



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

44th PARLIAMENT, 1st SESSION

Standing Committee on Fisheries and Oceans

EVIDENCE

NUMBER 099

Thursday, February 15, 2024

Chair: Mr. Ken McDonald



Standing Committee on Fisheries and Oceans

Thursday, February 15, 2024

• (1530)

[English]

The Chair (Mr. Ken McDonald (Avalon, Lib.)): I now call this meeting to order. Welcome to meeting 99 of the House of Commons Standing Committee on Fisheries and Oceans. This meeting is taking place in a hybrid format, pursuant to the Standing Orders.

Before we proceed, I would like to make a few comments for the benefit of witnesses and members. Please wait until I recognize you by name before speaking. For those participating by video conference, click on the microphone icon to activate your mic, and please mute yourself when you are not speaking.

For interpretation, for those on Zoom you have the choice, at the bottom of your screen, of floor audio, English or French; for those in the room, you can use the earpiece and select the desired channel.

As always, please remember to address all comments through the chair.

Before we proceed, I again want to remind members and guests to be very careful when handling the earpieces, especially when your microphone or your neighbour's microphone is turned on. Earpieces placed too close to a microphone are one of the most common causes of sound feedback, which is extremely harmful to interpreters and causes serious injuries.

Pursuant to Standing Order 108(2) and the motion adopted on June 16, 2022, the committee is commencing its study of the population sustainability of Yukon salmon stocks.

Welcome, everyone. On our first panel, on Zoom, from Little Salmon Carmacks First Nation we have Chief Nicole Tom, and from the Pacific Salmon Foundation we have Stephanie Peacock, senior analyst. In person, from Kwanlin Dün First Nation, we have Brandy Mayes, manager of operations, fish and wildlife, heritage, lands and resources. Thank you for taking the time to appear today. You will each have up to five minutes for your opening statement.

I'll go to Mr. Arnold, who has his hand up.

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

I would just ask that we carve out a few minutes towards the end of this meeting to discuss some future committee work, keeping in mind that we could potentially be interrupted by the bells and a vote.

The Chair: Well, if everybody sticks to the time, we'll get through our panels, and if there are 10 minutes or so left over at the end, we'll go back to you, Mr. Arnold.

Mr. Mel Arnold: Thank you.

The Chair: I now give the floor to Brandy Mayes for five minutes or less, please—

[Translation]

Mrs. Caroline Desbiens (Beauport—Côte-de-Beaupré—Île d'Orléans—Charlevoix, BQ): Mr. Chair, excuse me, you didn't see my hand.

[English]

The Chair: Go ahead, Madame Desbiens.

[Translation]

Mrs. Caroline Desbiens: I was signalling, but you didn't see me.

[English]

The Chair: No, I didn't.

[Translation]

Mrs. Caroline Desbiens: I, too, would like to discuss last week's notice of motion. We've already agreed on certain points, so I think we can do it quickly. We can also take a few minutes later, but before would be better.

[English]

The Chair: We'll deal with both issues at the end.

[Translation]

Mrs. Caroline Desbiens: Okay.

[English]

The Chair: Ms. Mayes, I go over to you.

Ms. Brandy Mayes (Manager, Operations & Fish and Wildlife I Heritage, Lands and Resources, Kwanlin Dün First Nation): [Witness spoke in indigenous language]

[English]

It is good to see you.

I would like to begin by acknowledging that the land on which we gather is the traditional unceded and unsurrendered territory of the Algonquin Anishinabe people.

Thank you to the committee for this opportunity to speak on behalf of Yukon River chinook and my people.

My name is Brandy Mayes, I am a proud descendant of the Tagish Kwan people, the original people of Kwanlin Dün First Nation and Whitehorse, Yukon. I belong to the Dakhl'aweidí clan, the Killer Whale and Wolf clan crest. The clan crest assures me I am part of the land and part of the water. As a beneficiary of Kwanlin Dün First Nation, my culture is who I am and where I come from. My family has lived at the headwaters of the Yukon River, Chu Níikwän as we call it, and Marsh Lake for generations.

Today, I am here in my role as manager of operations and fish and wildlife for Kwanlin Dün First Nation. I am also a land steward officer for my first nation. Additionally, I am the Canadian co-chair for the newly formed Yukon River Panel's traditional knowledge committee and first nations adviser to the Yukon River Panel. I have been involved in fish and wildlife management for over a decade, with a focus on indigenous knowledge, ethical harvesting and land stewardship.

The waterway now called Miles Canyon through to the Whitehorse Rapids was well known to generations of first nations people. Our ancestors called this area Kwanlin, which means "running water through canyon" in Southern Tutchone. Not only was this section of the river an excellent area for fishing, but well-worn trails on the banks of the canyon tell of centuries of people travelling overland in search of game. The banks of their river were lined with fish camps, lookout points, hunting grounds, burial sites and meeting places. Our values, language and traditions are rooted in this land. The headwaters of the Yukon River were home to the Tagish Kwan and a regular meeting place for people in other first nations to come to trade and fish.

Life changed forever at the turn of the century with the building of the city of Whitehorse. Our people have a long history and have always had a relationship with salmon. Unfortunately, Yukon River chinook salmon in Kwanlin Dün First Nation traditional territory have been depleted to a point that our citizens have voluntarily reduced or completely withdrawn from harvesting salmon.

This is one of the longest salmon migrations in the world. The impacts to our culture, our people's health, food security and the ecosystem, and thereby bears, eagles and others that depend on these returns, are devastating. Pressures such as overfishing, ocean commercial fishing, bycatch, climate change, predation and other ecological factors have taken a toll on the chinook returns.

The 1958 completion of the Whitehorse Rapids dam flooded our traditional fishing locations and put the productive culturally important Michie Creek and M'Clintock River stocks in an uncertain situation.

The water use licence for the Whitehorse dam will expire in 2025. KDFN is involved in the process and engaging our community. We are working to ensure that KDFN interests are represented and prioritized throughout the dam relicensing process. This includes the preservation or enhancement of KDFN environmental, cultural and heritage values in the Southern Lakes region, as well as the health and well-being of the KDFN community.

In 2023, the Whitehorse fish ladder saw the lowest count in history, with only 54 chinook passing through the ladder. The Takhini

River, a tributary to the main stem Yukon River, counted just over 350. Those are nowhere near historical numbers.

The collapse of the salmon population is one of the greatest challenges this region faces. We know the Yukon River Panel and governments of the U.S. and Canada have a role in managing the treaty obligation, but the current management model isn't working. Chinook have been managed to near extinction.

The Alaskan ocean bycatch in the trawl fishery is impacting and intercepting vital Yukon River salmon, not to mention the impacts on the ocean habitat and ecosystem. Mass amounts of pink and chum hatchery salmon being put into the system are competing with the chinook salmon food source.

Our late Elder Louis Smith said, "You must save the salmon. If it wasn't for salmon there would not be one Indian left in the Yukon. We would have all starved. Now it is our turn to save them."

What are we going to do as a nation, Canada, to save the salmon? As a country, how do we rebuild these life-giving salmon, when they are facing so many barriers? To rebuild a population that has been depleted to the point of near extinction is going to take every resource we have. It's going to take every effort we have.

● (1535)

This includes all levels of government on both sides of the border. Stopping fishing is not enough.

Canada needs to dig deep into the impacts of the Whitehorse generating station and its impacts on salmon, freshwater fish, animals and habitat.

Canada needs to fulfill its treaty obligation to the Kwanlin Dün First Nation Final Agreement under chapter 16.3.2.2, the Whitehorse fishway redevelopment project.

Canada needs to continue to provide capacity, money and resources to the Yukon River salmon rebuilding strategy and continue to support Kwanlin Dün on the feasibility and development of a salmon stewardship centre. That will support all Yukon first nations in their rebuilding and restoration efforts as a gathering and teaching place, a restoration and research hub, and a centre for chinook restoration.

Canada needs to work with Yukon first nations and their governments to support cultural inclusion in the rebuilding strategy and to have equal inclusion of both traditional knowledge and science in all decision-making.

This rebuilding plan has to include all levels of government, both international and domestic, and the people who reside along the river and its tributaries. The salmon need this. It is not just science that has a role in how to recover these stocks. We need to recognize the people who have relied on the salmon since time immemorial, the people who have protected and who have had a relationship with our precious relatives for thousands and thousands of years.

We need a commitment to ensure that our Yukon first nation citizens and governments are engaged in a holistic and meaningful way. We need to collaborate and work together in honesty and respect. We need to recognize different government processes while keeping momentum alive and striving towards consensus in decision-making.

We need to uphold our shared commitments to the vital habitats of the Southern Lakes region and to our salmon. As Elder Louis Smith said, we must save the salmon. Salmon can be resilient if we give them safe passage, clean water, a healthy habitat and a safe environment.

Let's do this together, Canada. We need a wild river with wild salmon. These things bring purpose. It is our responsibility as governments, as first nations, as Canadians—as humans.

When we take care of the river—

- (1540)

The Chair: Ms. Mayes, I have to cut you off there. It's gone way over the five-minute limit. Hopefully, anything you didn't get to say will come out in questioning.

We'll now go to Chief Nicole Tom from Little Salmon Carmacks First Nation for five minutes or less, please.

Chief Nicole Tom (Little Salmon Carmacks First Nation):
[*Witness spoke in Northern Tutchone*]

[*English*]

I would like to acknowledge the attendants in the room who have gathered here to pay respects to the Yukon River and the efforts to call the salmon back.

As a Northern Tutchone mother from the Little Salmon Carmacks First Nation, respect for the salmon has been ingrained in my DNA since time immemorial. As a child, fish camp was the most significant cultural bond and identity that was transferred every year. Our family would gather elders, children, youth, mothers, fathers, aunties and uncles, and our family bonds were solidified. Language, traditional laws, cultural values and oral stories were transferred from one generation to the next. This was the centre of the Northern Tutchone identity, tied to our keystone species, the chinook salmon, and our keystone place, the Yukon River.

