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# Standing Committee on Environment and Sustainable Development

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Chair: Mr. Francis Scarpaleggia





# Standing Committee on Environment and Sustainable Development

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• (1545)

[*Translation*]

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

Good afternoon everyone, and welcome to meeting number 99 of the Standing Committee on Environment and Sustainable Development.

Please be advised that the sound checks were completed. All our witnesses for the first hour are joining us by video conference.

We will start with Professor Alain Pietroniro, from the Forum for Leadership on Water, or FLOW.

Mr. Pietroniro, you have five minutes for your opening remarks. Please go ahead.

**Mr. Alain Pietroniro (Professor, Forum for Leadership on Water):** Thank you, Mr. Chair.

[*English*]

Thank you for the opportunity to speak on behalf of FLOW. I'll be covering topics around water monitoring today, so let's get right at it here.

Water monitoring and the data it produces are fundamental and key to addressing a myriad of environmental issues, contributing to water research, supporting water management, creating sound water policy and underpinning the economic prosperity of Canada. Climate change adaptation and resilience strategies also will require improved and integrated water monitoring to ensure future prosperity for Canadians.

We know that Environment and Climate Change Canada, through its national hydrological service, conducts hydrometric water quantity monitoring across Canada. This national network is co-managed with all the provinces and territories through a cost-sharing agreement that dates back to 1975. This arrangement ensures consistent and standardized data collection across Canada, data that are quality-assured and readily available in real time as well as maintained in a historical archive. This comanagement approach allows for federal and provincial network operators to work together in a collaborative framework and is an ideal model for other national monitoring programs to follow.

That said, the network of hydrometric monitoring stations has not recovered to the level it was at in the early 1990s, and it's well recognized that more stations are required to effectively address Canada's current and evolving water information needs, particularly

as we know that the impacts of climate change are being realized through accelerations in the water cycle, affecting floods, droughts and ecosystems. Although provincial investments in expanding the network have increased substantially—largely as a response to floods and water management challenges at the local level—overall, the number of stations has slightly decreased. This has been largely due to federally funded stations within the network being reduced substantially in the mid-1990s.

There was a significant increase in the federal monitoring budget in 2017, but that funding was focused on fixing a long-standing and significant infrastructure and technical debt in the program. The new funding focused on the modernization of the network, managing inflationary operating costs and addressing loss of infrastructure from fire and floods, leaving very little for network expansion. More funding needs to be allocated for targeted network expansion.

One case for expansion is to address the lack of monitoring on indigenous lands, which comprise a substantial area of Canada. Past external audits have identified indigenous lands as a federal priority for hydrometric monitoring, and this issue was recently reinforced in an internal program audit in 2023, which highlighted this concern and identified a course of action for moving forward with this by 2025. This will require additional funding and extensive indigenous consultations. An indigenous partnership culminating in a water monitoring agreement should be the goal of this effort.

ECCC also houses the water quality monitoring program. It has been recognized that water quality and quantity monitoring need to be more integrated. However, fragmentation of water programs in ECCC has impeded the integration efforts. A report produced by a blue ribbon panel in 2017 identified this, along with other issues related to water monitoring requirements within ECCC.

Another important water monitoring program that deserves more attention is groundwater monitoring. This program is carried out largely by the provinces and through rural municipalities in Canada, but national scoping and data collation resides at Natural Resources Canada. There are important linkages between surface water and groundwater, but there is limited to no interaction between ECCC and NRCan monitoring programs.

The Forum for Leadership on Water provides numerous submissions calling for all water monitoring programs to be part of the Canada water agency. The motivation for this is based on the co-operative approaches required for successful integrated monitoring among multiple levels of governments and with first nations. The agency would facilitate this co-operative type of approach and allow for multiple levels of government—including first nations, NGOs and industry—to contribute to an integrated approach. No one federal department can achieve this.

FLOW has been made aware that none of these water monitoring programs will be incorporated into the Canadian water agency. However, we hope there is potential for additional water monitoring components to be included in the CWA at a later stage.

Finally, at this point it's not clear how the CWA will provide any oversight, input or vision for water monitoring in Canada. Therefore, FLOW is proposing that, at a minimum, a water monitoring table be established by the CWA to facilitate dialogue and promote coordination among the water monitoring programs housed in different federal departments.

• (1550)

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

We'll go now to Tim Favari, vice-president, sustainability and stakeholder relations, at Nutrien Ltd. He's joined by Mr. Mike Nemeth, senior adviser, agricultural and environmental sustainability, at Nutrien Ltd.

I assume it's Mr. Favari who will be speaking.

**Mr. Tim Favari (Vice President, Sustainability and Stakeholder Relations, Nutrien Ltd.):** Yes, it is.

**The Chair:** Please go ahead.

**Mr. Tim Favari:** Thank you, Mr. Chair, for the introduction and the invitation to appear today.

Mike and I are joining you from Calgary. I'd like to honour our company's practice by acknowledging that we come to you from Treaty No. 7 territory.

I'll start with a few words about Nutrien, now the world's largest producer and provider of crop inputs and services. Our global business spans four operating segments across 13 countries, including our retail division—also known as Nutrien Ag Solutions—and the manufacturing and mining of potash, nitrogen and phosphate fertilizers. We have fertilizer production and sales of over 30 million tonnes, and our retail business serves over 500,000 growers and 150 million acres around the world. Also, we are proudly headquartered in Canada.

With this comes great responsibility to safely and sustainably feed a growing world. We call it “feeding the future”. That's our purpose, which is more important than ever. By some estimates, the use of fertilizer accounts for approximately 50% of global crop yields. It's critical for growers to meet the continued, growing demand for food, fuel and fibre.

Water is an essential input to our operations, especially in mining and fertilizer production. Waterways are crucial natural infrastructure assets for the transport of our products to market. In 2022, Nu-

trien achieved WAVE certification verifying our company's commitment to the use of credible, water-related data and best practices for water stewardship performance. Less than 2% of Nutrien's water intake is from water-scarce regions.

Agriculture is also highly dependent on water, but localized challenges exist regarding availability and quality, which can vary significantly by region and are often intensified by the effects of climate change. Nutrien is committed to working collaboratively to address water-related challenges and opportunities. We support water stewardship in agriculture, starting at the farmer's field through the use of practices like 4R nutrient stewardship products and digital tools that support sustainable agriculture and water stewardship in the entire agri-food value chain.

With water, you must always be proactive. Nutrien occupies a unique position in the value chain as an input producer and retailer, leveraging that role to ensure the protection of the environment while demonstrating a business case to our customers. We've had success in using a carrot, not stick, approach with our customers to reduce greenhouse gas emissions through carbon markets. We see the same opportunity and potential for markets to positively benefit water and biodiversity.

Several years ago, we initiated a pilot with value-chain partners to try to understand how we can support growers in driving positive water outcomes on the farm and in the watershed through management practices, products and solutions, all based on good agronomy. We brought together diverse stakeholders within the Lake Winnipeg basin—ALUS Canada, the Water Council, BASF, General Mills and J.R. Simplot—with counsel from the likes of Agriculture and Agri-Food Canada, the Manitoba Association of Watersheds, Ducks Unlimited Canada and more.

Phase one plainly demonstrated the water, soil health, biodiversity, climate and—most importantly for growers—financial return of on-farm water stewardship plans. The social return on investment was \$6.50 for every dollar invested in on-farm practices, 15 times the amount for every dollar invested in wetlands enhancement.

Phase two, which began last fall, will run for two years with a focus on implementing the water stewardship plans, documenting and assessing the environmental outcomes and value from actions taken, scaling this work with other stakeholders in the region, and continuing to build the business case for investing in on-farm water stewardship.

We've appreciated the support of the Government of Canada to date. We ask the committee to support continued investment in these efforts and to examine the potential for market-based mechanisms to drive adoption.

With that, I thank the chair and the members for their time.

• (1555)

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

We'll go now to Chief Billy-Joe Tuccaro, who I think many of us met when he was here a couple of weeks ago.

Welcome to the committee, Chief Tuccaro. You have five minutes, please.

**Chief Billy-Joe Tuccaro (Mikisew Cree First Nation):** Thank you very much. Good afternoon, everyone.

First and foremost, I'd like to thank our Creator, my elders and my community members.

I'd also like to thank you for inviting me to speak to the committee today.

Today I sit on my Treaty 8 homeland as the chief of Mikisew Cree First Nation. We are the largest first nation downstream from the world's largest resource-extractive industrial development in the northeastern part of what is now known as Alberta.

For as long as the sun shines, grass grows and the rivers flow—this is what we were promised in Treaty 8. It was understood by our ancestors that this was about the spirit and intent to recognize a nation-to-nation relationship. Our way of life and who we are as Mikisew people depend on water for all aspects of our traditional cultural inherent rights. It connects us to our ancestors. It is what connects us as human beings. For us, water is boss.

Our elders remind us that, before we are born into this world, we have lived our first nine months in water. It sustains and gives us life. We are dependent on water. Without water, we will die. Water holds memory that is transferred to us. That is our relationality. As Mikisew people, we rely on our local water sources on a daily basis as we hunt, harvest and fish as intended in our promised treaty.

I will speak about how Canada got into this situation, and I will talk about fresh water as it relates to Mikisew in two ways: its quality and its impact on our health; and its quantity and its impact on our culture.

