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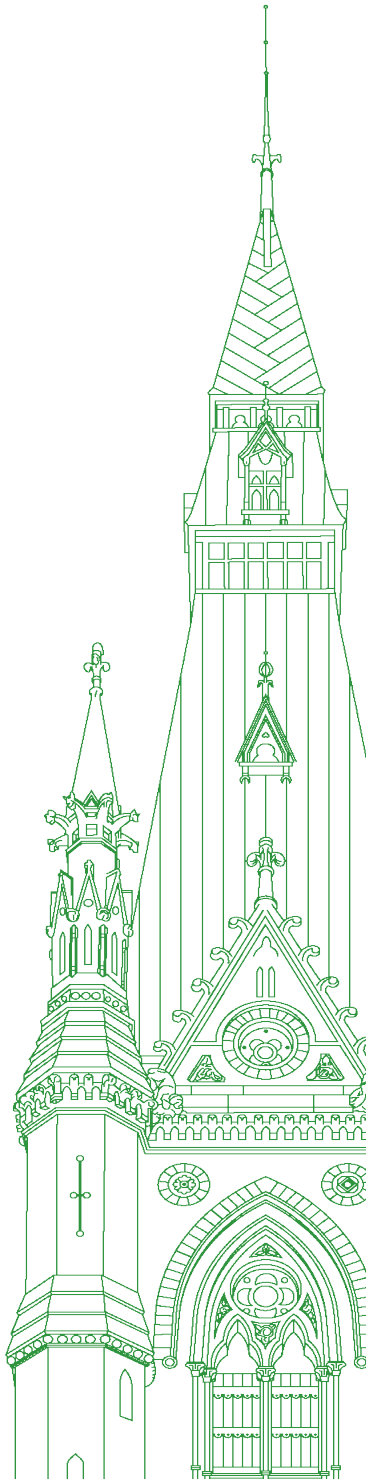

Chair: Mr. Ken McDonald

Standing Committee on Fisheries and Oceans

Thursday, July 23, 2020

● (1205)

[*English*]

The Chair (Mr. Ken McDonald (Avalon, Lib.)): I now call this meeting to order.

Welcome to meeting number 13 of the House of Commons Standing Committee on Fisheries and Oceans.

Pursuant to the motion adopted by the House on May 26, 2020, Standing Order 108(2), and the motion adopted on June 1, 2020, the committee is resuming its study on the state of Pacific salmon, with today's focus on the Big Bar landslide.

Today's meeting is taking place by video conference. The proceedings are public and are made available via the House of Commons website. So that you are aware, the webcast will show the person speaking rather than the entirety of the committee.

Regular members know this by now, but as a reminder and for the benefit of our witnesses who are participating in a House of Commons virtual committee meeting for the first time, I should remind you of a few rules we would like you to follow:

Interpretation in this video conference will work very much as in a regular committee meeting. You have the choice at the bottom of your screen of either floor sound, English or French. As you are speaking, if you plan to alternate from one language to the other you will need to also switch the interpretation channel so that it aligns with the language you are speaking. You may want to allow for a short pause when switching languages.

Before speaking, please wait until I recognize you by name. When you are ready to speak, you can click on the microphone icon to activate your mike.

Should members have a point of order, they should activate their mike and state that they have a point of order.

If a member wishes to intervene on a point of order that has been raised by another member, I encourage him or her to use the “raise hand” function. In order to do so, you should click on “participants” at the bottom of the screen. When the list pops up, you will see next to your name that you can click “raise hand”. This will signal to the chair your interest in speaking. We'll keep the names in a chronological order, as long as I look at my screen and see the “raise hand” signal.

When you are not speaking, your mike should be on mute. I try to enforce this rule as much as possible. Please do this at all times.

The use of headsets is strongly encouraged.

Finally, when speaking, please speak slowly and clearly.

Should any technical challenge arise—for example, in relation to interpretation, or if a problem with your audio arises—please advise the chair immediately so that we can stop the meeting and get it straightened out as soon as possible.

Before we start, can everyone click on your screen in the top right corner and ensure that you are on “gallery” view? With this view, you should be able to see all the participants in a grid view. It will ensure that all video participants can see one another.

As Nancy mentioned, Ms. Elizabeth May, from Saanich—Gulf Islands, is joining us again today. Whether she is in Ottawa or at home, I'm not sure.

Welcome again, Ms. May. We're always glad to have your input.

As witnesses, we have as an individual Mr. Carl Walters, professor emeritus, Institute for the Oceans and Fisheries, University of British Columbia. From the BC Wildlife Federation, we have Jesse Zeman, director of fish and wildlife restoration. From the Pacific Salmon Foundation, we have Jason Hwang, vice-president. From the Watershed Watch Salmon Society, we have Aaron Hill, executive director.

We will now start with Mr. Walters, for six minutes or less.

When you're ready, sir, the time is yours.

Mr. Carl Walters (Professor Emeritus, Institute for the Oceans and Fisheries, University of British Columbia, As an Individual): Thank you. I wasn't given any terms of reference for what you wanted me to talk about, so I'll talk fairly generally about what has happened with Pacific salmon.

I've been doing research on Pacific salmon populations for over 50 years, and my research has focused in particular on trying to understand why there have been severe declines in many salmon and herring populations. The Department of Fisheries and Oceans has responded to these declines by closing various fisheries, but those closures have not reversed the declines. Many DFO scientists blame the declines on environmental factors that we can't control, such as climate change, but in recent years I've come to believe that the declines have substantially been due to massive increases in marine mammal, seal and sea lion populations and their predation impacts. The number of seals and sea lions on the Pacific coast today is probably double what it was for the last several thousand years, when first nations peoples harvested them intensively. We're in an unprecedented situation in terms of predation risk for salmon.

As an avid sport fisherman since 1969, I've been particularly dismayed over the years at the collapse of the Georgia Strait sport fishery, one of the most valuable fisheries on the Pacific coast. When I first started fishing in the Georgia Strait, there were close to a million angling days of fishing every year, with a net economic benefit from non-resident tourism of over $60 million a year for the local B.C. economy. That's more valuable than the commercial sockeye fisheries of B.C. That fishery has declined now by over 80%, mostly between 1980 and 1995, and there's been no retention of coho salmon at all for over 20 years.

When those declines first started in the 1980s, scientists like me blamed the problem on overfishing. We advised former fisheries minister John Fraser to introduce more restrictive regulations, which happened, and the commercial troll fishery closed completely. However, the stocks just kept declining. Then we started blaming hatchery production and other factors, such as warming water, but the stocks continued to decline anyway.

None of us suspected that marine mammals might be a cause of these declines until a major paper came out from DFO scientists in 2010 showing that the seal populations in the Georgia Strait had increased by about tenfold between 1972 and 2000 in a pattern that was pretty much a mirror image of the decline in the Georgia Strait sport fishery.

Today there's a big controversy. We see two major explanations for why those declines occurred and why the stocks continue to be low. One of them is climate change, and increasing water temperatures in particular. The other one is the increase in seal predation. Our data show that the amount of juvenile salmon eaten by seals each year in the Georgia Strait is enough to directly account for the decline. There are almost as many juvenile chinook and coho going into the Georgia Strait every year as juveniles as there were back in the 1970s, but they're not surviving their first year in the ocean.

We can't prove that the consumption that we calculate of those juveniles by marine mammals is what we call additive. We can't prove that if you took away the predation, the fish would survive. It could be that other mortality agents would kill just as many of them, because there's still something wrong with the ocean. It would be a large-scale management experiment to reduce seal populations through commercial first nations harvesting in order to see if we can restore at least some of the economic value of that sport fishery and perhaps benefit other really endangered stocks, such as the interior Fraser coho salmon.

● (1210)

More broadly, we've been doing research recently suggesting that the big increases in Steller sea lion populations in our waters outside the Georgia Strait have likely been at least partially responsible for the Fraser sockeye declines that triggered the Cohen commission and are very likely responsible for collapses of two of our major herring stocks on the west coast of Vancouver Island and in the Haida Gwaii area.

I've recently helped the Pacific Balance Pinniped Society develop proposals for commercial and first nations' harvesting of seals and sea lions, aimed at reducing these pinniped populations to about 50% of their current levels and keeping them nearer the levels we think were present when first nations people were harvesting them on a sustainable basis. Those proposals went into DFO two years ago, and the department has been sitting on them for over two years with one excuse after another for not taking any action. This is understandable, considering how controversial any proposal involving marine mammal harvesting is on the Pacific coast.

