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## **Standing Committee on Fisheries and Oceans**

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**EVIDENCE**

**Tuesday, October 30, 2018**

—  
**Chair**

**Mr. Ken McDonald**



## Standing Committee on Fisheries and Oceans

Tuesday, October 30, 2018

• (1530)

[English]

**The Chair (Mr. Ken McDonald (Avalon, Lib.)):** Good afternoon, everyone.

Welcome back to committee members who were here earlier in the day as well for a session.

Pursuant to order of reference of Wednesday, June 6, 2018, we are undertaking a study on the situation of endangered whales, M-154.

Joining us this afternoon for this particular session we have Area 19 Snow Crab Fishermen's Association, represented by the president, Basil MacLean.

From the Sport Fishing Institute of British Columbia, we have Martin Paish, director of business development, and Owen Bird, executive director. Welcome, gentlemen.

By telephone from Omega Pacific Hatchery Inc., we have Carol Schmitt, president, and Brian Tutty.

We'll get to statements by our guests with a time frame of up to seven minutes, and then we'll get to our rounds of questioning.

First off, Mr. MacLean, go ahead when you're ready, sir.

**Mr. Basil MacLean (President, Area 19 Snow Crab Fishermen's Association):** Good afternoon, everybody. My name is Basil MacLean. I am the president of the Area 19 Snow Crab Fishermen's Association. It is located on the west side of Cape Breton Island on the Gulf of St. Lawrence side.

I am a fisherman myself, 27 years as an owner-operator in the fishery. I represent all the licence holders in our zone. I'm not a lawyer. I'm not a lobbyist. I'm not a very well-educated person, but I'm here, and I thank you once again for allowing me to come and speak to you about the right whale issue.

Just for a little bit of knowledge for everybody, our fishery is a snow crab pot fishery. We border the coastline of Cape Breton Island, and around us are other crab fishing zones, the biggest zone being the area 12 fleet. We're made up of all owner-operators. There are very small communities on the west side of Cape Breton, so everybody knows everybody, and we've always had a fear of the depletion of the biomass, of the stock, and how that would affect us, and we worry about the price in the markets and how that affects us.

Up until last year, we never expected that a whale would be the possible death of us, maybe, if that's the right word to use, but we're

here now. You know, fishermen in my zone feel we have a moral obligation to save the whale, to save all marine mammals. It's not the fisherman's intent to have happen what happened two years ago. It was the dynamics of the fishery and how it was executed, and possibly mistakes were made, and hopefully we've learned from them and we're on the path to fishing with the whales, to co-existing with the whales. I guess that's the best word to use, because the whales probably aren't going anywhere. There may be more coming in the future.

The fishery, the snow crab fishery, is probably the major economic driving force on the west coast of Cape Breton. The lobster fishery is there as well, but the snow crab fishery is a very lucrative fishery for the communities, and closing the fishery, in our minds, is not an option. The fishery has to be maintained. If we close the fishery, we might as well as swing the bridge at the causeway, turn off the lights, and that's the end of it for our coastal communities. We don't have a big industry, so it's very important to us.

We took measures last year to protect the right whale for this year, for the 2018 fishery. We're all very happy that we had no deaths in Canadian waters. What factors were the driving factors in those deaths, I don't know. Which measure was the key one? I don't know, and I'd be doubtful if any biologists or professionals could tell you either. I'm just thankful that we did get through the season and that there were no deaths or entanglements, but I don't know how we're going to proceed.

Last week in Halifax I met the Minister of Fisheries. He was down looking for ideas. It was a good session. Everybody has ideas of what can be done and what should be done. I'd like to say my ideas are right, but I can't say that.

• (1535)

I don't know that. Nobody else can say their ideas are right either because 2019 will be a different season, as is every season, from weather to tides to what will come for whales, to biomass in the gulf, how the fishery is executed, and the effort that will be there. So 2019 could be a very different year, but I hope not.

I just saw on the news this morning that whales are an international issue. I saw that Air Canada and WestJet have cut their ties to SeaWorld. It's not only the right whale, it's all whales. It's definitely an international issue.

I don't really know how to end it or what to say. As I say, I'm unprepared. Coming here today got dropped on me.

**Mr. Blaine Calkins (Red Deer—Lacombe, CPC):** You got the short straw.

**Mr. Basil MacLean:** I always draw the short straw. Not every fisherman wants to come and sit and talk to people. I don't know why they chose me. As I say, I'm a volunteer; I'm not paid to be here. I come because I feel that I want to see the fishery go, and I definitely don't want to see the extinction of the whales or any other animals. I worked very hard on getting MSC certification in the Gulf of St. Lawrence for snow crab. It was a hurtful loss to have that suspended last year.

Once again, I thank you for the opportunity to sit here. I look forward to questions.

**The Chair:** Thank you, Mr. MacLean.

Being from Newfoundland, it's encouraging to know you're an owner-operator. I support that wholeheartedly.

We now have representatives from the Sport Fishing Institute of British Columbia.

You're going to split your time. You have seven minutes between you, when you're ready.

**Mr. Owen Bird (Executive Director, Sport Fishing Institute of British Columbia):** All right.

Good afternoon, ladies and gentlemen. Thank you for the opportunity to speak to you today.

My name is Owen Bird and my colleague is Martin Paish. We are here to talk about southern resident killer whales, or SRKW. We both represent the Sport Fishing Institute of British Columbia, or the SFI.

I will take a moment to provide details about our organization and about the sport fishery in British Columbia, and Martin will detail our concerns and observations about SRKW recovery strategy development on the B.C. coast.

The SFI is a non-profit association that represents the interests of 300,000 licensed, tidal-water anglers in B.C., and thousands of businesses that support them. The latest figures available indicate that these businesses produce \$936 million in annual sales, and create more than 8,400 jobs and 3,950 person-years of employment, resulting in a \$144-million contribution to the province's gross domestic product. The sport fishery is the single-largest economic driver of all B.C. fisheries even though anglers take only 15% of the annual halibut catch and less than 10% of the annual salmon harvest.

As you may know, the sport fishing contribution to the Canadian economy is at least \$8.3 billion annually. The SFI are strong supporters of the recovery of SRKW and of the residents of the small B.C. coastal communities who depend on fishing and related tourism activities as a key component of their livelihoods, family, social activity and food security.

As such, Martin will provide specific details regarding our suggestions and approach to the SRKW recovery strategy.

●(1540)

**Mr. Martin Paish (Director, Business Development, Sport Fishing Institute of British Columbia):** Hello, and thank you for the opportunity to appear before this committee.

We would like to suggest to you today that the goal of having both a recovered southern resident killer whale population and a vibrant, sustainable recreational fishery should be the Government of Canada's stated objective.

As the Prime Minister recently declared, "In the 21st century, we don't have to choose between a healthy environment and a strong economy. They must go together." We believe this is certainly true in the case of southern resident killer whales and the communities that share the environment with them. However, the government must make the necessary investments in chinook production and sound scientific research to enable this to happen.

The challenge we face is that so far, DFO has focused mainly on restricting recreational fishing activity in its attempt to address the problem. While no research has been conducted nor evidence collected that these large-scale closures are in any way effective in enabling southern resident killer whales to access more prey, the closures have created significant social and economic disruption in communities like Sooke on southern Vancouver Island, and threaten to exacerbate the disruption with the designation of critical habitat extensions. To make matters worse, these closures were implemented against the advice of both Pacific region DFO staff and a group of marine mammal scientists and fishery managers who convened in November 2017 to come up with solutions to address the accessibility of prey for southern resident killer whales.

We believe that both the whales and the residents of small coastal communities in British Columbia deserve better, and we are seeking your support in ensuring that they get that moving forward.

The unfortunate fact is that the recent proposal for the designation of a huge area of the west coast of Vancouver Island as critical habitat is based on inference, faith and hope rather than science, evidence and sound research. The data used to support the claim that this is critical habitat is poorly designed and lacks the certainty that is required to justify the devastating impacts that large-scale closures will have on the communities that depend on recreational fishing activity. We don't have time to get into the details of the data gaps and potential economic impact today, but we would be pleased for the opportunity to provide the relevant documents and available reports.

As stated, we believe that the Government of Canada can do the right thing for both whales and local communities, but it requires investment, a transparent reliance on evidence-based research and science, and a multi-faceted approach.

First, we believe that DFO needs to invest in gaining a greater understanding of what represents critical habitat for these animals. As stated, the current critical habitat extension designation proposal is based on very infrequent sightings and acoustic monitoring data that demonstrates that in fact the whales are only sporadically present in the area, but counters this with the inference that, and I quote, "It also includes several other relatively shallow banks including La Perouse Bank to the northwest which, like Swiftsure Bank, are among the most productive fishing area for Chinook and other salmonids on the North American west coast. It is probable that the whales make greater use of these banks than the modest number of documented Resident Killer Whale encounters might suggest—this is likely a reflection of the relatively low observer effort in those areas." That is Ford et al, 2017, which is the critical habitat extension proposal.

"Probable" and "likely" aren't good enough for either the whales or the residents of the west coast of Vancouver Island whose livelihoods and communities are on the line. We urge DFO to invest in the necessary research to make sure we make decisions properly and effectively the first time. It is very possible we may only have one chance to do this right.

Second, we urge DFO to understand that cutting back the 1% to 3% exploitation rates that ocean recreational fisheries currently produce on Fraser River chinook stocks has not and will not increase the availability of chinook to southern resident killer whales. While imposing huge closed areas may look good on a map, it won't do anything for the whales. That same working group struck by DFO of the leading scientists and researchers in the Pacific northwest reached exactly this same conclusion in November 2017.

To address the availability of prey we urge DFO to reinvest in salmon production using strategic enhancement of stocks favoured by southern resident killer whales and to consider focused predator control programs on seals and sea lions that are targeting juvenile salmonids as they leave the Fraser and other important chinook-producing streams in the Salish Sea. Similar measures are being considered in Washington state as part of their recovery plan.

Largely due to budget cuts, salmonid enhancement production of Fraser River-bound chinook, which are the key stocks that southern resident killer whales depend on, have been reduced from just over 15 million in the 1990s, when southern resident killer whales were increasing in their population, to less than three million today. We need to turn this situation around, and we have the expertise to do this. All it requires is funding and political will.