There is a physical, mental, emotional and spiritual connection to a fish camp. The whole process from beginning to end is hard work. Physically, you are actively engaged with the water, setting net and carrying out various duties to run the fish camp. Mentally, you have time to reflect and concentrate on your well-being. You must be sober and in good mental health so as to not pass on any negativity to the salmon preparation for your family. Emotionally, your cup is full of laughter, wisdom, joy and love shared with the

environment, salmon and family. Spiritually, you are paying respects to the original agreements with the salmon by following your traditional laws and values.

I quote from our history with regard to coexistence with other animals: Traditional law, or “dooli”, is the most sincere expression of respect that humans can offer. But what is respect? Consider the contrasting viewpoints of the Northern Tutchone and modern science. Whereas science views salmon as a simpler life form operating on basic instincts, much as a complicated little machine would do, Northern Tutchone consider salmon to be a distinct culture, a culture whose fortunes have been intertwined with the Northern Tutchone for countless ages in an intricate relationship that has not always been smooth. Crow, for instance, caught no salmon because he created a permanent barrier/trap across the river. He had to learn the lesson. And the salmon people were offended by their treatment by humans, so they took the little boy to the ocean to teach proper respect.

This, then, is how the Northern Tutchone view salmon, not as primitive animals that are almost oblivious of humans, but as equals, as intelligent beings that are fully aware of their surroundings and what is happening to them, as persons who deserve the same respect as the Northern Tutchone would receive if that person were to give up their life for the survival of another.

Thus, it deeply pains us to witness any instances of disrespect to the good salmon, on whom we rely every year for our health and well-being. We fear that their role in the rhythms of nature is being abused and that the entire ecosystem is in jeopardy. By bringing back traditional knowledge, we are striving to redress this imbalance, as we have done in the past, but we are no longer alone in this responsibility, and we desire that other cultures respect our concerns and work with us to achieve a more harmonious relationship with the salmon and all life.

I was recently told a traditional knowledge story that came from the Alaska territory. Elders knew that there would be plenty of salmon when there were plenty of monarch butterflies. This traditional knowledge was new to me and was never taught by my people. In curiosity, I researched the monarch butterfly and found that it became endangered in 2016. Soon after, our salmon declined drastically, so, you see, the knowledge held within the peoples of the land is of value and can help restore the policies that are to the detriment of the ecosystem.

The Yukon first nations would like to bring attention to the devastation that we are feeling in our hearts due to the decline of the Yukon River salmon. We ask that all parties engage in the habitat protection and attention to resources and capacity that are needed in order for Yukon to proceed in this endeavour. We can no longer argue or dispute the reason.

We must now work in unity before the salmon becomes extinct. This tragedy is a direct threat to our inherent rights to harvesting. This alone makes the Northern Tutchone people question what has happened to make it so. The mismanagement of the international fisheries is an infringement on our treaty. Our forefathers sacrificed lands for the right to feed their families with healthy homeland foods. The treaty must be honoured. Traditional knowledge tells us, “Don’t drag nets. Don’t mess with fish.”

• (1545)

These ancient laws have long been broken. We hold a responsibility to protect the rights to clean water and sustenance for future generations. We ask that Canada and the United States champion this initiative and that true reconciliation take place.

Mahsi cho for all your time.

The Chair: Thank you.

We’ll now go to Stephanie Peacock, senior analyst with the Pacific Salmon Foundation.

You have five minutes or less, please.

Dr. Stephanie Peacock (Senior Analyst, Pacific Salmon Foundation): Thank you.

My name is Stephanie Peacock. I’m a senior analyst with the Pacific Salmon Foundation. I am based in Whitehorse, Yukon, and I am joining you today from the traditional territories of the Kwanlin Dün First Nation and the Ta’an Kwäch’an Council.

The Pacific Salmon Foundation is a non-governmental organization dedicated to the stewardship and conservation of Pacific salmon in B.C. and the Yukon. We invest in community-driven initiatives and lead science programs that help inform salmon conservation and management efforts.

My area of expertise is in salmon population ecology. My work centres around compiling and analyzing salmon-related data to understand the status of salmon in B.C. and the Yukon. Through that work, I have gained familiarity with the status and trends of Canadian-origin Yukon chinook salmon—not just a uniform group of fish but one comprised of 12 genetically and ecologically distinct populations called “conservation units”.

Each of these conservation units has a unique evolutionary history and is an irreplaceable unit of biodiversity. Conserving this diversity within Yukon chinook is essential for resilience in the face of climate change. A recent study found that Yukon chinook return migrations to Canada were 2.1 times longer and 1.4 times more stable through time than they would have been if there was just a single homogeneous population.

Unfortunately, the reality is that we have very little information on how most salmon conservation units are doing. The publicly available data on Yukon salmon is focused on border passage. There is not a single estimate in DFO’s publicly available spawner database for any chinook spawning in the Yukon since 2008. We need to improve monitoring and data availability at the scale of conservation units to be able to identify when and where actions are required to avoid local extinctions and loss of biodiversity. From

the limited data that we do have, the recent declines in Yukon chinook seem to be reflected across conservation units.

Why are these salmon disappearing? There’s no single cause. The likely suspects are the usual—decades of habitat degradation and loss. In the Yukon this is mainly due to mining and hydroelectric dams, commercial fishing and climate change. However, there are a couple of things that make Yukon chinook unique. Canadian Yukon chinook are the longest-migrating salmon in the world, and this increases their exposure to threats in fresh water. In particular, with climate change we are seeing unprecedented increases in river temperatures, which has correlated with reduced productivity of Yukon chinook over the past 28 years. This does not bode well, given the predicted impacts of climate change. Strategies to mitigate rising river temperatures and their impacts on salmon, such as the protection of undeveloped watersheds and wetlands, need to be prioritized.

Yukon chinook are bilaterally managed under the Yukon River Salmon Agreement of 2001, which recognizes that effective conservation and management are of mutual interest. However, harvest remains a primary focus of management, even as allowable catches have declined to zero. Further, the Yukon River Panel has failed to agree on management recommendations in recent years. In the face of unprecedented declines, we need to re-examine this agreement and sharpen the focus on biodiversity conservation and rebuilding.

The complexity of the life-cycle and management systems for Yukon chinook necessitates a multipronged approach to recovery. Management discussions must shift from border passage to preserving the biodiversity within Canadian-origin Yukon chinook. Canada can lead this discussion by supporting the monitoring and assessment of conservation units and improving access to data. There needs to be pressure on the U.S. to prioritize effective salmon conservation, as outlined in the Yukon River Salmon Agreement, and reduce any illegal fishing or incidental mortality of chinook.

Although research into the drivers of these declines must continue, we cannot wait for evidence to accumulate before taking actions to prevent the extinction of Yukon chinook.

Thank you.

• (1550)

The Chair: Thank you for that.

We’ll now go to our rounds of questioning.

To start off, we’ll have Mr. Arnold for six minutes or less, please.

Mr. Mel Arnold: Thank you, Mr. Chair.

I thank all three witnesses for their interesting information today.

Ms. Peacock, I'd like to start off with you, please. Can you tell the committee what type of chinook salmon inhabits the Yukon, Alsek and Porcupine rivers? Are these river-type chinook or ocean-type chinook? Do they spend time rearing in the river environment, or are they quick in migrating out to sea?

Dr. Stephanie Peacock: They are river-type chinook. As I said, because of their long migrations—these fish migrate over 2,000 kilometres upstream—they do spend time in fresh water rearing as juveniles before making it to the ocean, so they're considered 1+ or river-type chinook. Where they rear is variable, and because of the length of the Yukon River, it's not easy to pinpoint important rearing habitats for these salmon. They have a lot of area that they can use within the main stem of the Yukon.

Mr. Mel Arnold: Are there what are often referred to as S0s, S1s, S2s, mixed stocks in those rivers, or are they all, basically, I believe they would be called S1s or S2s, or river-type fish?

Dr. Stephanie Peacock: I believe it's the latter. I don't know whether it is the case in the lower portions of the Yukon, but for Canadian origin salmon, yes, it's rearing 1+ majority.

Mr. Mel Arnold: Is it known where these stocks migrate to when they hit the open ocean?

Dr. Stephanie Peacock: There is a fairly good juvenile chinook sampling program run by the Alaska Department of Fish and Game. I'm not intimately familiar with the details of that sampling program, but I know that they have found increased mortality at the juvenile marine stages in recent years as well, so that's certainly being looked at as a contributing factor to these declines.

Mr. Mel Arnold: I'll turn now to Ms. Mayes.

What do you see as the biggest risk to the health of the Yukon salmon?

Ms. Brandy Mayes: I don't see one biggest risk. I see multiple risks.

Of course, we're facing climate change, and with the warming waters and the distance, the size of the fish that are coming back are not the same as they used to be, therefore they are not producing the number of eggs that they have, historically. We are in the process of needing more fish to get to the spawning grounds.

Another one that I really feel we need to address is the number of hatchery fish from pink and chum that are being released into the Bering Sea and the ocean. The trawlers are a huge component of that.

Then, of course, on the Canadian side they are facing—because it's the longest migration—the barrier of the Whitehorse Rapids generating station or hydro plant, which has an inefficient ladder. They're also facing juvenile mortality on the out-migration.

There's not just one. There are multiple. I'm sorry that I couldn't give you one.

Mr. Mel Arnold: That's very interesting, because you led into what was going to be one of my next questions for some of you, as to what condition these fish are in when they do return to spawn. You just said they're smaller. Do you believe that's an indication that they have less food available, or is it something that's happened

through the genetics of the larger fish being harvested through various means and affecting the gene pool?

• (1555)

Ms. Brandy Mayes: There have been some studies on that and the size of the fish. The large ones, back when there was fishing, were the ones that were taken.

I go back to the traditional knowledge side of it. The indigenous tribes along the Alaska side of the Yukon River would say that they knew exactly when they had Canadian-origin fish because of the size of the fish. They said they were oilier, heavier and relatively larger in size, and they were harvested first. The genetics, of course, are impacted by that. Over the years, what we're getting through is more of a torpedo-shaped salmon now and of course that means we need more of them on the spawning grounds in order to get their numbers back up.