● (1215)

The Chair: Mr. Walters, I will have to interrupt you. Your time has gone over. Hopefully anything you didn't get to say will come out in the line of questioning.

Mr. Carl Walters: I'm sorry.

The Chair: We'll now go to Mr. Zeman from the B.C. Wildlife Federation for six minutes or less, please.

Mr. Jesse Zeman (Director of Fish and Wildlife Restoration, BC Wildlife Federation): Thank you for the opportunity to present.

I'd like to discuss the future of Pacific salmon using my experience with interior Fraser steelhead, in particular the Thompson and Chilcotin fish. The history is that the fishery went from a catch-and-kill fishery to a catch-and-release to no fishing.

The trouble with these fish is they comigrate—

[*Translation*]

Mrs. Marilène Gill (Manicouagan, BQ): Pardon me, Mr. Chair, but there's no interpretation.

[*English*]

The Chair: I wasn't getting it either.

Can we start again when you're ready, Mr. Zeman?

Mr. Jesse Zeman: Thank you for the opportunity to present.

I would like to discuss the future of Pacific salmon, using my experience with interior Fraser steelhead, in particular the Thompson and Chilcotin fish.

The history for angling was a catch-and-kill fishery, then a catch and release, and then no fishing at all. The trouble is that these fish comigrate with pink and chum salmon, and in the worst years, steelhead experts estimate that half of these fish were caught in a net as bycatch, and up to half of those died. Populations were considered in severe decline in the mid-1990s, when 3,000 to 4,000 spawners made it. There were an estimated 62 Thompson and 134 Chilcotin fish this year. They're endangered.

In 2017, the alarm bells were going off and we were in crisis mode. Despite this, DFO still opened net fisheries on the Fraser. ENGOs pushed for an emergency assessment under the COSEWIC, which was undertaken. In 2018, COSEWIC announced that two of these populations were at imminent risk of extinction and that the main threats include bycatch of adults by net fisheries targeting Pacific salmon, as well as poor ocean conditions.

That triggered the Species at Risk Act process. As part of this process, there's a science advice document. It was put together by three scientists: one from the province, one independent, and one from DFO. It went through the peer review process by the Canadian Science Advisory Secretariat, and later freedom of information feedback indicates that it was vetted by 42 experts and managers. This document has never been released to the public.

After the RPA, the recovery potential assessment, correspondence was obtained from the province, going to DFO, which says the DFO summary is no longer scientifically defensible. What we've found through FOIs, freedom of information requests, is that the peer-reviewed science document findings had been edited in a science advisory report ostensibly to downplay the effects of nets on steelhead.

In 2019, the federal and provincial governments created a recovery plan. B.C. recommended that protecting 95% of these fish would require a period of 84 days without nets on the Fraser. DFO committed only to a 27-day moving window. In September, DFO killed its first two steelhead in its test fishery. On September 16, the Province of B.C. closed its statistically insignificant trout fishery on the Fraser, likely as a quid pro quo with DFO, only to find the next day that DFO had opened an economic opportunity fishery for pinks using beach seine, allowing chum to be retained. It should be noted that at that time, DFO had calculated a 1% probability of meeting its escapement target of 800,000 chum in the Fraser, and it still allowed fish retention.

DFO again used its own model, which was later and before found to be invalid, to justify opening this fishery. We had to file an ATIP request to find out what had gone on behind the scenes inside of DFO for the entire two-year process, and we were told it would take 822 years to get our ATIP back from the federal government. This was refined down to two and half months, and it will take two years to find out what went on behind closed scenes.

For this year, in 2020, the plan is the same: The steelhead experts say you need 77 days without nets, and DFO's plan is to take the nets off for only 27 days. That means we are pushing these fish into extinction.

At this point, the science advisory report is the only document available. The peer-reviewed science is still not out and we still don't have our ATIP. That is the DFO that people in B.C. know. There are dozens of structural and cultural issues within DFO that have resulted in a failed ministry and agency.

Steelhead are not the only victims. Interior Fraser coho were put on life support in the 1990, and a number of our chinook and sockeye runs are headed for the same place now. DFO's response has been to change the fisheries regulations and manage these fish to zero. This has failed our fish and the people who care about them.

Here are some things that can be done to stop the bleeding.

You can fund habitat restoration. There are only six restoration biologists for the entire province of British Columbia. They have no base budget.

We can move to selective fishing methods. Not only are steelhead a victim of nets on the Fraser; so are salmon, and I'm sure over the next year we'll find that sturgeon are being driven into a decline that is largely attributed to nets. Nets need to go.

On poaching, there are pictures of endangered chinook and steelhead and at-risk coho in illegal nets that surface almost daily. They are reported to DFO, and no one even calls us back. Charges are rarely pursued. Fisheries officers have become experts in cutting gillnets out of the Fraser, as opposed to protecting salmon from poachers.

Fisheries monitoring must be improved for all sectors. There is no illegal harvest accounted for in run reconstruction models, and we are aware that fisheries-related induced mortality of Fraser chinook are not even included in the river. What that means is there are thousands of fish, if not tens of thousands, that are killed in the Fraser every single year, which, according to DFO, never even existed.

We can deal with fish farms, we can deal with pinniped predation, we can deal with fish passage, and internationally we can deal with ocean ranching to reduce the number of hatchery pink and chum fish that are being dumped into the Pacific on an annual basis. These are all things that can be done.

● (1220)

DFO is culturally and structurally broken. It is a fishing management agency. It's not accountable to the public. Getting data from them is almost impossible. We are constantly referred to ATIP because people are worried they will lose their job if they share data with the public that was paid for by the public. Scientists, habitat staff and enforcement staff are rarely listened to. The prescription of the day is fishing, fishing, fishing.

Now, on the broader picture around natural resource management, whether it's water, air or fish, you need three things. You need funding, science and social support.

First, funding has to be dedicated. This facilitates leveraging, line of sight for ratepayers and an ability to plan on annual, five-year and 10-year bases.

Science's role is to set objectives for fish and habitat population to identify threats and barriers and establish the allowable catch. That is not management's function; that is a science function.

Finally, there's social support. The agency needs to be accountable and transparent and to make decisions based on evidence, and those who care about the resource have to see themselves as part of the process. That is what DFO should look like, and currently couldn't be any further from.

Thank you for your time.

The Chair: Thank you, Mr. Zeman.

We'll now go to the Pacific Salmon Foundation and Mr. Hwang for six minutes or less, please.

I would remind the witnesses to please try to speak slowly. We have interpreters who are trying to keep up. For me on the east coast, I naturally speak much faster than a lot of other people, and I find it difficult to slow down at times, but remember that there's an interpreter at the other end trying to translate this for people who want to hear it in their first language.

Thank you.

Mr. Jason Hwang (Vice-President, Pacific Salmon Foundation): Good morning, everyone, from Kamloops, British Columbia. Thank you for having me. It's a pleasure to be here today.

I have some opening points.

There is a major problem in front of us. To align with some of what Mr. Zeman said, what we are currently doing is not working for our Pacific salmon. Many of the populations are in serious conservation decline. What slipped under the radar last year, because of the attention going to Big Bar, was that it was the worst coast-wide Pacific salmon return ever. It was the worst sockeye return on the Fraser ever; worse than what triggered the Cohen commission of inquiry. Failure to take action now is likely to result in many of our Pacific salmon populations following a path similar to what happened to our east coast cod, and we all know that story.

In terms of thinking about what to do, we have to take a long view. Recovery is going to take time. I don't believe there are simple answers, but it is possible to take actions to make things better for our salmon.

There are some good things happening. I think some of the recent funding programs that have gone on—going back, the RFCPP under the Conservative government and the Oceans Protection Plan under the current Liberal government—are positive things. In particular, most recently the B.C. Salmon Restoration and Innovation Fund is positive, because the collaboration between the federal government and the provincial government is the kind of thing we need to do.

However, we need to recognize that the problems are big and they're long term. This funding over five years, while it is useful, is not of the kind or scale or duration that we need to solve the problem. Other things, such as restoring lost protections, represent a positive step, but we need to follow up with action.

