we
19
            don't know what level of compliance.
20
            Again, I'm going to direct you away from using the
       Α
21
            term "compliance". Yeah, they were basically, I
22
            quess it would have been, what is it, almost 70
23
            percent were built as proposed? But because they
24
            were built as proposed or not built as proposed,
25
            that's somewhat distinct from whether they were
26
            compliant with the Act or not.
27
            Yes.
       Q
28
       Α
            Right.
29
            Yes, I take your point from earlier. Now, I think
       Q
30
            it's been said but to be clear, all of the work
31
            that you're doing is monitoring of projects,
32
            right?
33
       Α
            Yes.
34
       Q
            So it's project-based?
35
       Α
            That's correct.
36
            And at the very end of questioning from Ms.
37
            Tessaro, she asked you about the links or
38
            connection between WSP indicators and work there
39
            or whether they were using any of that
40
            information. As I understand it, the WSP work is
41
            watershed-based, as opposed to project-based?
42
            Or conservation unit-based --
       Α
43
            Yes.
       Q
44
            -- so stock-based. I should clarify, I guess
45
            there is some work that we were doing, some
46
            inventory work that is somewhat distinct from
47
            project assessment so things like the shoreline
```

monitoring that was done on the Shuswap and things 1 like that but the bulk of it is all project-3 directed. And you're correct, that WSP is more of 4 a conservation unit approach. 5 So you're doing something different? 6 Α Well, we're doing more project monitoring as 7 opposed to ecosystem or conservation unit 8 monitoring. 9 Q Right. 10 That doesn't mean that that couldn't be 11 incorporated into our monitoring efforts in the 12 future but currently the main focus of our 13 monitoring efforts are project-based. 14 All right. And with the projects that you do 15 monitor, and I gather you looked about 614 last 16 year? 17 Α Yes. 18 Q How do you select --19 Α Well, actually 614 site visits. The number of 20 actual projects would be lower because some of the 21 projects involved more than one site visit. 22 Okay. And how do you select which sites to go to? Q 23 We actually looked at sort of selection of sites Α 24 in three different approaches. We did some 25 monitoring that we referred to as "routine 26 monitoring" where we did random samples. We did 27 random samples of authorizations, random samples 28 of letters of advice regionally. And then we also 29 did some monitoring that we would have termed as 30 "strategic monitoring" where we directed 31 monitoring efforts at specific types of projects 32 or specific activities. So we did monitoring on 33 seawall developments and we would have done a 34 sample of seawalls. We did monitoring of docks in 35 the Interior. We did monitoring of clear span 36 bridge crossings. And those would have been strategic projects. 37 38 So for a particular project type, we would 39 have done a random sample but within that project 40 type, so a stratified sample. And then, thirdly, 41 we did a certain amount of targeted monitoring, 42 which was strictly risk-based monitoring where 43 somebody identified a concern or identified an

issue where they felt monitoring should be applied

perspective where we did some targeted monitoring

more from maybe a compliance management

as well. So three different approaches to

44

45

46

1 monitoring. 2 Q In terms of that last group, the targeted 3 monitoring, would that be based on one or both of 4 the particular project or activity has a high 5 risk, sort of a well-known high risk to it, and/or 6 the particular proponent has a reputation or --7 It could have been compliance risk or it could 8 have been impact risk, you're right. 9 And in terms of the strategic monitoring, how did 10 you pick the particular kinds of things you looked 11 You mentioned stream crossings and seawalls 12 and so forth. How did you pick those versus 13 others? 14 Prior to doing our work planning for last year, we 15 identified a number of priorities and we tried to 16 integrate national priorities, regional priorities 17 and priorities that were identified in the various 18 areas. So we actually met with staff or section 19 heads and looked for them to provide us with 20 things that they felt monitoring efforts should be 21 directed towards. Those priorities were 22 identified and then we used those priorities to 23 include specific projects within our work plan. 24 So things like clear span bridges and docks were 25 identified as priorities and that's why there was 26 monitoring effort directed towards those. 27 Was there a conscious determination made to divide 28 up the sites that you looked at between what I'll 29 call large projects and small projects? 30 No, we broke it down more by regulatory tool. Α 31 we looked at authorizations, which might involve 32 large projects or small projects. We looked at 33 letters of advice. Again, they might be large or 34 small. So it was more by the regulatory tool 35 rather than the size of the project. 36 And that end result, you have in your data 37 collected monitoring information on a range of 38 size of projects? 39 Α Yes. 40 And do you know what the split between large and 41 small is in rough terms? 42 Α I'm sorry, I don't. 43 That's fine. Q 44 That would be something I could look up but it's 45 something I don't have on the top of my head. 46 That's fine. Now, we've already covered that

there are the three kinds of monitoring: the

1 compliance, the effectiveness and the fish habitat health. And you're at the first stage --3 Mm-hmm. Α 4 -- the compliance monitoring and that's what we've 5 just talked about for the last few moments. 6 you on target to move along that time continuum 7 that we saw in the picture chart that we went to? 8 We're definitely working on building some of the 9 tools to do the effectiveness monitoring. I think 10 we're dependent on some support from Science and I 11 expect that support will come but I can't say for 12 So I think we're moving in that direction. sure. 13 I think that timeline of fully implementing 14 effectiveness monitoring in the ecosystem is 15 ambitious, just knowing how much effort is 16 involved in getting solid information that's 17 gathered consistently. 18 And that's up to 2013, is it? 19 Α Yes. 20 Q Mm-hmm. 21 Α So I think we're moving in the right direction. 22 All right. Are steps being taken to have Science 23 become available to do what you need of them? 24 Α Yes, they are. 25 And that's that? Q 26 There is a liaison or a person involved in sort of 27 working with Science within Pacific region that I 28 have opportunity to communicate with and get 29 priorities to. There is also national engagement 30 between Habitat and Science that has been ongoing. 31 There have been meetings that have occurred 32 between the two groups. 33 What sort of work will Science be doing? 34 needed of them? 35 Α We definitely need support when it comes to 36 effectiveness monitoring in terms of, you know, 37 number of sites, how many replicates, how to 38 sample, which specific variables to gather, which 39 would be the most indicative of change. 40 there's definitely support from Science in the 41 design of the sampling regime or the monitoring

regime. And you know, in Pacific region because

indicators, a number of those have already been

developed but again there's the need to develop

sort of a framework for applying those indicators.

of WSP when it comes to the ecosystem health

developed. So those indicators have been

42

43

44

45

46

You know, you might have a specific indicator but how many sites within a watershed do you need to sample to accurately represent what's going on in that watershed? Do you need to look at a hundred or do you need to look at a thousand?

- Q Returning for a moment to WSP, are you involved in developing a framework for how monitoring may be done in relation to WSP?
- A I have been involved in the development of that framework, which is ongoing.
- Q And what is your involvement?
- A I've just been a reviewer. That is work that's being done by an outside contractor so I have been asked to review the work that's been done currently and to provide some advice.
- Q Okay. Does compliance monitoring play a role in identifying habitat violations that might warrant enforcement action?
- 19 A Yes, it would.

1

3

4

5

6

7

8

9

10

11

12 13

14

15

16

17

18

20

21

22

2324

25

2627

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

- Q And can you elaborate on that?
- Α Well, through compliance monitoring, we would identify occurrences, which are circumstances where an unauthorized harm to fish habitat has occurred. Those occurrences are basically noncompliance with the Fisheries Act. Then the next question comes how do you respond to that And that's where that Compliance occurrence? Decision Framework comes into play. If it was deemed that the compliance risk was high, i.e., maybe the cooperation of the proponent was low or there was a previous history of non-compliance and the level of impact was high, that would be something that would likely be, if you followed the direction with that Compliance Decision Framework, something that would be recommended for enforcement action.
- Q So if there is something found that's identified as a problem and a recommendation made, who does that go to? Who sends what to who?
- A Well, through the Monitoring Unit, we would do the monitoring. If we identified an occurrence, we would then refer that information to the Habitat biologist involved in that file and then they would work with their C&P staff in their area to make a decision about the level of compliance risk and how to proceed with that.
- Q All right. If we could turn to Tab 18 in the

Commission's binder, I think we might have mentioned this earlier, this is now Exhibit 678. You're familiar with this document?

A Yes, I am.

- Q And I think you said you wrote it?
- A With a lot of help.
 - Q All right. And it sets out, does it, the way that habitat monitoring in the region will work and the goals and the objectives of it?
 - A It does.
 - Q Okay. Is there anything in this document that you think important to underline for the Commissioner?
 - A I think the goal is fairly key. And the primary goal of habitat monitoring in Pacific region is to increase the amount and quality of information available through compliance effectiveness and fish habitat monitoring to support the continuous improvement in current habitat management approaches.
 - Q And that's in aid of what?
 - A That's in aid of meeting, I guess, the Habitat Policy of avoiding or minimizing losses of fish habitat.
 - Q All right. Have you got any recommendations to do with monitoring or suggestions that you think are important to leave with the Commissioner for his consideration?
