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• (1100)

[English]

The Chair (Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.)): I call the meeting to order.

Good morning, all. Good morning to the witnesses.

We have with us today in person Mr. Julian Aherne, associate professor in the school of environment at Trent University.

Online we have Mr. Tyler McCann, managing director of the Canadian Agri-Food Policy Institute, and from Wildsight we have Mr. Randal Macnair, conservation coordinator, Elk Valley.

Each witness will have a five-minute opening statement.

We'll start with you, Mr. Aherne, for five minutes, please.

Dr. Julian Aherne (Associate Professor, School of Environment, Trent University, As an Individual): Thanks very much.

Good morning, Chair, and members of the standing committee. Thank you for the opportunity to speak today.

As was already mentioned, I'm an associate professor in the school of environment at Trent University in Peterborough, Ontario. During the past three decades, my research has focused on assessing the impacts of air pollution on natural ecosystems, including fresh waters. I have studied fresh waters in the Canadian Arctic, in western British Columbia, in the Athabasca oil sands region and in south central Ontario. I focus on issues such as freshwater acidification; eutrophication; nutrient enrichment; and the fate of mercury, trace metals and emerging contaminants, including microplastics, in these systems.

Today I will briefly reflect on five broad points with respect to the federal management of pollution. I intend to expand on these points in a brief to be submitted within the coming weeks.

The first point is that pollutants can travel. Through this committee, you have heard evidence of freshwater pollution downstream of waste-water treatment plants or other point sources of pollution, which, for example, are some of the causes of pollution in the Great Lakes.

You've also heard that many pollutants can travel long distances in the atmosphere before being washed out by rain and deposited into fresh waters. It's well established that pollutants can travel across provincial boundaries and impact fresh waters in background regions that are remote from population centres. Therefore, freshwater pollution is a national-scale issue that requires management at the national scale.

The second point is that pollution is transboundary. Many pollutants undergo a long-range transboundary transport in the atmosphere, crossing national boundaries. In other words, some pollutants can travel through the atmosphere from one country to another. For example, Canada is a recipient of pollution from its nearby and distant neighbours. Similarly, Canada contributes to the pollution burden of other countries.

Therefore, the management of many pollutants can only be addressed through international agreements. There are many examples of the success of international agreements, such as the recovery of fresh waters from acidification under the Canada-United States Air Quality Agreement or the current work of the United Nations Intergovernmental Negotiating Committee on Plastic Pollution. Canada should continue to be an active participant in the international management of pollution.

The third point is that freshwater pollution will be influenced by climatic change. We currently lack an understanding of how the sources of pollutants, their transport and their fate in fresh waters will be impacted by climatic change. However, the current prediction is that climatic change will exacerbate freshwater pollution across Canada.

The fourth point is that monitoring is essential. Monitoring of fresh waters is essential to our understanding of the sources and impacts of pollution and essential in evaluating the success of mitigation strategies. This point is obvious.

However, we should reflect on the type of monitoring programs that are required. I suggest that coordinated national-scale monitoring is required for effective detection and management of pollution. Such monitoring programs must be long-term programs to allow for the detection of trends, and they must be coordinated to allow for comparison across regions.

For example, to date, observations of microplastics in fresh waters have been carried out by individual researchers, each using different sampling and analytical protocols. As a result, we have no capacity to compare across studies, and a limited understanding of the scale of the issue.

The fifth and last point is that research is essential. If we are to effectively tackle freshwater pollution, we need to understand the pollutant sources and their fate in the environment. Resources must be dedicated accordingly through provincial and federal funding programs to build capacity in research, and through grants and contribution agreements to build partnerships between governments and research institutions.

It is well established that research has played a central role in our understanding of freshwater pollution. For example, research conducted at the IISD Experimental Lakes Area in northern Ontario has contributed to environmental policy around the world, from mitigating algal blooms to reducing how much mercury gets into our waterways, and more recently to advancing our understanding of the fate of microplastics in fresh waters.

● (1105)

In closing, I urge the committee to reflect on these five points with respect to the federal management of freshwater pollution. Pollutants can travel, and pollution is transboundary.

It is a national and international-scale issue that requires management at the national and international scale. Monitoring and research are essential to our understanding of the sources, fate and management of pollution. A change of government should not result in the dismantling of monitoring capacity, research support or legislation to protect the quality of fresh water.

The Chair: Thank you, Professor. We'll have to stop there, but there will be much time for questions.

We'll go now to Mr. Macnair by video conference.

Mr. Randal Macnair (Conservation Coordinator, Elk Valley, Wildsight): Thank you, Chair.

Good morning, Chair and members of the committee. Thank you for the opportunity to speak today.

My name is Randal Macnair, and I am speaking to you from Vancouver, the unceded territory of the Musqueam, Squamish and Tsleil-Waututh nations.

My home is in Fernie, in British Columbia's Rocky Mountains, the unceded territory of the Ktunaxa people.

I know you've heard statistics and results of reports from auditors general and the like. Levels of selenium are rising in the Elk Valley and fish are dying. What does this really mean, though? What's it like to live with this environmental catastrophe every day of your life?

I spent 15 years on Fernie city council as mayor and as a councillor. It's a beautiful mountain town in the heart of the Rockies. Our city motto is "In the Mountains by the River", and the mountains and river define us and affect the people of our valley profoundly.

During my time on council, our aging water system regularly had boil water advisories, so we needed a second source to provide safe drinking water during these periods. We spent several years determining a source and working with the federal and provincial governments to fund the many millions needed for a safe, reliable water source. We determined the best way forward, and because the spectre of selenium was already flowing through our valley, we

asked about future contamination of this new well. We were assured by both Teck and our geotechnical consultants that all would be fine.

I suspect you can see where this is going. After we had spent millions of dollars on a new water source and system, this spring selenium levels in the new well began to exceed levels for the safety of human health. This well has had to be taken off-line, and Fernie is again experiencing boil water advisories.

This impacts the elderly and medically compromised and creates great stress for many in our community. When you walk into the grocery store, along with the notices of school concerts and swim meets, you see the boil water notice from the city. These notices are a regular reminder of the failure of the provincial and federal governments and Teck to keep our river and our drinking water safe.

Unfortunately, what's happening in Fernie is not an isolated case. Sparwood, our sister community 30 kilometres upriver, had to have one of their wells for drinking water replaced by Teck several years ago due to selenium contamination. I have friends who have drinking water delivered to their home, as their well is contaminated, and no doubt others will follow.

In our beautiful valley, one of our signature summer draws is fly fishing. It's a key part of our summer economy and brings people from all over North America to fish westslope cutthroat trout. Many of my friends who work in the industry and rely on the river to provide for their families are increasingly concerned about the ever-rising levels of contamination.

Concerns regarding selenium have been part of our lives in the Elk Valley since the 1990s. For over 25 years the provincial government, the federal government and Teck have assured us that all will be well and that they are dealing with it. We regularly hear how much money Teck is spending, yet levels continue to rise. Statistics and assurances mean little when you can't drink the water.

As you may be aware, we are at a crossroads in the Elk Valley. Teck is selling its coal properties to Glencore, a Swiss mining giant. Again we have assurances, yet with a long history of failures in the Elk Valley, our skepticism runs high. Our valley needs to heal, yet Glencore promises government expansion of the mines.

We, the Ktunaxa Nation, and others have been calling for an International Joint Commission reference on the issue of selenium and other contamination in the waters of the Elk Valley.

The provincial and federal governments have failed us. We need this broad oversight. We need the health of our river back. We have a right to safe drinking water.

Thank you very much.

• (1110)

The Chair: Thank you, Mr. Macnair.

We'll go to Mr. McCann for five minutes.

Mr. Tyler McCann (Managing Director, Canadian Agri-Food Policy Institute): Thank you, Mr. Chair.

[*Translation*]

Mr. Chair and committee members, thank you for inviting me to speak this morning.

[*English*]

Agriculture and water have a critical relationship. Water, food security and national security are inextricably linked. Agriculture, the driver of food security, is limited by water quality and quantity. While Canadians often consider water to be an abundant natural resource, around the world there are pressures, including increasing demand and climate change, that are turning water into a scarce resource and reinforcing how precarious agriculture's relationship with water can be.

That increasingly precarious relationship is part of the reason that CAPI launched an initiative on agri-food water earlier this year. This work was funded in part by the RBC's tech for nature fund and was led by our distinguished fellow, Nicolas Mesly.

Before I dive into our recommendations, I'd like to provide some context.

First, Canadian agriculture compares pretty well to other major food producers when it comes to water. Canadian beef has a water footprint smaller than the world average and is 70% of the footprint of Brazilian beef. Canadian beef also reduced its water intensity by 20% between 1981 and 2011.

When it comes to wheat, we have a smaller footprint than the global average, with the lowest footprint measured in a 2010 study.

Food processing made up 7% of all manufacturing water intake in Canada, and improvements in efficiency helped lead to falling water use between 2013 and 2017.

Increasingly, players in agriculture and food value chains are setting and working towards water use efficiency targets. These figures do not capture how volatile agriculture's relationship with water has become. Struggling to cope with too much or not enough water is something that unites farmers from coast to coast. Our re-

cently released report included a series of recommendations built around the creation of a national agri-food water action plan. We did not call for a strategy, as it seems like we are drowning in strategies these days; what we need is action.

The action plan must bring together different levels of government with farmers, indigenous communities, civil society and the agricultural value chain to proactively plan for and deliver the two outcomes we need: one that conserves this vital resource, and one that leverages it to boost sustainable food production.

Federal, provincial and territorial agriculture ministers should take ownership of agri-food water. Our report recommends they commit to develop the action plan by convening an expert panel, releasing a state of agri-food water report and then releasing the full action plan in July 2025.

Our report also recommends immediate action while the action plan is being developed. Immediate actions include developing a coordinated model for standardized data collecting and reporting; going further to use watersheds as the basis for research, innovation and knowledge mobilization; and investing in a mission-driven research call to respond to the grand challenge of conserving and leveraging water as a strategic asset.

Finally, I'd like to touch on the role of the Canada water agency, which came up throughout the outreach we undertook for the report.

There were ongoing questions about what role the agency would play in how agriculture and food would fit into its mandate. There is significant potential for the water agency to facilitate and convene progress on this important issue. A common refrain was that the agency should be a convener and an enabler, not a regulator. Given the needs and the potential of agriculture, the industry should embrace agriculture as a partner.

Water is critical for agriculture. Too much or too little has the potential to cause significant harm to food production, but managed and leveraged strategically, it can give Canada a significant competitive advantage in an increasingly hot, thirsty and hungry world.

I look forward to taking your questions.

• (1115)

The Chair: Thank you very much, Mr. McCann.

We'll go to the first round, starting with Mr. Mazier.

Mr. Dan Mazier (Dauphin—Swan River—Neepawa, CPC): Thank you, Chair.

Thank you to the panel for coming out here today. This is an important subject.

Mr. McCann, I'll start with you. You were singing to the choir here when you were talking about how government needs to basically coordinate and how there's an underlying issue across Canada and in different agencies in that they're all fragmented. When it comes to water control or, I guess, water authorities, we have a multitude of different agencies, and I guess this is one of the reasons we're trying to clarify this in the study.