While a much more controversial issue, the population of seals and sea lions in the Salish Sea has increased tenfold since they were protected in the 1970s and they are now estimated to consume up to 47% of all salmon smolts leaving the river systems that drain into the Salish Sea.

● (1545)

We suggest that careful study is required to identify exactly where the problems exist, and that they are then addressed accordingly.

Finally, we urge DFO to listen to its experts, and instead of implementing large areas closed only to recreational fishing activity, to use the concept of a moving protective bubble of a minimum 200 metres in non-refuge areas, and 400 metres in important foraging areas. This would provide the necessary lack of competition for prey, and the elimination, not just reduction, of physical and acoustic disturbance, to enable effective foraging. Again, this measure is being considered in Washington state.

Implementing this measure is a function of education and awareness amongst boaters, whale-watching fleets and fishermen, and is largely under way as a result of the recent move this summer from 100 metres to 200 metres. Anglers have once again been leaders in this area, adopting voluntary best practices that include turning off sonar equipment, removing fishing gear from the water and slowly moving away from whales if they are spotted.

Ladies and gentlemen, thank you for taking the time to listen to us. We urge you to consider meaningful, effective and science-based solutions rather than measures designed to provide the optics that something is being done. Both the southern resident killer whales and the residents of British Columbia's coastal communities are depending on our government to do the right thing.

**The Chair:** Thank you, gentlemen.

We will now go to the Omega Pacific Hatchery Inc.

Ms. Schmitt and Mr. Tutty, can you hear us?

**Ms. Carol Schmitt (President, Omega Pacific Hatchery Inc.):** Mr. Chair, yes, we can, and thank you for inviting us to provide our knowledge and experience in support of the endangered southern resident killer whales and all the fisheries, all of which are dependent on healthy chinook populations.

I'm an owner-operator of Omega Pacific Hatchery. We're located in the centre of Vancouver Island, British Columbia, the centre of southern resident killer whale chinook country.

My extensive work has been with the provincial fisheries, as well as past federal fisheries hatcheries and private hatcheries. My 38-year career has been dedicated to chinook culture excellence.

In 1987, we built Omega Pacific hatchery, situated on the southern shore of Great Central Lake. This site has a remarkable cold-water supply, and there are no fish upstream, so it is disease free. This was conducive to growing a one-year-old, stream-type overwintering chinook.

Our natural slow-growth process results in a more physiologically competent smolt, has the identical life history of coho and is consistent with documented findings of wild yearling chinooks throughout Vancouver Island streams. The chinook eggs hatch and emerge in April and May at half a gram, slowly grow for an additional year in cold-water conditions and are released the following April.

With me is Mr. Brian Tutty, a DFO habitat biologist having 33 years' experience, who trapped and discovered overwintering chinook in the upper Fraser River during the McGregor hydro project and Nechako investigations. He has written a report, and in it cautioned that stream-type chinook were likely underpraised as contributors to the B.C. fisheries and that SEP should consider this important chinook life history within its planned Fraser hatchery development program.

Since then I've been consulting with Brian, and Brian has been consulting with us and providing additional advice to Mr. Chris Bos and me, who, together have a project concept linked with the subject of this presentation.

I'll say a bit about our hatchery results. We've grown yearling S1s for 30 years, and in early 1996, our smolts were assessed as part of the co-operative assessment salmonid health program for aquaculture, which attained 98% survivals to harvest. Our freshwater juvenile rearing program is transferable to the enhancement program. We predicted marine survivals would increase to 5% to 10% compared to DFO's hatchery ocean S0 marine survival, which is 0.02% to 0.06%.

DFO previously grew 16 trials with S1s, but did not have greater results. However, in 2009, Mr. Paul Sprout, who was the RDG, directed his staff to revisit the use of S1s and work with Omega Pacific, with the goal of increasing chinook survival rates.

To date, Omega Pacific has produced 478,000 S1 chinook for 10 releases, with four complete datasets. Seven years are required from the initial egg stage until all the adults return. All of our S1 juveniles released were coded wire tagged and adipose clipped. Omega's projects and support of the strategy were only possible due to the support and financial contribution of many groups, which I have listed in our brief.

The adipose fin clip and coded wire tag pin are numerical pins. The coded wire tag is placed into the fish's nose, and as the fish are captured in the wild as adults, the head of any fish missing the adipose fin is removed, and the pin later read. The number, which is specific to that release group of fish, is placed in a Pacific-wide data bank. Therefore, we can assess where all the fish we have grown are captured: their date, fishery, number of fish captured and overall survivals.

To date, for Omega's S1 releases for the West Coast Vancouver Island and Georgia Strait, our first four-year results had greater than 5% marine survivals, a two to eight-times greater number of adult

spawners as compared to the same stream S0 releases. An eight to 31 times greater number of coded wire fish were recovered, compared to federal production S0 releases; few jacks—

• (1550)

**The Chair:** Excuse me, Ms. Schmitt. Could you slow down a tiny bit? The interpreters are having trouble translating into French as you're speaking. They have the same problem with me at times, my being from Newfoundland, but I'm used to it. They'd appreciate it. Thank you.

**Ms. Carol Schmitt:** Okay.

We have fewer jacks, low straying, and older and larger tyees—over 30-pound—chinooks have returned from the S1 releases.

We have a solution here. SARA outlined four objectives for the recovery of the southern resident killer whale. Our work is applicable to objective number one, which is to increase feed availability. Seventy-five per cent of the diet is preferably large chinook salmon. Many wild chinook stocks have been reduced to low escapements and have been unable to increase due to a low survival. Our hatchery demonstrated that a 50,000 S1 release will increase adult returns from a few hundred to over 1,500 returns in four years.

The Office of the Washington State Auditor, which assessed 25 hatcheries growing S1 and S0 smolts, recommended that only those hatcheries that had survivals with the S1s should continue to grow them. The Washington state biologists only use S1s to rebuild low-level stocks.

Current releases from DFO are approximately 27 million, almost entirely S0 ocean-type chinooks. Over the past decade, we've developed an effective strategy for rebuilding some of the stocks in low abundance. In addition, when coupled with smolt pen-rearing technology, even higher survival rates are possible. However, no other projects have been approved, other than one S0 versus S1 survival experiment, in the the last two years.

Omega's facilities and knowledge in improving chinook enhancement is an excellent, well-placed Canadian resource that is significantly underutilized.

The following are our recommendations for a solution:

First, Omega Hatchery's cold-water facility, which is the only site with a proven track record, should grow S1 chinook to be used to rebuild low-level stocks, which will feed orcas and recreational, commercial and first nations fisheries.

Second, DFO should provide support for the costs to grow the S1s, including the current 209,000 chinook we have at our hatchery.

Third, representing the South Vancouver Island Anglers Coalition, Mr. Chris Bos has developed an orca food sustainability program over the past three years at Sooke. It is a 30-day estuary pen-rearing component that increases the size of S0s prior to release and doubles their survival rate. Chris presented an expanded program to DFO's regional headquarters just yesterday in Vancouver, and has identified as many as 17 potential project sites.

Fourth, a cohort of S1 chinook could be introduced to the same pens before the S0s arrive to imprint prior release. This double-barrelled approach is an immediate approach that would substantially increase chinook food available to the resident killer whales by having both S1 and S0 chinook released in the same spring.

Finally, Omega Pacific can grow one million S1 chinook annually for 10 different projects in the southern resident killer whale critical feeding areas. This strategy could increase the number of adult chinook if Chris Bos's program and Omega's synergies were combined. This strategy may also avoid having to close areas that would cause a devastating local economic impact.

Dr. Beamish from the Pacific biological station and Dr. Brian Riddell, from the Pacific Salmon Foundation have encouraged Omega Pacific, especially in this era of climate change—

•(1555)

**The Chair:** Excuse me, Ms. Schmitt, but you've exhausted the seven minutes allowed. I suggest that any recommendations that don't come out in the questions be submitted in writing to the committee to be entered as evidence for us to consider.

I'll start now with the rounds of questioning. The first question goes of course to the Liberal side.

Mr. Fraser.

**Mr. Colin Fraser (West Nova, Lib.):** Thank you very much, Mr. Chair.

Good afternoon, everyone. Thanks very much for being here. I appreciate your taking the time to come to our committee to share with us some of your wisdom.

Mr. MacLean, I'd like to start with you. I appreciate your being here on behalf of snow crab fishermen. It is important that you have a representative at the table to share some of your thoughts on this stuff.

Being from the southwestern part of Nova Scotia, I know exactly how important the fishery is to our small rural communities. It is the backbone of many of these coastal communities you talk about. I don't have as much of a snow crab fishery down my way, but obviously there's lots of lobster throughout Nova Scotia and in Cape Breton and your area, too.

I'm well familiar with how lucrative the snow crab fishery is in your area. I'm glad you mentioned the Marine Stewardship Council certification and how important that is to the industry. I'm wondering if you could explain to the committee, from your point of view and that of the people you represent, what the MSC certification means to you.

**Mr. Basil MacLean:** The MSC certification certifies that the product has come from a sustainable resource, where it's harvested properly and you're not damaging the stock, the ecosystem, or anything with it. It means a lot to consumers, especially the European markets, where it's probably at the forefront, but the U.S. is a major snow crab consumer now as well, being our biggest consumer. It has become a big, hot topic down there. People want to purchase sustainable seafood.

It makes it difficult for our plants. I've attended the Boston seafood show pretty well every year and have spent quite a bit of time trying to market the snow crab. I don't want to talk about the processing, because it's not my field. It's tough for the plants. If they have snow crab coming in from an area that is MSC certified and they also have snow crab coming from an area that's not MSC certified, they can't mix it on the line. It becomes tough for the local plants.

At the end of the day, it affects the price. I might as well be truthful; I fish for money, not for fish. The most money I can get out of my product is what I'm looking for. That MSC label is a huge tool in selling the market. We've been marketing gulf snow crab, especially area 19 snow crab, as the cream of the crop.

**Mr. Colin Fraser:** It's the highest quality, and it has that reputation. So it's important for the MSC to put that mark of approval on it.