For decades, Canada has participated in the approval of the oil sands industry, mine by mine, with no mechanism for managing the cumulative effects. Canada and the Alberta Energy Regulator have authorized the withdrawal and use of water from the Athabasca River and the accumulation of truly staggering volumes of semi-solid toxic waste.

Canada told all of us that they would find a solution to tailings. The government has issued three federal reports saying that they would find a solution to the tailings. Thirty years later, there is none.

In our traditional territory, there are now at least 1.8 trillion litres of process-affected water. This is highly toxic liquid waste that is formed by various industrial processes. That number continues to grow daily, and the waste in those ponds would fill enough swimming pools to reach three-quarters of the way around the earth. Tailings ponds are the largest industrial waste site on the planet.

Industry is telling us that their best option is to treat and release all the dirty water, and what they're not telling you is that their plan

for all those tailings is to put them in pits, cover them with water and walk away. Is this truly an option? For whom? Industry? We are being told that the same two levels of government that approved the industry and then turned a blind eye to our concerns about health and accumulating waste will approve these regulations.

Canada is trying to work with us on solving the issues, but it's facing increasing pressure from industry. Industry's approach does not meet Mikisew Cree standards. It will not protect the Athabasca River. We say, "No way." We say that Canada cannot turn the Athabasca oil sands into Canada's largest hazardous waste disposal.

While we suffer the disproportionate impacts of industrial development, other non-first nation governments benefit from the development. Our traditional territory continues to be altered and extracted from at a fast pace, which has impacted and continues to impact our watersheds. I have witnessed our watersheds, which I once drank from or swam in as a child, become so polluted that we are now fearful of drinking and/or swimming.

• (1600)

I have witnessed large sores on the moose and fish we hunt and harvest. I've witnessed friends and family fighting or dying from cancers that we believe were caused by naphthenic acids or carcinogens in our watersheds.

In the last nine months, we lost two of our previous chiefs, who succumbed to cancers: the late chiefs Peter Powder and Steve Courtoireille. Our nation is grieving. We're not only grieving friends and family, but we're grieving the impacts on our lands and water.

The health impacts go beyond cancer and other diseases. Our people don't use the land anymore because they just don't trust the water. This is a direct cultural impact. We are seeing increasing rates of opioids, addiction and mental health issues because of the water crisis we face—

**The Chair:** Chief Tuccaro, we have gone a bit over time. We had extra time because other witnesses took less time, but I'm hoping we'll leave enough time for questions, because I'm sure there will be many questions for you.

Would it be okay to stop this portion and then open up the questions in a couple of minutes?

**Chief Billy-Joe Tuccaro:** That sounds great to me.

Thank you very much.

**The Chair:** Thank you.

[*Translation*]

Lastly, we have Elizabeth Hendriks, vice-president of restoration and regeneration at World Wildlife Fund-Canada, who is joining us by video conference.

You have five minutes, Ms. Hendriks, for your opening remarks.

[English]

**Ms. Elizabeth Hendriks (Vice-President, Restoration and Regeneration, World Wildlife Fund-Canada):** I want to thank the committee for inviting me to share my expertise on fresh water and the impacts of climate change, and for undertaking this study.

I'm grateful for online technology today. I am on Mi'kma'ki lands, the ancestral and traditional lands of the Mi'kmaq people. However, the land and waters I will be speaking to today are the traditional homelands and territory of first nations, Inuit and Métis people, and remain home to diverse indigenous people. The water and land was and remains native land, and it is important to keep this front and centre.

As was mentioned, my name is Elizabeth Hendriks. My role at WWF Canada is vice-president of restoration and regeneration.

Today my testimony will illustrate two core points. First, we are facing the dual crisis of climate change and biodiversity. Freshwater impacts are core in that story. Second, with federal investment we can address these crises by stewarding, protecting and restoring nature. This investment will have cobenefits for our communities, economy and the nature that we depend on for our survival.

The challenge in Canada and around the world is that we are witnessing the devastating impacts of a planet that is out of balance. Climate change is a real and present threat, and we're regularly reminded of how much our world has changed with extreme weather events.

Recently at the Globe Forum in British Columbia Premier Eby spoke frankly of the climate impacts to that province. Parts of the province are experiencing high levels of drought and there is concern that water levels in the dams will prevent their ability to generate power at the level needed to serve customers.

Here in Nova Scotia, in 2022, our government put out an analysis of climate change impacts for the future. This report said that by 2050 warmer temperatures would mean that wildfires would be the biggest threat to Nova Scotia, yet just one year after that 2022 report, we watched a massive wildfire devastate the Halifax region.

Unfortunately, the climate crisis isn't the only crisis before us. The planet's biodiversity is shrinking and quickly. There is a slow yet persistent disappearance of nature and the diversity of life on this planet. It is bad for nature and it is bad for us. Specifically, freshwater ecosystems are undervalued and understudied. Fresh water is critical for community and species health. There is also a real cost to Canadians.

In Manitoba, financial predictions are that the average potential crop yields could fall by 10% to 30% due to higher temperatures and lower soil moisture. Hailstorms in Winnipeg and Calgary combined to cause more than \$250 million in damages, and in Regina, unexpected significant snowfall events and resulting road maintenance costs in 2022 produced a municipal operating deficit. The city is directly linking the growing operational costs with climate change.

Operational costs of managing water are also putting major pressures on municipal budgets in Quebec. In 2023, Quebec public security officials announced 89 communities affected by spring

flooding, while places like Sutton, Quebec, were addressing the costs of drought conditions.

There is a solution. We can tackle the biodiversity crisis and the climate crisis by protecting and restoring nature. We can address climate risks to communities and economies by addressing freshwater challenges in our communities. Because nature is habitat, it's the building block for biodiversity. It stores carbon. It absorbs floods. It holds the earth in place, preventing landslides and erosion. It keeps fresh water available and accessible for food production, sanitation and basic needs, and nature keeps our communities resilient.

Nature-based solutions can help our towns and cities be more climate resilient and natural disaster-resilient, too. Do you know a healthy silver maple can absorb 220 litres of water per hour? That is a lot more than a concrete culvert.

Healthy terrestrial ecosystems can ensure healthy freshwater ecosystems that collect, store and filter water. Restoring blue carbon, peatland and wetlands can absorb significant carbon emissions and support our communities.

The strength of the federal government lies in reconciliation and investment via the power of convening and capacity building. Here's where you come in, because you're all committed to promoting responsible, innovative and effective water resource management through this study. You have a voice and authority, and your expertise carries a lot of weight in your parties and in your home communities and ridings, ridings with voters who are all experiencing the real impacts of climate change.

In the face of biodiversity and climate crises, water management through freshwater restoration and protection strategies is going to be critical to mitigating the risks, threats and impacts of climate change.

With that, thank you for your time.

● (1605)

**The Chair:** Thank you.

Mr. Kram, you have six minutes.

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

Thank you to all the witnesses for being here today. I'd like to start with Mr. Faveri from Nutrien.

Mr. Faveri, you talked in your opening statement about on-farm water stewardship plans. Could you elaborate on what these on-farm water stewardship plans are? Are they mandated by governments, or are they partnerships between Nutrien and the farmers? If you could elaborate on that, that would be very helpful.

**Mr. Tim Faveri:** Sure. They are highly voluntary, but I'd like to pass it to my colleague, Mike, who runs these programs.

**Mr. Mike Nemeth (Senior Adviser, Agriculture and Environment Sustainability, Nutrien Ltd.):** When we say on-farm water stewardship plans, those are voluntary, as Tim stated. What we're doing is piloting those right now in a credible way, using an international water stewardship standard with the farmers and agri-food value-chain members to develop water stewardship plans that work for each farm.

They're full farm. They encompass all aspects of the farm—planting, management of all the fields, crop rotation, 4R nutrient stewardship—and the idea is to make sure that we're tying good agronomic practices that support profitable, productive and resilient farms with producing positive water, biodiversity, climate and social outcomes.

In doing these plans, we're piloting with growers to understand how best to do this water stewardship planning across regions and how it can create value at the farm and also in the value chain, which allows us to really understand the business case for value-chain investments in water stewardship.

• (1610)

**Mr. Michael Kram:** What is the incentive for the farmer to participate?

**Mr. Mike Nemeth:** The incentive for the farmers who are involved right now, actually, was for them to pilot it with us in an innovative way. Nothing like this has been done anywhere else in the world, so piloting it in Canada, piloting it with value-chain members and understanding that there was the potential for value creation for their operations was their incentive.

**Mr. Michael Kram:** Okay.

Mr. Faveri, in your opening statement, you talked about how you prefer a carrot approach rather than a stick approach to water. Besides the on-farm water stewardship plans, do you have any other examples of where the carrot has worked better than the stick, so to speak?

**Mr. Tim Faveri:** Sure.

We've demonstrated this through our sustainable agricultural programs, particularly with nitrogen management and utilizing the federal price on carbon to incentivize growers to shift their practices and become more nutrient efficient by rewarding them through that price on carbon and the amount of greenhouse gas reductions that can be modelled and measured on the field. That has been very successful. We've actually scaled that across western Canada on well over 400,000 acres.

**Mr. Michael Kram:** This is still for the Nutrien witnesses.

In your opening statement, you talked about how water is a key input for potash mines. Can you give the committee an idea of what type of regulatory process Nutrien has to go through to open a new potash mine? How much money does it cost, and how much time does it take to get the regulatory approvals?