Mr. Mel Arnold: Chief Tom, can I ask you to basically answer the same question? In what condition are the fish that you're seeing returning in your area, and why do you think that might be?

Chief Nicole Tom: There are many reports of the fish looking different, as we've heard. They're smaller and have more scars and softer meat, and there's just an all around difference. When we get them to prepare them, we will hear the grandmas say, "The fish looks different."

As we heard, there are many different factors playing into this. We know that the environment in which they need to survive is suffering somehow, and this is an indication of what is happening. To pinpoint it, we really don't know.

The Chair: Thank you, Mr. Arnold.

We now go to Mr. Hanley for six minutes or less, please.

Mr. Brendan Hanley (Yukon, Lib.): Thank you very much, and thanks to the three of you for being here.

I also thank all the committee members who have supported making this study finally happen. I'm thrilled that we're able to have this discussion on such a critical issue, and I hope that, over the next few meetings with witnesses, all of us will not only understand why this is a critical issue, not just for Yukon but for North America, but also reflect on the concrete steps that can be taken to address this situation.

Chief Tom, to start with you, in your opening comments you described yourself as a mother. I know you have a family, of whom you're very proud, and you have a community right in the middle of Yukon—the hub of the Yukon, as they say—Carmacks, Yukon, in a very beautiful location. However, I wonder if you can describe the impact on your community and family from the state of chinook salmon, including the fish camps and the tradition around the fish camps.

Chief Nicole Tom: Our families and our community are in what I call a collective trauma state. It's a heart wound. It's a soul wound. It's affecting everything that we are. We are Little Salmon Carmacks people. Without salmon, where are we going to go? We've been infiltrated by the gold rush and residential schools, and we have a lot of things that have already been taken from us and lost. At this point, the culture, which is the epitome of our whole nation, is also being lost, and that's the salmon.

There are so many things that play into the fish camp, and at this point our fish camps are left empty—and you can see it all down the Yukon River. This has been happening for very many years, and it's absolutely devastating to our people. Our children, at Christmastime, made a Santa Claus, and they were asked to ask Santa what they would like. In that Santa Claus's arms was a huge Chinook salmon, so all of those children are so feeling that devastation that they wrote Santa and asked for the salmon to come back. Our elders, who are used to the vitamin D and all these wonderful omegas that come from it, they're feeling it in their bones. They just want to have the salmon so badly. Everybody is trying to respect that we can't do this right now, and we're taught to leave it alone. It's "dooli" for us, so it's heartbreaking to see our community and our people in such a devastating loss.

• (1600)

Mr. Brendan Hanley: Chief Tom, as a follow-up question, you described that in a heart-rending way, but why should this be an important issue for Canadians to know about and to reflect upon? Why is this important for Canada, not just your community or Yukon?

Chief Nicole Tom: We're all Canadians. We all love our home on native lands. We are the true north, strong and free. We love hiking, biking, canoeing, skidooning and skating. We love our environment. It's what makes us Canadians. We love the majestic mountains. We love the clear waters.

Currently Little Salmon Carmacks First Nation has an urgent matter in our backyard. We have an old abandoned mine, the BYG mine, and there's a threat that it could be leaking or bursting with freshet. There are so many horrible and deadly contaminants in there that would go into Dome Creek, the White River and the Yukon River, the very ecosystem that is already suffering in terms of the salmon. These issues are huge. It's ecocide. This is the death of an environment. The salmon are only giving us an indication and a message for all of our environment that we love as Canadians, and that is why it is important. These things are happening to us right now. We need to listen to the messages.

Mr. Brendan Hanley: Thank you so much.

I have a little bit of time left, so, Brandy, I wonder if you'd be able to describe some of the key activities that Kwanlin Dün First Nation is undertaking when you're looking at salmon restoration?

Ms. Brandy Mayes: Kwanlin Dün has taken on a number of initiatives over the years. DFO doesn't have part of Stephanie's recollection in its files, but Kwanlin Dün has a Michie Creek salmon monitoring restoration project that we've had for over 24 years. That has been one of the longest runs in the world where the salmon go to spawn. That is one where we've been doing the restoration project. We keep that creek open. We've been moving

barriers. We count the redds. We do water temperature quality, water quality. We do a number of initiatives on that one. We've been doing that for a while.

We also have the Takhini River sonar project, which is where we're looking at what the numbers are coming to. The Takhini is a tributary to the Yukon River and is a big salmon river. It's very important to us to look at what kinds of numbers are coming back up there, so we can look at restoration efforts in that system.

Besides all the other formal—

Mr. Brendan Hanley: I'll probably have to get you to continue in the next round.

Ms. Brandy Mayes: Okay, yes, and then there are chinooks.

Mr. Brendan Hanley: If we don't get time, you could submit that in writing.

Ms. Brandy Mayes: Okay.

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

[Translation]

Mrs. Caroline Desbiens: Thank you, Mr. Chair.

With all due respect for the issue we're studying today, I have to use my speaking time to discuss my motion. It's an urgent matter, so I have to spend my six minutes on it.

I also have an announcement. Today, the National Assembly of Quebec unanimously adopted a motion to inform the federal government that it is concerned about quota allocations being too low, about the possible disappearance of the shrimp fishery, and about the dangers to which shrimp fishers in our part of Quebec are exposed.

As I said, this motion was passed unanimously just a few hours ago. I would like us to discuss the importance of undertaking two studies on how DFO approaches this and the criteria it uses to make decisions about the lives and livelihoods of shrimp fishers in Quebec, decisions that affect every one of their communities.

• (1605)

[English]

The Chair: Can we deal with that at the end? We have a couple of motions. You have four minutes.

[Translation]

Mrs. Caroline Desbiens: I think we can do that. This is my speaking time, and I can use it for this.

[English]

The Chair: Yes.

[Translation]

Mrs. Caroline Desbiens: I think it'll be quick.

May I read my motion?

[English]

The Chair: Okay.

[Translation]

Mrs. Caroline Desbiens: Given the significant decline in shrimp biomass, the low redfish allocation for shrimp harvesters, the possible disappearance of the shrimp industry and the impact on fishers, crew and processing plant owners and employees, as well as coastal communities and businesses; and, given the urgency, I move:

That, in accordance with Standing Order 108(2), the committee undertake a study of the scales used by the Department of Fisheries and Oceans (DFO) to set redfish quotas, in particular those announced by the Minister on January 26, 2024, in order to assess the extent of their effects on the shrimp fishing industry; that the committee allocate at least two meetings to conduct this study; that the February 27 meeting be allocated to hear from the Minister and senior DFO officials so they can answer the committee's questions for two hours, and that the February 29 meeting be allocated to hear from any witnesses the committee deems necessary; and that the committee report its findings and recommendations to the House.

[English]

The Chair: Mr. Cormier has his hand up.

[Translation]

Mr. Serge Cormier (Acadie—Bathurst, Lib.): Yes, Mr. Chair.

I'd like to propose a minor amendment to this motion. I can read it, and then I can send it to the committee.

The end of Ms. Desbiens' motion reads "that the committee report its findings and recommendations to the House."

That would be replaced by "that the committee draft a letter at the end of the study with its recommendations to the Minister for a plan to assist the shrimp industry."

[English]

At the end, then, instead of what I just read, it will be, "That the committee draft a letter at the end of the study with its recommendation to the minister for a plan to assist the shrimp industry."

I'm going to send it to the clerk right now.

The Chair: Is there any other discussion?

Mr. Mel Arnold: Can we just suspend for a couple of minutes?

The Chair: Okay, we'll suspend for a couple of minutes.

• (1605) _____ (Pause) _____

• (1610)

The Chair: First off, does everybody have a copy of the amendment by Mr. Cormier?

Is there any discussion?

Not hearing any discussion, we'll vote on the amendment, or is everybody fine with it?

Mr. Mel Arnold: We have no opposition to the amendment.

The Chair: Okay, so there is no opposition from you guys and nothing from our side.

Madame Desbiens, you are okay with the addition, with the amendment, are you?

[Translation]

Mrs. Caroline Desbiens: Given the urgency of the situation, I think the letter may be the best way to get back to the fishers quickly.

(Amendment agreed to)

[English]

The Chair: All right, now we'll go to the motion as amended.

Mr. Serge Cormier: Mr. Chair, I just want to clarify one thing, just to make sure that the clerk understands: It was the removal of the report by...?

Okay, that's perfect.

The Chair: Mr. Arnold, go ahead.

Mr. Mel Arnold: Thank you.

We seem to have a lot of new studies stacking up. One comes in and it displaces one that's already on the docket, and then another one comes in and it replaces the most recent study—

• (1615)

Ms. Lisa Marie Barron (Nanaimo—Ladysmith, NDP): I have a point of order, Mr. Chair. I'm sorry, to my colleague. It's just that the translation is not working.

The Chair: There's no translation?

Mr. Mel Arnold: I can try again to see—

The Chair: Okay, try again, Mel.

Mr. Mel Arnold: Okay. We seem to be having a lot of study motions coming in. One replaces or displaces motions and studies that we already have on the docket, and the next time around we have a motion for another study to displace what we agreed to in the last meeting.

I suggest, Mr. Chair, that we should probably have a subcommittee meeting to discuss some of this and to try to determine the workflow and work plan in the near future.

With that I'll turn it over to others.

The Chair: Actually, I agree to a certain extent, Mr. Arnold. We should pretty soon have an hour or so dedicated to committee business to look at what's already in the bucket to be done and what new ones have come in, and see where and when things are going to fit.

Between now and June there's really not a lot of time. We have one sitting week in March. Then it's April, May, June and we're done. We should try to do that no later than Thursday of this week, or we should try to do it when we first come back from the break week, to try to nail this down.

Again, I'll go back to the motion as amended.

I know it was asked that we have February 27 and February 29, but that may not happen. We will have an hour or so dedicated to just committee business when we come back after next week's break, to look at the schedule and see where we can fit things in.

We have witnesses lined up for Thursday already, for the Yukon salmon study. I don't want to cancel on them right now, because they're making arrangements.

Go ahead, Mr. Arnold.