 - A I guess a key thing is it will be important to build a solid foundation that all of these various forms of monitoring are important to do and the compliance monitoring, the effectiveness monitoring and the ecosystem health monitoring. I think it's key that a strong foundation gets built so that the information that's gathered is sound and that good decisions can be made based upon sound and defensible information. I think it's also important to recognize that there's a number of parties potentially involved in that.

There's follow-up monitoring from proponents that, if gathered in a very standard fashion and under a certain set of parameters could be used to support that, as well as entities outside the Department such as non-governmental organizations, streamkeepers. There's a number of parties that could play a role in this. But it's key that a strong foundation be built and that, as I said, that the information gathered is sound.

- And I take when you say "foundation", you mean a collection of data and information that's kept and can be used as a baseline and for reference?
 - A Exactly. And that it's gathered in a consistent and defensible manner.
 - Q All right. Are there other suggestions that you have?
 - A No, I think that's the main one.
 - MR. TAYLOR: All right. Thank you. Those are my questions.
 - THE COMMISSIONER: Mr. Taylor, I just have a couple of quick points that came out of the evidence that you elicited from the witness during your examination. You asked him about how much staff time was spent and he said the goal was 20 percent on monitoring. But he said, in reality, it's in the neighbourhood of 5 percent. I wonder if he could just explain what is happening with staff when they're not monitoring. In other words, if they're doing 5percent instead of 20 percent what makes up the difference?
 - A Sure. The reality is, and I think it came out in the discussions with the previous Panel, a lot of work is drawn up into the referral side of it and the project review side of it. And there's been a lot of effort done by the program to triage those referrals to try and prioritize them and ensure that time is being spent on the most important. Part of the reason for doing that triage and that prioritization is to try and free up time to do other things such as monitoring. But the referrals do chew up a lot of time.

MR. TAYLOR:

- Q Well, just summing up on that. So is this part of the age-old saying that the immediate overtakes the important sometimes?
- A Yes.
- Q All right.
- THE COMMISSIONER: And just one other question that came out of the evidence. You talked about Science developing ecosystem indicators.
- A Yes.

- THE COMMISSIONER: And you also talked about the Wild Salmon Policy and the ecosystem-based approach there.
- 46 A Yes.
- 47 THE COMMISSIONER: Are you talking about national

55
Dave Carter
Cross-exam by Mr. Taylor (CAN)
Cross-exam by Mr. Harrison (CONSERV)

Science developing indicators for ecosystem that would be used within the Wild Salmon Policy, or are you talking about two different sets of indicators?

A Hopefully not. I think, you know, if you look at that national framework diagram, it does talk about indicators. I guess one key thing to point out is that the indicators under Wild Salmon Policy are specific to salmon populations, whereas at a national you might be developing indicators that would have to deal with more species under different situations.

THE COMMISSIONER: I see. Thank you.

MR. TAYLOR: All right. Those are my questions.

MR. MARTLAND: Mr. Commissioner, I have Mr. Harrison with a 30-minute estimate.

MR. HARRISON: Thank you. Good morning, Mr. Commissioner. Good morning, Mr. Carter. My name is Judah Harrison, for the record, H-a-r-r-i-s-o-n, and I represent the Conservation Coalition, which is a group of non-governmental organizations, and Mr. Otto Langer, who I believe you know. I will be sticking to my time estimate this time for certain so I have actually only a few questions for you.

CROSS-EXAMINATION BY MR. HARRISON:

- Q Over the last two days, which I believe you were here for, the witnesses, including Ms. Reid, discussed the fact that Habitat staff were losing their investigative powers or there was a decision taken to remove investigatory powers from Habitat staff and to place them only with C&P staff. Am I right in that?
- A Are you referring to inspector's designation?

 Q Well, yes, I guess so because I thought -- yes,
 inspection powers is what I understood it to be so
 - if it is inspection designation, that could be it.
- A I am aware of that. It does relate to the national protocol that has been revised, sort of clarifying the role of C&P and Habitat with regards to enforcement. Inspector's designation has to do with section 36 in terms of deleterious substances. And having inspector status, one of the things that it does provide is the opportunity to provide an inspector's direction. The national

protocol, as it's been revised, has identified
that C&P would be the body that would issue those
inspector's directions rather than Habitat staff.

So has it had any impact on the ability of your
staff to collect evidence, for instance?

The intent under the national protocol, my
understanding is that staff would still be

The intent under the national protocol, my understanding is that staff would still be designated as Fisheries guardians. So under the Fisheries guardian status you would still have the opportunity to trespass, if necessary. You would have that protection and to gather information in support of monitoring. So with guardian status, the monitoring staff or staff would still be able to gather that sort of information.

- Q Okay. And I guess, do you have an opinion as to whether removal of those powers from Habitat or clarifying those powers only belong to C&P? Do you have an opinion of whether that's a good thing or a bad thing?
- A I do have an opinion. I think that taking the inspector's status from Habitat staff does have the potential to create some challenges because one of the things about being able to issue an inspector's -- if you have inspector's status, one of your authorities is the ability to issue an inspector's direction. And that would be under section 38 of the Act where you could direct somebody to take action to avoid the deposition of deleterious substance.

If C&P officer are the only ones empowered with issuing those directions, I guess there is the potential where using that as a preventative measure could become a little bit more challenging. Though, I think it could be dealt with, it would just mean there'd have to be more collaboration between Habitat staff and C&P staff to ensure that the right person was on-site when that kind of a direction needed to be provided. So there's potential for some workload issues and some challenges.

- And on that note, can you describe generally the working relationship and collaboration between Habitat staff and C&P. And I guess specifically is there the equivalent of joint work plans or is there meetings to discuss collaboration and stuff like that?
- A Yes, there is. There do tend to be meetings

discussing sort of joint efforts, working together, collaboration on compliance management, identifying priorities, you know, Habitat identifying priorities for C&P. So that type of working relationship does exist. One of the things, though, in this region is the working relationship between C&P and Habitat, I quess there is some flexibility amongst the areas because the activities of C&P staff vary between the areas. And that's why, if you look at the protocol, there's a national protocol, there's a regional protocol, which is that roles and responsibilities and then within this region there's also area operational plans, and the reason for those area operational plans was there's differences in C&P's responsibilities. Some areas have year-round fisheries, other areas have seasonal fisheries. So the availability of C&P staff to be involved in Habitat issues can be changeable amongst the areas so that's why there's the area operation plans. But the working relationships generally are pretty good.

- Q Okay. Thank you. In your earlier evidence this morning, you said that compliance monitoring is limited to project that have obtained the HADD authorization or that have obtained letters of advice. Is that correct?
- A Or that provided a notification under an operational statement.
- Q So using a term that Ms. Tessaro used, for a high school student, on the level of a high school student, if one of your staff came across a blatant occurrence of habitat destruction that has not been authorized and no advice has been given with respect to that, what would they do?
- Obviously, they would act as a Habitat biologist and they would collect information about that particular situation. And one of the things they would do is, I think, initially identify whether it was a project that had been reviewed and was acting under a regulatory instrument or whether it was not and then they would likely make the area biologist of that area aware of the situation. So collect the information and make the correct individual aware of it. They may well even refer it to C&P if it was something where they felt an investigation was warranted.

- So it's really about at the front end to choose 1 where you go. You're only going to choose to go to spots that have been authorized or obtained 3 4 letters of advice; is that correct? 5 Well, when it comes to the monitoring that we have 6 been doing where we're looking at, you know, 7 evaluating our activities then, yes, we're basing 8 that monitoring on where we've provided advice or 9 provided direction, yes. 10 THE COMMISSIONER: Mr. Harrison, we'll take the noon 11 break now. 12 MR. HARRISON: Oh, excuse me. Thank you. 13 THE COMMISSIONER: Thank you. 14 THE REGISTRAR: The hearing will now adjourn until two 15 o'clock. 16 17 (PROCEEDINGS ADJOURNED FOR NOON RECESS) 18 (PROCEEDINGS RECONVENED) 19 20 THE REGISTRAR: Order. The hearing is now resumed. 21 MR. HARRISON: Good afternoon. Mr. Harrison, for the 22 Conservation Coalition, continuing. 2.3 24 CROSS-EXAMINATION BY MR. HARRISON, continuing: 25 26 Mr. Carter, I was hoping to just get some very 27 brief sort of clarifications on the ground on what 28 29 30 powers and the like, but I'm wondering, your 31 32 monitoring, or compliance monitoring, would 33
 - staff actually does when they get to sites. asked you about this before, about inspection staff, your monitoring staff, while they're doing collecting evidence be a forefront in their minds and in their purposes for later investigation? All of them are habitat biologists and, I guess, have had experience with or potentially with
 - gathering evidence in terms of enforcement activity. And some of that monitoring information they were gathering in terms of the project, how it was built, what the effects might have been, all could potentially be evidence. So the information they are gathering has the potential to be evidence, as opposed to making the decision to gather evidence in support of an investigation. That would be something that would occur once an occurrence was identified.

And it would depend on the situation as to, I

34

35

36

37

38 39

40

41

42

43

44

45

guess, the timeliness with which that information would need to be gathered. So if it was something where there was an ongoing situation they could well gather that information. If it was something that maybe wasn't time dependent, they might actually contact the biologist in the area and, you know, ask them to be involved in gathering that type of information.