**Mr. Tim Faveri:** We haven't broken ground on a nitrogen site or mine site for many years in Canada. Obviously, there are significant regulatory issues and approvals that would need to be created.

What we do know, though, is that our strategy is to utilize our brownfield sites for production expansion. I am probably not the best individual to answer those questions because of our lack of recent development in this area.

**Mr. Michael Kram:** Is there a chance that the lack of recent development is because of the regulatory burden?

**Mr. Tim Faveri:** That is a great question.

The regulatory burden obviously exists, but again, our strategy is around working with the assets that we do have, in line with our market demands.

**Mr. Michael Kram:** Okay.

Can you give the committee an idea...? If you want to open a new potash mine, are the regulations mostly federal or mostly provincial—or is it both?

**Mr. Tim Faveri:** Some are federal, but they're mostly provincial.

**Mr. Michael Kram:** Also, in your opening statement, you said that Nutrien operates in 13 different countries.

Can you give the committee an idea of what types of regulatory processes exist in other countries compared to in Canada? What works well in other countries that we could borrow here?

**Mr. Tim Faveri:** In every country we operate in, regulatory requirements are significant, and it takes many years for us to go through that process.

What works well is, for example, what's happening in the United States with the Inflation Reduction Act incentives to stimulate growth in sectors where we operate.

However, every time we would look into that activity... It's a very complex assessment of different material factors. Water would be one and access to water. For Nutrien, it's actually access to tide-water to get our products out to global markets but also to fresh water for our operations. Greenhouse gas emissions, etc.—

**The Chair:** Thank you.

We'll have to go now to Mr. Longfield.

**Mr. Lloyd Longfield (Guelph, Lib.):** Thank you, Chair.

Thank you to our witnesses for being here.

Chief Tuccaro, I'd love to hear any comments you weren't able to make because of time. You can open up my questions by finishing your comments, if there are any you'd like to make.

• (1615)

**Chief Billy-Joe Tuccaro:** Thank you, Lloyd. I appreciate that.

I had one more point to make. I will end with the existing quantity of fresh water in our territory.

Over the decades, Mikisew Cree First Nation has raised and continues to raise serious concerns about the quantity of fresh water, not only because of industry and resource development but because of the B.C. Hydro Bennett dam and, most recently, Site C, which affect our beloved Peace-Athabasca Delta.

When we cannot access the lands because of low water levels, we cannot hunt and gather. This impacts our rights, our culture, our food security and our identity. The solutions offered through Parks Canada are not meaningful and don't provide any real solutions to the low levels that we witness year after year.

Thank you.

**Mr. Lloyd Longfield:** Thank you, Chief Tuccaro.

In our last meeting, I made reference to a comment you made to me when we met, when you were in Ottawa a few weeks ago, about what living on the land actually means in real experience in terms of making tea out of snow or children being able to swim in lakes without parents worrying about them getting sick.

Can you give us more insight into how bad water affects, in real time, hunting, gathering or recreation?

**Chief Billy-Joe Tuccaro:** Yes. Thanks, Lloyd. I'll elaborate on that.

With regard to the water and what it's doing to my people and why we cannot hunt and gather as much as we'd like to, a lot of the time people are now going onto the land just for recreational use, as well as being there just for their mental health.

With regard to that, since the Kearl incident in May 2022, a lot of my people have turned away from the traditional way of life of being on the land with regard to hunting and trapping, because they are afraid to eat the stuff they are harvesting on the land. What that is doing is.... A lot of the people who are usually out on the land are staying in the community a lot more, and that is creating social problems for my people. A lot of them are turning to opiates. With regard to what's happening in my community, we also have an opiate crisis and a major drug issue.

Before the Kearl incident and what's been going on with regard to my people on the land, like Lloyd mentioned—I mentioned this to him when I was in Ottawa—a lot of my people, when they went on the land, took the snow right from wherever they were and made snow water for tea and coffee. A lot of my people don't do that anymore. A lot of my people don't use the beach area for swimming anymore because they're not sure what's going on with the water after the Kearl incident. It's still continuing to seep to this day.

We have seen a huge escalation in cancer in the last two years. I know that for a fact. As a chief, I know between 40 and 50 people who have been diagnosed or whose cancers were in remission and have now resurfaced. We also have the rarest form of cancer: bile duct cancer. When my people are diagnosed with that, they perish within a couple of months. I've seen it first-hand.

I was in the hospital with one of my best friends when he was diagnosed with this, the rarest form of cancer, about 20 years ago. His name was Grant Couteray. I spoke with the doctor. I wanted to know what was going on, and the doctor said, "Mr. Tuccaro, the

treatment we gave your best buddy here...all it did was speed up his death," because they don't have any idea how to treat it.

This is—

**Mr. Lloyd Longfield:** Another impact was that people don't want to go to the doctor because they don't want the bad news.

• (1620)

**Chief Billy-Joe Tuccaro:** Yes, that's exactly what it is. A lot of people are afraid right now. I know for a fact that there are couples.... The husband took his wife out, and his wife was being treated. He started not feeling well himself. He decided to get an opinion there while he was in Edmonton, and it was the same thing with him. He was diagnosed with cancer already. These are the real issues of what's going on in the community.

**Mr. Lloyd Longfield:** Finally, the hunters have to buy flats of bottled water, which is ridiculous. Also, the cost of bottled water is ridiculous.

**Chief Billy-Joe Tuccaro:** Yes. A flat of 24 of water right now in the community is \$27 or \$28. Since the incident, Imperial has sent water into the community. We appreciate that.

**The Chair:** Thank you.

**Chief Billy-Joe Tuccaro:** Like I said, this is a long process where it's going to take a lot for trust to be gained.

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

**Mr. Lloyd Longfield:** Thank you.

Thank you, Mr. Chair.

**The Chair:** Madame Pauzé.

[*Translation*]

**Ms. Monique Pauzé (Repentigny, BQ):** Thank you to the witnesses.

It's nice to see you again, Chief Tuccaro.

The more I learn about the human and environmental toll of oil sands production, the more outraged I become.

You said that you depend on water and that, without it, you will die. You gave us examples of the situation.

However, I'd like you to tell us about your relationship with the federal government, and your thoughts on Bill C-61, an act respecting water, source water, drinking water, wastewater and related infrastructure on First Nation lands. The committee is studying fresh water, and you rely on the Athabasca River for drinking water. It is incumbent upon Canada to show honour and integrity in all its dealings with indigenous peoples.

As of right now, three departments should be concerned about what's happening in your community. If I understand correctly, not one of them has acted honourably or with integrity.

Bill C-61 is currently at second reading. Do you really think that the government gave your concerns the consideration they deserved?



[English]

**The Chair:** Did the interpretation come through, Chief?

**Chief Billy-Joe Tuccaro:** No, it didn't.

[Translation]

**Ms. Monique Pauzé:** He didn't get the interpretation.

**The Chair:** Chief, do you hear the English interpretation of what I'm saying in French?

[English]

You'll see a little globe, I think, on your screen. Is it on English?

**Chief Billy-Joe Tuccaro:** It's on original audio, so I'll just go to English now.

[Translation]

**The Chair:** Do you hear the English interpretation?

[English]

**Chief Billy-Joe Tuccaro:** Yes, I can hear you.

[Translation]

**The Chair:** All right.

Please start again, Ms. Pauzé.

**Ms. Monique Pauzé:** I think he can hear what's being said in English, but I don't think he selected the French channel.

**The Chair:** Say something in French, Ms. Pauzé.

**Ms. Monique Pauzé:** Good afternoon, Chief. It's nice to see you again.

**The Chair:** He can hear you, Ms. Pauzé. You can just start over.

**Ms. Monique Pauzé:** Very well.

I was saying that the more I learn about the human and environmental toll of oil sands production, the more outraged I become. You said that, without water, you will die. You are living that right now.

The committee's study is on freshwater, and your drinking water comes from the Athabasca River. It is incumbent on the government to always show honour, integrity and good faith in its dealings with indigenous peoples. As far as I can tell, at least three departments should be concerned by the situation in your community, but I gather that not one of them acted with honour or integrity.

I'm talking about Bill C-61, an act respecting water, source water, drinking water, wastewater and related infrastructure on First Nation lands.

Do you think the government gave your concerns the consideration they deserved?

• (1625)

[English]

**Chief Billy-Joe Tuccaro:** In regard to Bill C-61, I can say this as a chief: Our concerns with the bill have not been met. I'm stating that because of where we're situated downstream from the oil sands and especially the largest wastelands. We're saying Bill C-61 is not adequate for us because, given where we live, why would we have the same guidelines in regard to the different thresholds and in re-

gard to some things that aren't even being tested for, like naphthenic acids? We know those are potentially cancer-causing.

We, as Mikisew people, truly believe we haven't been consulted in regard to that. How could we have the same guidelines as the ones for people who live in Ottawa and the people who are living downstream? Everything goes by parts per million, where 0.05 is adequate. Anything below that is what's accumulating in my people. There are cumulative effects. That's why we're saying we need those thresholds to be buttoned down in regard to where we are situated.

Thank you.

[Translation]

**Ms. Monique Pauzé:** If I understand correctly, you weren't really consulted on Bill C-61. For the past two decades, your community has been asking the federal government to do a health study. You asked again in 2019, when Teck Resources was planning to set up operations nearby. Neighbouring communities have asked for the same thing. Your community has reached out to the federal government numerous times, but to no avail.