I do remember the days of DFO, when they came over the landscape with a very top-down type of approach. As we go down this road of wanting to do better in Canada, are there any things we can point out or any rules we should be adhering to in order to make sure that we don't go beyond that and develop that kind of agency again, especially when it comes to this water agency?

Mr. Tyler McCann: I think it really speaks to the need to understand and respect mandates, jurisdictions and the role that all of the players play. I think there is a need and an opportunity for strong federal leadership, but it needs to be federal leadership that takes a collaborative approach with its provincial and municipal partners and the farmers who are often on the land and on the front lines of this debate. We see this not as a need for the federal government to expand its mandate but to act as a convenor and facilitator to bring more people together and develop common approaches.

With the provincial responsibility for water monitoring and water quality in Canada, we struggle with different approaches, different definitions, different standards used across the country. Bringing people together to develop a more common set of ways to talk about water research, water information and water availability is a small thing that can make a big difference.

I think there is an important opportunity as well in trying to better align and invest in that research so that we all have a common understanding of what we are really talking about with water availability and water quantity. Again, I think that's a real role that the Canada water agency can play to support other partners, and the federal government can play a supportive role, an enabling role, recognizing the limited mandate that it actually has on this issue.

Mr. Dan Mazier: How is my time, Chair?

The Chair: You have three and a half minutes.

Mr. Dan Mazier: I guess at this point I'd like to introduce a motion. I move that:

The committee report to the House that the Federal Court of Canada has overturned the Liberal Government's cabinet order banning plastics, declaring the order, "unreasonable and unconstitutional", and "invalid and unlawful", that the committee urge the Liberal Government to act in accordance with Canadian law, and no longer introduce legislation and Cabinet Orders that contravene Canada's laws and constitution.

Mr. Chair, I'm very surprised that this matter has not been raised at the environment committee yet, which is why I'm raising it today.

The Federal Court of Canada has deemed this Liberal government's plastic ban "unreasonable and unconstitutional". Those are the exact words from the court. This is the second time in nearly a month that the courts have ruled that the Liberal government's environmental policies are unconstitutional. Last month the Supreme Court of Canada ruled that the Liberals' "no more pipelines" bill, Bill C-69, was unconstitutional, and now we know that Minister Guilbeault's plastic ban is also unconstitutional. I wish he would just quit hiding from this committee so that we could ask him some quick questions on his failed policies, but he keeps hiding from Canadians.

It's been over 240 days since this minister has testified at committee. He has been embarrassed by these court rulings, but Canadians deserve answers. I expect that the Liberals and the NDP will once again block this motion and continue on, but the Conservatives believe the government needs to quit introducing legislation that contravenes the laws and the Constitution.

I hope we can vote quickly on this matter and move forward with our study.

The Chair: The chair recognizes Mr. van Koeverden.

Mr. Adam van Koeverden (Milton, Lib.): Thank you very much, Mr. Chair.

As we've said before, the minister will be appearing before the committee at his earliest availability. We'll also be appealing the decision on the unconstitutionality of our ban on single-use plastics.

In the interest of using the time we might have left, I think we should return to the study at hand.

• (1120)

The Chair: Are you proposing a motion to adjourn debate on this?

Mr. Adam van Koeverden: Yes.

The Chair: You're proposing that we—

Mr. Adam van Koeverden: I propose that we adjourn debate on this motion.

The Chair: That's a dilatory motion.

(Motion agreed to: yeas 7; nays 4)

The Chair: Thank you.

For the record, the minister has gotten back to me with a date, which I can share with you on another occasion.

We'll continue. Mr. Mazier, you have three minutes and 15 seconds.

Mr. Dan Mazier: Thank you, Chair.

Mr. McCann, I'll go back to you.

One of the more underlying questions.... As I've looked at water issues over the years, I've often wondered if there are any other agencies or countries that are doing this well. What does the United States do? Do they have overarching coordinating bodies? Does Europe? How do other countries handle water?

Mr. Tyler McCann: I think how you define "well" is an interesting question.

Other governments have been driven by crisis to take different approaches. In the struggles around jurisdictions in the United States, states with their own approaches to water management that didn't always work well together were recently spurred to work well together when the federal government threatened to intervene and override their state jurisdiction. It points to a system that probably doesn't do a very good job of conserving, managing and leveraging the water that it has.

We watch a lot, with interest, what happens in Australia. Again, their agriculture sector has been significantly impacted by water use policy there, a water use policy driven by a crisis or the threat of a crisis—

The Chair: I have to stop you there because there's a bell ringing. It's a half-hour bell, I believe.

I'd like to get unanimous consent to continue for the next 25 minutes.

Some hon. members: Agreed.

The Chair: Sorry. Go ahead—

Mr. Dan Mazier: Briefly, how much time do I have left?

The Chair: You have two minutes.

Mr. Dan Mazier: Okay, good.

Mr. McCann, could you wrap it up? I have one last question for you as well.

Mr. Tyler McCann: I would say, just briefly, that I think it's important to understand that around the world the water dynamics are changing. Canada has an opportunity to get ahead of the problem before it comes, before we're put in the same position that the Australians and the Americans have been put in, for example. We can act before the crisis gets here, and it's something that should be driving how we think about water and agriculture.

Mr. Dan Mazier: One other issue I want to point out, and I'm sure you're in agreement, is that I've often observed that rain makes grain. If we don't have water in agriculture, we don't have any food. Rain makes grain, but with drought, nobody wins. That's an old farm saying, actually, and you can take that one to the bank. It's so true, as we see when we look at how ecosystems break down when we don't have enough water.

When we talk about water, we are talking about food supply in our nation. This is why we need to get this correct. Agriculture needs to be front and centre. The agriculture managers—the producers who are on the landscape—have the ability to actually save Canada and make Canada a nation that is a superpower when it

comes to agricultural production, but they have to have the tools. It doesn't need a top-down type of government approach; it needs a bottom-up type of approach whereby farmers can actually be part of the solution.

Thank you.

● (1125)

The Chair: Thank you, Mr. Mazier.

We'll go to Madame Chatel.

[*Translation*]

Mrs. Sophie Chatel (Pontiac, Lib.): Thank you, Mr. Chair.

I want to thank the witnesses for joining us today, including those appearing by video conference.

My question is for Mr. McCann.

Good morning and welcome, Mr. McCann. I gather that you're from the municipality of Bristol, in the beautiful constituency of Pontiac.

Congratulations on your excellent report entitled "A National Agri-Food Water Action Plan." I read it with great interest. In your conclusions, you wrote the following: "In an era of increasing climate and geopolitical change and conflict, water is undoubtedly the challenge of the 21st century. For Canadian agriculture and food, there is tremendous potential to turn that challenge into an opportunity."

It's important to hammer this point home. Way to go!

I have two questions that directly relate to your recommendations in the report.

My first question concerns water management, which should be carried out at the watershed level to address the challenges posed by water and agriculture.

Could you elaborate on this key recommendation?

Mr. Tyler McCann: Yes, of course.

In some places, the planning done at the watershed level is very effective. However, in other places, the management could be planned better.

By way of context, water is a regional challenge. There are several ways to approach watershed management. Some approaches work well, but the solutions for a watershed in one region may not be the same as the solutions in other areas. The dynamics are different, depending on the quantity, quality and types of pressure.

Every province has a different approach to water management. In some places, watershed authorities have the tools and funding to invest in research, management and knowledge transfer. However, this isn't the case everywhere. The level of investment isn't the same in all regions.

We believe that these authorities should receive better support and the tools needed to manage the watersheds. This would help to support people who are well versed in the matter, who are working in this environment, who have experience in the field and who know the situation in their region's watershed.

Mrs. Sophie Chatel: Thank you.

We don't always agree with our Conservative colleagues on environmental measures. However, we do agree that farmers must be at the table. For example, as part of our committee's very important study of water, we must ensure that farmers' voices are heard loud and clear. As you pointed out, they're on the ground, and they understand the significance of climate change and water issues.

I want to talk about recommendation 6.2, which calls for the launch of an expert panel. I also liked Mr. Mazier's question about the possibility of incorporating your recommendation into the Canada water agency, which is still under development.

Do you have any solutions that we could put forward as part of this study?

Mr. Tyler McCann: According to our proposed action plan, the agriculture ministers would be responsible for the issue, and the responsibility would be shared. Other departments would have a say, including the environment and infrastructure departments. The list is quite long.

We want this matter to become a key topic at the agriculture ministers' working group meetings. The Canada water agency could provide support, and its representatives should be involved in all stages of the work. We recommend that a state of the water report be released every two years. This report would provide an overview of the situation with regard to the water and the agriculture and agri-food sectors.

Ultimately, the agriculture ministers should take the lead on this issue, even though it's a shared responsibility. In the agriculture sector, you can't always let others take the lead. The agriculture sector and the ministers involved must show leadership and propose their own solutions.

• (1130)

The Chair: Thank you.

You have about five seconds left, Ms. Chatel.

Mrs. Sophie Chatel: Mr. McCann, I just want to say that I'm intrigued by this recommendation.

How could the sustainable finance action council's work on governance structure help incorporate your proposal effectively?

The Chair: Unfortunately, the witness won't have time to answer the question.

Mrs. Sophie Chatel: It would be good to receive a written response, Mr. Chair.

The Chair: Thank you, Ms. Chatel.

Ms. Pauzé, you have the floor.

Ms. Monique Pauzé (Repentigny, BQ): I want to thank the witnesses for joining us.

I'd like both Mr. Aherne and Mr. Macnair to answer my question. I'll focus on the right to safe drinking water, which Mr. Macnair referred to in his remarks.

We know that the public authorities sometimes damage the integrity of water ecosystems, with complete impunity. I'll give you a few compelling examples. Naturally, I'm thinking of the dumping of toxic substances by the oil sands industry, the mining companies, which have dumping permits for 16 lakes in the country. I'm also thinking of the pest management regulatory agency, or PMRA, which advocates for an increase in pesticide use. After all, this does concern what we'll be eating. Other governments can only take so much action. They can't move forward if Canada doesn't get its act together.

Mr. Aherne and Mr. Macnair, do you think that Canada has the right legislative framework in place to protect the water environment?

[English]

Dr. Julian Aherne: Thank you for the question.

I missed most of the question because of my earpiece, but I got the end of it, which I think related to whether Canada has put in the right policies or framework.

I think Canada is working towards putting in the right policies and framework. There are good structures in place, but I think those structures can be improved, and there can be more common sense or joining of the dots between organizations.

For example, most of the pollution that I've worked with is atmospheric transport of pollution into receiving systems such as fresh waters, so clearly there needs to be a connection or coordination between agencies responsible for monitoring air pollution and those responsible for monitoring fresh waters.

I'd like to suggest an earlier—

[Translation]

Ms. Monique Pauzé: In terms of the agencies, we know that the government wants to set up the Canada water agency. However, could this agency resolve the main issue, which is the blatant lack of political will on the part of the public authorities?

I provided some examples earlier, including the dumping of toxic substances by the oil sands industry, the mining companies, which have dumping permits for 16 lakes in the country, and the PMRA, which authorizes pesticides.

Can the Canada water agency resolve all these issues?

I'd like Mr. Macnair to answer this question. I'll then turn to Mr. Aherne.