I think it's important to recognize that salmon ecology is really complicated. There aren't simple answers. There are issues with predation; there are issues with habitat; there are issues with fishing. There are subcomponents to these issues, and there is no single thing such that if we do that thing, everything will be better.

A way I like to look at what we can do for salmon is to think about the ocean as the big driver of what enables salmon populations to swing up and down. This is part of a natural cycle. It is probably changing because of climate change, but we as people can do things, managing what many biologists call the three H's: harvest, habitat and hatcheries. I'm going to speak to these in a little bit of detail.

Combined with these, I think we also need to think about having information and data, and we need to continue with the science to understand what's going on.

I'll speak to these all very quickly.

In terms of harvest, we know that harvest has been reduced. We heard this from Mr. Walters already this morning. We know that access and opportunity are very important to the constituents. However, we need to start to think about how we unlock access to this fishery. It's currently locked up, primarily because weak populations are co-migrating with populations that are stronger. We need better information, better management science, better monitoring and better assessment so that we can access the fisheries and the populations that are healthy and protect those that are weak. Participants in the fishery—first nations, public and commercial—have capacity to bring to the table.

Turning to hatcheries, I would say that not every hatchery is the same. What I would suggest we need right now is attention to conservation-focused hatchery capacity. This is different from producing fishable catch. It is different from dumping a lot of fish out into the ocean and hoping that something good happens. This is a very specific thing designed to bolster weak populations while we figure out what the problem is and make things better. A rush to increase hatchery production is unlikely to get us the outcomes we want.

I think we do have an urgent need for conservation-focused hatcheries. We need to turn those on quickly, for reasons such as Big Bar. It's going to take tens of millions of dollars, and we need to run them for two decades.

Turning briefly now to habitat, we need to protect what we have, we need to fix past damage, we need to be strategic and not reactive, and we need to be coordinated and not siloed. There are many good things out there in terms of what we can do for habitat, but we are not taking the kind of action that we need to take.

I have a number of recommendations that I will follow up with in writing, but we really need to start establishing watershed-based habitat plans and delivering on those kinds of things.

● (1225)

In terms of monitoring, assessment and data, to summarize, we can't manage what we don't measure. We're not monitoring enough and we're not measuring enough. We need to pay attention to ocean ecology and science so that we know what's happening out there.

In summary, the overall management system is not working. The sum of the parts is not allowing us to understand what's going on, put them together and solve the problems. We are saying the right kinds of things. We have the Cohen commission of inquiry and we have the wild salmon policy, but we are not getting the outcomes we need. The Government of Canada needs to set goals for salmon recovery and sustainability and take responsibility for achieving those goals and taking appropriate action.

In summary, significant new investment is required into the three "H" levers—harvest, hatcheries and habitat. New dollars need to go into DFO as well as to collaborators and partners. The management system needs to be revitalized. Consideration should be given to an independent oversight body to complement the work that DFO and other regulatory agencies are bringing forward.

I will stop there. I think I kept within my six minutes.

Thank you, Mr. Chair.

The Chair: You were right on the mark at six minutes. I appreciate that. Thank you.

We'll now go to the Watershed Watch Salmon Society.

Mr. Hill, you have six minutes or less, please.

Mr. Aaron Hill (Executive Director, Watershed Watch Salmon Society): Thank you very much for having me here.

I am the executive director of the Watershed Watch Salmon Society. We're a small salmon conservation charity. We've been identifying problems and engaging in solutions in wild salmon management for about 22 years.

I have been here for about a dozen years. I have a graduate degree in biology, focused on salmon. I worked for several seasons as a fisheries observer and technician in various commercial and recreational fisheries. I was born and raised in northern B.C. My father worked as both a commercial fisherman and a recreational fishing guide. I love to fish and I love to bring salmon home for my family. My organization and I also strongly support indigenous fishing rights.

Our job is to represent the public interest in wild salmon conservation in B.C., which is the dominant component of the public interest. I didn't realize that when I started working as a conservation advocate. I had an idea that only a minority of the general population really shared our values around conserving wild salmon and their habitat. However, we commissioned a public opinion poll in the run-up to the 2011 federal election, and the results floored me. For example, only 8% of British Columbians agreed that "the government should be allowed to let small, endangered salmon runs go extinct". Other questions in that poll showed, as have other polls since, strong public support for wild salmon conservation and restoration.

We badly need this right now. It's very grim out there, as the other witnesses have described. In the past, when one set of salmon runs came back in small numbers, usually another would come back strong, but in the past decade there have been fewer and fewer bright spots. In most rivers across our province, healthy salmon runs are now in the minority. In many rivers everything is depleted.

We know the problems. You've heard many of them already this morning: viruses and parasites from salmon farms; overfishing; the harmful effects of salmon hatcheries; habitat destruction and pollution; and of course climate change, which is upending water flow and temperature patterns and degrading the salmon's food sources. All of these problems have been exacerbated by the chronic management dysfunction that Mr. Zeman spoke to and that has been described, along with remedies, in a long series of public inquiries and official policy papers spanning the past several decades.

The solutions are there. I will just touch on a few places where you might want to start.

First, the government could implement the broad recommendations of the Cohen inquiry. It cost taxpayers around $35 million. Contrary to the spin, most of Justice Cohen's 75 recommendations have not been implemented. They could start with the recommendation to remove salmon farms from the Discovery Islands by 2020, which is this year. We also need quicker, stronger action on this government's mandate letter commitment to transition the salmon farming industry to closed containment so that the viruses and parasites won't be harming wild salmon. We need to build on the successful model created by first nations and the provincial government recently in the Broughton Archipelago.

● (1230)

The Clerk of the Committee (Ms. Nancy Vohl): Mr. Hill, would it be possible to bring your microphone closer to your mouth?

Mr. Aaron Hill: Yes. Is that better?

The Clerk: Thank you.

Mr. Aaron Hill: Okay.

We also need to implement the wild salmon policy. It's an excellent piece of work, and Justice Cohen agreed. The policy's action steps involve assessing the status of our salmon populations and their habitats and implementing rebuilding plans for the endangered ones, but 15 years later it hasn't happened. The current official implementation plan won't actually get us there. We should study and mitigate the risks of salmon hatcheries. We should do it through the use of a biological risk assessment framework, as promised in the 2005 wild salmon policy.

Again, this has only been half-done, and our hatchery practices are causing harm to wild salmon, and doing it at great expense to taxpayers.

Overfishing can be reduced by transitioning to what we call "known stock" fisheries, which take only the harvestable surplus of identifiable populations, and by implementing such best practices as effective catch and stock monitoring, verifiable catch reporting—

[*Translation*]

Mrs. Marilène Gill: Mr. Chair, the interpretation is still problematic. The French interpretation is constantly interrupted because of sound issues. If possible, the interpreters should be given a bit of time to adjust their equipment so we can hear them.

[*English*]

Mr. Aaron Hill: I'm sorry.

The Chair: I didn't get any translation on that, Madame Gill. I don't know if the translators are available, or is translation taking place? I didn't get any translation, Madame Gill.

[*Translation*]

Mrs. Marilène Gill: Exactly. I don't have any interpretation either.

● (1235)

[*English*]

The Chair: You have a minute and 42 seconds.

Mr. Aaron Hill: I was talking about overfishing. Many salmon monitoring programs have been cut to the bone, and we shouldn't be fishing if we don't know how many fish we have.

There are tremendous opportunities around habitat restoration. One great place to start is with the 1,500 kilometres of formerly prime salmon habitat that are being needlessly blocked by decrepit flood control structures in the lower Fraser Valley. Restoration projects create good jobs, create salmon habitat and, in this example, make our communities even safer from flooding. We need to do much more. We need to stop destroying habitat to begin with.

We should also protect endangered salmon populations under Canada's Species at Risk Act. That is what it's for, but so far, every single proposed listing has been rejected simply to preserve unsustainable fishing opportunities.

Finally, this government did a great thing by strengthening the Fisheries Act. Now they need to implement their own law and our national sustainable fisheries framework by coming up with recovery targets and rebuilding plans for endangered salmon and steelhead populations.

The bottom line is that we need the government to serve the broad public interest, because masses of people across our province, from across the political spectrum and from all walks of life, want their children and grandchildren to go out and see and catch salmon in their local waters for many years to come.