So it would depend on the circumstance. But yes, they could.

- Okay. So in cases of occurrences, if one of your staff members saw what they deemed to be a clear HADD violation, would they need an official -- officially to claim that to be an occurrence, or from that point forward would they start collecting evidence on that?
- A Okay, well, I guess, the thing is, when we do our monitoring, we could identify that there was a non compliance where an unauthorized impact to habitat has occurred. Then, in terms of how that occurrence is responded to, we could speak about that compliance decision framework and the evaluation that would need to be done to determine sort of what level of response was appropriate, and that compliance decision framework lays out an orderly approach to doing that, based on compliance risk and the impact to the habitat.

So if you're asking if the impact to the habitat was significant enough and it appeared that the compliance risk was high enough, would they gather information that could then be used as evidence? Yes, they would.

- Q Yes, and I guess my question was, in the majority of circumstances, if they came across what they determined was likely a HADD, would that then lead to collecting evidence of that and taking samples and photographic evidence or, it seems to me, as you're saying, it wouldn't; instead, they'd go back and make determinations on what level of risk it fits into, or is that wrong?
- A There would still be information gathered, though, that could be deemed as evidence, if it was decided that an investigation needed to be followed up on. So, you know, they would be collecting pertinent information about the site, what was done there, what the project was, you know, whether it was built as proposed, gathering

that sort of site information, including photographic information that could become evidence.

Q Okay.

- A It would depend on, you know, there would need to be a decision made as to whether this was something that needed to be investigated or not.
- Q Okay, thank you.
- A Yeah.
- Q Before the break, I asked you about your staff only going out to places where an authorization has been issued or where letters of advice have been given with respect to a project. My understanding of EPMP is that it has reduced, significantly, the amount of referrals that Habitat staff will receive so that there would be a lot less projects that actually do obtain an authorization or letters of advice; is that right? Or I see you --
- A Well, I guess, you know, I'm not the expert in EPMP or that policy. My understanding of it is that under EPMP there was some attempt made to, I guess, identify some lower risk projects and have them enter into the process through another means, being the operational statements, where projects could be dealt with, with an operational statement, would be done that way and with a voluntary notification.

I'm not sure, and I guess that may have reduced maybe the number of letters of advice, because some of those letters of advice could have been converted to being dealt with by operational statements. But in terms of authorizations if, you know, harmful impact to habitat could not be avoided, I wouldn't see the number of those being changed by EPMP.

- Q Okay. I won't belabour that point, I'll just move on. Earlier today you said that last season was a learning year.
- A Mm-hmm.
- And one of the largest lessons that you learned, according to your words, was there was an insufficiency in the availability of information. I would just like you to elaborate upon that and tell us, you know, what information do you not have and how that can be remedied.
- A I guess what I was speaking to was information

available in the project files.

Q Okay.

And that would be a lot of the information that we would base our monitoring upon So, you know, what was the project design, what were the conditions, what was the state of the habitat at the site prior to the project, you know, was there photographic information or other habitat information about what was there prior to the project going on?

You know, if we're going to compare what was there before versus what was there after, unless we know what was there before it makes it difficult. So that sort of information being available in project files.

We found, you know, sometimes that information just wasn't available; other times, it was difficult to obtain.

- Q Okay. Thank you for that. And this will be my last question. You spoke about, just now, about the status of habitat or baseline study and how that would be a good thing. Earlier this morning I heard you say that this was fairly key, to paraphrase what you said. My question to you is: Is there a risk that the longer that we wait to do such a baseline study the more habitat is lost in the interim?
- A Of course. I mean, if there is habitat loss occurring now, which I think, now, a number of the people who have testified before me have suggested that there is, the longer you wait to gather that inventory or establish that baseline, the incremental losses are occurring. So yes. And the earlier we have that baseline to compare with, the more useful it might be.
- Q Okay. And related in the document that was made an exhibit, and it was a 2011 document that you were working on, the Regional -- excuse me --
- A Our framework? Our Habitat Monitoring Framework?
- 40 Q Thank you for that.
- 41 A Yeah.
 - Q Within that document you say that you hope to do fish health -- habitat health monitoring within the next five years, to implement that. Do you feel that that is an adequate timeline?
- 46 A The date that was included in the regional framework was taking a cue from the national

direction. You saw that national document -Yes.
A -- with sort of a five-year horizon? To meet

- A -- with sort of a five-year horizon? To meet that five-year horizon, obviously we would have to be doing a lot of upfront work establishing the tools, the methodologies and the means to do that. So, you know, it wouldn't be suggesting that we wouldn't be making efforts in that direction, but in terms of having it fully established and up and operational, I don't think that's a necessarily unreasonable timeline to get it right.
- MR. HARRISON: Okay, thank you. And the document I was referring to is Exhibit 678, and I apologize for not saying that beforehand. Those are my questions, thank you.
- MR. MARTLAND: Mr. Commissioner, next on the list is Mr. Rosenbloom. My note is 30 minutes or less.
- MR. ROSENBLOOM: Thank you very much. My name is Don Rosenbloom. I appear on behalf of Area D Gillnet, Area B Seiner. Mr. Carter, thank you for answering my questions.

CROSS-EXAMINATION BY MR. ROSENBLOOM:

Q I have only two areas of focus in terms of my cross-examination of you. The first area of focus relates to the level of completeness or incompleteness in the monitoring regime that is currently being pursued by DFO regionally. And the second area of my focus will relate to budgetary issues and how the budgetary situation restricts the capacity of your group to carry out what might be said to be a statutory responsibility.

I'd like to go to the first of my two areas of focus. I want to focus not so much on what you have been able to complete in terms of analysis of compliance, monitoring and compliance, but, rather, I want to focus on what is left as the unknown; in other words, what is left that is not being monitored, and obviously leave it to others and ourselves to argue, at the end of the day, whether there should be a more complete initiative in terms of monitoring.

Before us is Exhibit two-sixty -- excuse me, 679, and I believe, if I'm following the evidence, this is the interim work you did in 2010 --

1 Α Mm-hmm. 2 -- to give some sense of to what extent there is a compliance being test -- a compliance that, in 3 4 fact, you are satisfied is meeting standard or, 5 indeed, isn't meeting standard. And if you could 6 go to page 10 of that document. I thought it was 7 page 10. Actually, what I'm looking for, and 8 counsel can assist me, is, I thought, that 9 document, but it's --10 Are you looking for the table? Α 11 Yes, the table. I think it's --12 Α 13 There we go. Thank you. Now, I want to 14 understand this table. As I understand your 15 testimony, firstly, let's put on record, and I 16 think it's clear already, that your focus, in terms of monitoring, is limited in the sense that 17 18 you're not doing -- you're not even speaking to 19 environmental monitoring or ecosystem monitoring, 20 you have made clear you are speaking to a focus in 21 monitoring that relates to project initiatives, 22 could I put it that way? You might have a better 23 term of phrase. 24 Α I guess, you know, in terms of the monitoring that 25 we're conducting currently, it is project-based 26 monitoring, and initially we are looking at 27 compliance in relation to those projects --28 Q Precisely. I'm sorry, yes, go ahead. 29 But with the expectation that there is going to be 30 the addition of effectiveness monitoring in 31 relation to those projects and the effects of 32 those projects and then future into looking at 33 ecosystem level monitoring, but those are future 34 qoals. 35 Q Yes. And so let's speak or focus on the status 36 quo of what you're doing now and what this table 37 represents that is before us on the screen. As I 38 understand it, and again, please correct me --39 Α Sure. 40 -- this table speaks to an initiative to monitor 41 either projects that were subject to referral, in 42 other words, where the voluntary regime took place 43 and somebody filed, or, as I understand it, 44 alternatively, they are projects where notice came 45 to you and that notice came to you because of

operational statements that your region has put

out that has encouraged parties initiating certain

46

```
1
            projects to at least give notice; is that correct?
 2
       Α
            That is correct.
 3
            And just so we spoon feed here for a moment, I'm
 4
            led to believe that the operational statements are
 5
            -- the areas where operational statements apply
 6
            would be found at page 115 of the PPR Number 8.
 7
            Let me just put it up --
 8
            Could be.
 9
       Q
            -- so we have it as a matter of record.
10
       Α
            Yeah.
11
            Page 115 of PPR8. Sorry, maybe my numbering's
12
            different than --
13
       Α
            Well, this would be the operational statements
14
            specific to clear span bridges.
            Yes. And let me, if I may, just show this to you, and if you would identify it and then we'll put it
15
       Q
16
17
            on the screen. I'm looking at this document here,
18
            which is part of the notification form, is it not?
19
       Α
            Correct, yes, it is.
20
            And I have --
       Q
21
       Α
            And these --
22
       Q
            Yes?
23
       Α
            And these are the operational statements that are
24
            applicable in British Columbia.
25
            That is correct.
       Q
26
       Α
            Right.
27
            And it is now on the screen, thank you very much.
            Now, have I now --
28
29
       MR. MARTLAND: I'm just going to preserve the record by
30
            saying this is Appendix 6 to the PPR8.
31
       MR. ROSENBLOOM:
                         Thank you.