[English]

The Chair: Go ahead, Mr. Macnair.

Mr. Randal Macnair: I don't profess to be an expert on this matter, but my short answer from our experience in the Elk Valley is no.

Right now, there is work being done by ECCC on coal mining effluent regulations, and the intent is to create a two-tier system by which new mines will be subject to one level of requirement while the mines in the Elk Valley will basically be grandfathered and get a free pass.

The situation that we have in the Elk Valley is one in which industry is addressing the symptom, which is the water contamination, not the problem, and that's how mining is conducted.

Again, the failure of the provincial and the federal regulatory systems is why the Ktunaxa Nation has been asking for more than a decade for an International Joint Commission reference on the watershed in the Elk Valley. We have really lost faith in the federal and provincial governments in maintaining the health of our watersheds and ecosystems. There have been mass die-offs of fish in three of the tributaries.

• (1135)

[Translation]

Ms. Monique Pauzé: Thank you, Mr. Macnair.

You're basically saying that everyone is working independently and that there's no coordination.

Mr. Aherne, do you think that the Canada water agency can ensure that the departments take a coordinated approach when the public authorities themselves are damaging the integrity of water ecosystems? Mr. Macnair has just provided an example.

[English]

Dr. Julian Aherne: Thank you.

Maybe I'll just follow up on the comment from the previous witness and say that to some extent I agree that we focus on end-of-pipeline solutions. We know that the answers are easy. We should really clean up the emission points.

I would suggest that an agency should be able to. It was a suggestion that an agency could convene or facilitate, but I think it could also mandate and put in place stronger responses. In theory it should, but it's tough to say. I mean, I don't understand why it couldn't.

[Translation]

Ms. Monique Pauzé: As I understand it, the current level of pollution control is totally inadequate. As you said in your opening remarks, pollution and pollutants move. Since each department works in its own little box, and there's no coordination, the other levels of government are limited, because the federal government doesn't take charge of its own affairs.

Is that correct?

The Chair: Unfortunately, we have to move on to the next speaker, Ms. Pauzé.

Mr. Aherne, you can always answer Ms. Pauzé's question in the next round of questions.

Mr. Bachrach, the floor is yours.

[English]

Mr. Taylor Bachrach (Skeena—Bulkley Valley, NDP): Thank you, Mr. Chair.

Thank you to our witnesses for being with us today.

I was listening to Mr. Macnair's presentation. He briefly mentioned the need for an International Joint Commission reference.

I wonder, Mr. Macnair, if you could expand on that. What would the process be for obtaining such a reference? What do the community and your organization see as being the beneficial outcomes of that? What role can the committee play in ensuring that such a reference takes place?

Mr. Randal Macnair: Thank you, Mr. Bachrach.

Again, as I mentioned, the call for the International Joint Commission reference has been put forward by the Ktunaxa Nation for over 10 years. It's a reference under the Boundary Waters Treaty of 1909. It's a method by which Canada and the United States would share oversight of the watershed.

This has been requested because, for instance, the Elk Valley water quality plan, which was implemented in 2014, has not achieved the results that it set out to. Teck has not been in compliance with that since the beginning, in the almost 10 years that the plan has been in place.

From the committee's perspective, it's a matter of political will. It's something that has been discussed by the President of the United States and our Prime Minister. We know that it's, shall we say, on the radar. However, as I mentioned earlier, with this pending deal with Glencore, we need that oversight in place so we can stop polluting our neighbours and stop polluting our own backyard.

• (1140)

Mr. Taylor Bachrach: With respect to the process for obtaining a reference, Mr. Macnair, would the Canadian government simply request that one take place, or is this something that both countries would have to request simultaneously?

Mr. Randal Macnair: Thank you for that question, because it is key.

It's my understanding that every reference that has taken place has involved a joint submission by Canada and the United States, although it is possible for one country or the other to move unilaterally.

It would be our hope that Canada and the United States, as neighbours and partners, would join together and make this reference together. That would, from our perspective, be much stronger. Of course, the Province of British Columbia and the transboundary Ktunaxa should be part of that dialogue.

As I understand it at this point, it is absolutely up to the political will of the government of the day.

Mr. Taylor Bachrach: Mr. Macnair, do we know how the Americans feel about this? It would be interesting to hear from them as part of this study. I'm not sure if we'll have anyone relevant to this specific topic coming to testify, but in your conversations with folks across the border, is there a shared desire to see such a reference?

Mr. Randal Macnair: From my understanding, from the U.S. Geological Survey to the indigenous nations in the United States right up to the White House, there is a desire to move forward with Canada on a reference.

Senator Tester of Montana recently spoke to this. A paper recently released on the contamination in the Elk-Kootenay watershed really underlined the importance of this issue. I can share that with you, Mr. Bachrach.

Mr. Taylor Bachrach: That would be helpful. Perhaps you could submit it to the committee and we could consider it as part of our report.

Mr. Chair, how much time do I have left?

The Chair: You have a minute and a half.

Mr. Taylor Bachrach: As you know, Mr. Macnair, my neighbours are considering a proposal to mine about 800,000 tonnes a year of coal in the Skeena watershed—

Mr. Lloyd Longfield (Guelph, Lib.): I have a point of order.

The Chair: Go ahead, Mr. Longfield.

Mr. Lloyd Longfield: I'm sorry, Taylor, but we are getting really close to the vote.

The Chair: No, we can finish. We will have time to finish and still have six minutes until the vote.

Mr. Lloyd Longfield: Is everybody voting electronically?

The Chair: Yes.

Mr. Lloyd Longfield: Okay. Thank you.

I'm sorry, Taylor.

Mr. Taylor Bachrach: Don't worry. I have it under control. I will let you know how you voted after it's done.

I see, Mr. Chair, that you will give me another couple of seconds to finish my question.

My question to Mr. Macnair is this: What message would he share with the people of the Bulkley Valley and the Skeena watershed who are looking at this proposal to mine 800,000 tonnes of coal per year in the Skeena watershed, which is home to an internationally renowned steelhead angling industry and, of course, all five species of wild salmon, which are vital to first nations?

What should people take from the experience of the Elk Valley?

Mr. Randal Macnair: I will put it this way. Coal mining has been happening in the Elk Valley for 125 years. If I were asked if we should do it again, I would probably say no.

We have a legacy in our valley, which provides high-quality steelmaking coal around the world, but to start a mine with the issues and the impacts that come with a sunset industry, the reality is that the world is moving away from steel made with coal, and the

horizon that would give us would be about 30 years, so I would say no.

The Chair: We will have to stop there for the vote, but we will have time for a shortened second round with this panel, so if the panel wouldn't mind waiting about 15 minutes, we will come back to you after the vote. We're all voting virtually, so we don't have to walk over to the House, and that saves time.

I appreciate members' agreeing to that.

Mr. Taylor Bachrach: Aren't they 30-minute bells?

The Chair: There are five minutes left.

Thank you. We will pause for a moment.

• (1140)

(Pause)

• (1200)

The Chair: We will resume now. We're doing a shortened second round. We're going to reduce everyone's time on the second round by 25%, so if my math is good, that means four minutes and two minutes.

[Translation]

We welcome Mr. Garon to the committee. Welcome, Mr. Garon.

Mr. Leslie, you now have four minutes.

[English]

Mr. Branden Leslie (Portage—Lisgar, CPC): Thank you, Mr. Chair.

I'd like to start with Mr. McCann.

I appreciate the comments of my colleague from across the way who spoke about the importance of the agricultural sector's voice in environmental policies, specifically in water policy. However, in my experience, that has not been the reality under this government at all.

I notice, Mr. McCann, that the National Agri-Food Water Action Plan states that a series of papers on the creation of the CWA mentioned supporting agri-food. However, agriculture formed a very small part of these documents, so I'm curious. From your perspective and that of your colleagues in the agricultural sector, is agriculture normally engaged meaningfully in water issues or in any environmental policy issues, the sustainable agricultural strategy and the Canadian water industry?

What is your perspective on the engagement with the agricultural community? Is it a consultation or is it a meaningful engagement?

• (1205)

Mr. Tyler McCann: I think that's an interesting question.

The level of consultation has probably never been higher. We have more opportunities to offer more perspectives in more places, but I think that's different from engagement, and I'll note that the approach with the sustainable agriculture advisory committee that the federal government is using is different. There's more ongoing in-depth engagement.

I don't think we necessarily see that on other files in the same way, and so I do think it is important to recognize the difference between consultation and engagement, and I think we would all appreciate the opportunities for more meaningful, more in-depth engagement on this issue and many others.

Mr. Branden Leslie: Thank you, Mr. McCann.

I'd highlight that research into productivity is an important part and potentially has great environmental impact in terms of moisture resistance and drought resistance for crop commodities. For example, we're seeing a shift away from farmer-led research and decisions being made that are going to have the benefits of productivity and the ability to have crops that adapt to changing climate and changing water levels.

I'd just like to combine two questions into one. What role does water management on natural landscapes on farms play in terms of irrigation and water availability, and what research priorities do farmers need to adapt to the changing water availability we have without investing in water retention and irrigation capacity?

Mr. Tyler McCann: Canadian agriculture, compared to its competitors, is a relatively low user of irrigation. We have a lot of untapped potential for sustainable irrigation on Canadian farms. The Government of Saskatchewan is picking up something that was started 60 years ago to build out greater irrigation infrastructure. The Canada Infrastructure Bank is a backer of that, so there is potential. It's a good example of finding the balance between conserving the resource that we have and leveraging it for irrigation, and I think we can do both in Canada.

R and D is really important. We have bred and developed more resilient crop varieties that are able to withstand droughts in ways they couldn't 20 or 25 years ago. That's a really good example of an R and D measure. Resilience in productivity is not necessarily directly related to water, but it is really critical to responding to this changing dynamic of water and climate change.

We need to do more. We need to invest more. We need to recognize that our models and our knowledge around how water is changing are also changing, and we're not doing enough. We called for a mission-driven research call.

One of the challenges we often get in agriculture is that rather than investing more and investing incrementally, we just keep adding research priorities to the existing budgetary envelope, and so rather than just adding water to the list, we think we need to actually invest more and dedicate and target that additional investment in water as a priority.

The Chair: Mr. Ali, go ahead.

Mr. Shafqat Ali (Brampton Centre, Lib.): Thank you, Chair.

Thank you to all of the witnesses for being here to share your knowledge and expertise on this important subject.

My question is for Professor Aherne.

Could you advise us with respect to whether there is more that our government could do to deal with microplastic pollution in our rivers and lakes? Would a ban on single-use plastics result in a significant reduction in microplastic pollution?

Dr. Julian Aherne: Thank you for the question.

Microplastic pollution is an emerging topic. We're still, I think, in a learning phase. I gave an example that much of the research to date has carried out sampling and analysis using different methods, which we can't really compare, so we really don't have a good understanding of the situation.

I know there's been another committee in terms of microplastics, but I think we need some understanding of a coordinated sampling approach across jurisdictions so we can have an understanding of the scale of the problem. Of course, there's interest in terms of nanoplastics as well.

In terms of pollutants, I think that to some extent it's quite simple. If we can understand the sources, we can manage those sources and help to reduce the problem. Therefore, if single-use plastics are a source, then perhaps we should manage that source.