•(1600)

**Mr. Basil MacLean:** It is, absolutely. For us, it's key.

Having that suspended this year was a setback, but I can understand the justification behind it. It certainly makes sense. We didn't lose it; it's been suspended.

**Mr. Colin Fraser:** Yes, true.

**Mr. Basil MacLean:** We're hopeful that we're going to regain it.

**Mr. Colin Fraser:** Yes, and I know we're heading in that direction. I appreciate your comments on that.

There was obviously some frustration and, hopefully, some lessons learned out of the things that have happened over the last couple of years. I wonder if you could speak to the level of consultation your industry, from your perspective, has had with DFO. I know there have been some major concerns around that. I want to hear from you what you think effective consultation would look like.

**Mr. Basil MacLean:** We had good consultations last week in Halifax. We had key department officials from Ottawa and Moncton and Quebec, which is the gulf region. The minister was there for the morning. There were a lot of good ideas.

Prior to that consultation, we had consultations—I guess I ought to back up to January. Some recommendations came from the department. We thought they were doable, but then when it came back to us two months later, the criteria or the kick-out levels of when areas would close all changed.

We fishermen didn't have the proper consultation then. We felt that maybe we got overlooked by...I'm not sure if it was the department or if it came from higher up.

**Mr. Colin Fraser:** Obviously, the meetings last week in Nova Scotia went pretty well. Things seem to have improved in making sure the stakeholders involved are consulted and listened to, and making sure we are learning from past mistakes that might have been made.

**Mr. Basil MacLean:** I believe that Monday and Tuesday last week were a step in the right direction. I understand where it's tough. I watch question period, so I get to see you guys argue back and forth, but you should try a bunch of fishermen arguing back and forth. Sometimes it's maybe not the brightest comments that come out, but.... It is tough, for sure, to put that many different personalities in a room and expect the outcome to be productive.

I was very pleased with last week. I was pleased with the consultation. I was pleased with the ideas, and I was pleased to hear the minister's comments, but at the end of the day, I'm not so sure. For changes for the snow crab fishery, I'm fearful moving forward. I'm hopeful that 2019 will repeat 2018, but of course I'm fearful that 2019 will repeat 2017, and that would be a disaster.

**Mr. Colin Fraser:** My time is up, Mr. MacLean. I wish I had more time, obviously, but I really appreciate your being here and being candid with the committee.

Thank you.

**The Chair:** Now we'll move to the Conservative side, to Mr. Doherty, who'll share his time with Mr. Arnold, who'll share his time with Mr. Calkins. I'll leave it up to you how you're going to share it.

**Mr. Todd Doherty (Cariboo—Prince George, CPC):** We'll see how we go from here.

Mr. MacLean, Mr. Bird, Mr. Paish and Ms. Schmitt on the line, I want to say how important it is that you are here. This is among the most valuable feedback we can receive. Let me give you a couple of examples as to why.

Earlier today, we held another committee meeting. I'm not sure whether you tuned in to it. We heard that seals were not really the issue, or that predation management wasn't needed. That was one of the testimonies we heard. In fact, collectively, I believe all five witnesses said that wasn't really what was needed. They suggested we should harass the seals instead as a way to make things better.

The other thing that was mentioned—which Ms. Schmitt might take some offence to—was that hatchery fish do not grow to the size that would be beneficial. The product that you would grow wouldn't be beneficial in helping solve the chinook problem. I believe that's what was said.

That's why it's important that you're here, because if we don't hear from you, the voices of others carry the day.

Mr. MacLean, in the past you have gone on record as saying that some of the policy process has been the most unopen and untransparent process out there. You gave us hope today that there was some consultation last week, but are they listening or are they telling? I've also heard, during consultation in the past, that DFO was telling you how it's going to be.

All of you, do you feel like your industry has been under attack?

Mr. MacLean.

• (1605)

**Mr. Basil MacLean:** Gee, we don't have enough time.

Yes, I've been on the record in the past saying that. I still would say it's true for a lot of things.

I can't say we're under attack, though. What happened in our crab fishery happened. It's world news, but are we being...?

I felt last winter we were being told what we were going to do for changes, and that they were maybe not listening to some of the recommendations and things that could have changed.

**Mr. Todd Doherty:** Mr. Bird or Mr. Paish.

**Mr. Owen Bird:** I feel we're under attack, or we're meat in the so-called sandwich.

There has been opportunity to consult. However, in the first round of consultation, our input was basically ignored, and the additional consultation opportunities almost seemed strategically poorly timed for us to be able to contribute meaningfully.

**Mr. Todd Doherty:** I want to turn over what time I have left to Mr. Arnold, if I may.

**Mr. Mel Arnold (North Okanagan—Shuswap, CPC):** Thank you.

Mr. MacLean, I'll start off with you, and if anybody else has an answer to this question, I'd appreciate hearing it.

I'll be very brief. Have there been any population targets set for whales that you know of? We hear that we have to conserve, have to protect, and so on. I come from a wildlife management background and from fisheries management in which we saw provincial regulators continuously restricting and restricting access, but never ever wanting to set a population target. Without a population target, how many do we have to save?

Have there been targets set?

**Mr. Basil MacLean:** No target has been set, to my knowledge, on the right whale population.

**Mr. Martin Paish:** It's the same with southern resident killer whales. To our knowledge, there's no population goal. They're still talking about a "rate of increase", or something like that, but no targets have been set.

**Mr. Mel Arnold:** Ms. Schmitt? Or Mr. Tutty, if you're still there?



**Mr. Brian Tutty (Independent Consultant, Omega Pacific Hatchery Inc.):** The only comment I could offer is that the target for prey has not been established. The target for chinook food availability has not been established either. Much of the discussion has thus been around conservation and initial closures, but there is no grow or go program that would allow us to actually produce more chinook as a collective strategy of private and public hatcheries and various nested strategies that could result in more prey. We're still treading water, and that's why we're here today.

**Mr. Mel Arnold:** Thank you.

Ms. Schmitt or Mr. Tutty, are there any hurdles in place preventing the expansion of your program?

• (1610)

**Mr. Brian Tutty:** The suggested program is largely limited by the ability to slowly grow overwintering chinook because of the cold water that the Omega Pacific hatchery has, as compared with the warmer waters that the existing DFO hatcheries have. They simply cannot grow them as effectively as Omega Pacific can.

However, with regard to the killer whales, it is to provide them with a directed food availability in the zones where they feed that we have suggested that the overwintering chinook be coupled with the pen-rearing chinook that Chris Bos is doing in Sooke. That is now in year three. They are doing half a million eggs this year, with a couple of million targeted in a few years. We think that by coupling both programs together we could have a grow team to fast-track.

**Mr. Mel Arnold:** Thank you.

**Ms. Carol Schmitt:** This is just a comment on [*Technical difficulty—Editor*] size.

Earlier, I believe 16 trials that federal Fisheries did with the S1s at their own warm hatcheries produced a large number of jacks, and the females returned at three years old. We [*Technical difficulty—Editor*] fish similar to the [*Technical difficulty—Editor*] you have very [*Technical difficulty—Editor*] jacks and had six-year-old tyeed fish come back. It's all related to how the fish are grown in fresh water.

**The Chair:** Thank you, Mr. Arnold. Your time is up, so Mr. Calkins will not take any time right now.

We'll move on now to the NDP.

Mr. Donnelly, you have seven minutes or less, please.

**Mr. Fin Donnelly (Port Moody—Coquitlam, NDP):** Thanks to all the witnesses for coming to provide testimony on this important subject concerning whales.

We've been told for decades that there is a problem with whales and that their populations have been impacted. Just looking at the southern resident killer whale, it was in 2003 that they were first designated, so we've known this problem was coming.

We've also heard from the environment commissioner, who has told us that collective governments over the years haven't acted on recovery plans—in other words, that nothing has been done—unless it hit the news. In 2017 it hit the news and, for right whales, that prompted the government to try to do something.

Scientists have told us now, concerning southern resident killer whales, that noise pollution and food seem to be the main issues.

Let me turn to Mr. Bird and Mr. Paish to talk about salmon production. That was one comment. You also talked about seal and sea lion predation. I think you stopped short of a cull.

Can you talk about your recommendations for salmon production, and can you also talk about whether the organization supports a sea lion and seal cull and say whether there is some evidence you could provide to the committee that culling works?

**Mr. Martin Paish:** I can handle this question, Fin.

First off, as it relates to increased production of chinook as a way to provide more food for southern resident killer whales, we do indeed endorse that approach. We think there is a strategic way of going about it in that we need to focus our energy on those stocks of chinook that are available to southern resident killer whales when they need them. That's not a broad scale "let's make a whole bunch more chinook" program, but more let's figure out when chinook are there based on their normal migration timing and enhance those stocks. We talk about mid and upper Fraser early time chinook, for example, the 5 sub 2s that grow really big, those types of things. We definitely consider that.

In terms of actually within a reasonable time frame being able to create enough chinook to help solve the accessibility of prey thing, that's definitely something we can do. We've done it before. I'll state again that in the 1990s, when the southern resident killer whales were demonstrating increases in their population, we produced 15 million chinook in the Fraser River through hatchery production and now we're producing three. It's a simple question of getting back there.

As it relates to seals and sea lions, we are not recommending a cull. We're recommending a targeted, science-based predator control program. Here's why: We know that there are about 70,000 seals in the Salish Sea right now. There were about 7,000 in the 1970s. We also know that it's a certain number of those seals in specific geographic locations that are causing the harm to outmigrating chinook. What needs to be determined is what those specific individuals are, where they're operating, when they're operating, and then deal with that type of approach rather than a broad scale cull.

Again, speaking to Todd's discussion of the Puntledge, it's a similar program to that. It's not a harvest, not a cull. You only need to take out a certain number of animals at a specific period of time to be able to accomplish the job from a predator control perspective, not a market harvest sale perspective or that type of thing.

• (1615)

**Mr. Fin Donnelly:** Thanks.

I'll go to you, Ms. Schmitt, in my remaining few minutes.

You were about to talk about some of your recommendations. Could you use a minute to talk about your recommendations?

Can you also explain—I was trying to follow along, it was a very technical presentation you gave—why DFO hasn't listened to your plan for growing fish? What's been the biggest barrier?