[*Translation*]

Mrs. Marilène Gill: Mr. Chair, I don't want to interrupt the witness a third time, but I heard the interpreter say she was having a lot of trouble given how quickly the witness was speaking. Witnesses who don't provide speaking notes should be asked to slow down. That applies to the rest of the meeting as well. Thank you.

Mr. Hill, my apologies for interrupting you repeatedly, but it's important that I hear everything you're saying. Thank you.

[*English*]

Mr. Aaron Hill: Mr. Chair, I would be happy to forward my speaking notes immediately if that would be helpful.

The Chair: Yes, that would be greatly appreciated. Thank you.

Thank you, Ms. Gill, for highlighting that. We do mention at the very beginning each time to ask people to speak slowly so the interpreters can keep up. I know it is hard for people to adjust their normal speech patterns. We try to be as patient as we can and we do encourage witnesses to provide speaking notes so that they can be followed, along with the interpretation. We'll make sure that in the future we'll tell them we have to have their speaking notes up front before they come to committee. Hopefully that will resolve any further problems down the road.

We now go to our questioning. Before I go to Mr. Arnold for six minutes or less, I will say that if you're asking a question, please try to identify the person it's addressed to. It makes it much easier. It will make better use of your six minutes instead of everyone kind of looking in a daze wondering who should answer it. If you could do that, it would make everything go a lot better and you'd get a lot more information. Thank you.

Mr. Arnold, you have six minutes or less.

Mr. Mel Arnold (North Okanagan—Shuswap, CPC): Thank you, Mr. Chair, and thank you to all the witnesses here today. We've certainly heard some varied and interesting testimony.

I want to start off with Professor Walters. What species of pinnipeds are preventing the recovery of Pacific salmon in B.C. waters, in your estimation?

Mr. Carl Walters: In the southern interior part of B.C., in the Georgia Strait area, it is harbour seals. On the outside waters, particularly impacting herring and some of our chinook stocks, it's the Steller sea lion. In recent years, there's been a fairly dramatic, but not closely monitored, increase in the number of California sea lions that are moving into our waters over the winter period.

We think the two species—the harbour seal and the Steller sea lion—are the main problem.

Mr. Mel Arnold: Thank you.

DFO recently provided the committee with written responses to questions raised in another meeting. DFO's response stated, and I quote:

> The current harbour seal population is in line with historic population norms, after depletion by overhunting prior to receiving statutory protection in 1970.
>
> Steller sea lion populations in BC waters have increased by approximately 4-fold since surveys began in the early 1970s.

Do you agree with this statement and the numbers?

Mr. Carl Walters: Absolutely not. The major paper that came out in 2010, and we repeated this work, used historical commercial harvest and culling information on harbour seals. There's a lot of back-calculation of how many seals were around in the 1880s, around the time when the first nations fish harvesting collapsed completely because of smallpox. At that time, we calculated that there were about half as many seals in B.C. as there are today.

Also, as I mentioned, first nations people have been harvesting seals and sea lions intensively for thousands of years, so when people say this is a natural situation, it isn't natural with respect to anything over the last several millennia.

● (1240)

Mr. Mel Arnold: Thank you.

You mentioned that first nations had been harvesting seals or marine mammals for millennia. Is there currently a market for the seals or sea lions? We're not talking about a cull here. We're actually talking about a manageable harvest that would contribute to the economic activity of first nations and British Columbia and Canada.

Mr. Carl Walters: There's a hope that commercial markets can be developed. One of the key parts of the proposals out there now is to test market options. Right now, the only obvious marketing options are for things like crab bait and for food for mink farms.

They've had a similar problem in terms of getting commercial fishermen to be willing to harvest seals back east, in that there's a lack of markets for the meat or other products.

There's a long-term hope that they can develop overseas markets, particularly in China. The Chinese apparently like to eat—

Mr. Mel Arnold: Okay, so there is potential for markets, so we're not talking about a cull. We're actually talking about a potential managed harvest. Thank you.

I want to switch to Mr. Zeman, if I can, from the BC Wildlife Federation.

Mr. Zeman, you were mentioning a report that was altered. Could you elaborate a little further on that? Why would DFO change or alter a report or censor scientific data or input that was in there?

Mr. Jesse Zeman: There are two processes. There's the recovery potential assessment, the RPA, which is a peer-reviewed science document that basically points to the causes and potential solutions. Then that's followed up with a science advisory report, which is really a layperson's interpretation. What happened is the RPA was conducted and went through the peer review process and, as far as we can tell through freedom of information requests to the province, somehow the wording or findings in the RPA were edited in the science advisory report. What the FOI tends to indicate is that this was done to downplay the role of nets on interior Fraser steelhead.

This broader issue around not being able to get data or information out of DFO and not being accountable to the public is a long-standing issue here in B.C. The ATIP of the federal government in that process resulted in a response that it would take 822 years to get the correspondence.

There is some hiding going on with that issue.

Mr. Mel Arnold: Thank you.

I would like to go back to Mr. Walters again.

Again, in a DFO response, they quoted:

> There remains a large degree of uncertainty and lack of scientific consensus regarding the impact of pinnipeds versus other predators on salmon, as well as other factors which may also be contributing to stock declines.

DFO also wrote that:

> The Department has embarked on a pinniped diet study to address this uncertainty.

Are you aware of any other relevant pinniped diet studies that have already answered the questions of uncertainty?

Mr. Carl Walters: No, and we're not going to be able to get a whole lot more accurate information.

The basic problem with juvenile salmon in Georgia Strait being eaten by seals is that it's a tiny percentage of the seals' diet. They eat so many tonnes of fish in general that only a tiny fraction of those tonnes need be juvenile salmon in order for it to be a very large number of juvenile salmon. Therefore, additional diet studies are not going to resolve the uncertainty.

Also, even if we could prove the diet data that we gathered at UBC that does show enough being eaten to account for the mortality change, even if we can confirm those numbers, it won't address this issue that we don't know whether the juvenile fish being eaten by the seals are ones that were sick because of things like disease or warm water and would have died even if the seals were reduced. That uncertainty can only—

● (1245)

The Chair: Thank you, Mr. Walters. Thank you, Mr. Arnold.

We'll now go to Mr. Hardie for six minutes or less, please.

Mr. Ken Hardie (Fleetwood—Port Kells, Lib.): I only have six minutes. Let's get started, then.

Mr. Walters, we've been looking at the east coast fishery as well, particularly all the efforts to recover the cod off Newfoundland. Since 1992, they've been working at it, and we have had very little success. My friends from the Rock will note with great interest that the pinniped situation on the east coast also appears to be unresolved.

Do you get the connection there?

Mr. Carl Walters: Yes. I actually recently published a paper with George Rose on the northern cod stock. We examined the survey data and we've shown that the northern cod stock actually is rebuilding at a fairly high geometric rate, but it's still at such low numbers that it's going to be a long time before it reaches high biomass again.

DFO research in the Gulf of St. Lawrence indicates that seal predation impacts on the western-southern Gulf of St. Lawrence cod stock are probably very high, and have caused the natural mortality rate to be about four times higher than it should be.

Mr. Ken Hardie: I'll have to interrupt there, because I have a few other questions.

Mr. Zeman, a Senate study back in the mid-2000s asked the DFO to study the impact of drift gillnets and set gillnets in the Fraser River. To your knowledge, are those implements still being used?

Mr. Jesse Zeman: Yes, they are, both legally and illegally. The challenge with a net is that if a fish is the right size, it's going to get caught in that net, and there's a very high likelihood that even if it falls out of the net or somebody puts it back in the river, it's going to end up dead, so—

Mr. Ken Hardie: Are there sensitivities about relationships with indigenous people, first nations, etc.? Are they the ones who are more likely to be using these nets?

Mr. Jesse Zeman: It's really interesting that you bring that up, because in the first year of the salmon restoration and innovation fund, there were actually applications from first nations to transition to more selective methods, and those applications were turned down.

There is definitely an interest from a number of first nations on the Fraser to move to more selective methods, recognizing that, first of all, it's impacting fish that live there, but it's also impacting the really low stocks.

The reality is that if we continue down this road with gillnets and we have more weak stocks, we're not going to be able to fish, so we have to transition to selective methods. There are first nations that want to pursue that direction. They were turned down. We did a lot of work with the provincial government. I know that selective fishing methods are now a priority in shrimp, but this again just indicates the lack of direction coming out of a high level that.... We don't have the fish we used to have. We need to address our fishing practices and, quite frankly, we're 100 years behind on that.