It's also worth recognizing that microplastics in the environment today are plastics that degraded 20 to 50 years ago and were released into the environment, so there's been that slow breakdown. Therefore, we expect to see an exponential increase in microplastics in the environment, given the fact that there's been an exponential increase in the use of plastics over the past 20 to 50 years.

I think we're at the tip of the iceberg in terms of what we're seeing and in terms of microplastics in the environment, so what we do today may have an impact in 50 years' time.

• (1210)

Mr. Shafqat Ali: Through you, Mr. Chair, Mr. McCann, you have said that Canada has a "fragmented and siloed model" for water management and that the government's policies on data collection and reporting are far from complete or standardized. If you had the necessary authority, what steps would you implement to improve that situation?

Mr. Tyler McCann: I think there's an opportunity to bring people together. I think it's not necessarily about authority but rather about a collaborative approach that better standardizes the data collection, monitoring and reporting we do across provincial boundaries and alongside the federal government.

One thing I would do is standardize. We need to have a clear set of definitions. Then we need to invest more so we can better understand the availability and quality of water. This is a really good example of how the lack of understanding we have impacts our ability to be more strategic in how we conserve and leverage water.

The Chair: You have about 30 seconds left.

Mr. Shafqat Ali: Thank you.

Mr. Aherne, do you want to add anything on freshwater pollution and the different impacts on that, given your expertise?

The Chair: Please answer in 15 seconds, if possible.

Dr. Julian Aherne: I think somebody asked a question earlier about whether there were good examples elsewhere. I think one example that may be worth looking at is the EU water framework directive, which tries to establish consistent methods for monitoring across multiple jurisdictions but also looks at top-down and bottom-up solutions to solving pollution.

The Chair: That's perfect. That's a very interesting answer.

[Translation]

Ms. Pauzé, you have the floor.

Ms. Monique Pauzé: Thank you, Mr. Chair.

Mr. McCann, you have put a lot of emphasis on the Canada Water Agency. For our part, we still don't know much about that agency and what its powers and objectives really are. You talked about conflict and drought prevention, but I'd like you to tell us more about the protection of the resource, meaning water, and about the health risks.

Shouldn't more regulations be put in place? If the Canada Water Agency can't do more, how can we better counter all the threats?

Mr. Tyler McCann: It's important to understand that the provinces are usually responsible for protecting water quality. I think the agricultural sector is a good example of the need to invest more in research. We should be improving and increasing our knowledge of practices to better protect water. In addition, we need to be more aware of the real effects of agriculture. Today, we have a lot of knowledge, but there are things that we believe we know and that we need to delve into.

We sometimes have an opportunity to improve our knowledge of the impact of agriculture on water. Clearly, this is a situation where the Canada Water Agency can show leadership by bringing the provinces together. I hope this will also be an opportunity for the agency to invest more in infrastructure and knowledge transfer.

Ms. Monique Pauzé: If I could interrupt, Mr. McCann—

The Chair: You have a little time left for a brief comment, Ms. Pauzé.

Ms. Monique Pauzé: As I said earlier, provincial governments have responsibilities, but their ability to act is limited. If the federal government doesn't step up to the plate, they can't move forward.

The Chair: Mr. Bachrach, the floor is yours.

[English]

Mr. Taylor Bachrach: Thank you, Mr. Chair.

Mr. Macnair, when we talk about mining, much of the regulatory environment is provincial in nature, yet when we talk about fish, water and pollution, these touch on federal statutes.

I wonder if you could speak to the federal government's role to date in the Elk Valley. What role has the federal government played and how has that related to the overall track record in addressing the issues you've mentioned?

• (1215)

Mr. Randal Macnair: I think it's a case of using a hammer where a scalpel is required.

The federal government has intervened by fining Teck, imposing several of the largest fines in Canadian history in terms of environmental fines, the biggest one being \$60 million for thousands of infractions over several years, but it really appears that Teck takes this as just a cost of doing business. The amount of \$60 million may sound like a lot, but it's a few days' worth of revenue for a corporation of that magnitude.

We need to get away from this.... We need punitive measures, but they need to be more constructive. Again I go back to the International Joint Commission and that sort of oversight that truly takes the importance of the entire watershed into consideration. That is critical.

Another piece I'd like to touch on is that what ends up on the land runs into the water, so it's critically important in places like the Elk Valley to ensure the protection of the terrestrial environment, since it influences so substantially the aquatic environment.

The Chair: Thank you very much.

We'll go to Mr. Longfield for four minutes and then we'll come back to Mr. Mazier.

Mr. Lloyd Longfield: Thank you, Mr. Chair.

I'd like to build on that last discussion we were having with Mr. Macnair about the terrestrial impacts on clean water.

Guelph is on a groundwater supply. We don't take our water from rivers and streams. There is an impact on aquifers, but there are also impacts on wildlife and biodiversity.

Could you comment on what are, as we're studying water, the related externalities we should also be including in our study?

I know there's a lot of stuff there.

Mr. Randal Macnair: There's a lot of stuff there. I'll start with the selenium.

The selenium is oxidizing from waste rock that comes from the mines. The wells I referenced in Fernie and Sparwood were both in aquifers. They were not on the river. These systems are, as you know, so interconnected that it's really critical to take a big-picture look.

For instance, the constraints on the spending of that \$60 million fine from Teck are that it really be related to the aquatic environment, yet in many cases it might be better to acquire some of the surrounding landscape to reduce logging and to reduce turbidity.

We can't take any of this in isolation, as certainly Mr. McCann would know with respect to agriculture. This needs to be looked at holistically, thoroughly and now.

Mr. Lloyd Longfield: Thank you.

That's exactly where I was going with my next question, to Mr. McCann, about planting trees in riparian zones to try to filter the water before it gets into watersheds and looking at what else is done in agriculture for root architecture to get roots going deeper into the soil to also help with carbon sequestration and soil health.

Could you comment on how the reason Canada is doing as well as we are in terms of water management sometimes has to do with soil management as much as anything?

Mr. Tyler McCann: Often the right things to do, the good things to do, in agriculture have multiple benefits. Planting more trees and riparian buffers are good for water management also. It's really good for carbon sequestration.

I think it's a good example, though, of where Canada has been slower than the rest of the world. If you look at the farm programming in the United States, they have had, for a much longer time, a much more significant conservation program that supports agricultural ends. Canada is coming to that game a little bit late.

There are existing programs, like ALUS, that help support farmers and that deliver some of those benefits you're talking about, but governments have been slow to come to the table with investments. I think we can do a lot more than what we're doing today.

• (1220)

Mr. Lloyd Longfield: I asked the next question of another witness.

I grew up on the Prairies, and PFRA was all over the Prairies from the dust bowls of the 1930s up until 2014, when the program was cancelled. It had to do with irrigation water and tree planting.

Is PFRA something we could be considering revisiting in terms of our agriculture partnerships with the provinces and territories?

The Chair: We need a very brief answer, please—like 10 seconds.

Mr. Tyler McCann: There's a lot of opportunity to do a lot more and to invest in it. I think the delivery model of how you go about it can certainly be debated. I don't know whether we need a new PFRA, but more investment is going to be a good thing.

The Chair: That's perfect. Thank you.

Mr. Mazier is next.

Mr. Dan Mazier: Thank you, Chair. How long do I have?

The Chair: You have four minutes.

Mr. Dan Mazier: Okay.

Hi, Mr. McCann. I have some more questions here.

One thing about the farming community is that they're always being accused of dumping fertilizer into water streams—cows are in the water and all of that kind of stuff—but what about the technology of taking the nutrients out of the water?

Being in Manitoba, of course, we're the lowest part of the watershed, so everything from.... I said the day that Saskatchewan discovers that their nutrients are going down the river is the day the water gets shut off.

When I was previously, with Keystone Agriculture Producers, I noticed there was a model out there. They were taking the phosphorus out of sewage treatment plants and then putting it back on the soil. Where I farm, we're very low in phosphorus, so phosphorus would be a key ingredient.

When developing this agency, where would working toward solutions and technology belong in the water discussion, and how would we place it into whatever entity was going to be developed?

Mr. Tyler McCann: You highlighted some really interesting issues and dynamics that play out in agriculture. We often think about the one issue—carbon gets a lot of attention these days—but depending on where you are in the country and how you farm, water may be your number one environmental impact.

We don't do a really good job in Canada of prioritizing what issues need to be addressed in what places, but there is a lot of improvement that's already been made.

PFRA was mentioned in the last question. There are some really good examples of.... That is less relevant today, because the way that we farm is different. The practices that are used—no-till, a combination of no-till and Roundup, and GM products—have really changed the impact that farming has. They've reduced runoff and have helped reduce the environmental impact, but there are still some challenges in some places.

Recognizing that some of those areas need more of a focus around reducing environmental impact is important, but there's a lot of opportunity to do it in a proactive, progressive way rather than trying to regulate or take that stick approach. I think there's a lot of interest in doing better and a lot of opportunity for partnership to improve agriculture performance.

Mr. Dan Mazier: I've often thought that if somehow we could get the cities that have infrastructure problems when it comes to dumping sewage and all of those issues around it to somehow start marrying that with agriculture production, I think we'd be way better off as a country. I think that's something that the committee needs to coordinate as we develop new policies for this.

How much more time do I have?

The Chair: You have about a minute.

Mr. Dan Mazier: I know that PFRA is brought up a lot. I heard Terry Duguid, the parliamentary secretary for water, bring it up. He was saying, "Well, it's gonna be like PFRA."

The problem with PFRA was that it was a very government type of approach, and it was very outdated, as you commented as well. I think we could learn from PFRA; there were some good things, but there were also some very limiting things in it.

I'll go back to my first question.

If there's one takeaway when it comes to dealing with agriculture and food production, what should be focused on most importantly when it comes to water and water management?

Mr. Tyler McCann: I think it is investment in research and development. How do we do a better job of understanding how to be more water-efficient? How do we do a better job of developing more drought-tolerant crops and more drought-tolerant cropping systems?

We talk a lot about mitigation, but I think that adaptation is actually the number one issue for agriculture. That really should be where the focus is—on how we adapt to this new reality.

• (1225)

The Chair: Thank you very much.

On that note, I'd like to thank all of the witnesses today for their contributions to our study.

We will take a short break—ideally five minutes—and then go to our second panel.

Thank you again to the witnesses and thank you to the members for your questions. We'll be right back.

• (1225)

(Pause)

• (1230)

[*Translation*]

The Chair: We will now resume the meeting.

Greetings again to the committee members.

Welcome to our witnesses.

I want to assure you that the sound tests were carried out successfully.

We have with us Eddy Charlie, co-organizer of the Victoria Orange Shirt Day; Frank Annau, director of product stewardship with Fertilizer Canada; Jérôme Marty, executive director of the International Association for Great Lakes Research; Grand Chief Victor Bonspille and Eugene Nicholas, director of environment, who is joining us by video conference, both from the Mohawk Council of Kanesatake; and Tracy Cross, retired member of National Defence and retired chief of police of Kanesatake.

We'll start with Mr. Charlie.

Mr. Charlie, you have the floor for five minutes.

[*English*]

Mr. Eddy Charlie (Co-Organizer, Victoria Orange Shirt Day, As an Individual): Hi, everybody.