Mr. Mel Arnold: We also still have to provide drafting instructions for the IUU study. Hopefully we can do that before all of our memories fade as to what we've heard.

Thank you.

The Chair: Yes.

Is everyone okay with the motion as amended?

(Motion as amended agreed to)

The Chair: Ms. Barron, go ahead for six minutes or less, please.

Ms. Lisa Marie Barron: Thank you, Mr. Chair.

I want to thank all of the witnesses for being here. There's lots of really great testimony that will help us in our work on this important topic.

Mr. Chair, this should take only one minute at most. It pertains to this study, which is why I'm bringing it up now. I did provide a motion to my colleagues. I believe the clerk has it to circulate as well. As it pertains to the study we're talking about today, I just want to move:

That the committee include—

The word “include” is in there.

—two hours of witness testimony in its study on the population sustainability of the Yukon salmon stocks focused on transboundary issues related to the long-term health of B.C. wild salmon populations.

It's become increasingly evident as we've been listening to witnesses that this motion is important to expand the study slightly. However, it won't take more time. It will be included within the study at hand.

The Chair: Thank you.

We've heard the terms of the motion.

Mr. Arnold, go ahead.

Mr. Mel Arnold: To add clarity, the paper document that was circulated had the words “add two hours”. The motion—

The Chair: She actually changed it to “include” on the one that I have.

Mr. Mel Arnold: Okay, so we'd agree to that with the wording changed.

Thank you.

The Chair: All right.

Is everybody okay with the motion as presented?

(Motion agreed to)

Ms. Lisa Marie Barron: That's great.

Can I move on with my line of questioning?

The Chair: Yes. You still have four and a half minutes.

Ms. Lisa Marie Barron: All right.

There has been lots of great testimony provided today.

My first question is for Dr. Peacock.

You spoke about the lack of public data available since 2008. Can you tell us a bit more about the lack of data, the implications of the lack of data, and any further information you'd like to provide?

Dr. Stephanie Peacock: Sure. It's a great opportunity to elaborate on that. I'd like to point out that as Brandy said, a lot of monitoring is happening, and first nations have taken amazing leadership on monitoring salmon within their territories.

I think one of the issues is that there hasn't been leadership by DFO on centralizing and making data available. Even though there's also DFO-led monitoring on a number of sonar projects, those data are largely made public through the joint technical committee meetings and the Yukon River Panel meetings. They're really buried in hundreds of pages of PDF reports from which you cannot easily extract numbers. They're not provided in an analyzable format.

In the work I do to try to understand salmon populations, to share that information publicly and to create a common baseline understanding of how salmon are doing, it's extremely challenging to dig these data out of reports and copy them line by line. I can't even copy and paste out of the joint technical committee reports, because they are password-protected.

I think accessibility is a major issue here. DFO has historically been charged with compiling and analyzing data and making it accessible. Increasingly we're seeing that data collection happens by first nations. Kudos to them. It does mean that there's a bit of a gap in that larger-picture understanding. That's what I really see as a role that needs to be filled.

• (1620)

Ms. Lisa Marie Barron: Thank you so much, and hopefully I won't put you in a position, Ms. Mayes, where you're cut off again at the end.

You talked about the importance of indigenous knowledge going hand in hand with science. I'm wondering if you can expand on that a little, because I think it relates to what we were just talking about.

Ms. Brandy Mayes: I can, absolutely.

When we look at both knowledge systems, they're equally important, but we tend to put indigenous knowledge aside and recognize most of the science.

When you actually look at what's happening on the Yukon River, the people who live along the river are the people who actually know what's happening. They've maintained the salmon populations and had a relationship with salmon for thousands of years, and they've not depleted it. Then we look at how we've been managing this by science, and we're in trouble. It's been by the numbers only and it's been quantitative, and it hasn't been looking at what is happening in the river.

We look at what the Pilot Station site says, and it says that this is the science. It looks at the numbers coming through, and it says we're going to manage to the upper level in terms of how many salmon we can take out of that system, when the indigenous people are saying, no, we actually have to slow down.

Our people have been saying for 20 years that we need to slow down in fishing. We need to recognize that we need to not take all the first run, because those are the first ones that are going to get through it. They're the fast ones. They're the males. Then people say, "Okay—it's the middle of the run, so we're going to take the next ones." As people on the river, we know those are the bigger salmon. Those are the slower females that are coming through. We know we need to get those females through, and that's why we don't take that big pulse in the second run. We take the first ones because we know there are still more males coming.

This is just traditional knowledge, and that is the actual knowledge from seeing what's happening on the river. That's why it's so important to take that into consideration when we're looking at developing and rebuilding a plan, or even when we're managing within the "in season", as they call it.

The Chair: You have 20 seconds.

Ms. Lisa Marie Barron: That's okay. I'm not going to put any of our witnesses in a position of trying to answer something in 15 seconds.

The Chair: Okay. Thank you.

We have five more minutes left in our opening hour. I believe Mr. Bragdon is next, and if he could keep it to under five, that would be great.

Mr. Richard Bragdon (Tobique—Mactaquac, CPC): There was no hint in there was there, Mr. Chair?

It's good to be with you. I want to thank each of the witnesses today. Thank you for taking the time. We're honoured to have you join us. Thanks to our colleague Mr. Hanley for pushing to make sure this happened and for his passion around this issue. It's so important and so vital.

I hope someday to have the opportunity to visit the beautiful Yukon territory. I've never been to the Yukon, but hopefully that will happen at some point.

Hearing your stories and hearing about the obvious significance and connection between the salmon and your peoples is powerful indeed.

I'm a practical person. I know I'm not as technical or scientific, but could you just step back and look at it through a layman's lens and cut right through all of the data and the information, which is all very important, and bring it down to what you would rank as the top three biggest challenges? I know there are numerous challenges, but what are the top three biggest challenges to which you feel we could get a solution the fastest or have action and practical steps taken the fastest to get us closer to seeing a rehabilitation of the stocks in your rivers?

I know it's kind of a big, broad, open question, but I think a lot of people listening today want to know what we can do with respect to temperatures and things like that overall. They're big challenges

that are going to be with us for a long time. I don't know if there's anything immediate, especially by one nation, that is going to fix or solve that problem, but perhaps there are things within our control locally that we can do.

I'll start with you, Ms. Mayes, and then I'd be interested in hearing from Dr. Peacock and of course from Chief Tom. That's my long preamble, but now it's over to you to answer the big question.

• (1625)

Ms. Brandy Mayes: Thank you.

We for sure will welcome you to the Yukon if you come and visit us, and we'll show you a good time.

Well, there's not just one thing, but I would like to say that number one for Kwanlin Dün is that we are looking at the agreements under chapter 16, and we need a new fishway. A new fishway is one thing. It's not going to be immediate. It's going to take time, and it's going to take a lot of resources and money. We need one to be done for in-migration and out-migration. We need to look at the impacts from that dam. We need to continue the studies. There is some work being done there. That is number one for Kwanlin Dün.

The stewardship centre is looking at whether we can do a small restoration stewardship or conservation hatchery for which we can look at taking some of the brood stock that's left to make sure we can restore some of these creeks.

I think number three for us would be having some support for the rebuilding strategy and working with the U.S. on ocean bycatch. I think that's a number one thing for us on the other side.

Mr. Richard Bragdon: Well done. Thank you. That was a big question.

With the time I have here, I'll go quickly over to you, Dr. Peacock. Then I definitely want to hear from Chief Tom. Try to keep it as succinct as you can. Give me the top three.

Dr. Stephanie Peacock: I don't have much to add over what Brandy said. She did an amazing job.

I think, with the Whitehorse dam, the key is that although that will take time, the opportunity is immediate. As she said, the licence is being renegotiated now for 2025. That's an immediate opportunity. Again, as she said, it's putting pressure on our partners across the border in the U.S. to limit the illegal and incidental mortality of chinook. Those are immediate changes.

Other things are going to be hard and take time, but we also need to start on those sooner rather than later.

Mr. Richard Bragdon: Thank you.

Chief Tom, go ahead.

Chief Nicole Tom: Yes, come visit the Yukon. You will enjoy yourself.

I would say that the three would include the agreement we have with Alaska, which needs to be negotiated. I would also say regulating the mine-contaminated water discharge into the tributary spawning areas in the Yukon River. I would say that the third thing would be the dam.

Mr. Richard Bragdon: That's excellent.

Is that my time?

The Chair: You have 30 seconds.

Mr. Richard Bragdon: I'll do the same thing. I'll be very kind. I don't want to cut them off.

You all did great. Thank you.

That's all.

The Chair: That concludes our first hour of testimony with our witnesses.

I want to say thank you to Brandy Mayes, Dr. Peacock and Chief Nicole Tom for attending today in person and by Zoom and for sharing their knowledge with the committee on this very important study.

If there's anything you think of that you would like to include in any of the answers to questions you were asked, please, by all means, send it in to the clerk, and we'll make sure it becomes part of the discussion.

We're going to take a short suspension while we change out.

Everybody is on Zoom for the next hour or so.

We're suspended for a moment.

● (1625) _____ (Pause) _____

● (1630)

The Chair: Welcome back, everyone.

Before we proceed, I would like to make a few comments for the benefit of the witnesses who just joined us.

Please wait until I recognize you by name before speaking. For those participating by video conference, click on the microphone icon to activate your mic, and please mute yourself when you are not speaking.

There is interpretation for those on Zoom, which means all the witnesses for this session. You have the choice at the bottom of your screen of floor audio, English or French.

Also, I simply want to remind members to be very careful when handling the earpieces, especially when your microphone or your neighbour's microphone is turned on. An earpiece that's placed too close to a microphone is one of the most common causes of sound feedback, which is extremely harmful to interpreters and causes serious injury.

Welcome, witnesses.

We have today, in our second panel, by Zoom, as an individual, Bathsheba Demuth, dean's associate professor of history and environment and society at Brown University. We also have Mr. Dennis

Zimmermann, fish and wildlife consultant, Pacific Salmon Treaty Panel member, Big Fish Little Fish Consultants. From Beaver Village Council, we have Chief Rhonda Pitka, and from the Council of Yukon First Nations, we have Elizabeth MacDonald.