Mr. Ken Hardie: Mr. Hill, I have a quick question for you.

Last year we heard an awful lot from people out on the water that the Southern Strait of Georgia was absolutely teeming with hatchery fish from Washington state. It raises the concern that maybe the information that we have on the state of the stocks, or what might be available for fishing, is still highly incomplete or just plain wrong.

What are your thoughts on that?

Mr. Aaron Hill: You raise a very good point, Mr. Hardie. There was good fishing, and there is again this year, for certain Washington state and B.C. stocks transiting through the Salish Sea. It sort of masks the larger declines that we've seen coast-wide, and the poor state of the Fraser chinook populations that are migrating alongside those stocks. The abundance of a few populations is driving the harvest, while a great number of smaller and endangered populations are being hit even harder in the process of fishing.

It speaks to the need—as I mentioned, and Mr. Zeman and Mr. Hwang mentioned—for greater monitoring of the use of genetic stock identification to understand the stock composition of the catch as it's migrating through. There are ways to shift fishery management to take greater advantage of abundant stocks and have lower impact on the comigrating endangered populations. There have been several proposals put forward to the department to shift in that direction, and that's what we need to do.

● (1250)

Mr. Ken Hardie: How much time do I have left, Mr. Chair?

The Chair: You have one minute.

Mr. Ken Hardie: If we look at the health of the fish—not just the number of fish—and the health of the things that the fish eat, where are we on that? Especially with the herring, the plankton and the things that fish like to eat, are they in as tough shape as the fish themselves?

Mr. Hwang, do you have any thoughts on that?

Mr. Jason Hwang: I think that's a giant question, Mr. Hardie.

In summary, the ocean is changing from what we have been used to. Mr. Walters spoke to that to some degree and would probably be able to give more in-depth comment. Some of the herring populations are in decline and some are doing well, but it's a massive and complex issue in terms of ecological interaction.

The Chair: Thanks, Mr. Hardie. Your time is up.

Mr. Ken Hardie: Thanks, sir.

The Chair: We'll now go to Madame Gill, for six minutes or less please.

[*Translation*]

Mrs. Marilène Gill: Thank you, Mr. Chair.

I'd like to thank all the witnesses for joining us today. Your comments are very informative, so I appreciate your input.

I'll try to sum up what's been said, to the extent possible.

Most of you mentioned the lack of funding preventing you from achieving your objectives and the need for up-to-date data. You also talked about the Cohen report. I believe Mr. Hill said that, even if the recommendations were implemented, it wouldn't achieve the objectives. It was also said that efforts were either too slow or insufficient. Mr. Zeman even brought up transparency. I'd say that just about covers what we've heard today.

I'm going to give the witnesses the rest of my speaking time.

I know this is a highly complex issue, with different bodies of water and different species. What steps do we need to take as a matter of priority, to have a positive and relatively long-term impact? Feel free to include funding in that.

Mr. Hill, Mr. Zeman, Mr. Hwang and Mr. Walters, the floor is yours.

[*English*]

Mr. Aaron Hill: I think it's an excellent question. The place to start, really, is individual recovery plans for the endangered populations, as required under the wild salmon policy, the sustainable fisheries framework and the new Fisheries Act. Through that process, guided by science, we can identify the measures that will be of greatest benefit to the individual populations. There's so much diversity among the populations that different things will benefit different populations at different times and places. That is the way to tackle it.

Mr. Jason Hwang: I can build on what Mr. Hill has used for his response. It is about taking action.

We have lots of plans on the shelf. They are acted on in components that are convenient, generally in the short term and not funded for the duration and for the completeness that we need to be able to manage well and actually do the things that are required to facilitate recovery. There is a significant lack of resources, coordination and accountability, not because the people involved aren't good at what they do, but the system as a whole is not getting us the results that we need.

Mr. Carl Walters: I would have two top priorities right now for funding in DFO.

One of them is to restore and improve the escapement monitoring system. There are large parts of the coast for which we don't really have any idea of how many fish are making it to spawn and what the status of the large proportion of B.C.'s small salmon stock is because the escapement monitoring program has deteriorated so far.

The second major priority I would see right now is for some careful research on selective fishing practices. This was brought up a few minutes ago in talking about the idea of using beach seines, for example, in the Fraser River to allow selective harvest. There was recently some interesting physiological research showing that when you beach seine a bunch of salmon shortly after they've entered fresh water from the ocean and then turn them loose, that's the end of them—they die anyway. That's a so-called selective fishing practice that's liable to do more harm than good. We need to understand how to do selective fisheries, and we don't.

● (1255)

Mr. Jesse Zeman: Yes, the issue of selective fisheries on the Fraser is a huge one. What Dr. Walters is saying is completely accurate. Beach seining involves 30%-60% mortality. The way it looks, these fish die afterwards. Pound traps look like the way of the future.

Again, DFO in that case is authorizing a fishery using its own model, which was found to be scientifically invalid, which is killing endangered fish using methods that they call selective and which the research shows are not selective.

In terms of the department, these systemic issues.... We talk about east coast cod, we talk about interior Fraser steelhead, and we talk about interior Fraser coho. The agency is not structurally built to conserve and restore salmon. The agency is built to manage fishing. Those are two entirely distinct outcomes. One involves trying to find fishing opportunities; the other involves taking care of salmon.

Currently, management is carrying the day, and fishing is carrying the day, and the people who are scientists inside DFO are not able to control the outcome on sustainability. There's a systemic, root problem that is fundamental within the agency, which you don't see in other natural resource agencies. What happens is that we end up managing these fish out of existence through fishing.

Mr. Jason Hwang: Mr. Chair, if there is a little bit more time, another piece I'd like to highlight is the need for the federal and provincial governments to co-operate.

While the federal government has a mandate for salmon, the provincial government has the constitutional authority for land and water. You can't be successful in getting what you need for salmon without being successful at managing land and water in ways that lead to those sustainable outcomes. Federal and provincial co-operation is an absolute necessity to get that outcome.

The Chair: Thank you for that. You're almost right on the mark at six minutes.

We'll now go to Mr. Johns for six minutes or less, please.

Mr. Gord Johns (Courtenay—Alberni, NDP): Thank you all for your testimony.

I'll start with you, Mr. Hwang.

You talked about harvest, habitat and hatcheries. Can you speak about the scale on which the government has rolled out...? You cited the BC Salmon Restoration Fund and highlighted the importance of that funding. We saw in the first round that there was $340 million in applications just for the first round alone. The government rolled out less than half of the fund on that round.

Can you talk about the scale that's needed and how far off the mark the governments are right now for what's necessary?

We heard from Chief Patrick Harry and Greg Witzky yesterday about their applications. Many of them have been denied. They're saying that we're looking at extinction if we're not investing in restoration and habitat protection right now.

Mr. Jason Hwang: Thank you for the question, Mr. Johns.

I would say, just to preface my response, that there are some situations in which there is a critical urgency because of the state of the populations. The Big Bar problem has highlighted some of those things. There were problems of that nature even without Big Bar. Mr. Zeman spoke to the steelhead problems; there's been a southern BC chinook problem; there have been sockeye problems and coho problems.

I believe there are some things that need to be done fairly urgently that would require a significant investment now, and there are things that need to be done long term that require ongoing, substantive investment.

In relation to the scale of the BCSRIF, the kinds of numbers that were put into it—approximately $140 million over five years—are, I would suggest, in the range of an order of magnitude below what is needed to do all of the things that I think the collection of witnesses today have spoken about. We need to do the science, assessment and monitoring; we need to look after habitat; we need to manage hatcheries; and we need to properly manage harvest.

You wouldn't be able to do all of those things even if you put an additional $50 million a year into the system for 10 years. It would be a good start, but when you're talking on that scale of $500 million, it would be a target that wouldn't even let you do everything that every witness today has spoken to.

I hope that gives you some degree of answer to your question.

● (1300)

Mr. Gord Johns: Do you feel that there's a sense of urgency from the government? They're looking at Big Bar, and we see this crisis that's taking place, but really, in the crisis before that, we had half of the lowest return in recorded history. Do you feel that the government is responding to this quickly enough?