I'm from the Cowichan Nation. I left home when I was 14 and moved to Vancouver. I came back to the island 20 years ago. I went

to the Cowichan River and I noticed the water was very shallow, only about a foot deep. Every year that I went back, it was getting more and more shallow, so I asked somebody about that. They told me there was a mill in Crofton that was diverting the water for its use.

I went into the community and talked to some of the elders and asked them if they were getting salmon. They said no. I asked them a little bit more about the water and why it was so low. They told me that a lot of it had to do with the mill in Crofton diverting the water. That was having a drastic effect on the plants and animals around the river.

I am really concerned, because the salmon run has been getting lower every single year since 2002. Not only are the salmon not returning to the Cowichan River, but the plants are also becoming destroyed because the water is not getting there, and when the water does run, it's warm because it's too shallow.

I'm really concerned because my elders used the river as a source of food and medicines. Every year more and more of the plants are dying. More and more of the animals are not returning, especially the salmon. My ancestors thrived along the Cowichan River only because of the salmon.

I was talking to somebody about reconciliation, and I want to point out that reconciliation is not just about human relationships' it's also about reconciling with the land, having a relationship with the land. Right now, we are not getting that.

My people would like to be able to use some of the plants along the riverside, but that's not possible because the river is absolutely destroyed.

I was talking to somebody whose last name is Williams. He's one of the last few members of my nation who speak Hul'q'umi'num' and he knows a lot about the medicine and the land. He told me if we don't do anything now, we're not going to be able to pass anything on to our children.

I do not want to be one of the last few people to celebrate life along the Cowichan River. I do not want to be one of the last ones to be able to enjoy having salmon for dinner, and I do not want to be the last one to be able to enjoy collecting and harvesting medicines along the riverside, but that may be the case, because as it is now, the whole riverside is absolutely destroyed. You can drive a car right up the river for half a mile.

I am just asking the government to please help us achieve reconciliation—not just human to human, but with the land as well. I do not want my own grandchildren to not be able to enjoy what my grandparents were able to enjoy along the river.

I'm getting very emotional talking about this, because the life along the river is absolutely destroyed. The trees are dying. The plants are dying. The salmon are not returning, and...it's absolutely terrible.

• (1235)

The Chair: Thank you, Mr. Charlie, for that very cogent exposé on the impact of declining water levels on the way of life of a people. We'll have time for questions. I'm sure there will be many questions.

We'll go now to Mr. Annau from Fertilizer Canada. Mr. Annau is online, I believe.

Mr. Frank Annau (Director, Product Stewardship, Fertilizer Canada): Thanks, everyone.

I'm Frank Annau, the director of product stewardship for Fertilizer Canada. We represent manufacturers, wholesalers and retailers in nitrogen phosphate, potash and sulphur fertilizers. Thank you for the invitation to appear and to speak today.

We believe that voluntary industry-led initiatives that put farms at the centre are the best approach to reduce nutrient runoff. To that end, we have been heavily involved with implementing 4R nutrient stewardship across Canada. This 4R approach has helped farmers apply the right source of fertilizer at the right rate and the right place at the right time.

The resulting efficient use of fertilizer and nutrient use efficiency increases both cost savings and crop yields. Applying fertilizer in the right place with the right weather conditions also ensures it stays in the field and out of waterways.

For example, in Ontario, 4R corn production practices can reduce phosphorus runoff by up to 60%. In a Saskatchewan cereal-oilseed-pulse rotation, this reduction could be as high as 75%.

These numbers are provided by our 4R Research Network, a group of leading research scientists at the universities across Canada who help determine best practices for different growing regions. This knowledge is then shared with farmers by Canadian crop advisers, or CCAs, who participate in our 4R programming, which has two tracks: 4R designation and 4R certification.

The 4R-designated CCAs provide recommendations to farmers and create a 4R management plan. Acres under advisement are then reported back to Fertilizer Canada and aggregated across the country. As of 2022, we had 8.5 million acres under 4R designation towards our five-year goal of 14 million by 2025.

The 4R certification is built off the same foundation but is verified by third party auditing and is currently run in Ontario. Audits require documented evidence to show that CCAs have worked with farms to identify minimum setbacks for surface water, inlets and wells, and that they have collected on-farm data to show reasonable expectation of no increased risk to water quality.

The 4R certification standards were drafted in 2018 by our steering committee as part of a voluntary initiative to improve the western Lake Erie basin. One of the key goals is to create long-term positive impacts on water bodies associated with agriculture, including reducing eutrophication and helping to meet water quality standards. These efforts support the Canada-Ontario Lake Erie action plan, which features 4R in its approach to reduce water phosphorus levels by 40% below 2008 levels.

We are pleased to report that 1.8 million of 9 million total arable acres in Ontario are under 4R certification as of 2022. This exceeds our goal of one million acres by 2025. Combined with 4R designation, that's approximately 11 million acres under 4R advisement across Canada, towards our five-year goal of 15 million acres by 2025. We also recently hit the 500 mark of 4R-designated CCAs to provide guidance.

However, we can always improve. Our annual fertilizer use survey shows 56% of growers self-report these basic 4R practices. However, only 30% are where they already use 4R principles, and only 7% have 4R plans that are signed by a CCA.

The cost of initial implementation also remains one of the top barriers to wider adoption. To overcome this barrier, we believe that a 4R climate-smart protocol should be adopted by Canada's greenhouse gas offset system. This would allow farms to generate and sell credits for 4R practices that reduce emissions and would have the co-benefits of reducing runoff. In turn, this would generate revenue for farms, reduce implementation costs and increase demand for 4R guidance. The on-farm climate action fund has already upticked that demand, and a national protocol would push it even higher.

In response, we believe government support could help accelerate 4R training for crop advisers to provide the needed guidance. We have already invested \$2 million in developing and running 4R programming since 2018, and this is on top of the tens of millions invested in identifying and demonstrating best practices in R and D. Our pre-budget submission this year requests an additional \$2 million in government funding to aid in these efforts.

We have also advocated these solutions to the sustainable agriculture advisory committee, where I co-chair the fertilizer emissions reduction working group. I'm pleased to report that the working group on soil health and water has also identified advanced nutrient management in its recommendations.

We have also engaged AAFC on the UN's global biodiversity framework under target 7 to reduce the risk of nutrient runoff. We were very pleased to see 4R featured in its recent "what we heard" report on Canada's 2030 biodiversity strategy consultation and we look forward to further collaboration.

Just to close, our 2021 consult on the Canada water agency also had three key recommendations: to recognize the standard of 4R stewardship, to support market-based incentives for growers and to align with provincial management plans that feature 4R, such as the Manitoba climate and green plan and the Prairie resilience plan.

Thank you again for this opportunity to speak. I would be happy to take any questions.

• (1240)

The Chair: Thank you very much.

[Translation]

Mr. Marty, the floor is yours.

[English]

Mr. Jérôme Marty (Executive Director, International Association for Great Lakes Research): Mr. Chair, members of Parliament, distinguished guests and committee staff, good afternoon.

My name is Jérôme Marty, and I am the executive director of the International Association for Great Lakes Research.

I first would like to acknowledge the land where we gather today: the unceded, unsundered territory of the Anishinabe Algonquin nation. The Algonquin people are the customary keepers and defenders of the Ottawa River watershed.

I welcome the opportunity to share with you the main issues and priorities that Great Lakes scientists are reporting for the Laurentian Great Lakes. There are three main topics that we would like to bring forward.

The first one is about nutrients. Although the Great Lakes water quality has improved in several lakes, Lake Erie continues to remain a priority area with regard to nutrient management, both for point sources—for example, urban areas—and for non-point sources, such as agriculture. The Great Lakes Water Quality Agreement includes reduction targets for phosphorus loading, with a 40% reduction from 2008 levels by 2025. The reduction of point source discharges of nutrients has been achieved through improved wastewater treatment technologies, but the reduction of non-point source nutrients through adaptive management and best practices poses more challenges.

The second topic is about contaminants of emerging concerns: the CECs, the “forever chemicals”. Pharmaceutical and personal care products—PPCPs—and pesticides and per- and polyfluoroalkyl substances—PFAS—are increasingly detected in the waters of the Great Lakes, including in urban surface waters. Understanding the human and ecological impacts of exposure to persistent CECs is critical both for specific compounds and for mixtures.

The third is microplastics. They are now widespread through the Great Lakes basin. They can be detected in water, sediments and wildlife. Recent research has been conducted to assess the toxicity of microplastics exposure in the Great Lakes. These risk assessments show that the concentrations measured across the Great Lakes exceed proposed risk thresholds for water samples.

We have produced five recommendations as part of our brief.

The first one is to consider adding CECs and microplastics to the list of contaminants of concern in, for example, Annex 3 of the Great Lakes Water Quality Agreement.

The second is to invest in research to better understand the fate, behaviour and toxicity of emerging contaminants to support informed regulations.

The third recommendation is to consider climate change as an accelerator for pollutant production and toxicity. Higher tempera-

tures increase metabolic rates of resident organisms, causing oxygen depletion and creating toxic conditions for the biota. Higher water temperatures also favour the growth of harmful algal blooms—HABs—that are able to release cyanotoxins such as microcystin. As stated by the editor of our journal, Dr. Robert Hecky, Lake Erie is “the canary in the Great Lakes climate mine”. In this context, the urgency of reducing nutrient inputs from the land becomes even more critical.

The fourth recommendation is to engage with first nations and Métis on water monitoring and management. This recommendation is reflected in “The 2023 Third Triennial Assessment of Progress on Great Lakes Water Quality”, released by the IJC to the parties earlier this month.

The fifth and last recommendation is to adopt a comprehensive approach for Great Lakes science. As mentioned earlier, the Great Lakes are inland seas, and as such they call for management approaches that are similar to those developed for marine ecosystems. Faced with an aging research infrastructure, Great Lakes science has fallen behind in its ability to understand the physical, chemical and biological features of these ecosystems and also to report on how quickly they are changing. Several organizations are working together to develop a decadal science plan for the Great Lakes. This initiative is led by the IJC and has identified six priorities for the Great Lakes and will next focus on a blueprint for the plan's implementation.

I thank you for your time to allow us to share insights on the threats that pollution poses to the Great Lakes. Please contact IAGLR should you have any questions about science and the Great Lakes or require support for your work.

• (1245)

[Translation]

Thank you very much for your attention.

[English]

The Chair: Thank you very much, Mr. Marty.

Next is Grand Chief Bonspille.

Grand Chief Victor Bonspille (Mohawk Council of Kanasatake): *Shekon Sewakwe:kon.*

I'm here today to bring to your attention an issue in my territory, the Kanasatake Mohawk territory, concerning a G&R site that is owned by two community members. It's on federal lands within our territory. I want to bring to the attention of the committee here and to all the members who are listening and who can bring awareness or some assistance the issue that since 2015, I believe, this has been a toxic waste site in our community.

In 2021 my council and I revoked the band council resolution, the permits and the agreement we had with the owners of G&R. We were in discussions with the federal and provincial governments on a remediation process, which has now been halted because of the interference by five members on my council regarding the site and because of three requests from the federal government that have not been answered due to the toxic environment in our council.