What reasons did the federal government—whether it be Health Canada or Fisheries and Oceans Canada—give you for its lack of action or concern in response to your request?

[English]

**Chief Billy-Joe Tuccaro:** Can you elaborate more on that, please? Thank you.

[Translation]

**Ms. Monique Pauzé:** You've been asking the federal government to conduct a health study for two decades. You asked again in 2019. I gather that nothing's been done so far.

How has the government responded to your request? What were you told? Did you get an answer? That's probably the first thing to know.

[English]

**Chief Billy-Joe Tuccaro:** Thank you.

In regard to the health study, it's something we tabled 20 years or so ago in regard to what's happening in this area. It always boils down to the lack of funding. We were in Ottawa a couple of weeks ago and we mentioned this to the health minister as well. It was the same thing—lack of funding. It blows my mind that where we're situated is the economic engine of Canada, but we cannot find some money to do a health study that can give us an idea of what is going on in the area.

I can say, as the chief of the Mikisew, that we haven't ever been anti-industry at all. We know there are safer ways of doing things. That's why we're asking for these different guidelines and thresholds to be lowered, so that my people can have a chance for a higher life expectancy, like the rest of Canada. It blows my mind, as the chief of the Mikisew Cree First Nation, that the federal government would even consider Bill C-61, an act respecting water, source water, drinking water, waste water and related infrastructure on first nation lands.

Why do we have to be a second tier in this country when we were the first peoples of this land? That tells me that there are two tiers. Why can't we have the same access to clean drinking water that you guys get in Ottawa?

That's another thing. They talk about treat and release. I'll agree to treat and release if they can put that in a pipeline and you guys in Ottawa could drink that water first.

• (1630)

**The Chair:** Thank you.

**Chief Billy-Joe Tuccaro:** That's how serious I am.

Thank you.

**The Chair:** We'll go now to Ms. Collins.

**Ms. Laurel Collins (Victoria, NDP):** Thank you, Mr. Chair.

I want to thank all the witnesses for being here. I have questions for Chief Tuccaro, Ms. Hendriks and Mr. Pietroniro.

I'll start with Chief Tuccaro.

I think you spoke really powerfully about the impacts on your community. Your people deserve your inherent right to clean water. This would never be happening in a city like Ottawa or Montreal or Vancouver or Victoria, which I represent.

Since you last appeared at the environment committee, what has your experience been with Imperial Oil, the federal government and the Alberta Energy Regulator? Do you feel like any of your concerns have been taken seriously? Have there been adequate responses?

**Chief Billy-Joe Tuccaro:** Who did you mention?

**Ms. Laurel Collins:** It was the federal government, the Alberta Energy Regulator and Imperial Oil.

**Chief Billy-Joe Tuccaro:** In regard to the AER and their response, again, they can only do what.... I'm going to be honest and say they can't really do much because they can't bite the hand that feeds them. That's who they get their funding from, the industry itself. They're coming back into the community on March 5, I believe, to do another open house. They're going to try to repair the relationship in regard to the trust that was broken a couple of years ago.

In terms of the feds, how will we know these changes will be made if these recommendations that we're putting forward in regard to all the different thresholds being lowered...? Until this day, as first nations people, it's hard to take words when we'd rather see action.

With Imperial, I can say that they've stepped up to try to improve the relationship in regard to what was broken a couple of years ago. We've had some meetings with them. They've brought some water into the community a few times. For that the community is thankful, but in regard to that there's still lots of work to be done to repair the relationship in regard to all those three.

Thank you.

**Ms. Laurel Collins:** Thank you so much.

I just feel like your community deserves access to clean drinking water and also to clean water for hunting and fishing and swimming in lakes.

**Chief Billy-Joe Tuccaro:** The thing is, sure we're getting the drinking water, but a lot of my people are scared to use it for bathing and even for cooking and stuff like that. That's a lot on their mental health. It's a long way to go.

Thank you.

**Ms. Laurel Collins:** Honestly, what you shared about the disconnection from the land that happens when people can no longer use water in traditional ways and what that means to the opioid crisis in your community, these are really serious impacts. The federal government has a responsibility to step up and to listen to your recommendations.

I have a small amount of time, so I do want to ask Ms. Hendriks a couple of questions.

In particular, I wanted to ask you about the cost of climate change and the cost that we're seeing when it comes to water. We've heard from our Conservative colleagues sometimes that climate action costs too much money. I'm just curious. From your perspective, how do you respond to those kinds of concerns?

• (1635)

**Ms. Elizabeth Hendriks:** I think the cost of inaction is going to be too much. We see increasingly every year the insurance companies are coming out and saying this is billions of dollars. I think last year it was \$3 billion of climate-related insurance impact.

If you want to talk investment, why aren't we, when we flow dollars, looking at those investments with a climate lens? I would say if you want to talk nature agreements, health agreements with provinces and municipalities or a green municipal fund, those should all be with a freshwater and a climate lens to maximize those benefits and maximize those investments and be more efficient with our use.

Insurance companies have also said they won't insure houses built on flood plains. Why are provinces or federal governments supporting rebuilds on flood plains? We need to be looking through those lenses or we're wasting that money. Nobody wants, in this economy, to see a waste of money. I would just say we can no longer ignore nature and the needs of nature. There are tons of ways to increase those investments to benefit both communities and nature at this point.

[Translation]

**The Chair:** Thank you. Unfortunately, the member's time is up.

We are now starting the second round. I'm going to cut everyone's time by a quarter, so members will have either four or two minutes, as the case may be.

Go ahead, Mr. Mazier.

[*English*]

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

Thank you to the witnesses for coming out today. My questions this afternoon will be for Nutrien.

In your opening remarks—and I think this bears repeating here—you said, “the use of fertilizer accounts for approximately 50% of global crop yields. It's critical for growers to meet the continued, growing demand for food, fuel and fibre.” I've farmed all my life and I've been in farm policy all my life, yet I didn't think it was that high—50%.

If we were to reduce any type of fertilizer in our agriculture industries right now, we would start reducing at least 50% of our food production. That's quite an important thing to remember as we talk about how we deal with water and fertilizers. Also, we know fertilizer is needed to grow food and to feed the world.

Can you tell the committee how important water is to fertilizer production?

**Mr. Tim Faveri:** Thank you.

Yes, in fertilizer production, water is pretty critical for our industrial processes in nitrogen and phosphate manufacturing. In mining, it's less so. It's a closed-loop system that we use in potash mining. What's very important is the fact that fresh water is available at the start of our process.

Mike, if there's anything else you would like to add, please do so.

**Mr. Mike Nemeth:** I'll add that it's critical in all of our milling processes, slurry use.... Without fresh water, even the rates that we can recycle and reuse water.... Fresh water is absolutely critical to the production at all stages.

**Mr. Dan Mazier:** I know a lot of fertilizer plants get accused of...from the cooling towers. As we were talking about, there are millions of gallons a day, basically, that are just evaporating. You need water to cool things off. That was always quite astounding. Never mind the water you need for the boilers in the processes and all those kinds of things people don't consider, just to make a ton of fertilizer and to feed over 50% of the world.

You touched earlier on the regulatory environment. I'm kind of curious. Between Canada and the U.S., both countries work a lot with each other when it comes to fertilizer production and even supply chains. Back in Brandon, we're always shipping down to North Dakota, so the supply is there.

In dealing with the two different countries and the regulatory burden, are you seeing a certain pattern here in Canada that we can correct versus the U.S. so that we can be more competitive, build more fertilizer plants and be more self-reliant?

• (1640)

**Mr. Tim Faveri:** Certainly, the incentive infrastructure in the U.S. is very strong. I know the Canadian government and other governments around the world have tried to step up in ways similar to what the U.S. has done. The regulatory burden, we feel, will always exist. To some extent, it's greater in other countries than it is in Canada, and to many extents, it's less burdensome as well.

Again, I would reiterate that we have to look at all the issues with respect to the production that we deal with, water being a material one, as you indicated. We have described how important it is. Emissions, labour, access to tidewater, etc., are all very important factors.

[*Translation*]

**The Chair:** Thank you.

Mr. van Koeverden, you may go ahead for four minutes.

[*English*]

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

Thanks again to all the witnesses who have come today to provide their testimony.

Just to recap, 5.3 million litres of toxic tailings from Imperial Oil's Kearl Lake leaked into nearby waterways. Most agree that this includes the Athabasca River. Alberta Premier Danielle Smith has said the Imperial Kearl Lake mine had no affect on local waterways or wildlife.

When he was here back in December, Imperial Oil CEO Brad Corson corroborated the same when he said that he was happy with how his company had dealt with this disaster. He also said there was “no process-affected water” that had entered waterways, despite the fact that Imperial Oil's own reports conceded that some tailings had entered into a nearby fish-bearing lake.

These are all attempts to minimize this environmental disaster. These attempts by both Premier of Alberta Danielle Smith and the CEO of Imperial Oil are extremely distressing.

Chief Tuccaro, I've read your letter to the Prime Minister. I agree with the four recommendations that you've made. I think anybody would, given the chance to read it. I'll highlight them just to get them on the record here.

The requests are collaboration on immediate actions with respect to the availability of safe drinking water; enhanced information sharing; taking action on health risks and funding for a Fort Chipewyan health study; and action to assess and correct tailings risks, which is a federal and indigenous audit of risks for all tailings facilities in the region.