32
            Now, so am I right in stating that the analysis
33
            you did, which was just on the screen a moment
34
            ago, was an analysis limited to the areas we've
35
            just spoken about?
36
       Α
            Yes, you would be correct.
37
            All right. I want to focus on the areas that you
       Q
            have failed to do monitoring - I'm not criticizing
38
39
            you in the slightest - but that aren't part of the
40
            record of your work with DFO. Can I assume that
41
            all projects or initiatives where individuals have
42
            chosen not to file referrals with the Department
43
            are off the radar screen unless they have given
44
            notification under this document now before you?
45
            I guess I need clarification. Off of the habitat
46
            monitoring units --
```

Yes.

Q

- 1 -- that are screened? Α 2 Q Yes. 3 Α That would be a reasonable assessment, but not 4 necessarily off the radar screen of the rest of 5 the habitat program nor C&P. 6 All right. But in terms of a study to determine 7 the extent to which the public are complying with 8 your regulations and statute, can I assume the DFO 9 has to rely, regionally, at least, solely on the 10 2010 document that is before us? 11 So in terms of the monitoring study I would say 12 yes. 13 Q And so --14 Α In terms of -- yeah. 15 Yes. And so to speak of the fear of the unknown, Q 16 is it fair to say that we don't know, or more to 17 the point, you don't know, as DFO, to what extent, 18 let's say, firstly, individuals or companies are 19 failing to comply and have chosen not to file 20 voluntary referral, nor have they -- and they've 21 failed to give notification to you? 22 I think there are a couple of avenues where that kind of information could be gathered or is being 23 24 gathered. We made reference to the shoreline 25 inventory program that was being done on Shuswap. 26 That would have identified a lot of projects that 27 didn't go through any formal permitting or 28 referral process but were identified, as well as 29 regular patrols either by C&P staff or Habitat 30 staff. But in terms of the monitoring staff, you 31 would be correct, we're not out there looking for 32 those, currently. 33 And is it appropriate to term the voluntary system 34 of filing for referral almost an honour system? 35 Α I guess much like a speeding ticket in that there 36 is a risk inherent in not referring, that if you 37 did do something and you did end up out of 38 compliance with the Act, there might be the 39 potential of being prosecuted. 40 Q Right. 41 So I guess, yes, I mean, it is voluntary, but Α
- the rules you might be.
 Yes. And you happen to have the good fortune of being here yesterday and hearing the exchanges in cross-examination about the possibility there was

there is, you know, a knowledge that, or there

should be a knowledge that if you don't adhere to

42

```
only one conviction in British Columbia last year.
       Α
            Yes.
 3
            You heard that evidence?
       Q
 4
       Α
            I did, yes.
 5
            That's the deterrent you're speaking about?
       Q
 6
       Α
 7
            Thank you. Now, I want to continue to focus on
 8
            the second prong of the voluntariness of this
 9
            program, the first one being to file for a
10
            referral; the second one to give notice if one is
11
            pursuing one of these initiatives as set out on
12
            the screen right now.
                                   In respect to the
13
            obligation on the second prong, there is no
14
            statutory obligation, it, too, is a voluntary --
15
       Α
            Yes.
16
            -- discretion?
       Q
17
                 The notifications with regard to the
       Α
            Yes.
18
            operational statements are voluntary.
19
            All right. Now, to what extent should the public
20
            be concerned of the unknowns here? In other
21
            words, the initiatives that individuals or
22
            companies are taking that are choosing not to seek
23
            referral, that are choosing not to give
24
            notification from a policy operational basis, what
25
            does the Department know of what they're missing?
26
            I think, as you posed it, it is somewhat of an
27
            unknown, so I would hazard to put a number to that
28
            or to put an estimate to it.
29
            I'm sorry, I didn't hear the last part.
30
       Α
            It would be a hazard for me to try and put a
31
            number or an estimate to that. As you've
32
            correctly phrased it, it is somewhat an unknown.
33
       Q
            Doesn't that keep you up at night?
34
            It's definitely a concern.
       Α
35
            Isn't it also a concern to your colleagues within
36
            the habitat monitoring field?
37
            I think it would be a concern, though there are
            other avenues for that information to be made
38
39
            available to the Department.
40
            Well, when you say there are other avenues to
41
            allow this information to be made available, is it
42
            being made available? What are those avenues, and
43
            why, if those avenues are available, why is it not
44
            being obtained by DFO so that you could come here,
45
            today, and answer --
46
       Α
            Yeah.
47
            -- the simple question, to what extent are we
```

1 missing it?
2 A Well, I thi
3 get an answ
4 the next co
5 compliance

Well, I think, you know, where you'll be able to get an answer to the question would be probably in the next couple of days when you're talking to the compliance side of it. There are, I guess, things in this region, such as we do have a report line, there is a 1-800 number where people who see things going on in their area, in their neighbourhood, they can phone in and report that they've seen an incident that they think might be a violation of the **Fisheries Act**.

So there is information on how many of those incident reports occur within the region, which would probably give a feel for, you know, you could evaluate how many of those are associated with projects that have been reviewed versus how many of those are on projects that have not been reviewed. So I guess that would be a way of getting a handle on some of that information.

- Q But we have a large sea of unknowns here, don't we?
- A I would say there are some unknowns.
- Q And I appreciate you're not a legislature, you obviously didn't pass the **Act** and **Regulations**.
 Can you explain to me the motive behind DFO choosing to approach this area of compliance in a totally voluntary schematic?
- A I think you phrased it well: I'm not a legislature. I didn't write the legislation as to how it's written, so I don't know that I'm the right person to pose that question to.
- Q Do you and your colleagues within Habitat Monitoring, regionally, complain to headquarters that there isn't the teeth that there should be in the statute so that you could feel comfortable that you're catching -- the radar's catching most of these incidents?
- A I don't know that I've personally made that complaint. I think there's a recognition that there are a lot of things going on out there that we're probably not aware of that we -- would be beneficial if we were or that should have come through the referral process.
- Q And sadly, if you had more staff, you might become aware of more than -- more incidents than obviously you can possibly investigate?
- 47 A Yes, though I think it's also important to go back

to some of the things that were discussed previously under the Habitat Policy, in that there's a number of different, you know, I guess, strategies under that policy that could address some of these issues, such as education, promotion, some of those other things as well, so there are tools, as well, that could be used in this.

- Mm-hmm. I want to now come to the second area of my focus, which relates to budgetary issues, and again, yesterday you had the opportunity to hear exchanges about budgetary problems and how it causes a consequence in the field of monitoring and compliance. You would agree with me, would you not, that the budgetary restrictions that DFO is facing year by year is obviously to the prejudice of the monitoring program within your branch?
- A I mean, budgetary restrictions that effect operational funding obviously will influence how much time we can spend in the field, you know, the resources towards that, so it does have implications on monitoring and how much monitoring can be done, yes.
- Q And you also heard testimony yesterday, and I'm sure you were well aware of this, that there's no reason to be optimistic, certainly for this present fiscal year, correct?
- A Yes.

2.8

- Q And you've had no information to cause you to be optimistic in terms of the next year or two?
- A In terms of there being an increase? No, I've
- Q No. And that being the case, is it fair to say that your prognosis, in terms of what can be accomplished in the way of monitoring of compliance over the next couple years, we can't look forward to an aggressive increase in your surveillance of this area of your responsibilities?
- A I guess I have to address that, you know, last year was the first year where the monitoring unit was out actively doing compliance monitoring, so there were, you know, in the neighbourhood of 600 visits conducted that weren't conducted the previous year, so there has been an increase. But in terms of whether there will be subsequent

increases in the future years, I would agree with 1 you that it's not likely that that, you know, that 3 level is going to increase. 4 And that's a very unfavourable situation for you 5 in your area and your mandate, is it not? 6 Α I guess it does cause me concerns when we have a 7 plan of not only implementing compliance 8 monitoring but also effectiveness monitoring and 9 into ecosystem health monitoring. I think all of 10 those endeavours would involve increased levels of 11 field time, which would be a challenge. 12 Appreciating what you have just said, you were Q 13 here yesterday and probably heard an exchange 14 between myself and Monsieur LeBlanc and, indeed, 15 Ms. Reid, about whether their recent budgets as 16 advanced to Treasury Board included an increased 17 line item for -- or an increase for funding for 18 monitoring; did you hear that exchange? 19 Α I did hear a discussion, yes. 20 And you heard both these witnesses indicate, if my 21 memory's right of the testimony, that to the best 22 of their memory no -- the region nor the national 23 headquarters had applied for increased funding for 24 Habitat Monitoring; do you remember? 25 Yeah, I'm not aware of an increase -- a request Α for increase --26 27 Q Okay. 28 -- no. Α 29 Was there an application for an increase in 30 funding by your group, to Region, asking Region to 31 fight the good battle with Treasury Board through 32 headquarters? 33

- A Not formally, not in writing, but there have been conversations indicating that there were -- there would be operational funding necessary to conduct the field monitoring. So there's been discussions, but no formal request.
- Q Please, without it in any way being interpreted to be critical of you, sir, can you explain to me why your group would not be taking a more assertive initiative with Region to top up your funding so that you would be able to sleep at night?