**Ms. Carol Schmitt:** They designed all their hatcheries originally to produce these quick S0s, where you spawn the fish in the fall; they are grown rapidly the first three months in fresh water on high-energy diets to get them to three to five grams by the first of May, and they would release them. However, in our hatchery, we only start feeding the fish at half a gram, when they're releasing theirs, and we keep ours an additional year.

Their hatcheries are not designed to grow any number of these yearling chinook, and yes, 30 years ago their S0 production did have greater survival, but currently, they do not. So we have to change the strategy. The great thing about the S1s that we grow is we release them at the beginning of April. There are herrings and herring spawn. The S1s migrate very rapidly. They're not huge; they may be only 10 or 11 grams, but there's other food available and they're not targeted by the seals and they're more immune competent. They move quickly up to Alaska. It's a totally different creature from the type that the government releases.

To get back to your question, they simply are not set up to grow these, whereas we have designed our whole facility around it. It's a big facility. We spent about \$3 million. We have a big cold-water source, lots of independent incubators and rearing facilities, and proven results.

**Mr. Brian Tutty:** The other comment I would make is that DFO has produced the 90-day S0 fish from a point of view of the least cost. They can produce a large number of them at the least cost and get them out of the hatchery and then essentially wait until the next cycle. The S1s require husbandry year-round, and it's roughly a dollar a fish to produce. They're more expensive, but they survive much better.

It seems to me that DFO has not experimented a great deal, because they've not had cold water to experiment with. This has an opportunity to link to other private sector [*Technical difficulty—Editor*] projects. In my view, the experiment should be, let's couple both hand rearing of the fish such as Chris Bos is doing in the south island for killer whales with Omega hatchery and we could have a particularly well-targeted program as Owen Bird and Martin Paish have just explained.

**The Chair:** Thank you, Mr. Tutty.

Thank you, Mr. Donnelly.

We'll now return to the Liberal side for seven minutes.

Mr. Hardie.

**Mr. Ken Hardie (Fleetwood—Port Kells, Lib.):** Mr. Chair, I'm still looking for the channel for the Newfoundland....

Sorry, we'll just move on.

**A voice:** I don't think he found that amusing.

**Mr. Ken Hardie:** He never does.

**The Chair:** It's your time.

**Mr. Ken Hardie:** Mr. MacLean, we've heard a fair number of times that local knowledge sometimes isn't rated highly enough by DFO when it's given to them. They'll quite often hear something and then come back with something quite a bit different from what the local people, who should know the conditions, would advise.

If we were to rewind the clock to the decision to close the snow crab fishery, how would you advise DFO to proceed if this situation were to come up again?

● (1620)

**Mr. Basil MacLean:** I believe you're right in your comments on not taking some of the traditional knowledge of the fishers or the people there.

In terms of the closing of the fishery, DFO's mandate is to manage a fishery, not to close it. It should be managed so that it doesn't have to get closed. In 2017, things happened, and it was closed. It's important for people to realize how we got to 2017. It was mismanagement, if I dare say that, that brought us to 2017 and all the deaths. There were decisions made about quotas and how that was executed. It was a perfect storm, I guess, that brought everything into the Gulf of St. Lawrence at the same time and cost the sad death of those whales.

If I could rewind the clock and go back, there were some proper management pools put in place for a lot of the fleets that were entering the snow crab fishery. It's a tough question to answer. A lot could have been done in terms of the length and scope of the ropes, which I think we curbed in 2018, but the fishery went on for a long time.

The right whales were in the gulf prior to 2017. Nobody should fool themselves by thinking that they were new in the gulf in 2017. They were there prior to that, and I don't believe we had any deaths. I stand to be corrected.

**Mr. Ken Hardie:** Something obviously changed.

**Mr. Basil MacLean:** Something changed, but in 2018, it changed again, and we didn't have deaths again.

**Mr. Ken Hardie:** I think that because I did waste a little time at the beginning, I should move on to another question here, but I take your point. Fisheries should be managed so they don't have to be closed, but that's our history in Canada.

Look back to July 1992 when John Crosbie closed the northern cod fishery. Things had been allowed to progress to a point where it collapsed, and boom. It's an on-off switch.

Mr. Paish, with respect, you're calling for evidence in science, which is a good thing, but DFO quite often finds itself in a position of having to apply the precautionary principle. There's a lot they don't know. We could spend a lot of money on science and evidence, and they'd probably tell you they still don't know conclusively what's going on.

With the application of the precautionary principle on coho salmon, particularly as it affected the sports fishing industry, how would you have changed what DFO did, still providing for the whales and for the forage that they needed? Did they go too far? I guess you're going to say yes, but what advice would you give to live up to the precautionary principle in the absence of all of the evidence that anybody would like to see?

**Mr. Martin Paish:** I can answer that question.

First off, I would have adopted a multi-faceted approach. I would have actually focused and invested some energy on recovering chinook populations, rather than just focusing on reducing catch.

We have a tremendous amount of evidence already in the Pacific fishery that further reducing chinook catch was not going to be an effective strategy to provide more prey for southern resident killer whales. This is advice that was offered by the scientists and fishery managers who were there. I can easily forward this committee the findings of that workshop.

**Mr. Ken Hardie:** It's not intuitive.

**Mr. Martin Paish:** The reason it's not intuitive is that there is an assumption that recreational fisheries are catching a tremendous number of chinook in the region, which they are not. We're already dealing, in the Strait of Juan de Fuca, with the most restrictive management measures on salmon fisheries anywhere on the coast of British Columbia. We already have slot limits in place to protect age classes that southern resident killer whales are there—

•(1625)

**Mr. Ken Hardie:** If the chinook isn't really that important to the sports fishing industry, what was the harm? I'm sorry. Have I missed something that you said?

**Mr. Martin Paish:** It's not to suggest that they're not important; it's to suggest that salmon fishermen are willing to go out and deal with restrictive regulations in order to do the right thing, and we've consistently done that.

What I would suggest to you, Mr. Hardie, is that closing fisheries is easy. Closing fisheries is cheap. Closing fisheries presents really wonderful optical solutions on maps that do great things to pacify vocal ENGOs and to deal with social media. The more difficult and more effective approach is to adopt a long-term strategy that DFO's own experts are telling them is what's going to solve the problem. That's the solution.

**Mr. Ken Hardie:** Quickly, Ms. Schmitt, I want you to comment on the point that my friend Mr. Doherty raised on the size of fish that comes out of your operation. We were told earlier today that the cultured fish don't grow to a size that's really useful to orcas: 90 pounds is good; 30 pounds is marginal.

Have you actually rated as to size the fish that are coming back mature from your operation?

**The Chair:** Respond in a minute or less, please.

**Ms. Carol Schmitt:** Yes. In the four release datasets that we have—two for Phillips River, one for Sarita, and one for Nahmint—Nahmint River and Phillips River both saw reappearances of six-year-old chinook that were over 30 pounds.

Any hatchery enhancement manager has always said that the minute we start enhancing the use of S0 chinook, that's the end of our tye chinook, which is the opposite of what you're being told. The S1s, grown properly, no straying, we had few to zero jacks and we saw a lot of five [*Inaudible—Editor*] fish.

**The Chair:** Thank you. The time has expired.

I want to thank all the guests for appearing—

**Mr. Todd Doherty:** We have—

**The Chair:** Actually, we have four more people. We have to set up for the second hour.

**Mr. Todd Doherty:** Yes, but we still have three minutes. We should at least get another short question.

**The Chair:** We'll lose it at the other end. Okay.

**Mr. Todd Doherty:** Mr. Paish, you brought up a very valuable point.

Speaking to my honourable colleague across the way who was looking for an answer, I'd tell DFO and the bureaucrats to do their job.

Among the upper Fraser chinook, the spring 5-2s and summer 5-2s have been listed as stocks of concern for multiple years, yet we don't have a hatchery north of Kamloops. We continue to use copy and paste for innovative fisheries management plans on these fish specifically. They're using data from a fishery at Dome Creek, which is in my neck of the woods, that has been outdated and that failed 20 years ago. DFO continues to use that data.

Mr. Paish, I'd love to hear more comments on the 5-2, whether it's spring or summer 5-2, and on the need for us to increase attention to those species.

**Mr. Martin Paish:** In the short time frame, it's very simple: 5 sub 2 chinook and 4 sub 2 chinook are chinook that return to the river at a large size. We have been told, and I believe it makes sense, that southern resident killer whales like to target larger chinook.

The bulk of the hatchery closures in the Fraser have taken place on hatcheries such as Dome Creek, Willow River, and Spius Creek that focus on those larger chinook.

**Mr. Todd Doherty:** Any of the hatcheries we have that are run by volunteers have been targeted and shut down. Isn't that correct?

**Mr. Martin Paish:** Both DFO production facilities and community development projects, all of the volunteer and the DFO-funded hatcheries, have basically been closed. When I talked about targeting our efforts on specific stocks of chinook that southern resident killer whales need, those are the stocks.

We need chinook salmon in the spring, in May, June, July. We need chinook salmon that are large. Those are the stocks of chinook that traditionally these whales would have fed on. There's a whole bunch of reasons why sub 2 chinook salmon, or all sub 2 salmonids, are struggling in the Fraser River right now, whether they are Thompson, Chilcotin, or steelhead—your committee has probably talked about those—or whether it's interior Fraser coho.

Mr. Hardie talked about a precautionary principle application on Fraser River coho that took place more than 20 years ago. The recreational fishery was brought down to a less than 3% exploitation rate on those fish. They still haven't shown any signs of recovery.

Closing down fisheries isn't going to work. Making more chinook salmon available to whales through the application of hatcheries and focus predator control is what's going to work.

• (1630)

**Mr. Todd Doherty:** Thank you.

**The Chair:** Mr. MacLean, Mr. Bird and Mr. Paish, and to Ms. Schmitt and Mr. Tutty on teleconference, a special thank you to you all.

Ms. Schmitt, my clerk said that you jumped through hoops to be able to do this today, so let me say that we appreciate your time and effort. Thank you.

**Ms. Carol Schmitt:** Thank you, Chair.

**The Chair:** We will suspend for a couple of minutes.

• (1630)

(Pause)

• (1630)

**The Chair:** We'll get started.

I'd like to welcome our guests to the second hour of our committee this evening.