I would note that, from research on this study, it has come to light that most of them are actually designed to leak.

Request number four was to take action on the tailings reclamation crisis, including support for enhanced indigenous-led monitoring and training, and identifying actions and real solutions to tailings.

I want to thank you for taking the time to write that letter. Thank you for advocating to our government. I want to say that we're broadly supportive of all your requests and recommendations. We're working to ensure better outcomes for your citizens. Your community deserves better, Chief. From us, I want to apologize from Canadians.

I wasn't satisfied with the answers that we received from Imperial Oil CEO Brad Corson back in December. I heard from members of your community that they weren't either. We're going to keep holding them to account and demanding better from these oil companies. It's an absolute disaster, which continues to occur.

Before I go on, Chief Tuccaro, do you have any reflections on progress with that letter or anything that you'd like us to know that you've made recommendations for since writing the letter?

**Chief Billy-Joe Tuccaro:** Thank you.

In regard to what we had mentioned and what we put forward there in the four asks, we've kind of hit a wall in regard to those asks.

That's the reason I went to Ottawa last week. You can only send so many letters. Then when you get there, you find out that 98% of the letters aren't even actually opened up and read. That's the reason why we made the journey there—to actually beg. I'm going to be honest. We went there to beg to get this community health study done. It's 20 years overdue.

I took one of my councillors, who's a former chief. She was the one who had pushed this issue 20 years ago. A lot of these issues that they tabled 20 years ago are still surfacing now. That's the reason why we made the trek and made the contacts there.

Now, like I said when I was there last week, if nothing is done, we'll be back again.

• (1645)

**The Chair:** We're going to see you when we travel up to Fort Chip, by the way, but I know that when you say you want to see “us”, you mean the government departments.

We'll go now to Madame Pauzé for two minutes, please.

[Translation]

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

I take it that our travel request was approved. That means we will be going on a trip.

Chief Tuccaro, are you getting the interpretation? Yes? Okay.

You talked about the funding you needed. It's obvious that health is your number one concern.

What measures should the federal government prioritize when it comes to protecting the water, health and rights of indigenous communities in Alberta?

[English]

**Chief Billy-Joe Tuccaro:** Can you provide more information, please, with that question?

[Translation]

**Ms. Monique Pauzé:** Sorry. I didn't understand your question.

**The Chair:** Could you provide more information to help the witness better understand what you're asking?

**Ms. Monique Pauzé:** You gave us some recommendations, so I'm wondering which ones you think should be prioritized. Which measures need to be taken in order to protect the water, health and rights of indigenous communities?

[English]

**Chief Billy-Joe Tuccaro:** The health study that we've been requesting for the last 20 years would go a long way to telling us exactly what's going on in the area. I know for a fact.... I'm 46 years old. I've had the benefit of living on the land and off the land. The reason why I choose to live off the land now is because of the dangers that are out there in regard to the water, the animals, the fish and the berries that my people consume for harvesting and stuff like that.

The recommendation we're putting forward is in regard to the health study. We really need that done in the community as soon as possible, and I truly believe that—

[Translation]

**Ms. Monique Pauzé:** Were you able to meet with the Minister of Health?

**The Chair:** You're out of time, but I think the witness said that he had met with the health minister.

**Ms. Monique Pauzé:** What was the response he got?

[English]

**The Chair:** On Madame Pauzé's question, I think you mentioned that you did meet the health minister, Chief Tuccaro.

**Chief Billy-Joe Tuccaro:** Yes, we did. Again, it all boils down to the lack of funds and where they would access them from—

**The Chair:** Yes. Okay—

**Chief Billy-Joe Tuccaro:** —for the health study. I mentioned to him that they get a lot of money from the area of the extractions.

Thank you.

**The Chair:** I understand.

We'll go to Ms. Collins now.

**Ms. Laurel Collins:** Maybe I'll just let the chief finish that thought. Oil companies are raking in record profits and billions of dollars. There is a lot of money being made and the cost of a health study seems....

Chief, if you wanted to finish your thought...?

**Chief Billy-Joe Tuccaro:** In regard to the health study, a lot of money is taken from this area. I know for a fact that the health study we're proposing is in the neighbourhood of about \$30 million, and we're not asking for everything up front. We're asking for it in instalments. Then, for the people who are going to be funding that, there are deliverables on our behalf, too, to see that there are actual things being done.

I truly believe that \$30 million is a drop in a bucket. When you hear of an executive making \$17 million a year, just one person, I mean, that tells me that there's money available for this to be done. I don't know if they don't want to do it because they're scared that the answers are what they don't want to see, but we need those answers in regard to what's going on in this community.

Thank you.

**Ms. Laurel Collins:** Thank you so much, Chief.

Our party has been pushing for an excess profit tax on oil and gas companies so that we can put money into supporting communities that are impacted. The government has a responsibility to do this health study, so we're going to keep pushing them on that.

I do want to quickly ask this question. It's for Mr. Pietroniro and also Ms. Hendriks. I'm curious as to what role you think the federal government should play in addressing the climate crisis and, in particular, how funding programs might support nature investments in fresh water. How do you see that in the next few decades?

• (1650)

**The Chair:** We'll have time for one person to answer that. It's a big question.

Ms. Hendriks, I think that sounds like it might be a question for you, but with a very brief answer, please.

Mr. Pietroniro, please don't be offended that I didn't go to you.

Go ahead, Ms. Hendriks.

**Ms. Laurel Collins:** Just because Mr. Pietroniro hasn't had a chance to answer a question, maybe we could go to him first.

**Mr. Alain Pietroniro:** From a monitoring perspective, I'd say we have to.... From an adaptive management perspective as well, you can't really manage what you don't monitor. I'll put that lens on it and say that we should probably look at expanding monitoring—

**The Chair:** We need to do more monitoring.

Ms. Hendriks, very quickly, please.

**Ms. Elizabeth Hendriks:** We have existing funding programs, but I would want to see a freshwater and climate lens placed on them. When we work towards our global commitments to the biodi-

versity framework, I think there's a lot of opportunity, and the ENGO community has requested that we see a lens of biodiversity and fresh water specifically for this study, on that funding.

**The Chair:** Thank you.

Mr. Leslie.

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

I'd like to start with Nutrien.

The statistic that my colleague Dan Mazier mentioned is a very important one: 50% of the food produced is thanks to fertilizer. I think it's important to highlight that with a population of eight billion, we'd be looking at starving about four billion people if we didn't have the invention of the Haber-Bosch process. Therefore, I'd like to thank your industry for the work that you're doing to support rural communities and farmers and to, frankly, feed our entire population.

Now you did mention Nutrien's use of market-based mechanisms to drive grower adoption of lower-carbon products and practices. I'm just wondering if you could expand a little bit on what that program has looked like for Nutrien as part of a volunteering of farmers, and how that could work with water.

**Mr. Tim Faveri:** Absolutely.

We use the nitrous oxide emission reduction protocol from the Alberta government plus the conservation cropping protocol. We work with growers on executing that protocol, which promotes higher nutrient use efficiency. Through that measurement we can pay them a price utilizing the federal carbon price for their greenhouse gas reductions and/or removals.

What's interesting in the project that we're working on in Manitoba with water is that if we focus on water conservation or water quality, ultimately, we believe there is a net benefit to greenhouse gas reductions as well, plus biodiversity. In a similar way, those volunteer programs could reward growers for their practice changes.

**Mr. Branden Leslie:** You mentioned the 4R nutrient stewardship application practice. For those who might not understand, could you expand on what that process is, why it matters in terms of efficiency, and how it relates to the efficient use of water on plants?

**Mr. Tim Faveri:** Mike, do you want to take this one?

**Mr. Mike Nemeth:** Sure.

4R outlines the right source of nutrients, the right rate at which they need to be applied for the crops, the right timing so that plant uptake is optimal, and then the right placement—so, making sure that, where possible, it's banded under a subsoil versus broadcast. All of these practices—combined with technologies such as enhanced efficiency fertilizers, nitrification inhibitors and other products, and digital technologies such as precision agriculture—can help optimize nutrient use, reduce potential loss to the environment, whether through water or the atmosphere, and optimize the use of water and nutrients in the farmers' fields to create a more productive and profitable crop that's more sustainable from an environmental standpoint.

**Mr. Branden Leslie:** That's great. Thank you, Mr. Nemeth.

Mr. Chair, in my remaining time I would like to move the motion that I spoke into the record at the last meeting of the environment committee regarding the Minister of Environment's announcement that there will be no more envelopes from the federal government to enlarge the road network, and asking that our committee condemn Minister Guilbeault's announcement.

Now I think it was perhaps the minister saying the quiet part out loud, and it obviously sent the Prime Minister's Office into a communications frenzy to try to backtrack on whether or not this government was, in fact, abandoning supporting all communities in their desire to increase the capacity of our roadways. Unfortunately, it seems as though, from the accidental announcement, this was intentional. It was a decision made by the cabinet with the intention of, I suppose, trying to curb emissions, taking Canada back to the Stone Age where we have no power, no vehicles, no new roads and, frankly, no wealth.

● (1655)

Obviously, the intention is to move people out of their cars and onto buses or some sort of mass transit system, which is so tone-deaf and out of touch with the vast majority of our nation's space.