- A Ah. Hmm. I think the expectation is that, you know, we've been made aware that, you know, increases in funding were unlikely and that, you know, there was an expectation you were going to have to make do with what was available, so that

34

35

36

37

38

39

40

41

42

43

44

45

46

1 would be, I guess, the impetus for not pursuing that avenue. 3 Appreciating how your initiatives are limited by 4 the funding problems, do you think the public 5 interest is being well served at this time in 6 terms of DFO carrying out its monitoring program? 7 It comes down to an issue of, you know, doing the 8 best you can with the resources available. 9 It doesn't --Q 10 Α No? 11 -- quite answer my question. I appreciate your 12 response. 13 Α Yeah. 14 Q Do you think the public interest is being well 15 served right now? 16 Α I think we could do more with more, which is -- I 17 may be -- I'm not trying to hedge the response 18 there. Would it be beneficial to do more 19 monitoring? Of course it would. Would more 20 resources being available facilitate it? Yes, it 21 I think that probably answers your would. 22 question. 23 Q Do you ever have the opportunity to meet American 24 colleagues and discuss matters relating to 25 monitoring of the fishery resource? 26 Not since I've been back with DFO, no. Α 27 And so you cannot bring to this inquiry any 28 knowledge of whether the Americans are doing a 29 more effective job in monitoring their fish 30 habitat? 31 I'm aware of some of the programs that are ongoing 32 in the United States, because obviously we're 33 looking at some of those as potential things that 34 we could apply here, things that are being done by the EPA, things that are being done by the U.S. 35 36 Geological Survey, so I'm aware of some of those 37 initiatives, but I haven't had direct discussions 38 with... 39 Q I appreciate that, and the fact that you are 40 looking at this American experience, is it fair to 41 say, from your perspective, that they are 42 discharging more effectively the monitoring of

habitat in the U.S. than we are here?

I haven't done a thorough evaluation of their

I would be qualified to answer that question.

methodology or of the approach they're taking and

the results that they're getting, so I don't think

43

44

45

46

71
Dave Carter
Cross-exam by Mr. Rosenbloom (GILLFSC)
Cross-exam by Mr. Harvey (TWCTUFA)

- MR. ROSENBLOOM: I appreciate that. Thank you very much for your questions -- answers, I should say. Thank you.
 - MR. MARTLAND: Mr. Commissioner, I have, next, Mr. Harvey, at 10 minutes.
 - MR. HARVEY: Chris Harvey, for the Area G Trollers and the UFAWU.

CROSS-EXAMINATION BY MR. HARVEY:

- Q Mr. Carter, as you know, this commission is mandated to investigate the causes for the decline of the Fraser River sockeye fishery?
- A Yes.
- Q And your work, I take it, covers all fisheriesrelated habitat issues throughout the province?
- A And the Yukon.
- Q Yes, all right. But with respect to sockeye, and Fraser River sockeye in particular, do you have priorities for your monitoring and compliance work?
- A Well, there are a number of priorities I think I mentioned earlier that we use to develop our work plans, and some of those were national, regional, as well as area specific priorities.
- Yes, I didn't mean in the sense of policies, I mean in geographic location. We've heard a lot of evidence here about the importance of the spawning grounds, of course, but also the rearing lakes, because the juvenile sockeye spend almost half the lifespan of sockeye in the lakes, and lakes have a certain carrying capacity that's critical to their future survival and growth.

Has somebody come to you, ever, and said, "Look, we've got to focus on the Shuswap," or, "We've got to focus on the Cultus," or, "The Quesnel system is very important," that sort of thing?

A You know, there have been, as I said, some regional priorities identified, one of them, you know, being sockeye and this, I guess, commission. Some of that priority did influence some of the projects that were included in our monitoring work plan, so we actually were involved in the shoreline monitoring initiative that was done in the Shuswap. So I guess it would influence some of the projects that were included in our work

plan.

- All right. Now, with respect to that shoreline inventory program in the Shuswap, I think you said that's -- is that going to be part of the report, the regional report that will be developed from the Habitat Monitoring update?
- A There was, actually, through the SLIPP Program, there was already a report generated regarding the Shuswap shoreline monitoring initiative. That has already been published, is my understanding, and it was published as a joint venture between mainly the Province, the Regional District, DFO. So that report already exists.
- Q All right. Well, I'm sorry, I haven't seen it, but maybe you can tell me this: Is there any connection or any analysis in that work, any analysis in that work of the effect of habitat changes on the carrying capacity of the lake?
- A To be honest, I can't -- couldn't tell you whether that analysis was included in the report or not.
- I see. I'm going to just refer to the transcript of February 10th for a moment, page 56. There was a short discussion here, and there's been discussion elsewhere, on the Cultus, because that really seems to be one of the bottlenecks that's causing problems in the sockeye fishery. And this is part of cross-examination of Dr. Walters, one of the eminent population dynamics scientists in the area, starting at line 13, he says:

The stock -

-- he's referring to the Cultus stock here -- Mm-hmm.

A Mm Q

- was relatively healthy. It was relatively stable in abundance, so it didn't show cyclic patterns. It wasn't until the '70s that it started the decline and moved into a cyclic pattern. At least according to the escapement records of the Salmon Commission.

And he's asked:

Fairly heavy population pressure on Cultus Lake; is that fair to say?

5 6 7

8 9 10

11 12 13

14 15 16

22

17

29

30

36 37 38

39

40 41

42 43 44

45 46 47

He agrees.

Recreational development, such as boating,

He agrees.

Docks, a boat-launching site right next to one of the preferred beaches for the sockeye?

And he agrees. And he says there's:

... a whole bunch of other things impacting them...

Now, this lake system is one in which the sockeye actually spawn in the lake, as well as the lake also supports the fry as a rearing habitat. you describe what work your section does with respect to monitoring and compliance in the Cultus?

- If there were projects proposed that were reviewed, there is a good potential that they would come up and be identified for monitoring in relation to the Habitat Monitoring Program, so I can't, off the top of my head, you know, recall any projects that were done in Cultus Lake last year that were monitored, but if they did, you know, apply for a **Fisheries Act** authorization or received a letter of advice, they -- there is a good potential that we would go out and monitor them.
- So no one in the Department's come to you and said, "Look, the habitat conditions in the Cultus are causing millions of dollars of loss to the economy in the province. We've got to focus on it as a priority," that sort of thing is not happening?
- That has not happened, no. Α
- MR. HARVEY: No, all right. I have no further questions, thank you.
- I have Ms. Brown, for First Nations MR. MARTLAND: Coalition, at 30 minutes.
- MS. BROWN: Thank you. For the record, Anja Brown and with me is Leah Pence. We're counsel for the First Nations Coalition. And the Coalition is made up of First Nations from the Lower to the

74
Dave Carter
Cross-exam by Ms. Brown (FNC)

Upper Fraser, as well as the Council of Haida Nation, and we also represent a number of Fraser River aboriginal organizations.

CROSS-EXAMINATION BY MS. BROWN:

9

10

11

12

13 14

17

18

19

20

21

22

23

27

28

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

1

3

- Q Mr. Carter, a few minutes earlier you made reference to 600 visits that your unit engaged in last year, and I'm wondering if you're able to break that down into at least an approximate number of projects that that represents.
- A I would be, I mean, I'd have to look at the number and identify it. I would say in the neighbourhood of 400 --
- 15 Q And are you able -- 16 A -- individual proje
 - A -- individual projects or projects that had specific PATH numbers in our file system.
 - Q Are you able to give us an idea how many of those would have been located on the Fraser River?
 - A Based on the number that occurred, either through the Lower Fraser group or through the BCI group, I'd say 40 to 50 percent.
 - Q So around 200.
- 24 A 200 projects.
- 25 Q Possible.
- 26 A So, yes.
 - Q All right. Now, you've testified that you have 12 staff that are dedicated to monitoring.
- 29 A Mm-hmm.
 - Q And can you tell us the number of those 12 staff that work out of Fraser River area offices, either on the Lower or the Interior offices.
 - A That would be four.
 - Q And can you tell us which office they're working out of?
 - A Well, actually it would be five, now that I think about it. There's two in the Annacis Island office in the Lower Fraser, there's two in Kamloops, and one in Prince George.
 - Q And what about the 60 to 70 additional staff that you estimated provided about five percent of their time to support your 12 staff. Are you able to give us an idea of how many of those are from Fraser River offices?
 - A In terms of organizational structure, it would be better to ask somebody else, to be honest. I'm not sure exactly how many staff are in each of the

1 individual offices, so...

- Q Are you able to give us an idea of full-time equivalents, or anything like that?
- A Not one that I would rely on.
- Q All right. Now, you've talked about the field season, and I'm curious, does the field season stop and start on a specific date regionally, or is that something that is determined on an area basis?
- A It's determined on an area basis. Obviously, it's somewhere like the Yukon, the field season is going to be relatively short because of ice and snow. Whereas in the Lower Mainland or in South Coast the field season actually may run for most of the year, because they have access to the sites.
- Q All right. And when you were referring to your field season earlier in testimony, what were the specific dates that you were referring to there?