From the Canadian Ferry Association, we have Serge Buy, chief executive officer. From the Shipping Federation of Canada, we have Sonia Simard, director, legislative affairs. By video conference, representing the Vancouver Fraser Port Authority, we have Carrie Brown, director, environmental programs.

Welcome to everyone.

We'll start off now with your seven-minute opening statements.

First we'll go to Mr. Buy.

**Mr. Serge Buy (Chief Executive Officer, Canadian Ferry Association):** Thank you very much, Mr. Chair.

I act as the chief executive officer of the Canadian Ferry Association. Our association represents ferry owners, operators, and suppliers to the ferry sector in Canada.

Our members run a fleet of more than 160 ferries, employ close to 10,000 people, and generate an additional 20,000 jobs. We transport 53 million people, 21 million vehicles, and billions of dollars of goods. More importantly, we enable people to go to school, hospital, and work. We are often the only link for remote communities.

Our members have operations in the areas in which southern resident killer whales, North Atlantic right whales and belugas can

be found. This means that our members have for years been interacting with whales. Ferry operators have for decades and long before whales reached the national agenda implemented measures designed to protect them. Here are some examples.

Bay Ferries has, since 1998, put in place an education and monitoring program. It has worked with the company to provide training for its officers in the identification of mammal species and whale behaviours. A biologist was posted and made daily observations for many years. Data was reported and made available to the scientific community.

If an aggregation of North Atlantic right whales was observed, ferry routes would be diverted until the whales left the area. It happened once in 20 years, in the Gulf of Maine in the early 2000s. This company's voluntary program, leadership and due diligence have resulted in the avoidance of ship strikes.

• (1635)

[Translation]

The Société des traversiers du Québec is participating in a project to measure the underwater sound emissions of its vessels and new ferries, specifically for belugas.

The dredging carried out to maintain operations is limited to certain periods. This increases costs and creates some risks for the teams as a result of the difficult conditions during these periods.

[English]

Marine Atlantic has engaged marine biologists to develop a marine mammal management plan. Its vessel crews maintain an effective bridge watch for marine mammals. It has organized a whale monitoring group that monitors location of the North Atlantic right whale.

BC Ferries has invested hundreds of thousands of dollars in support of technologies to monitor underwater radiated noises. It has invested more to look at technologies to limit such noises, and in this case, the federal government can certainly play an additional role. Its crews are trained to avoid whales. BC Ferries has assumed a leadership role in efforts to save the southern resident killer whales.

Those are only some of the examples of what our members are doing. As an association, we recently signed a conservation agreement with Transport Canada respecting the southern resident killer whales. We are committed to do what we can to help the nationwide efforts to save those whales.

Mr. Chair, my wife and I have two little girls, Audrey and Cleo, and I want them to be able to know that these whales continue to exist thanks to a nationwide effort to save them. We need to save those whales and do what we can. We certainly as a ferry association and with our members are doing our part.

We support the general objective of motion M-154. This issue needs to be discussed and debated. Our operators are doing what they can, and we know that other sectors are doing the same. We welcome the involvement of the Government of Canada and think that its leadership in bringing together stakeholders is crucial.

Thank you.

**The Chair:** Thank you very much. You used less time than was allotted. That's what we like to see. We can get more questions in.

We'll go now to the Shipping Federation of Canada.

Ms. Simard, whenever you're ready, you may take seven minutes or less.

**Ms. Sonia Simard (Director, Legislative Affairs, Shipping Federation of Canada):** My name is Sonia Simard. I'm here today on behalf of the Shipping Federation of Canada, which represents owners, operators and agents of those big ships, ocean-going vessels, that are carrying Canada's international trade to and from the overseas markets.

The vessels of our members call ports in the Atlantic, the St. Lawrence, on the Great Lakes, on the west coast, and in the Arctic. As such, we have a vested interest in the safe co-existence of ships and whales. I'll take a few minutes here to outline some of the concrete actions we have undertaken so far.

On the east coast, for the North Atlantic right whale we were part of the protection efforts that took place in the Bay of Fundy and in the Roseway Basin in 2003 and 2008. Since then, these whales have moved to other parts of the Gulf of St. Lawrence, which led to a terrible situation in 2017.

The death of several of those whales in the gulf over a very few months has affected all of us. The shipping industry has been affected not only because there has been quite a challenge resulting from the very sudden imposition of a large area slowdown, but also because we have a shared concern for the survival and protection of those whales.

As such, from mid-2017 to the beginning of 2018, the shipping industry got together. We initiated discussions and worked with the North Atlantic right whale scientists whom you heard from this morning in putting together a proposal for dynamic management. The idea was to protect the North Atlantic right whales where they aggregate, which you can see in some of what we've distributed, and then allow the vessel to navigate at the normal speed in very limited shipping corridors away from the aggregation when the whales are not present.

The proposal from the industry was key, and it fed into the dynamic mitigation measures that the federal government implemented in 2018.

Looking into the St. Lawrence now, for the beluga, again the shipowners since 2013 have worked with several partners to put together mitigation measures, including a voluntary slowdown, to minimize the risk of collision with several different populations of whales that operate in the area from May to October. These measures, which have been in place since 2013, have led to a change in behaviour. They have produced a reduction in the risk of collisions.

I know that Carrie will soon be addressing the west coast, so I won't go too much into detail but will just again underline that the shipowners, the operators and the ship agents have for the second year in a row delivered voluntary measures that are delivering noise reduction in important areas used by the southern resident killer whales.

These are, just to complement some of the examples from Mr. Buy, some of the actions that the shipping industry is taking to protect endangered whales in all Canadian waters.

We know, however, that more needs to be done and we are grateful for the occasion to discuss with this committee what the next steps could be. I'll take the rest of the minutes I have to underline some of our perspectives.

First, for us regulations are not the be all and end all. We say this because we think it's important to take into consideration that in some cases, voluntary management mitigation measures implemented on an industry-wide basis are very efficient, adaptive in nature and very swift in results, if you compare them with some of the heavy regulatory processes.

Second, although there's a body of knowledge to the effect that reducing speed to 10 knots can indeed reduce the risk of ship strikes, the situation is not the same when it comes to addressing the issue of underwater noise from vessels. There is an important knowledge gap there.

To give you an example, we are still finding information about the noise that can be allocated to different categories of vessels and how the footprint of a vessel may vary because of such factors as loading conditions or even such fixed factors as the type of propellers on board vessels or the shape of those vessels.

It is then a very complex issue. Efforts are under way to gather the data we need to address some of the knowledge gap, but in our opinion, we are not there yet.

● (1640)

I'm saying this to underline that in some cases regulations may look good on paper but may not always produce the best solutions, because regulations tend not to allow for real-time learning experience and an adaptive approach such as is very critically needed when dealing with underwater noise.

The third point for us is that a "one size fits all" solution is not the way forward. What I mean by that is that if you take the situation of the North Atlantic right whales in 2018, we are seeing indeed that a dynamic approach to minimizing the risk of ship strikes is producing effects, and actually from our perspective it is much better than the big box with a static speed.

There is a learning curve. We are still in the learning process and we have identified elements that could be improved for the 2019 regime. I'll be happy to elaborate more in questions.

Looking at underwater noise, again, if you focus on one speed and crystalize that speed into a regulation, you run the risk that it's not going to be an efficient solution, and we have learned in the last two voluntary measures trials, in 2017 and 2018, that there are different ways of accomplishing a target noise reduction. We need to learn more from these. Again a "one size fits all" approach is not necessarily the solution. Also, if we focus all our efforts on speed reduction, we may deny efforts in ship design, and that's where the solution really needs to lie.

A fourth point that's very important and is common to the problems of ship strikes and underwater noise is the need to know where the whales are. For that we need sustained and very efficient investment in detection technologies.

I'll give you one example. This season we are urging the federal government to invest in real-time acoustic detection in the shipping corridor in time for 2019, so that we combine acoustic detection with aerial detection in order to improve dynamic management.

My very last point—I promise, 20 seconds—is something that this committee has addressed before. You've said that we need to be nimble in our actions to protect the whales. We agree, and for that reason we think that the industry must be part of all solutions. And it's not just about consultation. I'll go one step further: it's about constructive partnerships, which are essential to address and find dynamic management solutions that work and are sustainable.

Thank you for listening.

• (1645)

**The Chair:** Thank you, Ms. Simard.

We'll go now to Carrie Brown from the Vancouver Fraser Port Authority, for seven minutes or less, please.

**Ms. Carrie Brown (Director, Environmental Programs, Vancouver Fraser Port Authority):** Thank you for this invitation to appear before you.

My name is Carrie Brown. I'm the director of environmental programs at the Vancouver Fraser Port Authority. We are the port authority that's responsible for the stewardship of the port of Vancouver, Canada's largest port. Our mandate, as set out under the Canada Marine Act, is to facilitate Canada's trade objectives, protect the environment and consider the impact of port activity on local communities.

Since 2014, the port authority has been leading the way in engaging regional stakeholders on the topic of minimizing threats posed by shipping to at-risk whales in southern British Columbia. This includes initiating the enhancing cetacean habitat and observation, or ECHO, program. This is a regional collaborative initiative that seeks to better understand and reduce threats to at-risk whales through advancing research and voluntary threat reduction measures.

The ECHO program works collaboratively with marine transportation industries, scientists, indigenous individuals, conservation and environmental organizations, and Canadian and U.S. governments. BC Ferries and the Shipping Federation are members of our advisory working group. The program is recognized regionally, nationally and

internationally as a model for effective collaboration and evidence-based decision making.

The program has focused its efforts currently on understanding underwater noise from large ocean-going vessels. As you've probably heard, what we know about the measurement and analysis of underwater noise is that it's complicated. The ways in which different levels of underwater noise affect the life functions of whale species are not entirely understood. To add to this complicated issue, each vessel has a unique sound signature. Operational or design mitigation that may reduce noise for one vessel may not be applicable to others: one size does not fit all.