In regard to Big Bar—maybe you could speak about this—we saw the delay in the rollout of the tendering process and the work that was necessary there. Tuesday we heard from Kiewit, and they were citing that tendering would need to go up now for the engineering to put in fish ladders and whatnot to be in place for next season—immediately, almost.

Do you feel that the government is moving at the pace that's necessary to save those stocks for next season?

Mr. Jason Hwang: I'm very pleased to see the work that's going on this summer. They are ready for when the fish get there. The fish are having trouble because of the naturally high water, but they're in a good place right now.

What I am not sure about, and will have some concern over until I am able to see the action, is what is in place to get ready for the fall and winter to take advantage of the low-water period, when additional work can be done. The problem isn't solved yet. To take best advantage of the work season, the financial approvals need to be in place and the procurement system needs to be activated. I don't know if this is in place or not, but a high priority should be placed on having this done very much in advance so that those kinds of administrative functions are not a delay to taking action on the ground.

Mr. Gord Johns: Mr. Hill, you talked about indigenous fishing rights and the importance of resolving the outstanding issues with Canada and indigenous communities. At the last meeting, we heard from Chief Harry and Mr. Witzky about the lack of resources for indigenous communities to help support fisheries management, restoration and habitat protection, implementing indigenous and traditional knowledge and working with DFO and the province.

Can you talk about the importance of resolving those issues, recognizing those rights and resourcing the tables that are currently ongoing?

Mr. Aaron Hill: I think you've said it well. There is a tremendous need for more resources.

I'll talk about habitat. In terms of protecting habitat, some of the most exciting and positive things happening right now are happening through first nations-led land use planning, which is prioritizing land use decisions and protecting and restoring critical habitat for salmon and other species. There is a critical need for more resources and more capacity within first nations and from all levels of government to allow participation and to move those processes forward.

On the fisheries side of things, as Mr. Zeman and others have said, there's a tremendous need to advance stock-selective fishing going forward so that we can harvest more from abundant populations and have a lower impact on endangered populations. First nations are going to be the leaders in that.

Mr. Gord Johns: I know the Nuu-chah-nulth are doing some important work, but again, their applications are being denied. Of course, they have outstanding issues with the court case.

You talked about aquaculture. Can you speak a bit more about the disconnect between the government's promise in the campaign to move to closed containment by 2025 and their promise now to just have a plan, and the impact that's having on wild stocks?

Mr. Aaron Hill: We were excited to hear the promise, and I think it's great that it's in the mandate letter. We heard some backpedalling on how quickly that would happen, but we understand there's still a commitment in place.

We encourage the government to move forward with that as soon as possible, in tandem with implementing Cohen commission recommendation number 19 to move farms out of the Discovery Islands by this year if they can't show that they're not creating harm to wild salmon. The sea life monitoring of the Discovery Islands and other areas of the coast where salmon farms are in place this year is showing a tremendous impact, with high levels of lice. There's a lice epidemic, and they need to deal with it by implementing that recommendation immediately.

The Chair: Thank you, Mr. Hill and Mr. Johns.

We'll now go to our second round of questioning. We'll start with Mr. Fast for five minutes or less, please.

Hon. Ed Fast (Abbotsford, CPC): Thank you very much, Mr. Chair.

Dr. Walters, I noted your comment on predation. One of the work items that our committee will be undertaking in the future is a study on predation on both the west coast and the east coast. We hope to have you come back to committee to talk about predation specifically.

In the meantime, I note that three of our witnesses—Mr. Zeman, Mr. Hwang and Mr. Hill—expressly referenced dysfunction in DFO, and Dr. Walters implied it. Mr. Hwang referenced an independent oversight body.

I want to throw this question out to all of our witnesses. What structural changes would you make to DFO to make it more responsive to stakeholders and more effective in addressing the very real challenges facing our west coast salmon stocks?

Any of you can respond.

● (1305)

Mr. Carl Walters: I'll start. Having dealt with DFO a lot over the years, and having lots of its people being students of mine, I think the basic structural problem is there's no accountability. So this pinniped harvesting proposal is allowed to sit on one DFO manager's desk long enough to have probably cost the sport fishing industry of B.C. something like $40 million, and yet he's not in any way held responsible for that inaction. That's happening, whether it's initiatives like the one I'm talking about, habitat industries or fisheries—

[*Translation*]

Mrs. Marilène Gill: Mr. Chair, I have a point of order.

The interpreter is indicating that, in order for her to do her job, it would be helpful if Mr. Walters brought his microphone closer to his mouth. The sound isn't coming through very well.

[*English*]

Hon. Ed Fast: Mr. Chair, I did not understand what the interpreter was saying. It wasn't being translated.

The Chair: I didn't hear any interpretation on your intervention, Madame Gill. So if you—

[*Translation*]

Mrs. Marilène Gill: The interpreter mentioned that she couldn't interpret because she was having trouble hearing what the witness was saying. She would like Mr. Walters to bring his microphone closer to his mouth.

[*English*]

Hon. Ed Fast: I did want to hear from the other three witnesses as well. What are the structural changes you would make if you had a chance to restructure or reform DFO? Be very quick, because I have a couple of other questions.

Mr. Jason Hwang: Mr. Fast, I would suggest that one of the recommendations from Cohen was around having an associate RDG position that would be responsible for implementing the findings.

One of the challenges that DFO has is the integration of a lot of the good work that happens within the department. I would say that helping with that integration, having some independent oversight, would really help with the accountability. I was a long-time public servant. Working in the space between what the political and public pressures are and the realities of what you can do with the money you have is very difficult, and it's hard to have a voice in terms of what is possible to change and make better. Having a place that can test that and check that can help us get the best that we can out of the department.

Hon. Ed Fast: Thank you.

How about the other two?

Mr. Aaron Hill: I would support what the other two witnesses have just said.

I would mention the other recommendation in the Cohen inquiry of splitting out the mandate of promoting salmon farming from the responsibilities of DFO, because it's charged with both. They have a conflicting mandate of conserving wild salmon and promoting salmon farming, which is untenable.

With respect to accountability, there's also a disconnect between the mandate to conserve wild salmon and the mandate to promote fishing. The wild salmon policy says conservation is the number one priority in resource management decision-making, but we don't see that operationally within DFO. The priority is fishing. That needs to be a top-down change in terms of priorities there.

Mr. Jesse Zeman: Briefly, as I mentioned around natural resource management, the three things are funding, science and social support. I'm going to really focus in on the science piece because there is an internal conflict within DFO in terms of who is the decision-maker and who makes decisions.

Science's role is to tell us what's available, what's possible, and how to get to that place. After we calculate all of that, science's role is to tell us what can be harvested.

Currently, the approach is, let's figure out a way to harvest things. There is no focus, or very little focus, on restoring fish populations or conserving them. You're constantly going to have this structural issue where you talk about fishing a lot and you don't talk about fish very much. I'm sure you can trace that back to the east coast cod. You can trace it back to interior Fraser coho and to Thompson steelhead.

● (1310)

Hon. Ed Fast: Thank you.

Mr. Chair, how much time do I have?

The Chair: You have about 20 seconds.

Hon. Ed Fast: Mr. Zeman, you talked about bycatch, gill netting or netting that was causing significant mortality. Can you very briefly comment on selective fishing gear that could be used to replace the net?

Mr. Jesse Zeman: Yes, absolutely. The biggest ones that everybody is talking about and we're trying to get promoted are things called “pound traps”. Essentially, the fish swim in; you can almost lift up a net and then pick out the fish that you're allowed to keep, and the rest end up in the river.

What Dr. Walters referred to in beach netting is the fish actually will hit other...and end up dead. Pound traps are being used on the Columbia,. They seem to be the way of the future and are our best hope to allow first nations, in particular, to continue fishing with mixed stock fisheries.

Hon. Ed Fast: Thank you. That's very helpful.

The Chair: Thank you, Mr. Fast.

We'll now go to Mr. Hardie, for five minutes or less, please.

Mr. Ken Hardie: Thank you, Mr. Chair.

Thank you to all the witnesses. This has been fascinating.

We read about the blob, which is a huge mass of warm water out in the Pacific Ocean. Depending on whom you speak to, that's what's forcing the really good plankton that salmon like farther north, leaving the salmon with a less desirable version of plankton.