- A I guess the approach is we do our planning and our work planning right now in the spring, usually field programs sort of start April into May, run May through the summer into September/October, and then we would be moving, you know, after October we would be moving more into the analysis and starting to write up the results.
- So there's a good chunk of the year, then, where there's no monitoring at all taking place; is that right?
- A It would vary by area and accessibility. So in some areas you might have monitoring going on most of the year, like I said, in the Lower Fraser. In other areas where there's ice and snow and there isn't the access, you're right, there would be a winter season where it wouldn't be very reasonable to be attempting to do monitoring.
- Q Right. Now, is the actual level of monitoring dependent on the nature of a particular project. And what I mean by that is --
- 40 A Yes
 - Q -- the number of visits that a particular project might be subject to.
- There is the potential, especially with very large projects, or linear projects, where there might be multiple site visits involved. There are also smaller projects where a single site visit might be adequate to evaluate the situation. So, yes,

it's going to vary by the nature of the project as to how many site visits are involved.

Q And are those visits unannounced, or is the proponent aware of scheduled visits?

A Somewhat variable. I would assume a number of them are, you know, on Crown land. We would just factor that into our work planning. Others that might be on private property or, you know, if we needed to gather some information from the proponent, we might contact the proponent in advance of the site visit to confirm that, you know, the work was actually ongoing and that the work was being done.

You know, one of the things we found with the notification processes, often we received notifications, we went into the field to go monitor the project and it hadn't been constructed. So obviously, you know, adding an element of contact the proponent in advance to confirm they'd actually done the work, was useful.

- Q Now, this morning in answer to one of the questions posed by Ms. Tessaro in her questions was "Why monitor?" Your answer was that it was important to ensure that when DFO provides conditions or advice, that that advice is adhered to, and that obviously this creates an incentive on the proponent to be compliant. And later when speaking with Mr. Taylor, you said that effects monitoring is something that would be undertaken by proponents. Did I understand your evidence correctly in that regard?
- A Well, that if some of the effects monitoring could be done by proponents, so I think there's an expectation that some of that effects monitoring could be done by Habitat staff, and some of that effects monitoring could be done by proponents or people working for proponents as part of their follow-up program.
- Q So where there's an aspect of effects monitoring that's undertaken by a proponent, what happens to the incentive to comply where you have a proponent who's doing essentially monitoring itself?
- A Well, first of all I guess a lot of that monitoring is third party monitoring where they actually hire a consulting company or a professional to do that monitoring on their behalf. There's also the other side of it, too,

is just because a proponent has a monitor on site,
that doesn't necessarily remove or negate us going
out and doing monitoring on that project and sort
of verifying that information that's being
gathered.
And what would determine whether there would be

- And what would determine whether there would be that additional layer of monitoring by the Department taking place?
- A We would do that when we establish our samples. So most of the authorizations that we monitored this year also had a follow-up monitoring that was being done by a third party monitor hired by the proponent. So when those projects were identified in our sample, we went out and monitored them as well. So it's determined by how we choose the sample.
- Now, in the evidence you gave earlier today in response to questions posed by Mr. Taylor, you indicated that one of the ways that DFO chooses its priorities for strategic monitoring is based on integrating national regional and area priorities. And if I heard your evidence correctly, is this an internal exercise, then?
- A Yes.

- Q All right. And some of the priorities that you mentioned were seawall developments and docks and bridges. And we noted that you didn't mention dams or hydro developments as a priority, and my question is why projects such as that wouldn't -- because such projects affect fish, why wouldn't those sorts of projects be identified as strategic priorities?
- A I guess we should be careful, in terms of something being a priority, it might be a particular issue that was identified as a priority, and then we would identify particular projects to go out and monitor, to speak to that issue. So it wasn't necessarily the particular project types were identified as a priority. It might have been shoreline development or stream crossings, and then we would go out and look at something like bridges.

In terms of hydro facilities or dams, are you talking about IPP projects, like independent power projects, or BC Hydro projects?

Q Well, I'm just talking about larger scale projects that we didn't hear you --

```
1
            Oh, okay.
       Α
 2
       Q
            -- make mention of.
 3
            Oh, okay. I mean, there were a number of large
 4
            scale projects that monitoring was conducted on,
 5
            things like the Sea to Sky Highway, the Deltaport
 6
            development, you know, a number of large projects
 7
            that were also included in the monitoring. And
 8
            again there was a potential if there had been an
 9
            authorization in place for one of the hydro
10
            projects, they could have come up as part of the
11
            monitoring. I'm not aware of any of the hydro
12
            facilities that did, but could well have.
13
            And is part of the project or part of the process,
14
            rather, for determining these strategic
15
            priorities, is part of that process receiving and
16
            responding to concerns, perhaps, from First
17
            Nations, or NGOs and then your Area staff bringing
18
            that to the table's attention?
19
       Α
                 I think that it would be, yes.
20
            Mr. Bisset, could you turn up number 5 from our
            list of documents, please.
21
22
                 Mr. Carter, this is a Discussion Paper that
23
            was prepared by one of our clients, Russ Jones,
24
            and it's entitled "A Scoping of Aboriginal
25
            Implications of Renewal of the Fisheries Act
26
            1985". Mr. Jones prepared it for the Assembly of
27
            First Nations in March of 2006. So first of all,
28
            I'll ask you if you've seen this document before?
29
            No, I'm sorry, I have not.
30
            All right. I'm just going to take you to a couple
       Q
31
            of parts of the document. Do you know Mr. Jones,
32
            or have you had occasion to work with him?
33
       Α
            I don't believe that I do.
34
            All right. Just by way of explanation, Mr. Jones
35
            is one of our clients. He's also a council member
36
            from the First Nations Fisheries Council. He's a
37
            Haida hereditary chief, a member of the Council of
38
            Haida Nation, and he's also a member or a
39
            commissioner, rather, from the Pacific Salmon
40
            Commission.
41
            Oh, okay.
       Α
42
            So that's his background. And I'll bring you
43
            first of all, please, to page 35, which lays out
44
            the context for this part of his paper, which he
45
            identifies as "Priority Habitat Management
46
            Issues". And then on the next page, page 36,
```

heading "4", in his view one of the priority

habitat management issues is to "Promote enhanced First Nations roles in habitat monitoring and enforcement." And I'm wondering if you agree that an enhanced role for First Nations to work with DFO with monitoring would be a useful thing, a positive thing.

8 9 10

7

I think it would be a positive thing. You know, as mentioned before, you know, doing some of this work in partnership with other entities only increases the capacity and the opportunity for doing things well. So I think it would be beneficial.

11

Right. And I would think that particularly in light of the evidence that we've heard about the staffing and resourcing challenges that the Department faces, having participation from First Nations could be beneficial.

16 17 18

Α Yes.

19 20 21

And just flipping over to page 34, we note there that Mr. Jones makes reference to:

22 23 24

Some First Nations in the Atlantic and Pacific regions have been involved in habitat monitoring through AFS.

25 26

27

The Aboriginal Fisheries Strategy, and I'm wondering if you're aware of any First Nations in the Pacific Region that are currently or perhaps have been in the recent past engaged in habitat monitoring activities.

32

33

I know instances where First Nations have been involved in the monitoring associated with specific projects. So but I don't know whether that occurred through the AFS or not. But I do know of First Nations being involved in the monitoring of projects.

34 35 36

37

All right. And are you able to speak to any specifics?

Α I'd be hard-pressed, I do believe First Nations were involved in some of the monitoring on the Toba Montrose independent power project, that would be one instance, but beyond that...

42 43

I'll leave it at that. Thank you. Q

44 Α Sure.

45 If that document could be entered as the MS. BROWN: 46 next exhibit, please. 47

THE REGISTRAR: Exhibit 681.

EXHIBIT 681: Discussion Paper: A Scoping of Aboriginal Implications of Renewal of the **Fisheries Act** 1985, Russ Jones, March 30, 2006

MS. BROWN:

- Q And finally, then, I just have a few questions in respect of ecosystem monitoring and these arise from some of your answers earlier today, and we've heard about how ecosystem monitoring is on DFO's horizon in the future, and you estimated that the work plan, that you hoped that that work might be completed or in place perhaps around 2013. And we also heard from you earlier that developing the indicators and the sampling and monitoring regime is something that's going to be primarily on the Science Branch's plate.
- A Mm-hmm. I think there is an expectation that Science will take the lead in providing a lot of the guidance for the development of that.

Q Right.

- A Habitat will be involved, as well, obviously, but you know, taking, leaning to the expertise of Science in terms of the development of those programs.
- Q Right. And in terms of developing those programs, do you see any room there for collaboration or partnering with academic institutions, or environmental groups and First Nations, to move this ecosystem monitoring work ahead and perhaps be able to do so within that somewhat optimistic timeframe?
- A I think there's opportunities for it, yes, and I think, you know, in terms of the development, having some discussion and, you know, I guess consultation about how to involve others.
- Q Right. And that actually leads into my last question, which is whether you can offer a recommendation on how such collaborative efforts, and let's say with First Nations, could best move ahead.