However, knowing this, the ECHO program has made considerable advances in a very short period of time in understanding vessel-related threats to at-risk whales, including the southern resident killer whale, and we have engaged relevant interests to identify solutions and implement voluntary threat reduction actions. For instance, we have been working with stakeholders to formulate, trial and implement voluntary noise action measures. Such measures include both slowing down vessels and shifting vessel traffic away from key southern resident killer whale critical habitats. Vessel operator participation has been very high, on the order of more than 80%, and has demonstrated that voluntary measures can be an effective means of reducing underwater noise from vessels.

The large-scale voluntary measures implemented through the ECHO program in the last two years illustrate how much can be achieved through well-designed, adaptive and voluntary measures. The ECHO program fosters an environment for innovative thinking in which those contributing to the threats play a central role in developing solutions and taking ownership of and accountability for the implementation of threat reduction actions. We believe that the ECHO program's collaborative voluntary efforts can and will continue to yield positive results when they are implemented.

The port authority has expended and continues to expend considerable effort to better understand and mitigate the effects associated with deep sea vessels on cetaceans, particularly the southern resident killer whale, within and beyond our jurisdiction. The ECHO program is helping to address some of the key data gaps that are a focus of the amended recovery strategy for northern and southern resident killer whales; however, the most recent version of the recovery strategy acknowledges that much still remains unknown about resident killer whales and their critical habitat.

We believe that before government develops regulations around reducing underwater noise from commercial vessels through such measures as speed limits, time must be given to better understand science before imposing actions that could have unintended consequences on industry or the environment. There is a need to undertake research and consultation with subject matter experts to adequately assess both the benefits and impacts of environmental threat reduction. Any proposed regulations must be informed by a full understanding of not only the impacts on whales but the effects on navigational safety, operational feasibility, and commercial and economic growth.

We believe strongly that government should also give consideration to the potential implications of applying regulations only in Canadian waters. Whales do not recognize international boundaries.

• (1650)

For geographic areas located in proximity to international borders, a competitive disadvantage for Canada could be created, limiting the achievement of environmental benefits. Any measures that are implemented must have coordination from both Canadian and U.S. governments in order to ensure a greater overall protection strategy. Transboundary voluntary and adaptive efforts will likely yield much greater environmental benefits.

We would like to see government consider all vessel types in its mitigation strategy, not just commercial shipping traffic. The Salish Sea has seen and will continue to see an increase in all vessel traffic, including that of ferries and of government, recreational, whale-watching and fishing vessels. These vessels also have the potential to generate environmental impacts and should be given due consideration when addressing the cumulative environmental threat reduction.

Government should also consider both the anticipated short-term and the long-term environmental benefits and implications of regulation. Although adjustments to vessel operations on water, such as changes to routes or speeds, may in the short term reduce the effects of shipping on endangered whales, the long-term solution to vessel noise reduction lies in the design of quieter ships.

We believe that regulating short-term threat reduction solutions, such as vessel slowdowns, may consequently stifle progress and inhibit drivers for innovation and longer-term change, which could include the design of quieter vessels. The ability to create an environment in which innovation is encouraged will yield much greater conservation benefits regionally and globally in the longer term.

Alternatively, instead of regulation, we would encourage voluntary measures that provide vessel operators with choices about ways to offset their effects. For example, vessels could slow down or maintain regular speed by installing quiet technologies through critical feeding areas or could make an investment in vessel quiet design.

Last, regulation must be adaptable over time. As our knowledge of both threats and threat reduction measures evolves, there should be an ability for regulation to also evolve and adapt over time.

The Vancouver Fraser Port Authority commends the actions taken by the Government of Canada to deliver its national oceans protection plan and protect endangered species. We hope that we

can continue to provide insight into collaborative and voluntary ways to reduce impacts to at-risk whales here on Canada's Pacific south coast and that these learnings can be applied across Canada and around the world.

Thank you. I look forward to your questions.

**The Chair:** Thank you, Ms. Brown.

We'll go now to Walter Daudrich, president of Lazy Bear Expeditions.

Before you start, I understand that you have a video you were going to show, but the clerk tells me she doesn't have the equipment to show it.

**Mr. Walter Daudrich (President, Lazy Bear Expeditions):** I have it on a stick, if you have a computer.

**The Chair:** I've asked the clerk to distribute it to the members of the committee so that they can look at it themselves.

When you're ready to start, sir, you have seven minutes.

• (1655)

**Mr. Walter Daudrich:** I'll just take a moment to say thank you to the committee members for having me here. I appreciate it. As you can imagine, it's a long drive from northern Canada.

I'm the owner and founder of Lazy Bear Lodge Limited. Lazy Bear is based in Churchill, Manitoba, and has been in operation for over 20 years. It offers a unique lodging experience to its customers, which, along with various other activities, includes beluga whale-watching tours in the summer months. I also operate an organic farm and greenhouse on Hudson Bay.

I am also the chair of the Churchill Beluga Whale Tour Operators Association, the CBWTOA, a group of independent small businesses that operate beluga whale-watching tours in and around Churchill and adjacent areas of the western Hudson Bay coast. The tours operated by members of our association include viewing and interacting with beluga whales from the shore, aboard vessels and in small craft, including but not limited to kayaking and canoeing. I am also president of the Canadian Coast Guard Auxiliary for Churchill.

CBWTOA has created a series of policies and protocols that protect beluga whales and endeavour to educate, inspire and communicate the value of this unique marine mammal throughout the world. A copy of our code of conduct, which governs our whale-watching tours, can be found at CBWTOA.com. This policy was drafted in part in recognition of the marine mammal regulations issued under the Fisheries Act as they existed prior to June 2018.

The town of Churchill is in serious economic distress. Initially, the port of Churchill closed, and then, approximately one year ago, the Hudson Bay rail line washed out. That rail line was Churchill's primary transportation link to the outside world. OmniTRAX, the railway and port owner, was in a legal dispute with the federal government over responsibility for bringing the rail line back into operation.

The tourism industry is Churchill's largest employer, and that industry is keeping the local economy afloat. The members of our association employ approximately 200 persons, including many indigenous persons. The summer tourism industry in Churchill generates approximately \$10 million in revenue. Even prior to the commencement of last summer's whale-watching season, our members were accepting guest reservation bookings for next year. We're hiring and training new employees and making new capital equipment purchases. The Province of Manitoba has spent millions of dollars through Travel Manitoba advertising the products provided by our members.

Regarding the beluga whale population, I want to draw to your attention some facts from a Canadian Science Advisory Secretariat study issued in October 2017 and titled "Estimated abundance of the Western Hudson Bay beluga stock from the 2015 visual and photographic aerial survey". This study illustrates that the beluga whale population in the western Hudson Bay area is thriving. This population is currently estimated at somewhere between 50,000 and 60,000.

The study illustrates that in the western Hudson Bay area, including the Churchill River and Seal River locations, there is a high density of beluga whales, which congregate in these areas during the summer months. There's a high density of beluga whales that travel up the Churchill River right up to the Port of Churchill. It has been estimated that there can be as many as 5,000 beluga whales in the Churchill River at certain times.

I have been involved in beluga whale-watching activities in and around Churchill for roughly 37 years. I can attest that beluga whales are very intelligent, extremely curious and highly social animals. Because of the high density of beluga whales in the areas mentioned above, and because of their natural curious and social behaviour, it is virtually impossible to avoid coming into proximity with beluga whales during our tour operations. As soon as our boats leave the docks, they are approached by beluga whales, which then follow the boats to any destination they choose. Even if we attempted to sail away from the belugas, they would follow us.

In all my years of involvement with whale-watching, I have never seen any beluga whale injured by whale-watching tour operations. Even though our boats use prop guards, these are virtually unnecessary because beluga whales, in my experience, are far too intelligent and agile to be injured by boat propellers. I have never seen any beluga whale bearing scars from a propeller injury.

Further, in all my years of involvement with whale-watching, I have never seen any beluga whale appearing to be distressed by the activities of whale-watching tours. To the contrary, they exhibit playful conduct and curiosity. We do not attempt to lure beluga whales by feeding them or inducing them in any other way. Frankly,

there is no need to do so. As noted, beluga whales approach our vessels the minute we leave shore.

You're no doubt aware of the regulations amending the marine mammal regulations, which were registered on June 22, 2018, and published in the Canada Gazette on July 11, 2018. Attached to the amending regulations is a regulatory impact analysis statement.

• (1700)

The statement identifies the matters that were considered by the government when drafting the amending regulations. For instance, the statement refers to the "risk of injury through collisions with boats or being slashed by their propellers". It also refers to circumstances that exist in other locations, including the St. Lawrence Seaway.

None of these considerations applies to the whale-watching industry in and around Churchill. As noted, to my knowledge, no beluga whale has ever been injured or distressed because of whale-watching tour operations in this location. As further noted, the beluga whale population is thriving in western Hudson Bay. Their numbers are currently estimated at between 50,000 and 60,000. In contrast, it is my understanding that the beluga whale population in the St. Lawrence Seaway numbers approximately only 500 to 600, and there has been notorious publicity regarding the injury or death of many whales in that area because of collisions with large commercial vessels.

The statement refers to Churchill, but says very little about the circumstances that exist in the Churchill area. It states that an "estimated 366 small to medium whale watching businesses were operating in Canada" in 2015. However, it neglects to mention that there are currently only three whale-watching tour businesses with boats in the water operating outside of Churchill. It also fails to mention that the beluga whale population in western Hudson Bay is large and thriving, and that there is no evidence, scientific or otherwise, which suggests that there is any harm or risk of harm to the beluga whale population in western Hudson Bay because of whale-watching operations.

Further, it fails to note that, unlike other parts of Canada or internationally, beluga whales in western Hudson Bay, because of their dense population, natural curiosity and social behaviour, actively approach boats in the water, including whale-watching tour operation vessels. It further fails to have regard to the fact that it is literally impossible to put a boat in the water in the Churchill area without immediately being near beluga whales.

It therefore appears clear to me that by expressly including the Churchill River, Seal River and western Hudson Bay areas as areas where whale-watching tour activities are restricted without any regard to the actual circumstances that exist in these areas, the amending regulations are extraordinarily unfair, arbitrary and discriminatory with respect to the whale-watching industry in Churchill, which is so vitally important to the economy of Churchill.