The witnesses here—Mr. Tracy P. Cross, and online, Mr. Eugene Nicholas, who is the environmental director at Kanesatake—and I have been working diligently with our community and with another council chief, Chief Valerie Bonspille, to help remediate the issue. There are remediation plans, but they're being stopped. They're being roadblocked by five members of my council for reasons that I can only say are ridiculous.

When it comes to health and welfare, this involves not just Kanesatake, not only my community, but also the surrounding municipalities and their community members. This is not a political issue anymore. I believe that the federal and provincial governments have been trying to undermine that view of it, but it is now a health issue.

I have joined forces, or forces from those municipalities have joined in with my plea with the MNAs. We've written a press release. We wrote resolutions together to the federal and provincial governments for assistance with this issue. Right now, they have fallen on deaf ears, and it seems that we're being ignored.

This was read out in the House by Ms. Elizabeth May. It was brought up, I believe, two years ago and it is still being ignored. It is being held, I believe, as a political hostage by these five individuals on my council to stop any progress in the remediation plan that the federal government is offering to our community. I think it's time that both governments—provincial and federal—realize that this has to stop.

People need to start listening. People have to realize that this is not a first nations issue; it's a community issue. It's a non-native issue, a health issue and an environmental issue.

We're talking now about water issues. There are three streams that run through the G&R site and into the Ottawa River, which turns into the Lake of Two Mountains, which then turns into the St. Lawrence River. That affects multiple municipalities and communities downriver as well as aquatic life, the fauna, our medicines, our natural way of life and fishing. This is affecting many, many aspects of our livelihood and traditional territory.

I'm just here to make a plea as a last.... We're almost destitute here to have something done, to have somebody listen to us and to get something in writing, an agreement. I've even gone so far as to ask the federal government to approve veto power for me to sign these agreements to get it done, because my community and other communities surrounding it have been wanting this.

● (1250)

It's being held as a hostage for negotiations by these five individuals who want their way done rather than what the community wants.

The Chair: Thank you for that opening statement.

We'll now go to the first round of questions.

Mr. Deltell, you have six minutes.

[*Translation*]

Mr. Gérard Deltell (Louis-Saint-Laurent, CPC): Thank you very much, Mr. Chair.

Good afternoon, dear friends.

Welcome to all the witnesses.

[*English*]

Mr. Cross, Mr. Nicholas and Grand Chief, thank you so much for your testimony—but what a testimony. It's hammering us to see how much a hostage you are right now.

[*Translation*]

The situation you are experiencing is completely intolerable. Thank you very much for your testimony today.

[*English*]

First, how do you explain the fact that the federal government didn't do anything to help you, and now we have this situation to address?

Grand Chief Victor Bonspille: The federal government has given us three options, three requests, that need to be done by a full council. It's obvious that the full council does not want to adhere to these requests. That is why I asked for veto power from the federal government to accept that. It was out of respect, but that respect has gone out the window right now. I haven't even gotten a response to my request. Our community is now wondering why this is not happening.

The federal government has left on the table these three requests that need to be done by a full council signage, which is going to be impossible at this point. It's a political vacuum. With the avenues I have within my mandate, we've been trying hard to try to rectify this and come to a solution for many years now, since I was mandated in 2021 as the new grand chief of Kanesatake. The previous grand chief ignored these issues.

When I was brought in, I did my mandate and I did my platform and I came through with my promises. I removed the band council resolution and the agreement from council. I was even able to have the owners of G&R turn over the lands to our community. That's one of the agreements the federal government wants, because they will not fund a privately owned property. I had those lands reverted back to the Mohawk Council. That's when these agreements were put forward by the federal government.

Now they're left on the table. My community and I and Chief Valerie and members like Mr. Cross here and our department of the environment are fighting for that and fighting against our own...these individuals who are supposed to be there for the community.

A voice: Governance.

Grand Chief Victor Bonspille: My own governance. Exactly.

It's just a fight. We keep running into walls because the federal and provincial governments are not intervening properly. They are letting us fight among one another. They're letting this become—I'll put it in brackets—an “Indian” issue, a “first nations” issue. It is not. This has gone way beyond the scope of just within our territory.

Right beside the G&R site, there are the properties of farmers who have been affected economically with their crops, with their dairy, with their agriculture. It's affected their income and it's affected their livelihood. I thought for sure that if we got these municipalities on our side, the federal and provincial governments would listen, but obviously they don't seem to care about either side.

• (1255)

Mr. Gérard Deltell: Grand Chief Bonspille, thank you so much.

[Translation]

The Chair: Mr. Nicholas has his hand up.

Mr. Gérard Deltell: Mr. Chair, I'd just like to say a few words to wrap up.

[English]

Mr. Bonspille, thank you so much for your great testimony. This is about courage and dignity. We deeply appreciate it.

[Translation]

Mr. Chair, I'll now share the rest of my time with Mr. Garon.

The Chair: Mr. Garon, Mr. Nicholas has his hand up. I don't know if you want to ask him a question. It's up to you.

Mr. Jean-Denis Garon (Mirabel, BQ): My questions will be for Mr. Nicholas in the next round.

I thank Mr. Deltell for giving me his speaking time.

[Member spoke in Mohawk]

[French]

Grand Chief, I hope that was said correctly. Welcome to the committee and thank you for being here.

The federal government has repeatedly said that this was an indigenous issue. It refused to act because the contaminated land was the subject of certificates of occupation, and Oka letters had been given to the two Gabriel brothers who operated that site.

Those letters of occupation have been returned to the band council, and now there are more administrative hurdles to intervening and decontaminating the land.

Can you clarify that again?

[English]

Grand Chief Victor Bonspille: Yes, that's correct. The owners of the G&R site did revert the lands back, and they had to go through our lands department, but for some reason that I can't explain, the lands department decided to share that information with my cohorts on council, the five chiefs who are against this. Now one of those chiefs has refused to share that and move it forward unless the federal government puts forward, in writing, a guarantee

that if those lands are reverted to the Mohawk Council, the MCK, they won't leave us holding a contaminated site in the end.

We all know right now that we're holding that site. The site is there in Kanesatake. It's not going anywhere. It's still in the hands, unfortunately of... Well, it's in the grey area now, because now that chief is holding the land transfer.

The Chair: Grand Chief, we're going to have to go because the six minutes are up, but there will be ample time afterwards.

We have to go now to Mr. van Koeverden.

Mr. Adam van Koeverden: Thank you, Mr. Chair.

Se:ko, Niawen'kó:wa for being here. Thank you for your leadership and your courage. It takes a lot of bravery to come here and be as forthcoming as you've been. I appreciate that. On behalf of this side of the committee, we thank you for your leadership.

The water of Kanesatake is important for a lot of reasons. It's not just drinking and irrigation; I know there's a big paddling community in Kanesatake as well. As somebody who got to use a kayak for 20 years, a white guy from Oakville, I want to say *niawen'kó:wa* for the sport that I enjoyed and that brought me around the world for a long time.

There were also some pretty awesome Mohawk paddlers I've looked up to over the years. Thank you for that. If you see Alwyn Morris one day, let him know I say hi.

Can I ask how the drinking water situation is in your community?

• (1300)

Grand Chief Victor Bonspille: The Kanesatake Health Center usually takes care of the drinking water. They take water samples every other month, I believe. It could be more than that. Usually the drinking water comes back satisfactory. That's the main response that every community member receives.

They have the opportunity to go further than that to do a deeper analysis of our drinking water, but I don't think too many members want to do that. It takes only a short matter of time. It takes, I believe, two weeks to get that extra analysis done. I did that, and the drinking water at my house showed a higher percentage of magnesium, I believe it was. They said it's normal to have that in drinking water that is coming from a well.

In all of Kanesatake, because we do not have an aqueduct system—we're all on wells—we're worried about that. As I said, we have three creeks running through the G&R site, which run into the Lake of Two Mountains. Some of our membership, like Mr. Cross here, live less than a kilometre away from that site.

One of the gentlemen was speaking earlier about water and how contaminants sit on top of the soil and seep into the earth and go into the water tables and then into our drinking water. Well, that's exactly what's going on in Kanesatake. We don't have the funding to do complete analyses or tests or assessments, so we don't know how deep this has gone. We do know that it is contaminated, through other assessments we've had through Health Canada and the T. Harris company. Right now, those assessments could go even further if my council—which just last night was voted out in a vote of non-confidence—would stop holding this land transfer hostage. Then the federal government would move forward with the right process and full funding to have that land assessed properly and remediated.

Mr. Adam van Koeverden: Thanks, Grand Chief.

Can I ask a couple of questions about the MCK, the Mohawk Council of Kanesatake? You kind of alluded to a bit of dysfunction and some challenges there. Do you have quorum right now?

Grand Chief Victor Bonspille: Yes, there is quorum among those five individuals, but we are a custom band. Our electoral code is a custom electoral code, and we practised our custom last night in the community meeting and voted those five members out.

They have taken me and Chief Valerie Bonspille to Superior Court, as well as 12 of my community members, for standing up for our hereditary right and custom. They're using our community funds. I, as grand chief, have to spend my own monies, and our community is spending their own money to fight these individuals, while they have an endless fund and are taking our band support to fight this issue against our community for this.

Mr. Adam van Koeverden: Okay.

I'm moving over to your communications with ISC, Indigenous Services Canada. Have you been in touch with Minister Hajdu? Have you had a conversation with her office?

Grand Chief Victor Bonspille: No, I have not. I sent multiple emails to her and, I believe, to one of her attachés, Natascha Barron-McNabb, to ask for conversations with her, but I haven't had any response, except.... The last response was when I asked for veto power. It didn't go anywhere.

• (1305)

Mr. Adam van Koeverden: Thanks, Grand Chief. Have you been offered mediation through Indigenous Services Canada?

Grand Chief Victor Bonspille: Yes, I have been, but we've had mediation before within the council, and during that mediation the Sûreté du Québec had to be called in because it was going to get physical. They've had to intervene in three of our meetings, so intervention—mediation—is out the window.

That is why I requested third party management: It's because these individuals have control and signing authority for our funding, and they're just wasting our community funds on lawyers, which, in fact, were terminated by our community in May.

Also, we have a criminal investigation that's ongoing, a fraud investigation, with the Sûreté du Québec, for breach of trust with the funds during the tenure of Serge Simon.

[Translation]

The Chair: Thank you very much.

Mr. Garon, the floor is now yours.

Mr. Jean-Denis Garon: Thank you, Mr. Chair.

Again, Grand Chief Bonspille, Mr. Cross, and Mr. Nicholas, thank you for being here today and for responding to my invitation.

The first file I started working on after being elected in 2021 was that one. We contacted the Department of the Environment and there were interactions with Minister Guilbeault and his office. One day, we were told that Minister Guilbeault could no longer get involved and that the file had been transferred to Mr. Miller. We no longer knew if it was Mr. Miller or Ms. Hajdu who was taking care of the matter. I consider myself an intelligent person, but I was very confused. At one point, no one was answering our calls.

I thought it might be easier for you, the people from the Mohawk Council of Kanesatake, to have ties with the federal government.

Have you had the same difficulties as I have in contacting the federal government for a major and urgent environmental problem?