- A I guess that I'm scratching my head a little bit on that. I think when it comes to the development of the Wild Salmon Policy, and developing some of the initiatives under that, that might be a good forum to have some of those discussions. And, you know, whether they be workshops or some way of

81
Dave Carter
Cross-exam by Ms. Brown (FNC)
Cross-exam by Ms. Robertson (MTTC)

gathering people from different areas together to discuss what are the opportunities, and what the roles that various entities could play. But beyond that, not really my area of expertise.

MS. BROWN: All right, thank you. Those are my

- MS. BROWN: All right, thank you. Those are my questions.
- MR. MARTLAND: Thank you. Mr. Commissioner, I have Ms. Robertson at ten minutes now.
- MS. ROBERTSON: Krista Robertson for the Musgamagw Tsawataineuk Tribal Council.

CROSS-EXAMINATION BY MS. ROBERTSON:

- Q Just a very few questions for you, Mr. Carter. I'm wondering if your branch ever monitors salmon aquaculture sites.
- A Currently we are not monitoring aquaculture sites. My understanding is that the monitoring of the aquaculture sites is being conducted by staff working in the Aquaculture office, so...
- Q And have you ever been -- there's been a fair bit of discussion today about the assessment and priorities. Have you ever been involved in any discussions where there was a consideration as to whether your branch should be considering that as a priority, or has it...
- A I was involved in one meeting with staff from the Aquaculture office discussing sort of monitoring and approaches to monitoring, and the discussion about trying to ensure that the standards and the approaches were similar. But that would be the only discussion.
- Q And what of that, are the standards and approaches similar as far as you know, or...
- A I'm really not aware of the standards and approaches that are being applied, so...
- Q So they may or may not be similar.
- A Yes.

2.8

- Q And another question just generally. Do you find when you're working with a letter of advice, as opposed to when you're working with a HADD mitigation agreement?
- 43 A By an authorization?
- 44 O A HADD authorization.
- 45 A Yes.
- 46 Q Or an agreement whereby the proponent undertakes to do certain things to avoid a HADD.

A Okay. Yes.

- Q Do you find that an adaptive management approach is -- is better facilitated by a letter of advice or by an actual HADD agreement in terms of your ability to monitor?
- A Oh, okay. Well, I'm not familiar with the term HADD agreement. I'm assuming that that would be an authorization under the **Act**, under s. 36. Normally authorizations do include conditions directly associated with monitoring, so there's some required monitoring under the authorization which isn't normally the case under a letter of advice. So there is, I guess, an increased effort in monitoring in association with authorizations on the proponent side.

In terms of adaptive management and whether one is more effective on one or the other, again normally letters of advice don't include conditions associated with adaptive management. But I have seen a number of authorizations where there are conditions associated with adaptive management.

- Q Okay.
- A So, yes.
 - Q So generally, then, you're saying when there's a letter of advice issued with respect to a project, it's more difficult on the monitoring end of things to engage in adaptive management, meaning the ability to make kind of changes as the work progresses, and in the operational phase, to make changes where assessments determine that, you know, there's uncertainty, at least with respect to fish habitat impacts.
 - A I haven't seen a lot of adaptive management in association with letters of advice, so I think I would, you know, agree with your statement that it doesn't tend to occur with letters of advice. Whereas I have seen it with authorizations, so, yes.
 - Q Okay, thank you. And my final question is in terms of doing the assessments, do you ever engage with First Nations in terms of traditional ecological knowledge around their insights, as to whether or not advice is working, monitoring is working, in terms of impacts you're seeing on fisheries.
- A There's been some discussion with regards to

83 Dave Carter Cross-exam by Ms. Robertson (MTTC) Questions by the Commissioner

1

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33 34 35

36

37

38

39

40

41

42

43

44

45

46

particular projects where First Nations have been involved in those projects, and that there have been some discussions. But as a general principle, not regularly, not that that wouldn't necessarily be something that would be worthwhile.

- And would that be a capacity issue, or a policy issue, or both, or what would be the barriers to taking that...
- I think part of it we're still building the toolbox. So that's part of it, as well, in terms of what to incorporate in here. There is still a lot of work going on in developing the monitoring initiative. So as to who will be our, you know, who will collaborate with us, or how we will collaborate with different groups, that's still developing, so...
- But you do think that would be a helpful tool. Q
- I think it, you know, bears consideration, yes. think there's a potential for it to be beneficial, yes.
- Thank you, those are my questions. MS. ROBERTSON:
- MR. MARTLAND: Mr. Commissioner, I believe Ms. Tessaro has one point to cover in re-examination. Mr. Taylor has two, but otherwise that should conclude our evidence for the day.
- THE COMMISSIONER: I wonder if I could just raise just a couple of quick points, Mr. Martland, and then Ms. Tessaro or Mr. Taylor may want to include that in their questions. And I am not sure quite how to articulate this, Mr. Carter, so I apologize in advance if the questions seem a little convoluted.

QUESTIONS BY THE COMMISSIONER:

- Q Insofar as DFO is concerned and the different elements of DFO responsible for management of the fishery, do you meet from time to time with all of your colleagues to, for example, we have heard evidence since January on harvest management, including the commercial fishery and the recreational fishery, and we will be having a panel on the aboriginal fishing, as well. And so they have dealt with different elements of their responsibility.
- Right. Α
- Q Be it escapement strategy or whatever. You're now 47 talking about the area of monitoring, for example,

1 and compliance. But do you and your colleagues come together and share your experiences and the 3 information that's available in sort of an overarching management discussion as to how the 5 different parts of the puzzle fit together within 6 management? And obviously this Commission is 7 concerned about salmon and Fraser River sockeye. 8 So I should be really, in fairness to you, really 9 addressing this question to within Fraser River 10 sockeye issues, do you have an opportunity to come 11 together and have those kinds of discussions? 12 Α 13 14

- There are discussions that have occurred where various elements of the Department or the various branches do meet, whether it be SARA or Oceans or FAM with Habitat, over, you know, discussing various issues. So those kind of discussions do happen. An overarching discussion of sort of management of a particular stock, I'm not aware of a discussion like that occurring, other than maybe under the framework of the Wild Salmon Policy where, you know, you've got those different stages within, or, you know sections within the Wild Salmon Policy and various groups are engaged in those, those various strategies, and there are discussions that occur under that banner where I think, you know, along those lines that may or has been happening.
- Q I see. So it would be a matter of someone inviting you to come to a particular meeting to address an issue like that under the Wild Salmon Policy?
- A Yes. And I do know that there have been discussions like that under the Wild Salmon Policy, where FAM and Habitat and **SARA** have been meeting to discuss, you know, implementation of the Wild Salmon Policy.
- Q Okay. And my other question, again I apologize in advance, I may not be articulating this very well, but I understand that policies are developed at the national level. There is input from the regional level, there may even be drafts done at the regional level, and so on. But in that process, you've had a lot of questions put to you by these lawyers with regard to staffing issues and that sort of area, and funding issues. Do you get an opportunity during the lead-up to a discussion paper being published or a strategy

15

16 17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34 35

36

37

38

39

40

41

42

43

44

45

46

85
Dave Carter
Questions by the Commissioner
Cross-exam by Mr. Taylor (cont'd) (CAN)

document or a framework document being published, to have a thorough analysis of what the impacts will be from adopting that particular discussion or policy or framework to your staff resources, your human and financial resources? In other words, is that part of the mix in the lead-up to these kinds of documents being adopted by DFO?

- A I can only speak from my personal experience.
- Q Of course. Of course.
- There have been instances where we have been asked to engage on policy under development or, you know, to provide our sort of two cents worth. There have also been other instances where things have rolled out in relatively short order and maybe there hasn't been as much opportunity. So it varies.
- Q I see.
- A Yes.

2.3

THE COMMISSIONER: Thank you very much.

CROSS-EXAMINATION BY MR. TAYLOR, continuing:

Q I'm first? I've now got three and a half questions of you.

You answered a question of Mr. Harvey as to monitoring to do with Cultus Lake in 2010. You'll recall that, and I think what you said was that if there was a project, it would likely have been caught, but you don't recall there being a project last year.

- A Well, it would have had the potential to have been caught, yes.
- Q Yes. In terms of monitoring by certainly your unit.
- A Mm-hmm.
- Q When you answered that question of Mr. Harvey, were you referring to the work that your unit would or would not have done, or were you including all of Habitat and all of the Habitat staff in your answer?
- A Yeah, good point. I mean, my answer would have been framed around the work that was being done by the Habitat Monitoring Unit. So but you're right, there are other Habitat staff that may have been involved in monitoring.
- Q And more specifically there are Habitat staff assigned to the Cultus area, to your knowledge?