The members of our association possess over 100 years of combined experience of watching and interacting with beluga whales in and about Churchill. A copy of our association's code of conduct, which I have provided to the clerk, has been drafted to incorporate rules and restrictions that ensure the welfare of beluga whales being watched. I sincerely believe that the whale-watching activities in the Churchill area are beneficial to the whales and enhance their conservation and protection.

Some—

**The Chair:** Thank you, Mr. Daudrich. We've gone almost a minute over time as it is.

**Mr. Walter Daudrich:** Thank you.

**The Chair:** Hopefully, anything else will come out in questioning. If not, a written submission will be provided to the members as well.

We'll go right into the question rounds now with Mr. Fraser for the government side.

Mr. Fraser, you have seven minutes or less. I will be very strict on the time because I want to make sure that we get a complete round in.

**Mr. Colin Fraser:** Thank you, Mr. Chair. I'll give my time to Ms. Ludwig.

**Ms. Karen Ludwig (New Brunswick Southwest, Lib.):** Thank you.

Thanks to all of you for being here today. When I put forward this motion, I thought it was important not only in my particular area of the country in Atlantic Canada, but certainly nationally when we look at the risk that we're all facing. It's about maximum protection and minimal disruption for industry, and I thank all of you as industry participants and partners in all of this, because we can't do this without you. I'll jump into my line of questioning regarding shipping.

Serge and Ms. Simard, thank you for our initial consultations and for supporting the motion. I look forward to seeing you in Beaver Harbour in the summer with your daughters.

I have a couple of questions. These are some of the questions that I hear from industry, from fishermen. They're specific to shipping.

For whales, do you know if the initial cause of death is actually ship strikes or is it potentially that they were already entangled or weakened because they could not find the prey to feed upon and that put them in harm's way when coming across a boat? That's the first one.

The second one, if I could ask you to speak to this as well, is on the research and development side. I know from the consultations I had with the shipping sector that in some areas, particularly with the southern resident killer whale, slowing down the speed of a boat in some respects can actually be detrimental, because at slower speeds there is a tipping point where it actually makes the boat louder.

Last, I'd like to hear your comments on how one size does not fit all. That is an entirely consistent message that I've heard from the beginning of the motion to now at committee.

I'm going to start with Serge.

• (1705)

**Mr. Serge Buy:** About a year and a half ago, or a year and a bit, I met with Transport Canada officials. Their statement to me was that we have to reduce the speed of ferries to protect the southern resident killer whales. My reply was, "Do you understand that if we do reduce the speed of ferries, it will increase the noise?" There was dead silence. They asked us to prove it to them, so we had to prove it to them using their own data and other data that we had.

I think we talked about unintended consequences and we talked about regulations that may not fit every part of this sector. I think there needs to be ample consultation before those regulations are put forward. There needs to be a little bit more discussion with industry on that. I see a change within TC and Fisheries and Oceans. I definitely think they heard the message that industry was concerned. To be frank, I've seen them very receptive to comments. I'm quite happy to see that.

In terms of whales, I've talked to the same fishermen you've talked to in the same part of the world. I was on a lobster fishing boat between midnight and noon earlier this summer, and I heard an earful on the regulations. I do think we need to be very careful on how we implement regulations. In the Bay of Fundy, Whitetail Fisheries—I was on their boat—expressed concerns about the way the regulations would be implemented and the stop to fishing that was put in by Fisheries and Oceans.

I do think we need to have a little bit more consultation and debate.

**Ms. Karen Ludwig:** Thank you.

Ms. Simard.

**Ms. Sonia Simard:** Not to repeat anything on that issue, I would add that we had necropsies last year. We had seven necropsies. They highlighted some of the conclusions. It is not an exact science. I think the important thing is not about what happened first, because indeed, those are both threats. From an industry point of view, the shipping industry recognizes that we need to act, so we're taking action.

We also think that all threats need to be addressed. You just had a very interesting panel on prey availability. We need to address that. In the same way, entanglement is part of the threat, and so are ship strikes. For us, it's not about what happened first but about making sure it doesn't happen.

The second thing I would quickly like to add is that one solution does not fit all. It's not only about the speed, which is a definite issue in terms of underwater noise; it's also a lot about learning from dynamic management. We just heard the fishermen tell us how turning it on and off is not a long-term solution. We believe there's a lot to be learned from dynamic management in the shipping sector as well.

**Ms. Karen Ludwig:** Thank you.

Carrie.

**Ms. Carrie Brown:** With respect to slowing vessels down, as you stated, there's no one size that fits all. Vessels can in fact become louder if they are slowed down, depending on the type of vessel. I know that BC Ferries and other shipping lines have done a lot of research around better understanding what their fleets are and having a fleet perspective.

Through the ECHO program we've learned about a performance objective. If we understand the overall desired level of underwater noise that we're trying to achieve, then different vessels can approach it with different speeds, depending on what works best for that vessel type. Through the Haro Strait slowdown this summer, we asked container vessels to slow down to 14 knots and we asked bulk carriers and others to slow down to 12.5 knots. By doing this differential speed, when the whales were present, vessels were able to participate when and if it was feasible for them and it was easier for them to achieve those speeds.

We are undertaking to have results, and we'll be analyzing the data. We'll have a report toward Q1 2019, but our objective all along has been to take the same speed reductions we had during the trial in 2017.

• (1710)

**Ms. Karen Ludwig:** I have one last quick question, and it's a really important one.

**The Chair:** Time.

**Ms. Karen Ludwig:** Where is the data being shared?

**The Chair:** Sorry. The time is up.

Now we go to the Conservative side.

Mr. Doherty.

**Mr. Todd Doherty:** I'm going to be really quick because I'm going to share my time with Mr. Sopuck.

In a previous study, I believe it was the Shipping Federation of Canada as well as the port authority who said that industry is doing a considerable amount of research but that it was falling on deaf ears with the government.

Has that changed in the last six or seven months? Our recommendation to the officials was that they were petitioning and working with industry on that.

**Ms. Sonia Simard:** Indeed. If I may, I would say that certainly with both the North Atlantic and the southern resident killer whales, there is much dialogue.

**Mr. Todd Doherty:** Carrie.

**Ms. Carrie Brown:** In the fall of 2016, in particular, when the oceans protection plan was first announced, government was very interested, and we have seen an increase in engagement and understanding. We've all come up to a consistent level of understanding of where we are with respect to—

**Mr. Todd Doherty:** Your data on number of strikes, is it predominantly passenger ferry traffic or is it predominantly shipping traffic?

**Ms. Carrie Brown:** Sorry. What was the first part of the question?

**Mr. Todd Doherty:** Is your data in correlation to shipping traffic versus passenger traffic in strikes?

**Ms. Carrie Brown:** Right. We're really focusing on underwater noise and its effects on southern resident killer whales and less so on the strike activity. I think there's a lot more strike risk potential on the east coast with the right whales.

Our data is available on our port authority website, and we have done an assessment to understand what the sound signatures are of different vessel types.

**Mr. Todd Doherty:** Thank you. I appreciate that.

Go ahead, Bob.

**Mr. Robert Sopuck (Dauphin—Swan River—Neepawa, CPC):** Thanks.

As full disclosure, I had the pleasure of going on a whale-watching tour with Mr. Daudrich this summer. It's an extraordinary experience.

Mr. Daudrich, I'm going to ask some really quick questions given that time is limited.

In your years of operating the whale-watching business, have you seen any change in the population of beluga whales that you could determine?

**Mr. Walter Daudrich:** No, the population is stable over the long term, yes, sir.

**Mr. Robert Sopuck:** Yes, I have the documents that you refer to, and the science backs that up.

For many years there were large vessels going into the harbour and estuary at Churchill, shipping grain, goods and so on. Was there any effect on the whale populations from those large vessels?

**Mr. Walter Daudrich:** I would go further to say that during operations, dredging operations and shipping seasons that were very busy, there was no noticeable change in beluga whale patterns.

**Mr. Robert Sopuck:** I've seen the new marine mammal regulations related to Churchill. If fully implemented word for word, what effect will they have on the \$10-million whale-watching industry in Churchill? I realized when I was up there that it is one of the main lifelines for the entire community. What effect would that have on the whale-watching industry?

**Mr. Walter Daudrich:** As I mentioned in my initial statement, we employ approximately 200 people. We are the biggest employer in Churchill. My company is the biggest employer in Churchill, but the industry itself is floating the town right now. We are—

**Mr. Robert Sopuck:** What effect will the regulations have if fully

**Mr. Walter Daudrich:** It would, over a period of a few years, kill the industry.

**Mr. Robert Sopuck:** So the main economic lifeline for Churchill would be extinguished if these regulations are fully implemented, and I appreciate—

**Mr. Walter Daudrich:** That's correct.

**Mr. Robert Sopuck:** —that witness saying that one size does not fit all, because Churchill is a completely unique situation.

How have your interactions been with DFO regarding this?

**Mr. Walter Daudrich:** In the last page of my submission, I mentioned we've written about seven or eight letters, starting initially with Mr. LeBlanc, the first minister, and then later on with the parliamentary secretary, as well as now the new minister for DFO.

From the first minister, we had no response. From the parliamentary secretary, we had no response. Finally, now, within the last couple of months, we did receive one response from the new minister, Jonathan Wilkinson.

**Mr. Robert Sopuck:** I recall when I was there, a DFO official called up immediately because we generated a lot of press over this. A DFO official called you and said that she was going to come up to meet with you, and we both thought that that was a good idea.

Did that meeting ever take place?

• (1715)

**Mr. Walter Daudrich:** No, and subsequent to that, I attempted to contact that person, and there has been no effort to contact me with regard to that.

**Mr. Robert Sopuck:** I think it's important for the committee to know how DFO behaves in situations like this. I find it utterly appalling that a staff person, a highly paid staff person in Winnipeg, promises to come up to visit this community, whose whole lifeline is based on the whale-watching industry, and she refuses, she then does not come up, and DFO Freshwater Institute has not contacted these people at all. I find it appalling and I want to make sure that is in the record.

When you asked them—when you finally got hold of them in some way, shape or form—how they intended to implement these regulations, what was their response to you in terms of how they see these things being rolled out?