[English]

Grand Chief Victor Bonspille: Yes, we've had those types of roadblocks, I guess, that we run into, but it just seems to me that the federal and provincial governments are passing the buck. Neither one of them wants to grasp or to take the reins of this issue fully, even though the federal government has offered suggestions and is floating agreements, I guess, until these five individuals on council agree.

I don't understand why the federal government would listen to five individuals who are holding up a potential rehabilitation plan for our community and the surrounding municipalities. Why would they allow this to happen? More and more people are going to get sick and more and more investigations are going to happen, and that's going to prove that it's because these sites were neglected, or this site was.

[Translation]

Mr. Jean-Denis Garon: Grand Chief, I'd like to know more about that.

Basically, letters of occupation were to be returned to the council so that environmental action could be taken. Those letters were returned and—I'll put it in my own words—stolen by certain council members, which means that decontamination can't be done today.

You're asking for a veto to be able to make decisions, but the federal government is asking for the council's unanimous consent to decontaminate the location.

By asking for unanimity, is the federal government not simply giving a veto power to those who don't want to decontaminate?

[English]

Grand Chief Victor Bonspille: Yes, it's doing the exact opposite of my request.

As Grand Chief, I only gave this video request to the federal government out of respect, from my office, as I was trying to do some due diligence here, but I did not have to do that. I can go directly to my community and ask for veto power, and I do not want.... The request wasn't for veto power in all issues or to finish my mandate with veto power' it was veto power on that one issue concerning the health and welfare of my community and the surrounding municipalities. That's the only one, and it was stated in that request.

Now, with my request not being granted, yes, I do believe that they're giving the veto power and the control to these individuals who are abusing the word "quorum" to their advantage.

[Translation]

Mr. Jean-Denis Garon: Grand Chief Bonspille, the federal government has already conducted studies on decontamination. Have they made you any offers? Has any work been done that could lead us to believe that the first stages of decontamination could begin tomorrow morning if the political situation allowed it?

If work has been started, is it now stalled?

[English]

Grand Chief Victor Bonspille: Yes, that is one of the three agreements proposed by the federal government: to have, I believe, the site assessed by their own people, by federal agents, I guess, or by federal entities that would do that. That is one of the reasons that these five individuals on my council are refusing that. They want to have control of the funding that will be coming in.

Why would a federal government give the funding to our governance, a governance that is under a fraud investigation?

• (1310)

[Translation]

Mr. Jean-Denis Garon: What would that amount be?

[English]

Grand Chief Victor Bonspille: I believe it's \$100 million plus.

[Translation]

Mr. Jean-Denis Garon: This demonstrates the importance of sound governance to ensure that these funds are spent in the interest of the community and to decontaminate the area.

Is that correct?

[English]

Grand Chief Victor Bonspille: Exactly. The only way to move forward is through collectiveness, and we don't have that.

What we have right now is our five individuals who have gone into, I guess, protective mode, aggressive mode, rogue mode. They have gone very rogue. They're not even listening to our community members, who have the last say in everything, in every decision. They're just not complying with any issues that are raised by our

members or even by the federal government and provincial government.

[Translation]

Mr. Jean-Denis Garon: Grand Chief Bonspille, you talked about the importance of the community and the fact that this was an environmental problem for the entire region.

Do you have the support of neighbouring municipalities, such as Mirabel, Oka and Saint-Placide?

You certainly have my support, but do you have the support of the MLAs in this fight to decontaminate the area?

[English]

The Chair: Be very brief, please. Give kind of a yes-or-no answer.

Grand Chief Victor Bonspille: Yes, I've been to many meetings with Mayor Pascal Quevillon of Oka and also with the surrounding municipality mayors, who have all been in agreement. We have BCRs or resolutions from those municipalities in the MRC. They are all in agreement to work together, moving forward, for a resolution to rectify this issue and to push the federal and provincial governments to act on this—

The Chair: Thank you.

Go ahead, Mr. Bachrach.

Grand Chief Victor Bonspille: —and on our health and welfare.

The Chair: Madame Chatel—

[Translation]

Mrs. Sophie Chatel: Thank you, Mr. Chair.

I don't want to interrupt the testimony, but I still want to mention that this is a study on water.

Grand Chief Bonspille, I understand that you have very specific problems. There are two indigenous communities in my riding. When there are problems, we work with the government to resolve them, rather than with the committees.

That said, I would be pleased to help you in your efforts with our government.

The Chair: Mr. Garon has a point of order.

Mr. Jean-Denis Garon: Mr. Chair, I want to respond to Mrs. Chatel's point of order.

The Grand Chief is telling us about the circumstances that are preventing the decontamination of a piece of land that is polluting the water in the entire Lower Laurentians region—

The Chair: I don't mind. Anyway, Mr. Bachrach has the floor.

Mr. Jean-Denis Garon: It's important to reiterate the relevance of the testimony.

The Chair: Okay.

Mr. Deltell, you have the floor.

Mr. Gérard Deltell: On the same point of order, Mr. Chair.

I'm completely distressed to see that the member for Pontiac feels that the testimony isn't related to the subject we are currently discussing. We're talking about water pollution and access to water.

We're talking about a population that is being held hostage by people and that is at risk of having health problems related to the consumption of polluted water. We are completely within our mandate, Mr. Chair.

[English]

The Chair: Okay. If you're—

Mr. Taylor Bachrach: There are a lot of points of order that aren't points of order during my round of questioning.

The Chair: We haven't started your round of questioning.

Mr. Taylor Bachrach: I know, but it comes off the end of the meeting, which is—

The Chair: Yes, I know. I would implore members to—

Mr. Taylor Bachrach: I can use points of order to ask questions and make comments too.

The Chair: I haven't ruled anything out of order, so these points of order are moot.

Go ahead, Mr. Bachrach.

Mr. Taylor Bachrach: Thank you, Mr. Chair.

Perhaps I can bring this to the point that Ms. Chatel was trying to get to, which is the aspect of this that relates specifically to water.

Grand Chief, I appreciate that your concern is regarding the contamination of the water supply and the impact not only on your community members but also on neighbouring community members.

I wonder if either you or Mr. Nicholas, the director of environment, could describe in more detail the nature of the contamination.

• (1315)

Grand Chief Victor Bonspille: Mr. Nicholas will answer.

Mr. Eugene Nicholas (Director of Environment, Mohawk Council of Kanasatake): Yes, and we have a problem answering that. Right now, we're currently launched in the third phase of a contamination study that does not touch anything outside of the contamination standards of Canada, but we're looking to alter standards.

However, we have conducted other studies in the community with Environment Quebec. In such areas, it was found that they had a lot of hydrocarbons and cancerous carcinogens in chemicals found inside the soil. This is impacting not only the water but the wildlife and the plant life, and it's impacting everything, all the surrounding areas. We have a very big species at risk area which we are—how would we say it—identifying and managing right now. Not only does it impact inside the forest, but it's impacting the health of our community, because our community is not far from the site. You can smell it in the morning. You can almost taste it in the air when you go through there.

I've been on the site several times, and it's unbearable. We've had some people from ISC, from the Quebec regional office, come down, and they couldn't even stand it themselves. This site is just

sitting there. It's fermenting. It's rotting. We're not sure how far this has gone down underneath the surface. We have very important water aquifers that feed our water supply, not only through artesian wells, but that also spill into the Ottawa River.

My concerns are that water is life, and our policies have to reflect that of life and make your policies stronger, in a sense. Where things are giving you life—animals, waters, plants—you should also put a heavier and substantial penalty on those who contaminate and those who don't follow environmental policies, because what we're dealing with here, gentlemen, is life and life surrounding. We've got to take care of that. We have to manage that. To me, there's no other priority than that.

On top of that, to add to that, our community since 1960 has been used as a dumping ground not only for the Columbian site, the mine site that is close by, but for other construction projects such as the 720 and the Champlain Bridge. Mayor Plante speaks so much about her green strategies, yet she's dumping all her infrastructure in our backyard. I'm not too pleased about that.

Our cancer rates are now at 1.77 cases per household, on average. That is highly unacceptable. Our people are dropping like flies left and right. It's beyond G&R. There's a lot more to this place. It's been going on for too long. Everyone knew about this—provincial governments and federal governments—but now it's coming to the surface.

Your policies are weak. Your policies need to be strengthened. Your policies need to reflect the human aspect of life and not just give fines, because money is nothing to some corporations. What we need to consider is all the constituents along the Ottawa Valley downstream going into the St. Lawrence as well.

I share with Mr. Clark here his concerns about his salmon population in B.C. First nation lives are taken for granted: "once we kill them all off, we can take the land". I sympathize with Mr. Clark where first nations are concerned. They have to be listened to, because we have the key in first nation knowledge and can help you in your policies and to manage in the future.

However, we have to manage the sources of the contamination, which is and has to be including the city of Montreal and all surrounding municipalities and governments that actually enable these companies to come here and dump this on us, because I consider this nothing but environmental racism.

Thank you very much.

Mr. Taylor Bachrach: Thank you, Mr. Nicholas. That's a helpful overview.

I think you were referring to Mr. Charlie, who testified earlier about the situation in the Cowichan watershed.

Mr. Charlie, I wanted to give you a moment to speak about your observations there. I know that in the Cowichan watershed there have been numerous and ongoing efforts over the years, both at the grassroots level and at the government level, to try to address some of these water issues.

Do you feel that the efforts to date haven't gone far enough? Do you feel that until this issue of the diversion of water by the mill in Crofton is addressed in a substantive way, we won't see the kind of progress that we need to?

• (1320)

The Chair: Please be very brief, Mr. Charlie. We have about 30 seconds.

Mr. Eddy Charlie: I spoke to Laurel Collins, our member of Parliament for Victoria, and told her my concern about the Crofton mill overusing the resources, the resources being water. I had just heard that they were dumping some of the waste, or it was leaking into the water. That is causing a lot of damage, not just to the ocean but to the river too.

I feel that the government needs to come down and listen to the elders. These elders have a way of connecting to the land. They know what we need.

The Chair: Perfect. Thank you for that.

Mr. Eddy Charlie: I think the government needs to come and sit down and listen to the people who live by the water. The water is life. We're committing genocide against the land.

The Chair: Thank you very much.

We have time for a second round. We have the House resources, so I'd like to do a truncated round of the kind we did with the first panel. That's basically four minutes and two minutes.

We'll go now to Mr. Kram for four minutes.

Mr. Michael Kram (Regina—Wascana, CPC): Thank you, Mr. Chair.

Thank you to all the witnesses for being here today.

My questions will be for Mr. Annau from Fertilizer Canada.

Mr. Annau, in your opening statement you talked about technologies and practices that can reduce phosphorus runoff into our lakes and rivers. Could you expand a little on these technologies and practices?

Mr. Frank Annau: Absolutely. There are a number of examples in terms of precision agricultural technologies that we feature in our 4R best practices.

One example would be switching from broadcast fertilizer to banding. We basically insert bands of fertilizer within the actual crop itself, within the soil by the root system, in order to basically provide more of an efficient uptake of nutrients.

There is also reduced overlap. We use section control and on-board GPS to help with the actual tracking of where the machinery can pass through the crop to make sure there is less overlap. By reducing the amount of overlap, we have less of a pile-up of nutrients, which would be less susceptible to runoff in the event of extreme rainfall.