1 Yes, there are. Α 2 And would I also be correct, then, that your 3 answer was not speaking to what the Enforcement 4 Branch might or might not be doing? 5 Α That's correct, as well. 6 That then leads to a related question. Where you Q 7 have larger projects, would it be the case that a 8 Habitat biologist is going to have a file open on 9 it? 10 Yes, it is. Α 11 And that Habitat biologist will be looking at it and monitoring that particular larger project? 12 13 Α The reality is they would have, I guess, a 14 responsibility with regards to follow-up 15 monitoring of a project that they may have 16 reviewed. But the Habitat Monitoring Unit might 17 be looking at doing monitoring in association with 18 that project, as well. 19 Q So you might both be doing it. 20 Α Exactly. And, you know, obviously we were trying 21 to do that monitoring jointly. 22 But my question was really going to whether on a 23 larger project, no matter what, you're going to 24 see a Habitat biologist on it. 25 You're going to see a Habitat biologist involved Α 26 in the review of it, and whether there is, you 27 know, whether that Habitat biologist goes out and 28 conducts monitoring on it, that might depend. 29 Okay. Mr. Rosenbloom pointed out that there has 30 been one conviction, and no doubt we're going to 31 hear a lot more about that in the next couple of 32 days, or over the next couple of days. Apart from 33 conviction, well, firstly it almost goes without 34 saying, but one conviction presumably means 35 there's at least one prosecution and probably more 36 than one prosecution. Some prosecutions don't 37 result in a conviction. 38 That's correct. Α 39 Q But besides the prosecution tool and convictions, 40 are there other compliance tools that can be 41 employed by Fisheries staff, or Habitat staff? 42 Well, I think that's a good point. You know, if Α 43 we were to consider in that compliance decision 44 framework the various responses of the Department 45 that are laid out in that framework, or that

policy document, you know, it speaks about a

continuum of actions in relation to compliance,

46

and, you know, on one end of the spectrum, promotion, education, advice, all of those can be used as tools to bring about compliance with the Act. Moving through the continuum to shifting more and more towards the compel side, where you might, you know, issue an inspector's direction, or a warning, or the enforce side where you might conduct an investigation and do an enforcement action. So there's a broad range of tools that can be brought to bear to try and ensure that if habitat is being impacted, that that impact is addressed.

- Now, do inspector's directions offer the opportunity for the monitoring Habitat official to give a direction that then allows them to have an ongoing review and clout, if you like, over that. In other words, the direction is to do something and to do it within a certain time, or stop doing it, and then there's further checks on that and maybe ongoing even beyond that.
- A There would be a follow-up, and I guess the conditions or, you know, the directions provided in that inspector's directions are in themselves enforceable.
- Q And is it your understanding that a conviction would simply result in a fine and/or jail potentially, I suppose, but a fine that's then paid, perhaps as a cost of doing business, and that's the end of the clout.
- A There is that potential, yes.
- Q Now, the Commissioner asked you a couple of questions a moment or so ago about meeting or consultation or dialogue as between the various units or branches within Fisheries in B.C., and you gave an answer. You've referred already to area staff.
- A Mm-hmm.

- 38 Q And those are Habitat staff, and then there's 39 other section or unit staff in those area offices, 40 isn't there?
- 41 A Absolutely, yes.
 - Q And do you have knowledge whether they dialogue amongst each other?
- A I have knowledge that yes, they do, and, you know, expectation is that it happens on a fairly frequent basis.
- 47 Q They're all working in an office together.

88
Dave Carter
Cross-exam by Mr. Taylor (cont'd) (CAN)
Re-exam by Ms. Tessaro

1 Α Exactly. Q For the same common goal. 3 Α Hopefully, yes. 4 Q And at the other level of the hierarchy, but still 5 within the region, are you aware -- well, firstly, 6 you report to a Regional Director, correct? 7 Through a Regional Manager, yes. Α 8 And all staff except C&P report to a Regional 9 Director, don't they? 10 They would, the C&P staff would report to their Α 11 own Regional Director, but yes. Yes. 12 Well, C&P report to Sue Farlinger, the Regional Q 13 Director General, right, through --14 Α Yes, though Randy Nelson falls there in that chain 15 of command somewhere, too. Yes. 16 Well, what I mean is through Randy Nelson. Q 17 Α 18 And all other staff report through someone to a 19 Regional Director. 20 Α Yes. 21 And then am I correct that Randy Nelson is the Q 22 head of C&P, and the Regional Directors and Sue 23 Farlinger, they all get together regularly, don't 24 they? 25 Yes. Α 26 And you don't know what they talk about, but you 27 know they talk about Fisheries business. 28 Α I would assume so, yes. 29 MR. TAYLOR: Thank you. 30 31 RE-EXAMINATION BY MS. TESSARO: 32 33

Q So my area of redirect is simply to be clear on the issue of anticipated timelines for incorporating fish health habitat or ecosystem monitoring into the habitat management program, because I fear the record may not actually be clear on that point. And to aid this effort, Mr. Bisset, if you could pull up what was Tab 15 of our materials, and is now Exhibit 676. And my questions, Mr. Carter, focus on this first page, under the heading "Longer Term (2013-15)", I'd like to have you clarify what the anticipated timeline is for implementing these elements. And I have heard you say, in response to a question from Mr. Taylor, that the timeline for implementing the -- and correct me if I'm wrong,

34

35

36

37

38

39

40 41

42

43

44

45

89
Dave Carter
Re-exam by Ms. Tessaro

for implementing the final box, which is a box that reads:

Science development of ecosystem indicators to determine whether cumulative effects and other ecosystem level issues are being addressed.

Is four to five years.

A Yes.

- Q Is that correct?
- When you look at this national document, developing those national indicators, and looking at that longer timeframe of four to five years, yes, you are correct, but those are the national indicators. I think you are also correct in assuming, though, that under the Wild Salmon Policy there are regional indicators that have been developed and that already exist.
- And on that point, do you know how the National Habitat Management Program's timeline for developing ecosystem indicators for monitoring fits with the Wild Salmon Policy indicator timeline, and maybe, Mr. Bisset, just so that Wild Salmon Policy timeline can be on the screen, as well, if you could pull Exhibit number 8. And it's page 23 in the real document, which I think is about 31'ish go back, there we go and it's under Step 3.1.

So when you refer to the regional ecosystem indicator timeline, are you talking about the line here, Mr. Carter, where it says:

Within two years, an ecosystem monitoring and assessment approach will be developed and integrated with ongoing assessments...

- A So you're reading this paragraph 3.1?
- Q Yes. Under the heading "Identify indicators to monitor status of freshwater ecosystems".
- A Okay. And my understanding is those indicators have already been developed, that they already exist.
- Q Who do you understand did that work?
- That would be the report that was generated by Heather Stalberg.
 - Q So you understand Ms. Stalberg's work to be under

1 Strategy 3? 2 Α I thought that was under Strategy 2 with regards 3 to developing sort of habitat indicators, or 4 status indicators. 5 Q So here, I think, we are under "Action Step 3.1". 6 Okay. Α 7 Under "Strategy 3". Q 8 Α 9 ... key indicators (biological, physical and 10 chemical) of the current and potential state 11 of lake and stream ecosystems... 12 13 So whether they fall under Strategy 2 or Strategy 14 3, I'm not -- I would say that I know that there 15 have been a suite of indicators that have been 16 developed and have gone through a peer review 17 process. 18 On the point of the degree to which, and the 19 processes by which --20 Α Yes. 21 -- Habitat Management and Science Branch Q 22 coordinate on Wild Salmon Policy implementation, 23 particularly with respect to monitoring. 24 Α Mm-hmm. 25 Q Do you have a counterpart or contact at Science 26 that you speak to about, for example, action step 27 3.1, do you yourself engage in that kind of inter-28 branch consultation? 29 There is a colleague that I work with that is 30 taking the lead on Wild Salmon Policy on behalf of 31 Habitat, and I do have, you know, a significant 32 amount of discussion with her. There are specific 33 scientists that, you know, are engaged with, but I am not the Science liaison between Habitat and 34 35 Science. There's another individual who plays 36 that role that I again have interaction with, 37 so... 38 And you're talking about Melody Farrell? 39 Α Melody Farrell, on the Wild Salmon Policy side, 40 and Derek Nishimura when it comes to the Science 41 liaison. 42 Q And I suppose I guess my last question, just on this same theme, your evidence is that you 43 44 understand that this ecosystem monitoring and 45 assessment approach referred to here, is already... 46

Well, the indicators have been identified.

47

Α

Dave Carter Re-exam by Ms. Tessaro

those indicators will be applied, that is work that is still ongoing. So developing a framework under which those indicators would be monitored and that information would be gathered is still ongoing work.

- MS. TESSARO: Okay. Unless you have any questions for the witness, Mr. Commissioner, I think that that concludes the evidence of this witness, and we'll adjourn to 10:00 a.m. tomorrow morning.
- THE COMMISSIONER: Yes, thank you, Ms. Tessaro, I appreciate that. And thanks to the witness for appearing here today and for answering the questions of counsel. Thank you very much.
- A You're welcome.
- THE COMMISSIONER: We are adjourned, then, until ten o'clock tomorrow morning, and that is to commence the panel on enforcement; is that correct?
- MR. MARTLAND: Yes. Our panel commencing tomorrow, continuing Friday and Monday is habitat enforcement.
- THE COMMISSIONER: Thank you very much.
- THE REGISTRAR: The hearing is now adjourned for the day and will resume at ten o'clock tomorrow morning.

(PROCEEDINGS ADJOURNED TO APRIL 7, 2011 AT 10:00 A.M.)

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

Diane Rochfort

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

Karen Acaster

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

Karen Hefferland

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

Pat Neumann