Now, I did take note that the rural member of Parliament for Milton, in 2021, did say on Twitter, "Say it with me: building highways doesn't fight climate change," so perhaps there is agreement across the caucus that, in fact, we should no longer be building highways and roads in this country.

It seems to be a bit at odds with the member of Parliament from Pontiac, however, who said, "I am very proud to be able to rely on the governments of Canada and Quebec to support the widening of Pink Road, as well as other initiatives."

It seems to be very unclear.

What I know is very clear is this. I'm sure that when we were all back in the ridings last week, we had our mayors, our reeves, our city councils come up and say, "What is going on in Ottawa? Where did the idea that we would no longer be funding roads come from?" If you didn't hear that, you're not telling the truth.

I'll give you a real-world example from my riding. Highway 3 in Manitoba is extremely busy. It is full of passenger vehicles, farmers and a whole lot of trucks using it every single day to make sure that we have the goods where they need to be and people where they need to be. The twinning of sections of this highway will reduce ac-

cidents and make sure that those goods get where they need to be on time.

However, with this Liberal government's commitment to not fund such projects, it sends a terrible message to all those who live and work in my riding, and in rural Manitoba, and across rural Canada.

My understanding is that Minister Guilbeault, the government, had not spoken to any provincial or municipal officials before taking this extremist position of not building any more roads.

I think it was extremely reckless to, although accidentally, make a clear announcement of the intention. I know my colleagues across the way—the rural Liberal MP from Milton, from Guelph, from Aurora—Oak Ridges and from Pontiac—are either sitting in gridlock near a city, or they're travelling long distances. I can't fathom that there would be agreement from these members of Parliament with this government's position—with this war on cars and commuters and the movement of goods across our country.

My hope here today is that we recognize that this was a poor decision, a poor announcement, and that we make the choice to condemn it. I don't think we should just simply adjourn debate, given the diversity of opinions from my Liberal colleagues on this matter. I hope we can bring this to a vote.

We can have a debate on this—I'm more than happy to do so. However, rather than just adjourning debate and hiding these extremist positions of this radical environment minister, let's have a conversation about this and whether or not this country should be built up with the help of our federal government, or if we'd rather go back to horses and buggies.

Thank you, Mr. Chair.

**The Chair:** Mr. Mazier.

**Mr. Dan Mazier:** Thank you, Chair.

I'll reread what the environment minister said, "Our government"—meaning the Liberal government—"has made a decision to stop investing in new road infrastructure."

Can you imagine that? A minister of the Crown...and his government actually backs it up. Justin Trudeau and the Liberals have backed up that statement. That is very disturbing, and it is a direct attack on rural Canada.

Let me be very clear. There are three policies that are hammering rural Canada. The first one is increasing the carbon tax by 23% on April 1. By increasing the carbon tax, the commissioner's already said it...and there are various agencies all across government that have acknowledged that, disproportionately, rural Canadians are being impacted by the carbon tax. They know that, and this government keeps on marching on with increasing that carbon tax.

The second one is banning gas-powered vehicles. That's another thing this minister....That's the goal—in 2035 we're going to have no more gas-powered vehicles in Canada. It's going to create a whole great shortage in Canada.

The third one is that we now have a minister saying we're not building any more roads and highways. Why not?

We know rural Canada and the rest of Canada needs highways to move around. We're a vast country. We need to move our goods. We need to make a living in Canada. We don't go anywhere without getting on a road in Canada, and this government wants to just get out of that and stop producing any types of roads. It's absolutely insane.

This is why this radical environment minister should be stopped. This is why we're bringing this motion forward. This is why you should go along with this, instead of talking against me, trying to draw me out and ignoring me. You should be paying attention.

• (1700)

**The Chair:** Order.

**Mr. Adam van Koeverden:** [*Inaudible—Editor*]

**Mr. Dan Mazier:** I know. It's your minister who said it.

**The Chair:** Order.

Mr. van Koeverden and Mr. Mazier, this is not a debate between the two of you.

Mr. Mazier, you have the floor. Go ahead.

**Mr. Dan Mazier:** Having said all that—

**Ms. Laurel Collins:** Mr. Chair, I have a quick point of order.

**The Chair:** Yes.

**Ms. Laurel Collins:** When people are shouting across, their microphones are not on. Those of us who are online can't actually hear what's going on.

**The Chair:** You're not actually missing much on the back-and-forth. On the heckling, you're not missing much.

Go ahead, Mr. Mazier.

**Mr. Dan Mazier:** I find it quite interesting; I know that the NDP members represent lots of rural ridings, and I know that they get the impact of this statement. They should be absolutely appalled as well, like I am, from that statement.

Even just the notion that we're laughing about it; I can't understand why you're so not shocked about this. People in rural Canada are scared. This is a trifecta of policies that are just absolutely punishing rural Canada, and you don't get it. You don't care.

**The Chair:** Go through the chair, please, Mr. Mazier.

**Mr. Adam van Koeverden:** Was that about me, Dan?

**Mr. Dan Mazier:** I didn't say you. I said the Liberals.

**The Chair:** Go through the chair, please.

**Mr. Dan Mazier:** So I would encourage the Liberals, NDP and Bloc to condemn this radical environment minister, stop his attack on rural Canada and support our motion.

Thank you, Mr. Chair.

**The Chair:** Go ahead, Mr. van Koeverden.

**Mr. Adam van Koeverden:** Debate is important, and I welcome debate, but what the Conservatives have consistently done on this committee is use their time and their questions to distract from what we're doing, which is a study on fresh water. It's incredibly disrespectful to the people who have taken time out of their day. These are researchers, advocates, chiefs of nations.

They don't care. They would prefer to push their agenda—

**Mr. Dan Mazier:** Just call it.

**Mr. Adam van Koeverden:** —to talk over top of me and to push their agenda based on misconceptions and misinformation—

**Mr. Dan Mazier:** [*Inaudible—Editor*]

**The Chair:** Mr. Mazier—

**Mr. Adam van Koeverden:** —and taking people's words completely out of context.

As for Mr. Leslie reading my tweet, that was about one highway project in Ontario called the 413, which I stand against.

It was. You didn't read the whole tweet, Mr. Leslie.

Secondly, the minister's quote was specific to the third link in Quebec City. My colleague Mr. Deltell knows about it intimately. He knows exactly what I'm talking about. Our government has invested in 10,833 roadways over the last seven and a half years. This federal investment represents more than \$4.5 billion.

The reason we had to spend so much money is that during the Harper years, there was a massive infrastructure deficit. The Conservatives didn't invest in things like that. We've redoubled it. We've doubled down on investing in community infrastructure through the Canadian community-building fund and through the gas tax. We are building Canada. More infrastructure has been built in the last eight years than in the nine years that Harper was in power.

Have a look at the numbers, have a look at the details, and please, stop taking quotes out of context, because it's completely absurd.

**Mr. Dan Mazier:** I have a point of order.

**The Chair:** I hope it's a point of order.

**Mr. Dan Mazier:** Does the member plan on shutting down debate?

• (1705)

**The Chair:** Well, that's.... I don't know.

**Mr. Adam van Koeverden:** It's not a point of order, and I spoke for less than half the amount of time that you did.

**The Chair:** It's not a point of order.

Mr. Mazier, when you had the floor, I recognized that you would have all the time that you would want.

Mr. van Koeverden, continue, please.

**Mr. Adam van Koeverden:** This is a ridiculous motion. This is taking quotes that I've made and that the minister has made completely out of context, and referring to specific projects. As MPs, we're supposed to be supportive or not supportive of specific projects.

No, I'm not going to shut down debate on it. I'm just going to vote against it, proudly, because you keep using words like "radical" to describe our minister. I'm proud of our minister for being an environmentalist.

Those four won't even say "climate change" in this committee. They won't acknowledge the impacts of climate change.

So yes, I'm proud to vote against this ridiculous motion.

**The Chair:** Have you called the vote?

**Mr. Adam van Koeverden:** No. My colleague from the NDP has her hand up, and I'm sure she'd like to speak to it.

**The Chair:** You're right.

Go ahead, Ms. Collins.

**Ms. Laurel Collins:** I just want to urge the committee to get through this as quickly as possible. Let's honour the time of the witnesses who are here.

I won't say any more, but this feels really disrespectful.

**The Chair:** Nobody has called for a vote.

**Mr. Adam van Koeverden:** You can't really call for a vote. Debate has to collapse.

**The Chair:** Well, there's nobody left.

**Mr. Adam van Koeverden:** Let's vote.

(Motion negatived: nays 7; yeas 4 [See Minutes of Proceedings])

**The Chair:** Mr. van Koeverden, you're the last questioner in this round. You have four minutes.

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

Somebody from our side actually looked up the numbers. Between 2006 and 2014, the federal government invested about \$500 million, specifically in roadways and related infrastructure. From 2015 to the present, it's been \$1.6 billion. It's triple, actually.

**Mr. Dan Mazier:** On a point of order, what does that have to do with the study?

**The Chair:** Mr. van Koeverden, if you could, keep your comments focused on the water study.

**Mr. Dan Mazier:** That was really important.

**Mr. Adam van Koeverden:** I appreciate the guidance from Mr. Mazier.

I will go back to my question for the chief regarding the impact this has had on his community. Before I do, I will preface my question by highlighting a trip we took last week to meet with the Mushkegowuk Council—six or seven first nations were represented at the meeting—where we committed to protecting 86,000 square kilometres of coastal territory.