By a similar extent, there is also variable rate equipment that can control the rate at which the fertilizer is applied. Again, that's using on-board sensors to determine where within the crop the nutrients are most required in order to ensure efficient application at the right rate of nutrient application. Once again, this reduces the amount of excess nutrient within the field itself, so in the event of any extreme rainfall, there would be less runoff.

Mr. Michael Kram: You also talked in your opening statement about the cost of initial implementation of some of these technologies. For an average farmer on an average farm, how much money are we talking about here?

Mr. Frank Annau: In terms of equipment, unfortunately, I don't have the numbers off the top of my head, but it would be in the high hundreds of thousands of dollars, depending on the size of the equipment you're looking to invest in. We do know that there is government support available on that. I believe the agricultural clean technology fund, for example, does provide a level of support there. I think the cost-share ratio does require a minimum of \$50,000 for participants to apply on that.

We definitely address the fact that for smaller farmers who'd benefit from the cost savings that would accrue through best practices associated with this machinery, that potentially might be a bit high of a buy-in. We have always discussed potentially scaling down the equipment so that it's more affordable to a wider variety of farms. To that effect, FC studied that, I believe with ISED, in 2019, prior to the pandemic. I think the outcomes in that report are still forthcoming, but that would be one approach that I think would help with support.

Mr. Michael Kram: About three years ago, the government released its report entitled "A Healthy Environment and a Healthy Economy". It outlined the government's plan to reduce fertilizer emissions by 30% below 2020 levels. I would think that it must include a significant reduction of fertilizer applications to reduce emissions by 30%.

Can you give us an idea of how much fertilizer applications would have to be reduced by in order to reduce emissions by 30%?

• (1325)

Mr. Frank Annau: We know that the government has put the position forth that it's not an application reduction target, just an emission reduction target. For example, Prime Minister Trudeau did show up at the Canadian Federation of Agriculture's AGM this past winter to announce that.

However, we did see language around use reduction mentioned in the budget, so it's something that we do put a bit of a note of concern on.

We do believe that reductions are achievable in terms of implementing 4R practices to ensure that the right rate does require less emission reduction. We hopefully encourage government to focus on not putting reduction caps on fertilizer.

We did have a 4R agro-economic study in the fall—

The Chair: We have to move on to Ms. Taylor Roy for four minutes, please.

Ms. Leah Taylor Roy (Aurora—Oak Ridges—Richmond Hill, Lib.): Thank you very much, Mr. Chair.

I'd like to actually continue the line of questioning with Mr. Annau.

I was very interested to hear about the 4R program. We've heard about it many times before. I think it's a fantastic program for our farmers to be using, and I know that many have adopted it, as you have said.

You mentioned the targets you have. I think it was 15 million acres by 2025. Is that correct?

Mr. Frank Annau: That's correct, yes.

Ms. Leah Taylor Roy: What percentage of the total farm land does that represent, then—of farmers who could possibly adopt the 4R program?

Mr. Frank Annau: I actually don't have that information off the top of my head, unfortunately.

Just to be specific, the 15 million would include acres under both our certification and our designation programming, the certification having that component largely run within Ontario, which does have that auditing component for [*Inaudible—Editor*].

Ms. Leah Taylor Roy: If you're able to submit what percentage of farmers are participating in the program and what the goal is in terms of potential to the committee, I'd appreciate it. I think it is a very beneficial program for agriculture, and I know they're doing a lot.

I understand that we are looking at the offset you have talked about as well, which I think would be beneficial.

When you talk about the cost—the hundreds of thousands of dollars—for the equipment that's needed for the targeted fertilizer application, could you put that in context? I find the numbers, when they're just out there, hard to understand compared to, for example, the other capital costs on some of these large farms or the overall expenses on the farms.

If you could submit something that shows what the cost of doing this is, especially on an amortized basis over time, relative to other costs that these large farms are incurring, that would also be helpful.

You mentioned that the agricultural clean tech fund already has funding for this.

Mr. Frank Annau: Yes, it has funding for support for precision agricultural technology. That's one of the sources of support available.

Ms. Leah Taylor Roy: Do you feel that this funding is sufficient? Do you know what the uptake has been on it?

Mr. Frank Annau: Unfortunately, I don't know what the uptake of the program has been, off the top of my head. I know it's definitely been used as a key resource for a lot of farms.

In my previous role, I worked at the Canadian Federation of Agriculture. The initial investment costs for smaller farmers was somewhat of a concern in terms of the cost share.

Ms. Leah Taylor Roy: You're talking about the \$50,000.

Mr. Frank Annau: That's correct, yes.

Ms. Leah Taylor Roy: The nitrous oxide that is emitted by these fertilizers.... I understand that it's multiple times more destructive or detrimental to our environment than carbon dioxide, for example.

When you talk about the difference between emissions and the actual amount used, how can emissions be reduced without the amount of fertilizer being reduced? I seem to have some question in terms of the application or the alternatives to some of the nitrogen fertilizers that are being used right now.

Mr. Frank Annau: Absolutely. That's specific to the 4R program that I was talking about, which is a right source of fertilizer applied at the right rate in the right place at the right time.

For example, you can take a similar quantity of fertilizer and apply it after a rainfall, and you would likely have reduced emissions compared to if you had applied it before the rainfall. Increased rainfall, for example, causes volatilization, which increases, of course, emissions from fertilizer.

The goal with the application method there is to make sure that it's really subject to local environmental conditions, as well as regional soil conditions, to account for those variabilities.

• (1330)

[*Translation*]

The Chair: Thank you very much.

Mr. Garon, you have the floor for two minutes.

Mr. Jean-Denis Garon: Thank you, Mr. Chair.

You referred to some documents earlier, Grand Chief Bonspille. Just a reminder that you can send them to the committee in the coming days or weeks.

Having said that, the Liberal member told you that your comments were off topic. I can tell you that's not the case. Talking about the environment at the Standing Committee on Environment and Sustainable Development—

Mrs. Sophie Chatel: A point of order, Mr. Chair.

The Chair: Is it a real point of order?

Mrs. Sophie Chatel: Yes, it is. I want to clarify something. My colleague's questions are off topic. The question is entirely relevant to our study.

The Chair: You may continue, Mr. Garon.

Mr. Jean-Denis Garon: I thank the member for that clarification.

Grand Chief Bonspille, I say that it's entirely relevant to talk about the environment, health and human life. I think that you're carrying the message of the Mohawk nation and the entire region.

You said that relations with the federal government to solve this environmental problem have been difficult.

I'd like to give you the opportunity, in the time we have left, to speak directly to the Council of Ministers and to tell them what you expect in terms of next steps.

[*English*]

The Chair: It's one minute, please, which I think should be sufficient.

Grand Chief Victor Bonspille: Excuse me?

The Chair: You have one minute.

Grand Chief Victor Bonspille: First I'd like to say that I appreciate everybody sitting here and listening to the issues from Kanesatake and the surrounding municipalities.

The main thing I'd like to get across is that the federal government has a fiduciary duty to the benefit, health and welfare of all first nations, including Kanesatake.

I was also told by former minister of indigenous affairs Marc Miller, and Minister Hajdu, that Kanesatake is a priority. Well, we haven't been treated like a priority at all.

We met with them a few times, and we've been getting more attention from the Province and Minister Lafrenière than we have from the federal government. They are supposed to be taking care of our welfare, our health, our lands, and helping us with that, but they haven't. They've been diverting and keeping away from it and trying to have us fix our own issues. Well, our issue lies within the federal government and the provincial government.

The Chair: That's understood. Thanks.

Mr. Bachrach, you have two minutes.

Mr. Taylor Bachrach: Thank you, Mr. Chair.

Could I get clarity on when we're adjourning?

The Chair: It will be two minutes for you, four minutes for Mr. Leslie, four minutes for Mr. Ali—

Some hon. members: No.

Mr. Taylor Bachrach: I think we're supposed to be adjourned at 1:30.

The Chair: The signal I got was that the committee didn't mind doing a full second round.

An hon. member: Is it abridged?

The Chair: It is smaller, yes.

An hon. member: I have to go—

The Chair: It's fine if you have to go. That's fine. Nobody is being kept here against their will.

Mr. Taylor Bachrach: I think this testimony has been really important and very interesting. I would like to change topics very briefly at the end of our meeting to move the motion that I put on notice at our last meeting. I move that given the importance of freshwater ecosystem services to the prosperity, sustainability and resilience of British Columbian communities, and given the increasingly severe impacts of climate change, including drought, wildfires and floods, the committee urge the federal government to work with the Government of British Columbia to establish a \$1-

billion watershed security fund, and that the committee report this to the House.

The Chair: Did you want to debate this now?

Mr. Taylor Bachrach: Yes. I think we heard some very strong testimony from the BC Wildlife Federation, and it's an issue on which I think we find common cause around this table. I would hope that we wouldn't have to debate it for three or four days and that we could move to a vote on it and send a message.

The Chair: Mr. van Koeverden, did you have...?

Mr. Adam van Koeverden: I do. We have an amendment for this motion, which I'm looking for.

An hon. member: [*Inaudible—Editor*]

Mr. Adam van Koeverden: Oh, you guys are frustrated that we're moving a motion? That's funny.

The Chair: Okay, so Mr. van Koeverden has an amendment to Mr.—

Mr. Adam van Koeverden: Thank you, Mr. Chair. I appreciate the indulgence of our colleagues opposite, who routinely run motions in the middle of these studies.

The only amendment would be adding “as soon as possible” at the end. As Mr. Bachrach said, the government would provide a written response to this committee, and then it would say “as soon as possible.”

Mr. Taylor Bachrach: I would accept that as a friendly amendment. It's something that we often include.

The Chair: Okay. Do we want to vote on this resolution?

● (1335)

[*Translation*]

You have the floor, Ms. Pauzé.

Ms. Monique Pauzé: I, for one, do not wish to put the question to a vote today, and I move that the meeting be adjourned.

The Chair: Okay. So you want the meeting to be adjourned.

We will vote on Ms. Pauzé's motion to adjourn.

[*English*]

Mr. Taylor Bachrach: Can I just ask Madame Pauzé—?

The Chair: You can ask if it's a matter of clarification, but not debate.

Mr. Taylor Bachrach: Okay. My clarification to Madame Pauzé is that I think she was trying to move the debate on this motion to a future meeting.

The Chair: No, she said she wants to adjourn.

Mr. Taylor Bachrach: You want to kill the debate and kill the motion?

[*Translation*]

Ms. Monique Pauzé: No, that's not what I'm suggesting.

[*English*]

The Chair: She wants to adjourn.

[*Translation*]

Ms. Monique Pauzé: I'm not proposing to eliminate debate on the motion. I just think it could be debated at another meeting.

The Chair: It will have to be moved again, but for the time being, you're asking for an adjournment.

Ms. Monique Pauzé: That's right.

The Chair: So there will be no debate. Can we have a show of hands? Who wants to adjourn the meeting?

[*English*]

Mr. van Koeverden, do you want to...?

[*Translation*]

Everyone wants to adjourn the meeting.

[*English*]

I think we're going to adjourn.

I want to thank the witnesses for an interesting discussion.

We'll see all of the members in question period.

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