We will begin with opening statements.

We'll go with Bathsheba Demuth for five minutes or less for an opening statement.

● (1635)

Dr. Bathsheba Demuth (Dean's Associate Professor of History and Environment and Society, Brown University, As an Individual): Thank you, Mr. Chair.

It's an honour to speak with you today. I'd like to start my brief remarks by framing who I am. I'm an environmental historian currently writing a book about the relationship between people and ecology along the Yukon watershed over the past two centuries, so salmon and the way salmon stocks have been managed clearly have a lot to do with this story.

As part of this work, I've been travelling the river, particularly, up to this point, on the Alaska side, by boat and by dog team, as well as working with archival sources and scientific research.

What is clear from this at a very general but, I think, critical point is that salmon are an integral part of Alaska native and first nations communities' lives as well as those of other subsistence users along the Yukon River and its tributaries. This has been true for as long as there have been people along this river.

Today, fish camps are places of cultural sharing, language learning and social revitalization, so being able to fish is an issue of food security and environmental justice. I know that members of this committee are travelling to Yukon to speak with first nations and people on the ground, so I will focus briefly on three points that have emerged from my interviews and general research around settlement, mineral extraction and the regulatory challenge that climate change poses for the Yukon River treaty.

First, with respect to settlement, I'm going to generalize here substantially, because the Yukon is very long, but a key historical adaptation to living in the Yukon's Arctic and subarctic ecologies has been for societies to move, to be fully or partly nomadic, so that when, say, a caribou migration pattern changed, people could adjust where they lived and hunted to be able to intersect with both caribou and salmon.

Since the acts of colonization by the United States and Canada, particularly through compulsory education, first nations and Alaska native peoples have become far less mobile, because you can't move a village like Old Crow just because the caribou are in a different place, but you can build communities near good salmon fishing. So the colonial expectation of permanence has made salmon a particularly critical resource for indigenous communities, both culturally and economically. I wish to underscore the critical need for salmon in communities along the Yukon that are at the end of the global supply chain so that food is expensive and sometimes simply unreliable. This fact makes salmon a critical food security issue.

Second, I'll discuss the history of mineral extraction and salmon. In some ways, this is a familiar history that starts with the Yukon gold rush near the Klondike River, intersects with salmon and their need for spawning streams, and continues through the Faro mine and other large-scale mineral projects. Residents along the river have emphasized to me over the last several years how concerned they are that this history is not over due to potential land withdrawals by the Bureau of Land Management in the United States on the d-1 lands, which would be familiar to Alaskans, as well as the Manh Choh mine and the proposed Ambler Road, all of which would impact Yukon River tributaries.

Historically the wealth that has been generated from mining projects has not stayed in local communities, while the harms have. All along the river, I've heard concern that this history of environmental injustice is likely to be repeated, in part because the discussion of salmon futures is so often separated from that of mining and economic development writ large.

Third and finally, the Yukon salmon treaty and the Yukon River Panel, as my fellow panellists here all know, are charged with setting annual goals to ensure that enough spawning salmon are able to meet the minimum sustainable escapement numbers by regulating the quantity of fishing that happens in the Yukon River. When the treaty was signed in 2001, I believed that this was a sensible move based on the history of commercial and subsistence fishing for Yukon salmon, both of which occurred primarily in rivers, but of course, Yukon salmon spend most of their lives not in the Yukon but in the Bering Sea, which is an ecosystem that is experiencing such a rapid degree of change that I'm basically out of superlatives, as the climate warms and where there are additional ecological pressures from the pollock fishery, which removes some three billion pounds of biomass from the Bering Sea basin every year.

Every person I have spoken to on the Yukon River Panel is deeply dedicated to having generations of salmon, but in this contemporary environment they do not necessarily have the levers to pull to address either bycatch or the changing climate.

Essentially, the Yukon River Salmon Agreement lays out 20th-century tools for what are becoming very 21st-century problems—climate change and ecosystem change due to intensive harvesting.

- (1640)

I want to leave my remarks here by noting that people do have tens of thousands of years of experience in living well with salmon, and, in fact, this is the normal historical experience for salmon and people, so it is a thing that can be done.

Thank you.

The Chair: Thank you for that.

We'll now go to you, Mr. Zimmermann, for five minutes or less, please, for your opening statement.

Mr. Dennis Zimmermann (Fish and Wildlife Consultant and Pacific Salmon Treaty Panel Member, Big Fish Little Fish Consultants, As an Individual): Thank you.

Thank you for the opportunity to address this esteemed committee today. My name is Dennis Zimmermann. I reside at Whitehorse, Yukon, on the traditional territories of the Kwanlin Dün First Nation and the Ta'an Kwäch'än Council.

There are various hats I wear related to salmon. I am a member of the land claim-established Yukon Salmon Sub-Committee, and I also sit as a Canadian representative on two international salmon treaty tables: the Yukon River Panel, chapter 8 of the Pacific Salmon Treaty, and the Transboundary Panel, chapter 1 of the Pacific Salmon Treaty. I'm a respective Government of Canada and recreational fishery nominee through those two processes.

First and foremost, I want to acknowledge the significance of this specific inquiry and the unique importance of the Yukon River chinook salmon.

Briefly, Yukon River chinook were historically large, old and prominent, in that returning adults would often travel in river and over 3,000 kilometres to their spawning grounds in Canada. I've often talked to Alaskans who catch both Canadian-origin and U.S.-origin chinook, and they speak of the Canadian "king" salmon as leaving puddles of fat on the ground when they put them up in their smokehouse. This nutritional value is highly prized in communities that have severe food security concerns.

I should also identify that with the lens through which I work with salmon—and I often find I'm in the minority—my work has always been centred around community values, human dimensions and the intricate socioecological systems that surround these cherished species. I also work within the philosophy that if people, first nations, recreational fishers and the general public are not interacting with salmon in some way, they are not likely to care nor wish to support it.

Having worked with various Yukon first nations on a number of community-based salmon plans, I've witnessed first-hand the profound impacts that the decline of salmon populations has had on cultures, peoples and ecosystems throughout the territory. As we know, the life history of Pacific salmon has faced multiple stressors at all life stages, many of which have recently been exacerbated by the effects of climate change.

Very briefly, in delving into the causality of this crisis, one needs to reflect on past fishery practices, where it's evident that the maximum sustainable yield approaches, coupled with uncertainties in run-size projections and a reluctance to manage in-season fisheries, took their toll on chinook salmon populations and essentially beat down their resilience over the years.

Over decades, we've witnessed the loss of older-year classes and of larger, more fecund fish, ultimately resulting in a shift towards fewer, younger and smaller salmon returning. We call this "quality of escapement", which is not generally accepted within the treaty as a metric to meet escapement goals. In my opinion, there was not enough risk-and-precautionary principle built into the management regimes, whereby treaty escapement goals were considered to be met by achieving a bottom end of ranges and putting just enough Canadian-origin fish into the spawning grounds.

Despite a proliferation of science often thrown at Yukon River chinook—what we often refer to as the counting and measuring approach—the status quo has failed to effectively address the decline in salmon populations. Approximately two decades ago, Yukon first nation voices began sounding the alarm, particularly at the headwaters in Canada, with the Teslin Tlingit Council, where at every meeting elders like Madeleine Jackson would advocate for voluntary subsistence fishery closures in Canada and across the river.

These community voices continue to sound and have moved consistently downriver to the point where we are now, where the impacts are being felt from the headwaters to the ocean. All 50-plus communities that depend in some way on Yukon River chinook in Alaska and Yukon are suffering, no longer fishing, and, most importantly, losing their connection to salmon culture.

Unfortunately, this is another fishery that has shown us that management decisions often lag behind the pace of the resource decline. It is with heavy hearts that we must acknowledge that there may be no fisheries into the foreseeable future. Despite the bleak outlook, we can't lose hope, and we need to continue fighting for Yukon River salmon. Now is the time to ensure that science does not go alone and that we employ all the tools in the tool box.

This means, in my opinion, enhanced investments in community-based stewardship efforts, maximizing the value of the few fish that are returning through ceremony, language, story and knowledge transfer. Through small-scale restoration efforts, this may include a variety of habitat restoration efforts, or indigenous-led conservation hatcheries, as an example.

Also, it means maintaining advocacy and diplomatic efforts within the United States and the international community and continuing to advocate for Canadian-origin chinook returns to spawning grounds, as well as coordinating efforts on the high seas as it

relates to bycatch, unregulated international fisheries and production hatcheries in the Bering Sea.

Finally, I'm hopeful that with the continued support of the Department of Fisheries and Oceans, Yukon first nations and other partners, our current efforts towards a holistic Yukon River chinook rebuilding plan will provide the blueprint and momentum to help conserve and rebuild our populations so that future generations may maintain that sacred connection to salmon.

● (1645)

Thank you for your time.

The Chair: Thank you.

We'll now go to Chief Rhonda Pitka for five minutes or less.

Go ahead, please.

Chief Rhonda Pitka (Chief, Beaver Village Council): Thank you for the invitation to appear before this committee to assist in building greater understanding of the crisis involving Yukon River chinook salmon and the impacts this crisis has had on indigenous peoples in Alaska as well as Canada.

I am Chief Rhonda Pitka of Beaver, Alaska. Beaver is a small fly-in-only community on the Yukon River, just south of the Arctic Circle, and the first community downriver of all the confluences of the Porcupine River and the Yukon River. I am chairwoman of the Council of Athabaskan Tribal Governments, a consortium that serves nine tribes in the Yukon Flats of Alaska. I am also a public member of the federal subsistence board and a member of the Yukon River Panel.

Our people have historically relied on chinook and chum as our main food sources and as a central part of our culture and way of life. Our people are "salmon people". Our health and the health of the salmon are inextricably linked. What befalls the salmon befalls our people. Over the past 20 years we have seen stocks of Yukon River chinook and chum salmon obliterated by numerous challenges, all of human origin, all originating from outside our small communities along the Yukon River.