One of the reasons I felt so strongly about going up and joining this meeting was the experiences I've had on this committee advocating for your community and other first nations communities in Alberta that have been affected by process-affected water and the mining activities that have had such a devastating impact on the health of your communities. I'm proud to be part of a government that is pursuing more opportunities to protect particularly sensitive environmental territory from this development, which is just proven to be unsustainable and unhealthy for communities.

Chief, it's back to you on anything else you'd like to say regarding the impact. As I wanted to say at the closing of your last speech, you should never have to beg for attention. I'll commit myself right now to making sure that anytime you need the attention of the federal government, we're here for you.

**The Chair:** Do you have a question for the chief?

**Mr. Adam van Koeverden:** He didn't finish last time.

**The Chair:** Go ahead, Chief Tuccaro.

**Chief Billy-Joe Tuccaro:** First, I'd like to thank you for being an advocate for us.

With regard to us having to beg for this House study, it's something we feel, as Mikisew people, should be owed to us. We're always having to wait for the other communities in the hamlet of Fort Chipewyan.

As we're waiting for everyone to be on board with the House study—and getting the feds on board as well—we're losing people by the week, like I said. We need some clear answers about what is actually happening.

I'll continue to beg for this House study until it comes to fruition for us. It's a baseline for my people to see exactly what's going on. As I made reference to earlier, one of my previous chiefs tabled this 20 years ago. A lot of the stuff that was tabled then is still a concern to us.

Thank you.

• (1710)

**Mr. Adam van Koeverden:** Thank you, Chief.

**The Chair:** You have about a minute.

**Mr. Lloyd Longfield:** I have a quick question for Mr. Faveri.



We talk about the four Rs—this was in my notes to ask about—and Guelph is quite involved in precision agriculture. As to the monitoring systems that go with that, including drones and other technology, could you bring forward to our committee how we would measure contamination getting into streams?

**Mr. Tim Faveri:** Technology has grown quite a bit over the last number of years, and it's really been the focus of the industry to get better data and monitoring. Right now, still, I would say the best way to monitor is through the taking of soil samples and water samples adjacent to farms.

[Translation]

**The Chair:** Thank you to our witnesses. This was a very informative discussion. You've given us a lot of food for thought, and the report at the end of our study will certainly reflect that.

We will now take a quick break to bring in the next panel.

Thank you again. I hope we'll have the pleasure of seeing you again, Chief Tuccaro, when we visit Fort Chipewyan, hopefully in May.

• (1710) \_\_\_\_\_ (Pause) \_\_\_\_\_

• (1715)

**The Chair:** We are now back with our second panel.

[English]

We'll start with Mr. Michael Miltenberger, special adviser for the Centre for Indigenous Environmental Resources.

All the tests have been done, and the sound meets the standard.

Mr. Miltenberger, please lead us off for five minutes.

**Hon. J. Michael Miltenberger (Special Adviser, Centre for Indigenous Environmental Resources):** Good afternoon. It's a pleasure to be here to listen to this spirited debate.

I'm the special adviser to CIER. Before I became the special adviser, I did 20 years in the legislature in the Northwest Territories. I did 14 years in cabinet and nine as an environment minister, and in those nine years, I was finance minister for seven at the same time. It's a pleasure to be back inside the ropes briefly.

CIER is a national organization headquartered in Winnipeg. It was formed by eight first nation chiefs about 30 years ago, chiefs like Phil Fontaine, Manny Jules, Matthew Coon Come and Roger Augustine. It has completed in its time and continues to complete hundreds of programs with indigenous communities across the country, projects such as climate change planning, species-at-risk management, energy literacy, watershed planning, ecological restoration and natural infrastructure, to name some.

The project I will be focusing on today is about collaborative water governance.

Currently in our country, our systems of water governance are inadequate. The status quo is not working. No one government can do it alone, especially when it comes to water. Existing decision-making over water is fragmented and siloed. Federal, provincial and territorial governments make their decisions about water within their respective jurisdictions without processes in place to collabo-

rate with indigenous governments, which are on the front lines of combatting the ongoing water crisis and hold inherent rights over the water in their territories.

Collaborative governance structures are critical to good water governance and to recognizing the inherent rights and authorities of indigenous nations. The collaborative leadership initiative is a process developed by CIER to build collaboration on shared water challenges between indigenous and non-indigenous elected leaders and their administrations. It focuses on two orders of government, indigenous and municipal, because most water decisions are made at the local level, and these two orders of government often have no structured mechanism for collaboration.

When first implemented in Manitoba in 2017, when the idea was presented to the chiefs, 11 indigenous governments and 16 municipal leaders agreed to engage in coming together for the first time in 150 years. Through a series of gatherings, the leaders built trust, learned about each others' communities and water challenges and began to think like a region.

CLI Manitoba advanced the development of a reconciliation framework while building a co-governance table where government-to-government decisions are made. Having elected decision-makers at the table was a critical factor in its success. The leaders collaboratively worked towards a range of shared priorities, particularly the health of Lake Winnipeg, with water at the centre of these efforts. After the CLI process carried on for a series of meetings, in 2019 there was a historic MOU signed between all the parties—the elected municipal leaders and chiefs—at Lower Fort Garry. I will direct you to a very powerful 20-minute documentary that summarizes the CLI Manitoba process on the CIER website.

Building off of this, the national CIER project, which was based on the success of the CLI process in Manitoba, allowed us to secure funding from the BHP Foundation to implement the CLI process with partners in other regions across Canada. This is a five-year project that recently passed its midway point and is generating valuable learnings and building collaborative water governance rooted in reconciliation. We're working with partners across Canada, including the Northwest Territories and British Columbia, as well as further parties in the Northwest Territories and elsewhere, to help create the conditions to change the way water is governed. Our goal is to scale up this work significantly, so we are also creating the resources, tools and learning networks to enable the growth of the CLI model on a big scale.

• (1720)

In the brief we have provided, we have recommendations on how the federal government can better support these collaborate governance initiatives, which I'd be happy to discuss in the questions and answers.

**The Chair:** Thank you very much, Mr. Miltenberger.

[Translation]

We will now go to Jimmy Bouchard, support representative at the Conseil régional de l'environnement et du développement durable du Saguenay-Lac-Saint-Jean.

Mr. Bouchard, you have five minutes for your opening remarks. Please go ahead.

**Mr. Jimmy Bouchard (Support Representative, Conseil régional de l'environnement et du développement durable du Saguenay-Lac-St-Jean):** Thank you very much.

Mr. Chair and members of the committee, it's an honour to be with you today on behalf of the Conseil régional de l'environnement et du développement durable du Saguenay-Lac-Saint-Jean. Today, I would like to talk to you about three topics that I believe are essential to your work on freshwater.

The first is control and regulation of emerging contaminants in drinking water. Quebec is currently facing an unprecedented wave of drinking water sources that are contaminated with perfluorinated compounds, PFAS and PFOS. Nearly a dozen municipalities are waging war on these perennial pollutants. The federal government is currently revising its regulations to establish a standard that, to date, has remained a recommendation.

It is high time for federal authorities to act decisively to ensure quality water for Canadians across the country. In my region of Saguenay-Lac-Saint-Jean, the city of Saguenay, more specifically, the borough of La Baie, is facing this scourge. It seems very likely that the source of the contamination is the Bagotville military base, which is under federal jurisdiction. It appears that this is not the only case in Canada. The federal government must act swiftly by adopting a strict standard and assume its responsibilities across the country.

Second, I would like to talk to you about invasive alien aquatic plants. The degradation of water bodies is well under way in several regions of Quebec. Estrie, Montérégie, Laurentides and Abitibi-Témiscamingue are facing unprecedented invasions. In some northern regions of Quebec, the problem is not as severe. In other words, there is still time to protect our water bodies from these invasive species. It is no longer a question of IF they will be affected, but WHEN. Elsewhere in the world, governments have moved quickly to curb this problem. For now, washing boat hulls seems to be the most effective preventive measure. In Quebec, municipalities have the power to require such a measure. Obviously, they must have cleaning infrastructure in place to carry out this obligation.

The federal government can and must act on two fronts. First, it must significantly improve its assistance programs to build boat washing stations. Second, it must pass legislation to control the washing of boats across the country. This can be done in a variety of ways, for example, by requiring ballast water filtration devices

and by requiring boats operating on waterways to show proof of washing.

The third issue I want to discuss with you today is the underfunding of water infrastructure. In Quebec alone, the water infrastructure asset maintenance deficit is nearly \$35 billion. This amount goes up with every year that passes due to infrastructure underfunding at the various levels of government.

The federal government has a key role to play in ensuring that funding is sufficient to have a chance of resolving the situation within an acceptable time frame. It must recognize the importance of local municipalities in building resilience to climate change and addressing water issues in cities. If it wishes to be taken seriously in its intention to put in place an effective strategy to protect freshwater, it seems clear to me that priority must be given to the rehabilitation, maintenance and improvement of municipal stormwater, groundwater, surface water and waste water catchment, filtration and treatment works.

I would suggest greater flexibility when allocating funding from the various programs. Take the example of the clean water and waste water fund program. Financial assistance is granted on a per capita basis. While natural and seemingly fair, this method of allocating funding has some major shortcomings. For municipalities with a population of 6,500 or less, there is the possibility of adjustment, but it is often insufficient. For larger cities, various criteria should be taken into account, for example, the amount of infrastructure, in absolute numbers or in kilometres of pipe, and the environmental impact of the projects presented.