**Mr. Walter Daudrich:** Much of the response that I received actually was through the media, one from Adam Burns, who said that they would be enforcing the regulations, and there were other responses, namely one from one of our senators in Manitoba, who said, “Why don't you just tell the enforcement officers that you're going to the other side of the river?” That was the answer that was given to me.

**Mr. Robert Sopuck:** So DFO gave you no guidance whatsoever in terms of how these regulations could be implemented in Churchill?

**Mr. Walter Daudrich:** Again, subsequent to the media finding that I had, I did contact Mr. Adam Burns. He said to let the courts settle it out.

**Mr. Robert Sopuck:** Well, again, I find it just absolutely appalling that they would say to let the courts sort it out.

I think I've used up most of my time, Mr. Chair, but in terms of Churchill itself, it is such a unique situation. There is no situation like it in Canada. I like the phrase said by the witnesses: one size does not fit all. It's quite clear that Churchill needs a complete exemption from these onerous marine mammal regulations that will do no good, only harm.

Thank you.

**The Chair:** Thank you, Mr. Sopuck.

I will note that the bells are ringing. I'll need consent to continue until 5:30, if we can.

Is everybody in agreement? Okay.

Mr. Donnelly, for seven minutes or less.

**Mr. Fin Donnelly:** Thank you, Mr. Chair, and thank you, witnesses, for coming today and providing your testimony on this important subject of studying the whales. We appreciate it.

The scientists have told us that essentially the three main issues are noise, pollution and prey, or food.

I'll start with you, Monsieur Buy. You mentioned that your association members have been proactive and you talked about the education program, so this is a one-two question. Have you noticed, say, an annual ship strike reduction? Also, what are the results of that education program? Could you talk a bit about how implementing the program went? Were there difficult elements of it? Did it go well? What were the good things?

**Mr. Serge Buy:** I think the ship strikes were an issue for the right whales in Atlantic Canada, and on the west coast we're talking about noise reduction. I'll talk about Atlantic Canada.

I think Mr. Doherty asked whether or not ferries were responsible for ship strikes. The fact of the matter is that we have had no ship strikes on ferries in Atlantic Canada that were ever reported to me or to the government or through any of our operators. Indeed, we have an operator, CTMA, that provides services to P.E.I., as an example, and in 75 years of operation from the Magdalen Islands, they have had no ship strikes. We're really proud of that. The work done by our members has ensured that we avoid any ship strikes and we mitigate any impact.

Our members have implemented programs. Those are voluntary programs. I do want to stress that. Those programs have been implemented with the full participation and full happiness of our members, because they want to be part of an effort to save the whales. There have been no issues. The staff has been great to deal with, and there has been support. There has been support even from Transport Canada on some of the things and from Fisheries and Oceans.

We've just heard about the issues at DFO from Mr. Sopuck. I can tell you about the opposite experience at Transport Canada. Michelle Sanders, who heads the program for us, has been wonderfully responsive on the issues and very good. We've had no issues on that.

**Mr. Fin Donnelly:** Madam Simard, you mentioned technology and how you're using it to identify whales and avoid whales, and then also there's the importance of mitigation for noise. Could you elaborate a little on how the industry and the association are working on that?

• (1720)

**Ms. Sonia Simard:** At this moment, mostly in the Atlantic, on the issue of how we implemented the dynamic management, it's done through aerial surveillance. We have the planes from DFO and Transport Canada. We're overseeing the area. It's indeed one way to locate those whales, but there are always limitations to each of those technologies, and for aerial surveillance they are weather conditions and daylight.

What we're looking to do is to complete the aerial surveillance with the acoustic surveillance. What is very good is that in Canada we have led technology development in this area with the underwater drones that have hydrophones. They are going out and they detect. They're very efficient in their detection. There are also tests with the bottom-mounted hydrophones, real-time hydrophones.

In short, if you combine real-time acoustics with aerial surveillance, you have much greater confidence in presence and absence, so you support efficient navigation and you protect the whales.

**Mr. Fin Donnelly:** In the remaining few minutes, Ms. Brown, perhaps you could talk a little bit more about the ECHO program. What are the successes or the things that you would say are the most beneficial results you've had out of the program, from the port's perspective, on reducing impact to southern resident killer whales?

**Ms. Carrie Brown:** I think one of the key benefits is bringing together all of the regional players to work on this issue collaboratively, looking at the ECHO program approaches and the key issues with a combination of approaches, including through education. We developed a mariner's guide and we're working on a "whales in our water" tutorial. We introduced incentives in 2017. We're incentivizing quiet technologies and quiet ship design.

We are also undertaking a number of research projects. We've undertaken over 17 research projects that have in turn helped us to inform trials and mitigation solutions. We're continuing to do those research studies. More is coming over the next little while to better understand what are some of the technologies and what are some of the features of a vessel that contribute the most to underwater noise. For us, I think a key success has been industry's interest in advancing the slowdown trial we undertook last year, the implementation of a slowdown in Haro Strait again in the summer of 2018, and the lateral displacement that's about to wrap up in the Strait of Juan de Fuca.

In short, we've had many successes. We approach it from a number of different angles using incentives, education, research and mitigation solutions in a collaborative forum. Really, the strength of the program is the collaboration of its many diverse interests in the region.

**Mr. Fin Donnelly:** When you identify a problem with noise, when you're talking ship design, how long does it take from the identification of a solution to actual implementation? I would imagine it takes a while.

**Ms. Carrie Brown:** It does. Probably Sonia and Serge are in a better position to answer when it comes to the life cycle of a vessel, but it's in the order of decades to replace a fleet.

**Mr. Serge Buy:** If I may, it is indeed decades. I would agree with that. Our problem here is that there are potential solutions, but we

have a fleet that's aging. When we build a ship, it's for decades. Right now we have some members who are wanting to refit their fleet and make changes, including finding propellers that produce less sound. They can't do that in Canada due to various issues—shipyards are too busy and so on—but the Canadian government, which would want to support this type of change, is charging 25% duties if we come back with a ship that's been refit. We're finding counterproductive measures in this case.

You know, I've often heard committee members ask us questions about what we're doing. Personally, I'd like to talk about what the Canadian government could be doing to support some of those issues. That certainly would be one.

• (1725)

**The Chair:** Thank you.

We'll go back to the government side for questions.

Mr. Hardie.

**Mr. Ken Hardie:** I'll let Ms. Ludwig have my first question so that she can finish what she was after.

**Ms. Karen Ludwig:** Thank you.

Many of our witnesses have spoken regarding data collection and its importance in terms of how that feeds into policy when one size does not fit all. Can each of you tell me how you're sharing your data, who you share that with, and if that's being recognized?

**Mr. Serge Buy:** A lot of our members on the west coast are members of the ECHO program, and the Port of Vancouver is doing a great job on that. I'm happy to see Carrie here and talking about that.

On the east coast, our members are sharing information with either DFO or the scientific community. They have done so for decades.

**Ms. Karen Ludwig:** Mr. Daudrich, you talked about a very unique situation in northern Manitoba. Do you share that data as you're collecting it or is it formally collected?

**Mr. Walter Daudrich:** We have worked with Oceans North, which is an organization partly funded by the Pew foundation and the federal government. We also share with the Vancouver Aquarium. They have an acoustics specialist.

**Ms. Karen Ludwig:** Thank you.

**Ms. Sonia Simard:** It's the same thing, I would say, for both the domestic.... I'll speak a little bit for them.

Aside from the ferries, there are also the cargo domestic vessels and the international domestic vessels. On the west coast, there is a program for training marine observers on board those vessels. They report their sightings in the same manner, as is the same with any international vessels coming into the waters having information to report.

My last point is that some of our members from the international fleet are doing studies to compare the noise footprints within their fleets. That is also being shared with Transport, to feed their knowledge gap.

**Ms. Karen Ludwig:** Thank you.

**The Chair:** Thank you very much.

**Mr. Ken Hardie:** I'll take it back now.

Thank you Mr. Chair.

Ms. Brown, we sit on this committee, and quite often we hear comments like, "Well, we shouldn't do anything until we know for sure what's going on." There's something compelling about that, except we never know for sure what's going on. That's sometimes code—I'm not saying in this case—for "Don't tag me with something that I'd rather dodge, because it's in my self-interest not to see something else happen."

So, if you don't want nasty government regulations coming in and messing things up, how will you apply the precautionary principle—which is what you should do when you don't know everything—to make the situation better on the west coast?

We know that the orcas use noise to find their prey, especially in the dark and murky water. You guys make noise, so what are you going to do about it? How will you apply the precautionary principle to forestall government regulations which may be far from perfect?

**Ms. Carrie Brown:** Thanks for the question.

Early on, when we first initiated this program, we met with industry and agreed that the science wasn't there. We identified a number of key questions that we had to work through to get ourselves informed.

The science—you're right—is not perfect. It's not exact. In the absence of having all of the answers, we have been implementing a slowdown in Haro Strait. Industry sought to lead that initiative again in the summer of 2018. That's wrapping up as of tomorrow.

We know that is reducing underwater noise. Slowing vessels down in Haro Strait has resulted in a quieter ocean in that area.

In the absence of having all of the answers, we are taking a precautionary approach and implementing mitigation through slow-downs as well as a lateral displacement.

There are actions that are ongoing.

**Mr. Ken Hardie:** With regard to your partnership in coming up with these precautionary moves, does that include indigenous people and fishers—people with local knowledge?

**Ms. Carrie Brown:** Our advisory working group is a multi-stakeholder group. It includes indigenous individuals, conservation and environmental groups, and I mentioned scientists, the shipping industry. There are different government agencies involved on both the Canadian side and the U.S. side. We recognize that it's an international regional issue.

● (1730)

**Mr. Ken Hardie:** Great. Thank you.

**Ms. Carrie Brown:** Thank you.

**The Chair:** That pretty well ends our time.

I want to thank the witnesses who are both here in person and by video conference for your input today. If you think there was anything missed or not caught in your testimony, by all means please make sure to submit it in writing so we can include it.

Again, thank you very much.

We're off to a vote.

**Mr. Fin Donnelly:** Mr. Chair, just before we break, are we going to go off to a vote and then come back?

**The Chair:** We're done.

**Mr. Fin Donnelly:** That's it.

Thank you.

**The Chair:** The meeting is adjourned.

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