As the stocks of salmon have dwindled, our food security has become imperiled. The smokehouses that used to be filled with a winter's supply of salmon sit empty. Our children's critical link to our food culture and way of life has been severed. We have not had salmon for funeral potlatches for our people. In the last four years of no harvest, this crucial religious and cultural ceremony need has not been met. There are not enough salmon to feed my community or the communities of the Upper Yukon River in Alaska that I represent or our relatives in Canada along the Yukon River and Porcupine River. That much is clear.

We have not fished in the last four years. We have not had a subsistence harvest that has met our needs. We've been told that our subsistence harvest is the reason we have not had returns of salmon. That is simply not true. Subsistence accounts for less than 1% of the total take of statewide harvesting of fish and other resources.

The subsistence fishers of Alaska have generously given their traditional knowledge to the State of Alaska and the U.S. Fish & Wildlife Service. Without this traditional knowledge, it is difficult for managers to have a clear idea as to whether their models of the run are correct. The managers use the number of salmon coming in at Pilot Station to estimate the run size and abundance of Canadian-origin chinook salmon. There is currently no mid-river sonar to "ground truth" that estimate.

The subsistence harvest helps management by giving in-season information on the timing of the run and the size of the run and on whether the estimates at the mouth of the Yukon River are accurate. The accuracy of the run size and timing are dependent on the knowledge of those fishermen along the Yukon River.

The chinook salmon fishery disaster hinders the customary and traditional selling, bartering and trading economy of the fishery. This is absolutely the case along the Yukon River, where depleted salmon runs have prevented our people from fishing and from participating in traditional economic practices of selling, bartering and trading Yukon River salmon. We used to have extensive traditional bartering networks and community relations, which have been strained because we have not had enough salmon to trade. The backbone of our livelihood is the traditional salmon fishery. The subsistence fishery is the primary economy in our region. Where I'm from, in the Village of Beaver, we do not have grocery stores. We don't have access to regular fresh food that people have, so we have to fly in food if we don't have it on the ground.

Furthermore, totally unaddressed through existing federal processes is the loss of tribal food sovereignty and food security and the loss of the ability to teach our children and transmit indigenous knowledge related to salmon stewardship, including providing for healthy salmon and salmon populations, processing, preparation and storing. Entire social networks, health and well-being have been devastated. Our children have never handled salmon. Our fishermen slump into depression, while domestic violence incidents and suicide increase along with increases in substance abuse, because our people are not fishing.

- (1650)

The loss of the Yukon River salmon and the cultural activities and spiritual values associated with salmon fishing are devastating our communities and villages.

Our tribes are not sitting idle. While the state and federal governments have continued conducting studies on the impacts of climate change, debating the impacts of bycatch in intercept fisheries and subsidizing commercial fisheries, here is what our tribes have been doing.

We have not fished. We implemented a self-imposed moratorium in 2014 in order to allow salmon to make the spawning grounds. This resulted in meeting the border passage goals into Canada in

2014. We have left our fish camps empty. Many of our children have not fished in their lifetimes.

We were told to buy seven-and-a-half inch nets as one of the management ways to change the numbers of salmon that we were getting, so we did that. We changed our net sizes to six-inch nets. When that didn't work, we bought four-inch nets for our people.

We've educated ourselves on ocean fishery science. As a fisherwoman along the Yukon River, the ocean is not where I'm from, but I've had to educate myself on things that are way outside of my purview.

We have spent thousands of hours and dollars on advocacy and legal action around the fisheries in our region—

The Chair: I'm going to have to stop it there, Chief Pitka, because it's gone way over the five minutes. Hopefully, anything you didn't get to say will come out in the lines of questioning.

I'll go to Elizabeth MacDonald now for five minutes or less, please.

Mrs. Elizabeth MacDonald (Council of Yukon First Nations): Thank you very much for inviting me to participate today in the study.

My name is Elizabeth MacDonald. I'm the manager of fisheries at the Council of Yukon First Nations. In this position I support the work of the Yukon First Nation Salmon Stewardship Alliance, which is our local AAROM. I'm also one of the vice-chairs of the Yukon Salmon Sub-Committee, which is an advisory body created under the Umbrella Final Agreement. For that role, I was nominated by the Vuntut Gwitchin government as a Porcupine River salmon representative.

I'm going to focus on the Yukon River salmon because Alsek River salmon are doing relatively better. I did provide additional information in a briefing note as well.

Chinook are the most significant salmon in the main stem of the Yukon River as both a food species and a culturally significant salmon. They are highly dispersed, with over 100 documented spawning locations. They are unique since no other salmon migrates as far, with the furthest migration being 3,200 kilometres. This is part of why they are so important, as they provide many people and habitats with food and nutrients.

Unfortunately, the salmon have been experiencing widespread declines and changes for some time. Traditional knowledge-keepers in the communities say this decline started before western science in the 1980s. Chum are also present in higher numbers, but they are not as widespread as chinook. In recent times chum have experienced highs and lows.

Chum are the most important and numerous species on the Porcupine River, a tributary of the Yukon River. Unfortunately, they are experiencing a long-term depressed population. In the last 23 years since the Yukon River Salmon Agreement has been in place, the spawning goal has only been met nine times. Very little information is available on chinook and coho in this river.

Then in 2020, we had a salmon crash. All salmon numbers plummeted. Chinook have been at about 12% of the average at the mouth of the river in the last two years, and up to 40% of them are dying between the mouth of the river and the border. Chum in the main stem have had four out of five of the lowest spawning estimates since 1980 and about 20% of the average spawning escapement estimate.

Estimates for porcupine chum at the Fishing Branch River weir in 2020, 2021 and 2022 were the lowest on record since 1971, at about 5.5% of the average spawning estimate. Last year was slightly better, I think due to better environmental conditions during the migration. Numbers of Porcupine River coho for the last two years have been the lowest on record.

The situation is dire for all the salmon species on the Yukon River. We are legitimately concerned about their extinction. I am sure we have already lost smaller populations of chinook.

Unfortunately, the solution isn't as easy as stopping fishing. Even if there were zero harvesting by humans, salmon numbers would not rebound. Climate change is having a larger impact. Since the crash, our river has been hot enough to kill salmon. We have sustained frequent flooding and we have seen low water, with much more variance than normal, which has affected migrating salmon and rearing juveniles during the freshwater stages.

The Bering Sea is also warmer than ever. This has impacted the food web, and salmon are switching prey. This has decreased the energy available to them and decreased some important nutrients. It has also resulted in a large increase in Ich disease, which is likely responsible for a significant number of the chinook dying during their migration.

We need climate action and we need to support Alaskans with habitat improvement in the Bering Sea. We also need to watch our own habitat and ensure that development and other impacts don't harm salmon. We need to increase our capacity. We have dedicated, passionate and absolutely wonderful individuals working diligently to improve things for salmon and fishers in the ecosystems on both sides of the border. The amount of passion and knowledge that we collectively share is incredible.

We have truly accomplished so much, but there simply aren't enough of us to do all the work. This is particularly true for my first nation colleagues, as most Yukon first nation governments don't even have a dedicated salmon person. Instead, staff cover many species. Each first nation needs its own dedicated salmon staff, so they can focus on restoration work and on keeping salmon culture alive until the salmon recover.

We also need accessible funding so we can do restoration work. Funding needs to be secure and long term, so we can focus on rebuilding salmon populations and not on administering funding agreements.

If we lose salmon, we will be losing more than just food and culture. We'll be losing a key ecosystem species. Marine-derived nutrients are extremely rare 3,200 kilometres from the ocean. If we lose these, our freshwater terrestrial animals and habitats will also suffer.

Finally, I want to stress how Alaskan communities depend upon salmon for food. While this is also true on our side of the border, it is a larger issue in Alaska. In Alaska some people need to choose whether to fish illegally or to starve. We need to support Alaskans so they have better options and in turn can support salmon recovery.

Thank you.

• (1655)

The Chair: Thank you for that.

You gave me back 30 seconds, so that's a great help.

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

Go ahead, please.

Mr. Mel Arnold: Thank you, Mr. Chair.

I want to thank all the witnesses for their input. Trying to rebuild our Pacific salmon stocks is of value. I want to start by doing a round with each of you. I want to ask the same questions.

What are the two biggest threats to these Pacific salmon, and what do you see as the key levers that can be pulled or the key tools that can be used to remove or mitigate those threats?

Ms. Demuth, perhaps I could start with you, and I'm just going to go through the list as we have it on our notice of meeting.

What are the two biggest threats and what levers or tools could be used to mitigate those threats?

Dr. Bathsheba Demuth: Thank you for this question.

I think the two biggest threats.... It came up pretty much in everyone's testimony here today that one of them is climate change and what it's doing both in river and to the Bering Sea. Secondly, they can have increased ecosystem pressures in the Bering Sea that are not directly related to climate change and have to do with large-scale fishing, which hurts salmon as bycatch but also is changing the food webs in the Bering Sea in other ways.

In terms of tools, I think one tool that has been effective in other situations in the United States, where species are both endangered but critical for subsistence, is to have a much clearer way of co-managing the salmon stocks between first nations and Alaskan native communities and the federal and state governments to set priorities that would be more in line with what Chief Pitka and Dennis Zimmermann both outlined in thinking about salmon not just as numbers but in terms of the health of the fish and how they're being used along the river.

I think that secondly—

Mr. Mel Arnold: I'm going to have to stop you there in order to get through all four and the further questions I have.

Mr. Zimmermann, you would be next on my list.

Mr. Dennis Zimmermann: Thank you.

I'll predict that a lot of us will have similar thoughts. I'll focus on two quickly.

I think Elizabeth MacDonald mentioned the physiological stress of rising water temperatures, which is resulting in a lot of prespawn mortality. Fish just aren't making it where they used to go. That's a big threat.

What can we do? For the levers we have to pull, to me, it's about all the tools in the tool box. Unfortunately, fishery closures are one of the things we can manage, and we are doing that. That's already been put on.

Secondly, losing connection to salmon culture is a threat for Pacific salmon, because if people are not connected to them—first nations and the general public—we're not going to care and we won't advocate for them, and there will be a shifting baseline.