That's going to be a tough nut to manage. Among the things, though, that we have a lot more control over.... We'll start with you, Mr. Walters. If we can't cool off the Pacific Ocean, what are the next best things we can do for the health of our stocks?

Mr. Carl Walters: The two main things now would be controlling fishing and controlling predation. Those are two things we can control, and for which we have very good direct evidence of large impact on the stocks.

In contrast to a couple of the other people's statements, we have radically reduced salmon exploitation rates along the coast generally. Management is not actually driven entirely by harvesting. There is certainly direct evidence of cutbacks in harvesting aimed at protecting particularly weak stocks and so on.

Mr. Ken Hardie: All right, sir, I'll have to—

Mr. Carl Walters: Right now, for me, the biggest single investment would be in reducing predation impacts.

Let me just add one quick point.

Mr. Ken Hardie: Very quickly, please, sir.

Mr. Carl Walters: Right now Steller sea lions are consuming about 300,000 tonnes of fish on the B.C. coast every year. The total fish and aquaculture production of all fish species in B.C. is less than that, about 290,000 tonnes.

Mr. Ken Hardie: Okay, thank you for that.

Mr. Hwang, one of the things we've looked at in the past is development, especially along the Fraser River. Individual projects are approved or assessed, but we don't get the sense that anybody is keeping good tabs on the cumulative impact of all these individual decisions that are made.

Mr. Hill, you're nodding. Perhaps you can speak to this a little bit more.

Mr. Aaron Hill: Yes, that's a very good point, Mr. Hardie.

There is an absolute failure to address the cumulative impacts on salmon habitat. The strategy, too, of the wild salmon policy is actually all about that, and the current wild salmon policy implementation plan won't get us there. It doesn't get us to the point of assessing the status of habitats and then setting targets for managing cumulative impacts.

Mr. Ken Hardie: Okay.

I don't know who could answer this one. Mr. Hwang, did you want to add something?

Mr. Jason Hwang: Mr. Hardie, there are a couple of things I would add to that.

One is that, at the Pacific Salmon Foundation, we do have a platform that is on the way to being able to do that. You can use this thing called the Pacific salmon explorer to see habitat pressures broadly. It doesn't get to the specific point you're talking about, which fully summarizes the cumulative effects, but at least we are starting to have technology to allow us to understand what we have.

But you're on a very important point, that we don't really have a target. What do we want for habitat? If we don't have a target, how do we know if we're where we want to be?

● (1315)

Mr. Ken Hardie: Yes.

Mr. Jason Hwang: So the targets are really important.

I have to emphasize that British Columbia is a key part of the equation. DFO has management authority for salmon and salmon habitat. B.C. manages land and water. Those are the same thing, and they have to co-operate to get the outcomes we need.

Mr. Ken Hardie: We hear an awful lot that DFO spends a lot of time managing the number of fish being caught, the fishing effort, but perhaps not enough on the effort to restore the stocks to actually have healthier fish and more of them.

Again, I don't know who can answer this one. What's needed to shift gears within the DFO so that it is actually looking at rebuilding stocks and not just managing what we have left?

Mr. Jesse Zeman: I would say, cut the scientists loose. Give them a role and have them set objectives for fish populations. The big failure in all this is that we don't have objectives for fish populations.

What we saw with chum is that when we do, DFO still opens fisheries when we don't meet the objectives. It's the role of scientists to say what the capability or the suitability is of a stream to produce fish, how many fish we should have in it, and how we get there. That's entirely a science role, and right now, inside the department, that becomes muddled with managers wanting to open fisheries.

This is raw science. In terms of the habitat piece you talked about, in terms of Canada's role, we have to get the environmental assessment process right. The easiest thing is to manage the land for fish.

The Chair: Thank you, Mr. Hardie. Your time is up.

We'll now go to Mr. Calkins for five minutes or less, please.

Mr. Blaine Calkins (Red Deer—Lacombe, CPC): Thank you, Chair.

My first question is for Mr. Walters. I believe the Department of Fisheries and Oceans is still using an ecosystem-based management approach. Would you agree with that?

Mr. Carl Walters: Right.

Mr. Blaine Calkins: I know, it's tongue in cheek.

But does it make sense to you that...? This is where I think part of the problem comes from. With the marine mammal protection act, there is a large segment of that ecosystem that's basically put in a box and put on the shelf with a “Do not touch” sign on it.

I know you've spoken a little bit about this, but how is it possible to do ecosystem-based management when you take a huge chunk of the ecosystem out of the equation for management purposes?

Mr. Carl Walters: Well, it isn't possible. That's a particular issue with Steller sea lions, which are listed as threatened, or something like that, under SARA, so that no harvesting of them is allowed at this time. However, there's good evidence that—for fish in general—they're one of the biggest problems, and one of the biggest causes of decline.

Mr. Blaine Calkins: The B.C. Sport Fishing Institute, the sport fishing advisory board and others have called for selective removal—not a broad-based cull but selective removal—in what they deem to be areas of known issues where this predation is affecting the population. Your scientific reports that I'm going through seem to substantiate that.

Do we need a broad-based reduction in the overall population to get back to historical levels that you talked about, or can it be done through ecosystem-based management, where we take a selective approach at the most problematic areas?

Mr. Carl Walters: The idea of harvesting or removing problem seals at river mouths won't work at all. Seals kill adult salmon on returning, and that's highly visible. People have known about it. It's basically accounted for in the population dynamics analyses already.

The juvenile mortality that's causing the more severe problems with Chinook and coho salmon does not occur at the river mouth. It's not problem seals; it's the whole seal population through which the juvenile fish pass. The juvenile fish migration is a kind of gauntlet as they're working their way along the coast.

It's a diffuse problem, so the selective cull idea is what I call a lose-lose policy. It will cause huge public controversy and won't do any good.

Mr. Blaine Calkins: For no gain.

What is the number that you think it should be at, based on the historical evidence that you've unearthed and the predictions and projections that you've had, and based on the current status of salmon stocks?

What is the number? How many should there be?

Mr. Carl Walters: The number we've recommended is about 50% of the current population sizes of both harbour seals and Steller sea lions. That's well above what.... For most of the 20th century, those populations were reduced to about 10% of their original levels. This would be bringing them back down to about the levels we think were present over the last several thousand years.

● (1320)

Mr. Blaine Calkins: Thank you very much.

Mr. Zeman, if I can chat with you, I believe it was you who talked about large numbers of first nations willing to move to selective fishing methods. The B.C. sport fishing advisory board, the SFAB, has recommended mark-selective fisheries as one of the tools that would be effective in restoring salmon populations, but also allowing for the continued prosperity of coastal communities that rely on salmon.

How many of these first nations are willing to move away from nets? Are we at the 50% point? Can you give us any indication? Was it you or was it Mr. Hwang who was talking about this?

Mr. Jesse Zeman: There were applications to the B.C. salmon restoration and innovation fund the first year, and that was to transition. It's not a number, but I think it offers first nations in particular an alternative. The discussions that we've had with first nations is that we, cumulatively, are all terribly concerned about the state of salmon. We all recognize that we have to change the way we fish in mixed-stock fisheries. That's really about the federal government and the province coming up with incentives and science to help improve fishing practices.

I haven't seen anyone who said they're opposed to pound traps at all, actually. Everyone recognizes we need to get there. The trouble is between here and there, and moving in that direction. Until this last round of SRIF funding, there was no appetite from the province or the federal government to move into selective fisheries.

Mr. Blaine Calkins: Compared to Washington.... In the time I've spent on the coast, in mark-selective fisheries, I've caught lots of chinooks that have had the adipose fin clipped. These are hatchery fish that are coming out of the Columbia. They're mixed in with some of the local fish from the Fraser. Of course, we have closures now, very punitive closures, because the department has basically said before the committee that the only tool it can use to restore salmon stocks is to reduce angler pressure, which I don't agree with.

We're talking about fundamentally changing the way the department approaches this. Through hatchery enhancement, hatchery use for scientific purposes, habitat improvement and using something called mark-selective fisheries, where we've seen a rebound of coho stocks, would this be part of an effective tool, in your opinion, when it comes to allowing harvest for sport fishing and harvest for first nations that is not as destructive as throwing a net in the water? In your opinion, are some of the recommendations from the sport fishing advisory board going to be part of the solution?

The Chair: Mr. Calkins, you've gone way over your time.