• (1700)

Mr. Mel Arnold: Thank you.

Chief Pitka, could you go ahead?

Chief Rhonda Pitka: Yes. Thank you for that question. I appreciate it.

The two biggest threats I see are also climate change and the trawl fishery. Shutting down the trawl fisheries and the hatcheries would decrease some of the threats. The salmon are coming back smaller and weaker, but that's also because of ocean conditions. One of those ocean conditions is the trawl fishery and what they're doing to the herring. It's causing malnutrition in the salmon.

Thank you.

Mr. Mel Arnold: Thank you.

Mrs. MacDonald.

Mrs. Elizabeth MacDonald: Thank you.

I would say climate change again, as being a big one, and then, as Dennis suggested, people losing connection with salmon is also a major threat. People aren't connected. They won't go out and fight for protections for habitat or give up other things to keep the habitat.

For tools, we definitely have the Yukon River Panel and the joint technical committee as a way to have coordination across the border and work together. I think that's a key tool that we can use and continue to use.

I also think we need to get food out to people, so that people aren't in such a bad situation that they have to choose between feeding family or not eating. I think that's a big tool we could help with, and it is within our realm of control. Otherwise, restoration is something that we need to look at, like what Ms. Mayes talked about earlier with the restoration stewardship centre. It would be a fantastic thing to happen for all the communities.

Mr. Mel Arnold: Thank you.

I want to turn back to Mr. Zimmermann.

I believe you said that the condition of the fish is not considered in the treaty or the process. Can you elaborate a little further on that? Is it just numbers that are used or is it biomass? How is that discussed and negotiated?

Mr. Dennis Zimmermann: It's purely numbers. In fact, they use the word "pieces" quite often. It's the number of pieces of salmon, so that's the essential metric.

We started seeing size declines at the headwaters in particular. Large fish were disappearing. That, of course, is a productivity issue: Less fecund fish have fewer eggs.

Rhonda mentioned the changing net size. We were doing that in relation to trying to preserve and protect the larger chinook. It should be noted that these chinook were up to eight years old. We lost the eight-year-olds. We've pretty much lost the seven-year-olds, and now we're down to four- to six-year-olds. That's a huge canary-in-the-coal-mine problem.

Mr. Mel Arnold: Thank you.

Basically, as long as the proposed number of fish is getting through, nothing changes in the ratios or, I guess, the catch or retention downstream.

Mr. Dennis Zimmermann: That's correct.

We are reporting on size, sex ratios and various other things now, and age class. We've always reported on age class, but yes, the actual metric for the treaty is the number of fish.

Mr. Mel Arnold: Thank you.

The Chair: Thank you, Mr. Arnold.

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

Mr. Brendan Hanley: Thank you, all of you, for appearing and for the really interesting and important testimony.

I'd like to begin with Chief Pitka.

You gave very moving testimony. Thank you very much.

You mentioned that subsistence accounts for less than 1% of total take. I'm assuming that the other 99% would be largely related to the trawl fishery. Could you explain a bit about that and elaborate?

Chief Rhonda Pitka: In the state of Alaska, 98.2% of the state total take is the commercial fishery's harvest. About 1% is for sport harvesters, and the other 1% is the subsistence harvesters, who primarily use this to feed our families and keep our culture alive.

Thank you.

Mr. Brendan Hanley: When you say "commercial" fishery, can you just elaborate? What is within that commercial fishery, including what is bycatch and what's deliberate catch?

• (1705)

Chief Rhonda Pitka: I'm not necessarily an expert on the commercial fishery in the state of Alaska, but it is primarily the pink salmon harvest in the Gulf of Alaska and also the area M fishery that are catching most of the salmon. That's where the bycatch is happening for the Yukon River chinook salmon.

Mr. Brendan Hanley: Thank you.

Lastly, you mentioned in response to Mr. Arnold's questions the importance of reducing—I'm not sure if you said shutting down or reducing—the trawl fishery. How could you even begin to do that? What would be the steps towards doing that? Is there a federal as well as a state role in addressing that?

Chief Rhonda Pitka: Shutting down the trawl fishery is entirely within the purview of the U.S. Secretary of the Interior and the Department of Commerce for the United States federal government, but it's also within the purview of the State of Alaska. They can severely limit the number of commercial fishing licences that they have.

Those numbers account for much higher numbers than the subsistence harvest has ever had, and cutting down that commercial fishing harvest and opportunity has had greater effects on the numbers of Yukon River salmon coming back into the river. We saw that in the 1990s when they shut down commercial fishing around area M because Bristol Bay was not getting enough fish back into their rivers and their lakes. We've seen the effects that it's had. It's been fairly effective.

Thank you.

Mr. Brendan Hanley: Thanks very much.

Mr. Zimmerman, we've had many conversations, of course. We've travelled together to Washington, D.C., along with Chief Tom, who was on the previous panel, and Senator Duncan.

One of the things I remember that most struck me in our conversations was that you said what's happening in the Yukon River is like a harbinger for the entire west coast salmon. I wonder if you could talk about that for a bit.

Mr. Dennis Zimmermann: Thank you, MP Hanley. I appreciate the question.

Absolutely, and one of the things we realize.... I happen to be in Vancouver right now at the Pacific Salmon Treaty negotiations for another chapter, so I have the unique advantage of being able to see

these various panels and fisheries along the west coast. I mean, the Yukon is unique. It's a northern species. They're uniquely adapted to the north. We're seeing declines across the entire west coast. These are large prolific chinook that obviously are special to everyone—everyone's salmon is special.

We have an opportunity with these fish. If we can actually conserve and rebuild these fish, I think we have an opportunity to be a template for essentially what will happen. There are multiple active commercial interests along the west coast for Pacific salmon. We're largely talking about subsistence fishers that are united on this front. There are similar international interests. There could be cohesion in that regard. I guess from my perspective I think it's worth.... We have an opportunity to essentially support these northern species, which I think can trickle down and provide that impetus for saving all the stocks along the Pacific coast.

Mr. Brendan Hanley: Thanks very much.

Elizabeth, I'll move over to you. Given your position with the Council of Yukon First Nations, I know that you're very familiar with governance. We don't have time to go over the intricacies of governance, but maybe you could talk about the importance of understanding between the levels of government and how important it is that we understand that relationship, especially considering the Umbrella Final Agreement.

Mrs. Elizabeth MacDonald: Yes, and I know that Tim will speak more on the Yukon Salmon Sub-Committee and the management role that plays at a later date. However, it's really important that governments work together and that we have a good relationship—Yukon first nations' governments, the Yukon territorial government and then the federal government as well—particularly around the work with the Yukon River Panel. We need to all be saying the same things and moving towards the same goal. I feel like we're currently doing that, and we're making great headway. Even just a year ago, we weren't all moving in the same direction, and you can see what a difference it has made for the salmon on the salmon front.

It's really key, and having first nations advisers at the Yukon River Panel and having those direct connections has been absolutely fantastic. It really does allow people along the river to have an input on those processes, which means that people buy into them more, which is exactly what we need.

• (1710)

The Chair: Thank you, Mr. Hanley.

We'll now go to Madame Desbiens for six minutes or less, please.

[Translation]

Mrs. Caroline Desbiens: Thank you, Mr. Chair.

I have just a couple of questions, and I'm going to share my time with Mr. Hanley, because this is an area of particular interest to him and it's all a little far away from Quebec. That said, Quebec has salmon, too, as well as other issues that are similar at times.

Mr. Zimmermann, you talked about bycatch. I heard someone else talk to you about the pollock fishery, which was removing billions of tonnes of biomass.

Does that factor continue to have a serious impact on the biomass as a whole, as we've heard from the witnesses today?

[English]

Mr. Dennis Zimmermann: Yes. I will also admit that I'm not an expert in this particular area, but I do know that over the years it was a significant issue for Yukon River chinook. The practices improved. There were observers. There were various things that they did to ensure that those catches were minimized. My understanding is that they have crept up again, so this is something that we're always trying to work on and make sure that we advocate for.

I think there are some significant high-seas issues that the Yukon and Alaska, Canada and the U.S., can align together on—this area of fishery, which is something that Chief Rhonda Pitka brought forward.

Again, it is one of those things that we have control over. It is very much salt in the wound, in that there are still some of these high-seas commercial fisheries taking place while all subsistence fishers on the Yukon River in Alaska and the Yukon are.... In principle, that in itself is probably the deepest wound that we're dealing with, and frankly it's quite offensive to everyone on the in-river who's not able to fish.

[Translation]

Mrs. Caroline Desbiens: That's kind of what we're seeing on the east coast.

Mr. Hanley, the rest of my time is yours.

Mr. Brendan Hanley: Thank you very much, Mrs. Desbiens.

[English]

The Chair: You have three and a half minutes.

Mr. Brendan Hanley: This is great.

I didn't get to ask Professor Demuth any questions.

You have a history that goes back to your residence in Old Crow in the Yukon, I believe, so you're very familiar with the Yukon. However, you're also a researcher, and from what I understand, you have experience in researching the biological and hydrological life of the Yukon River watershed.

I wonder if you could talk about the overall ecological impact and importance of the chinook salmon as a flagship species of the river system and also of the boreal forest.

Dr. Bathsheba Demuth: Yes, absolutely.

I think one of the most amazing facts about chinook that encapsulates just how important they are is that, if you do isotopic research into boreal forest tree species—spruce and other species that line the banks—you find the nitrogen isotopes that come from chinook salmon, because one of the major things they do in their life cycle is bring the nutrients of the Bering Sea thousands of kilometres inland to ecosystems that otherwise don't have access to them.

They're absolutely critical to the basic ecological function of this entire ecosystem in a way that's difficult to underestimate. We don't know what a Yukon River watershed looks like if it does not have the nitrogen that fish carry up and give not just to the plants but to the entire food web, from very small invertebrates in the stream systems all the way up through to bears, eagles and the kind of wildlife we like to have on our calendars.

They're truly critical in that sense. The ability for these fish to maintain this nutrient cycle is really fundamental to the functioning of the river, biologically and culturally.

Mr. Brendan Hanley: Thank you.

This is a question for Chief Pitka, and I feel like I'm asking this on behalf of Mr. Small, who's not currently at the committee. Could you talk about seal predation, and whether that is an issue that affects west coast salmon species at all?

• (1715)

Chief Rhonda Pitka: I'm not really sure. The place where we live on the Yukon River is so far in the interior that we don't actually get seals, so I don't have enough information to answer that.

Mr. Brendan Hanley: Does anyone have information to answer that? I know it's a question that has been brought up.

Ms. Demuth.

Dr. Bathsheba Demuth: I've never heard of seals identified on the Alaskan side. There has been discussions of beluga whales, which spend a lot of time down by the mouth of the Yukon and certainly eat salmon. My understanding is that they are not at the level that has been discussed on the Canadian coast, however.

Mr. Brendan Hanley: Thank you. Let's put that one to rest.

The Chair: Thank you, Mr. Hanley. I'm sure Mr. Small will be delighted to know you brought up seals and not sea lice.

We'll now go to Ms. Barron for six minutes or less, please.

Ms. Lisa Marie Barron: Thank you, Mr. Chair.

Thank you to all the witnesses here.

Should I be pausing?

The Chair: Please wait one second, Ms. Barron.

That's the 30-minute bell. We'll certainly get in the last round, if everyone is in agreement. Can we go to 5:30? There are 29 minutes left before the vote.

Some hon. members: Agreed.

The Chair: We'll go to you, Ms. Barron.

Ms. Lisa Marie Barron: That's great. Thank you, Mr. Chair.

Thank you to the witnesses.

I was just reflecting on the fact that I wish our witnesses were spread out over multiple meetings, because there's so much great testimony. It feels very rushed, and it feels like we're not able to really ask questions to the degree that I would like to. I can't speak on behalf of my fellow committee members, but for that, it's unfortunate.

I want to reiterate and ask that you please send along written information. I know the chair will say that, but I hope I can pick from the written components to support the recommendations moving forward.

There has been so much great testimony provided.

Chief Pitka, you talked about the importance of subsistence harvesting and being told that, despite accounting for less than 1% of the statewide harvesting, this is where the finger was being pointed for where the problem lay. Can you tell us a bit about that and how important it is to have that traditional knowledge when making decisions on how to best move forward?

Chief Rhonda Pitka: Yes. Thank you for that question.

The total harvest take of the chinook salmon in the Yukon River has traditionally been 25% of the Canadian harvest share for the United States for the upper Yukon River. Historically it's been such a low number that it's been about 10 years since it has been adequate to meet the need for our subsistence, according to the computation on the State of Alaska website. They have all of that information readily available there, but I can send some more detailed written testimony around it. I could go on for 16 hours, but you have about 29 minutes.

The traditional knowledge around that is that we take only what we need from the Yukon River, especially our subsistence fishermen. Our traditional way of life has been greatly challenged by the lack of fish. Part of what we know about the fisheries and the challenges associated with them is that it's never been our harvest that's been the culprit, that's been the problem. It's always been outside influences, whether regulations, lack of salmon due to climate change or, in the 1900s, having a net put across the Yukon River so nobody could get fish. It's always been outside people who have impacted our harvest greatly, and that's been a note of contention.

Ms. Lisa Marie Barron: Thank you very much.

Ms. Demuth, I believe you were talking about old tools being used and the problems with these old tools being used. I believe you said that leads to "invasive" harvesting, but that's a word that I wrote down that I can't quite differentiate.

Can you tell us a little bit more about what you were speaking about when you spoke to that in your testimony?

• (1720)

Dr. Bathsheba Demuth: Absolutely. Thank you, because I had to rush that at the end.

What I was referring to was the design of the Yukon River Panel. Many people here have spoken about how it's been quite effective at bringing the United States and Canada together and bringing first nations and Alaskan native voices to the discussion. It's also designed in such a way that it regulates salmon only within the Yukon

River itself, rather than having jurisdiction and a remit over the ocean where they spend so much of their lives.

The Yukon River Panel can do everything it possibly can—and it is doing that in many cases—within the river system itself, but where the Yukon River salmon spend so much of their lives is in the oceans. Therefore, they are subject to other kinds of regulation or a lack of regulation, as the case may be, in that space. Does that clarify?

Ms. Lisa Marie Barron: It does. Thank you. I'll update my notes accordingly.

I wonder if you could expand a little bit more on what you were referencing around the bycatch, what you're seeing and perhaps some solutions you can see around that issue.

Dr. Bathsheba Demuth: Sure. I'm sure the other panellists here can also speak to this.

The issue of bycatch primarily has to do with the pollock fishery, which is a large-scale trawling fishery in the Bering Sea that removes about three billion pounds of pollock per year. That's just the pollock. That's actually not counting the various other species that get caught up in the process. Those include lots of other kinds of fish. Those sometimes include orca, and it is a very invasive fishery from a biological standpoint.

Like most fisheries, it's regulated and assessed in terms of whether or not the single species it harvests is sustainable. Yes, you can take three billion pounds of pollock out of the Bering Sea every year and you will have three billion pounds next year, but that does not assess the Bering Sea as an ecological space, which means fish like salmon can get caught up in it literally as bycatch when they're hauled in with the nets for pollock.

That process has been improved in the past 15 years, so there's more emphasis on not catching chinook in particular. There are also lots of reports of that monitoring process being less than perfect. It also does not account for the ways in which that fishery changes the entire Bering Sea ecosystem more generally in ways that are compounding the climate change issue with respect to the success of chinook when they're at sea.

The Chair: Thank you, Ms. Barron.

Thank you to our witnesses for sharing their valuable information with the committee as we work our way through this study. That concludes everything.

I just want to remind everyone that today we approved the motion that February 27 and 29 would be for the study that was referenced by Madame Desbiens, but I'd like to carve off some time in that first meeting for committee business—even 45 minutes.

Mr. Arnold.

Mr. Mel Arnold: Thank you, Mr. Chair.

I recognize that Mrs. Desbiens had some urgency around her study. On Mr. Perkins' motion that we look at the elver fishery because of the timeline of when that season was to open, there are apparently only 10 days of consultation taking place right now on that. I think we need to have discussion amongst the committee as to what comes first before we....

The Chair: Okay, but like I said, we've already approved the 27th and the 29th. What I'd like to do is to take 45 minutes on the 27th to discuss that very issue and the schedule going forward—say, the last 45 minutes. If we need a bit of extra time, maybe we can rob a little bit of it, with 15 minutes or something added on if we can. If there's nothing pressing behind us, we can do it that way. I do know that the motion includes the 27th and the 29th.

Madame Desbiens, go ahead quickly, please.

[*Translation*]

Mrs. Caroline Desbiens: Um...

[*English*]

The Chair: What does that mean?

[*Translation*]

Mrs. Caroline Desbiens: Let me take this opportunity to thank our interpreters, who do amazing work. Thank you very much.

I feel that 45 minutes is a lot, especially since that's going to be cut from my time.

Would it be possible to shorten that to 15 minutes?

[*English*]

The Chair: It might be, if everything goes quickly and smoothly, but we have yours to deal with, which we know is for the 27th and 29th. We have to know what's coming next, because Ms. Barron had a motion, Mr. Arnold has indicated that he wants to discuss the elver fishery and, of course, we still have the Yukon study on the go as well. We'll use as little time as possible for committee business, but if we could start.... Because your motion indicated the 27th, we have to start on the 27th and the 29th. That was in your motion.

Mr. Cormier, go ahead quickly, please.

• (1725)

Mr. Serge Cormier: Mr. Chair, I think if you read the motion of Mrs. Desbiens very carefully, it said the 27th for two hours and the 29th for two hours. This is what we voted on, and I think we should respect that.

The bells are ringing.

The Chair: If I can find some extra time to add to one of the meetings, we'll do some committee business.

Ms. Barron, go ahead quickly.

Ms. Lisa Marie Barron: Thank you.

I was just going to say as well that I don't know if it's actually necessary, because we already know the order of when the studies are happening. If there's an additional motion to come forward, then it can come forward for us to debate, but I don't know if we really need time to go through it when we already know the order of the studies as listed.

The Chair: Mr. Hanley, go ahead quickly, please.

Mr. Brendan Hanley: I'm sorry. I was so excited about salmon I forgot to ask during my speaking time for the consent of the committee to resubmit the travel submission we had previously submitted. This is as part of the Yukon study. It's already been all costed out.

The Chair: You're determined to try it again.

Mr. Brendan Hanley: I'm determined to try it again if the committee would support the travel submission.

The Chair: I'm not seeing any noes, so that will be submitted again, Mr. Hanley, at your leisure.

Thank you, everyone.

Thank you to our witnesses. Thank you to our clerk, our analysts and, of course, our translation team and the team at the table who make it possible for this meeting to take place each and every day.

Madame Desbiens.

[*Translation*]

Mrs. Caroline Desbiens: How can we be sure the minister will be here on the 27th? Will this go as planned?

[*English*]

The Chair: I can check it with the clerk.

Mrs. Caroline Desbiens: Okay.

The Chair: The meeting is adjourned.

Published under the authority of the Speaker of
the House of Commons

SPEAKER'S PERMISSION

The proceedings of the House of Commons and its committees are hereby made available to provide greater public access. The parliamentary privilege of the House of Commons to control the publication and broadcast of the proceedings of the House of Commons and its committees is nonetheless reserved. All copyrights therein are also reserved.

Reproduction of the proceedings of the House of Commons and its committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the Copyright Act. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the Copyright Act.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the House of Commons website at the following address: <https://www.ourcommons.ca>

Publié en conformité de l'autorité
du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Les délibérations de la Chambre des communes et de ses comités sont mises à la disposition du public pour mieux le renseigner. La Chambre conserve néanmoins son privilège parlementaire de contrôler la publication et la diffusion des délibérations et elle possède tous les droits d'auteur sur celles-ci.

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la Loi sur le droit d'auteur. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre des communes.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la Loi sur le droit d'auteur.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Aussi disponible sur le site Web de la Chambre des communes à l'adresse suivante :
<https://www.noscommunes.ca>