I will ask the witnesses, if they want to answer that question, to please send a response in writing to the committee to include it in the testimony.

We will now go to Mr. Hardie, for five minutes or less, please.

Mr. Ken Hardie: Actually, with your indulgence, Mr. Chair, if Ms. May has a question to ask, I would be more than happy to throw some time her way, because she is on the ocean, as many of us are.

Ms. May, would you care to ask a question?

Ms. Elizabeth May (Saanich—Gulf Islands, GP): Yes. Thank you very much, Ken. You're very kind.

Mr. Chair, how much time would I have at this point, in accepting Ken's generous offer?

The Chair: You have just over four minutes.

Ms. Elizabeth May: That's wonderful. I'm setting my clock.

I'm going to start with a reminiscence, because in sitting here listening to all of this, I keep getting flashbacks to when I was working with a man whom Carl will remember for sure: Dr. Ransom Myers.

I was working with Ram when he was in the DFO, trying to stop the destruction of the Atlantic cod stocks. Scott will remember this, too. It was a DFO project to imagine that we had this vast spawning biomass and could keep increasing the fishing effort. After the collapse of the cod stocks and the various efforts following that with the DFO, I remember talking with a Newfoundland fisherman, who said that with DFO you go from a species being underutilized to it being extinct without a management plan in between. I'm afraid it feels much like déjà vu all over again.

I want to direct a question to you, Aaron Hill. You referenced taking off some of the flood control measures on the lower Fraser. This seems to go directly to what our colleague from Pacific Salmon Foundation, Mr. Hwang, was saying. Is it B.C. government decision-making to get those particular obstructions off the lower parts of the Fraser River?

● (1325)

Mr. Aaron Hill: It's a mixed responsibility, and that's the problem. Federal, provincial and municipal jurisdictions are involved, and the decision about fish falls into a no man's land where everybody shirks the responsibility.

We need federal leadership in implementing the Fisheries Act with respect to decisions about what flood control structures we put in the lower Fraser. Over $1 billion of flood control upgrades need to happen on the lower Fraser to keep communities safe in the face of climate change. We have a huge opportunity, as we upgrade those flood control structures, to use new, modern, salmon-friendly technologies that will open up this vast area of habitat that's blocked off and, as we do that, restore those habitats by removing invasive species and other things. The federal government has put some money into this through the salmon restoration fund, but it's just a tiny drop in the bucket, compared with what's needed.

Ms. Elizabeth May: As I think all of the witnesses will agree, this feels overwhelming, because we know we have climate change coming at us. We haven't even mentioned ocean acidification. We also have the problem of various degrees of fishing effort, and we have predation.

This set of hearings is looking at the Big Bar slide, and of course as everyone here knows, that happened in a year with the lowest-ever historic returns. In prioritizing things, I think it's helpful for us as a committee to know what measures have the largest implication in terms of approaching all of these problems.

I'll put my question to Aaron Hill, and I'll go to Mr. Zeman as well. Is it actually about fixing the Department of Fisheries and Oceans itself, around accountability? Is that our number one task? I ask because it seems to me this might be one change from which many other changes will flow.

Mr. Hill.

Mr. Aaron Hill: Absolutely. I think Mr. Zeman and others have spoken to that. There is a tremendous lack of accountability and transparency within the department and, as I mentioned, a disconnect between the priority in the wild salmon policy of putting conservation first and what we actually see in terms of decisions around fisheries management, habitat, salmon farms and other things.

Ms. Elizabeth May: Could I go to Mr. Zeman? I think I have a bit of time left.

It's hard to find a place to focus when it's a complex ecosystem and the problems seem overwhelming. Mr. Zeman, do you think that focusing on the way the department functions would be a good focus?

Mr. Jesse Zeman: It's definitely one part. It has to be done, but you take a triaged approach and you pick out.... I wouldn't do just one thing at a time. I would do multiple things and really get at it. It's part of the solution, but there's going to be no silver bullet for this problem.

The Chair: Thank you, Ms. May.

Ms. Elizabeth May: So more funding, focus on habitat and try to get to accountability in the department....

Thank you, Mr. Chair.

The Chair: Thank you, Ms. May.

We'll now go to Madame Gill for two and a half minutes or less, please.

[*Translation*]

Mrs. Marilène Gill: Mr. Chair, as I suggested, I'd like to give my time to Ms. May.

[*English*]

The Chair: Ms. May, go ahead when you're ready.

Ms. Elizabeth May: I am the beneficiary of such generosity today.

Quickly, I will go to the question of the wild salmon policy. I want to go back to Aaron Hill because he raised it.

We got the wild salmon policy, if memory serves, in 2005. Can you account for why we're still talking about implementing it?

Mr. Aaron Hill: That's a very good question. I think part of the problem is that there have been some resource issues. As Dr. Walters and others mentioned, we need to actually be counting fish to know what we have in order to implement strategy one, which is assessing the status of the population.

Then, as others mentioned—Mr. Hwang, I think—there's a lack of accountability within the department in terms of having somebody who's in charge of implementing it. It was a recommendation by Justice Cohen to have somebody actually in charge of implementing the wild salmon policy, and that hasn't happened.

Then, I think, the thing is just that by implementing the wild salmon policy, the department would be actually accountable to a number of pretty big management shifts, and I think there's a large resistance within the department to letting go of their status quo. That's a problem as well.

Ms. Elizabeth May: If I still have time, I want to turn to you, Mr. Hwang, because I haven't asked you any questions yet, and your perspective on the three Hs struck me as very good advice. With those three Hs, is any one more important than the others?

● (1330)

Mr. Jason Hwang: No. It's like saying, “What's the most important thing for human health? Do I need water, air or food?” You're not whole and you're not healthy unless you have it all.

Ms. Elizabeth May: I think that's probably my time. I really appreciate it. Thank you.

The Chair: Thank you, Ms. May.

We'll now go to Mr. Johns, for two and a half minutes or less, please.

Mr. Gord Johns: I have a question for Mr. Hill.

Mr. Hill, your organization has done some really important work in highlighting the importance of green infrastructure because of the impacts of infrastructure development on our salmon stocks. Can you speak about how that's being overlooked, the need to invest in it and the sense of urgency around that?

Mr. Aaron Hill: Yes, I think there's general agreement whenever we talk to members of Parliament and to government that we need to move forward with green infrastructure and habitat restoration, like the flood control example, where we can have our cake and eat it too. We can have flood protection for our communities and we can open up salmon habitat.

The problem is that there's jurisdictional complexity. There are people who are stuck in the old way of doing things. That's why we need federal leadership to make these things a priority and move it forward. There's siloing between different departments and different ministries that needs to be resolved through that high-level federal leadership.

Mr. Gord Johns: Thank you.

Mr. Zeman, you talked about some of the gaps in DFO's communicating with stakeholders. Can you give a grade? How do you feel DFO is doing in terms of consultation, reporting to stakeholders and listening to stakeholders on their work with regard to wild salmon?

Mr. Jesse Zeman: If I had to give a grade, it would be an F.

Mr. Gord Johns: Okay, thanks. Can you cite some opportunities for DFO to change that?

Mr. Jesse Zeman: Yes, absolutely.

When we talk in the wildlife world provincially, if I want to know something about endangered mountain caribou, grizzly bears or anything, I can pick up the phone, send an email, or get a hold of someone and they will send me what they have. When we call the department, we are told, “Sorry, you have to ATIP that—I can't provide that because I'll get into trouble.”

In terms of this business of hidden data, even with this recovery potential assessment document that went through the peer review process, the public can't even see that. The public paid for that. It went through a rigorous scientific process, and the department refuses to list it. We're talking about fish that have gone from thousands down to 62 and 134, and the department cannot even show what the scientists said. I mean, it's unbelievable that this is happening in Canada.

Mr. Gord Johns: Mr. Hwang, can you—

The Chair: Thank you, sir.

Thank you, Mr. Johns. Your time has gone over.

That ends our question round. We now have to suspend, leave the meeting and come back for an in camera session for some drafting instructions for our analysts. I'll ask everybody to sign off and then sign back on again with the new information and new password so we can continue.

I'll say a big thank you to our guests today. Hopefully, it was informative for everybody. Maybe we'll hear from you again soon. If there's anything you didn't get to present, by all means please send it to the committee in writing. Thank you.

[*Proceedings continue in camera*]