The City of Saguenay, for example, has as many water facilities, from pumping stations to filtration and treatment facilities, as the City of Montreal—but a population that is 15 times smaller. The objective of the program, which is part of the federal infrastructure plan, to further accelerate economic growth and job creation needs to be reviewed by integrating and prioritizing the environmental gains of submitted projects.

In closing, I would like to draw your attention to governance in terms of environmental jurisdiction. Jurisdiction is delegated by level of government, from municipalities to the provinces and from the provinces to the federal government. The result is a lack of alignment in this delegation of authority. Shared jurisdiction regularly generates conflicts and differences of opinion. All the points I have raised highlight this state of affairs. I sincerely believe that the federal government would do well to look into this issue and grant Quebec exclusive jurisdiction, or at least precedence, over environmental matters.

Thank you for your attention.

• (1725)

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

We'll now turn to Mark Fisher, president and chief executive officer of the Council of the Great Lakes Region.

Mr. Fisher, you have five minutes.

[*English*]

**Mr. Mark Fisher (President and Chief Executive Officer, Council of the Great Lakes Region):** Thank you, Mr. Chair and members of the committee.

I'm pleased to be here today to offer some freshwater perspectives from the standpoint of the Great Lakes region.

The Great Lakes-St. Lawrence region, which is shared by the United States and Canada, comprises eight states—from New York to Minnesota—and the provinces of Ontario and Quebec. For millennia, however, as we all know, this region has also been the traditional territory for many indigenous nations and peoples. Today, it serves as a vital economic and ecological region for both countries.

For example, it has roughly \$6 trillion U.S. in economic activity, which represents close to 10% of global GDP. This region, if it were a country, would represent the third-largest economy in the world. It would be behind only the United States and China and ahead of major economies such as Japan, Germany and the United Kingdom.

Unsurprisingly, border crossings in this mega-region are among the busiest in the world, because the provinces and states in this region trade more with each other than with any other country in the world. Over 50 million jobs—one-third of the combined American-Canadian workforce—depend on the region's commerce and cross-border trade.

At the heart of this economic region is one of the largest freshwater systems in the world: the five Great Lakes and the St. Lawrence River. Over 20% of the world's surface fresh water flows through these lakes before reaching the Gulf of St. Lawrence and the Atlantic Ocean. They sustain 50% of Canada's economic activity and 60% of the country's population, as well as important climatic and ecosystem functions along the way.

While this inland freshwater sea is vast in size, the Great Lakes are a finite natural resource. In fact, it is estimated that only 1% of these waters are renewed on an annual basis by precipitation, groundwater and runoff. Moreover, since the lakes turn over and replenish very slowly—anywhere from years to centuries in the case of Lake Superior—they are extremely sensitive to pollution and climate change.

The binational Council of the Great Lakes Region is working to accelerate the regional transition to a sustainable future by uniquely bringing diverse perspectives and interests together across borders and sectors to explore and solve the most pressing socio-economic and environmental challenges as one Great Lakes region. By bringing the environment and economy together in our work and by promoting sustainability in the region's academic research, public policy choices, business decisions, local and regional planning, and capital investments, CGLR is ensuring our regional economy is growing responsibly, our people are thriving and our environment and the Great Lakes are protected for future generations. In other words, we are finding ways to meet the needs of the present with-

out compromising the ability of future generations to meet their own needs.

For the sake of time, the council would like to offer four freshwater recommendations for your consideration. More details about each have been provided in this submission to the committee, which I hope you have.

The first recommendation would be more funding. It is required to accelerate restoration work at seven toxic hot spots or areas of concern—in Canada, there are 12 of them, five binational—that are currently not in recovery or delisted as areas of concern.

We must increase funding for Great Lakes science and environmental conservation efforts to deepen and accelerate progress on all annexes of the Canada-U.S. Great Lakes Water Quality Agreement.

We must move faster to create an independent Canada water agency with the right capacity, making it both a whole-of-government effort and a national call to action to respond to Canada's and the world's growing water challenges.

Finally, the federal government should move responsibility for the blue economy strategy from the Department of Fisheries and Oceans to the Canada water agency, and every effort should be made to release a pan-Canadian blue economy strategy with a supporting action plan as soon as possible.

Thank you for the opportunity to present to you today. I'd be pleased to take your questions when the time is appropriate.

• (1730)

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

Last but not least, from CropLife Canada, we have Mr. Pierre Petelle, president and chief executive officer, who is accompanied by Ms. Terri Stewart, executive director of chemistry.

Mr. Petelle, go ahead, please.

**Mr. Pierre Petelle (President and Chief Executive Officer, CropLife Canada):** Good afternoon, Chair and committee members.

As you mentioned, my name is Pierre Petelle. I'm the president and CEO of CropLife Canada. I'll be sharing my time with Terri Stewart, our executive director of chemistry.

Thank you for inviting us to participate in your study today of fresh water in Canada.

[*Translation*]

We're pleased to highlight some of the many ways that Canada's plant sciences sector is actively contributing to Canada's environmental sustainability by protecting our biodiversity and ensuring clean air, soil—

[English]

**The Chair:** We seem to be having trouble with interpretation.

We have it now.

Go ahead, Mr. Petelle. I'm sorry.

**Mr. Pierre Petelle:** Would you like me to repeat that part?

**The Chair:** Go from the beginning of the French part.

[Translation]

**Mr. Pierre Petelle:** Okay.

We're pleased to highlight some of the many ways that Canada's plant sciences sector is actively contributing to Canada's environmental sustainability by protecting our biodiversity and ensuring clean air, soil and water.

CropLife Canada represents an innovative and solutions-oriented industry that supports sustainability, food security and economic growth.

[English]

In addition to providing farmers with tools that increase productivity and sustainability, our members develop products used in a wide range of non-agricultural settings, including urban green spaces, public health, invasive species control and transportation corridors.

CropLife Canada advocates for predictable, science-based regulations, both federally and provincially, that protect human and environmental safety and encourage innovation and competitiveness.

**Ms. Terri Stewart (Executive Director, Chemistry, CropLife Canada):** There is no question that the global agricultural community is currently facing some enormous challenges, all of which we've heard talked about today: climate change, severe weather conditions, water scarcity and increasing global population. This is all while the amount of arable land available for agriculture is shrinking due to urban expansion.

With water shortages on the horizon for much of the world, growers continue to actively seek out tools that help them reduce water. Canada's agriculture industry is focused on providing crops that are better able to withstand drought and other extreme weather occurrences, are more efficient at storing carbon in the soil and have better nutrition profiles to help us meet our health needs and reduce the impacts on our health care system.

Collectively, our ag sector is focused on protecting those crops from the various weeds, insects and diseases that grow more prevalent each year with climate change. This allows growers to grow more food on less land than ever before, leaving more untouched habitats for pollinators and other species. These innovations are part of a highly regulated system in Canada that protects the health and environment of Canadians.

The Canadian Food Inspection Agency and Health Canada's Pest Management Regulatory Agency ensure that all of these innovations meet high safety standards and are protective of health and the environment, including our water resources.

In terms of why farmers need to use pesticides, pesticides can destroy entire crops, which can increase production costs, making food more expensive. When the crops are lost, so are all the resources, including water, that are used to grow them.

Globally, there are over 30,000 different species of weeds, 3,000 species of fungi and 10,000 species of insects that plants must combat on a daily basis. Even today, up to 40% of global crop production would be lost due to weeds and diseases.

When we're thinking about pesticides and plant breeding innovations, they help protect crops and give them the best chance of success to make agriculture as efficient as possible. Technologies are being used to develop and apply crop protection products, and these are changing rapidly.

Precision agriculture techniques using GPS, drones and sensors are helping growers make better-informed crop management decisions so they can use inputs and resources, including pesticides and fresh water, more efficiently, increasing productivity and furthering sustainability efforts. This is all good news for agriculture and the environment.

• (1735)

[Translation]

**The Chair:** Unfortunately, your time is running out. There will certainly be questions for you, Ms. Stewart and Mr. Petelle.

Mr. Deltell, you have the floor.

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

Good afternoon. Welcome to your parliamentary committee and your Canadian Parliament.

Mr. Chair, a certain water quality issue affects us all. Many witnesses shared their concerns about jurisdictions. Lucky for us, people at this table today can answer specific questions about jurisdictions.

[English]

My first question will go to Mr. Fisher.

When we talk about the Great Lakes, we're talking talk about Canada, the United States, five different states and Ontario, obviously. How do you deal with so many jurisdictions to be sure we can have clean water in the Great Lakes?

**Mr. Mark Fisher:** It's a great question, and thank you for it.

There are really two main mechanisms where that work happens, the first being the Boundary Waters Treaty from 1909.

More recently, the Great Lakes Water Quality Agreement from 1972 is really the framework that brings both federal governments together alongside Ontario and Quebec, the eight Great Lakes states, first nations and many others to look at how we are trying not only to restore the Great Lakes from past challenges we've seen from industrial development and urban development but to protect the Great Lakes for future generations.

It's important to say that over the last 50 years there has been tremendous progress. Albeit slow, it's been positive and in the right direction, but there's certainly more that we need to do.

**Mr. Gérard Deltell:** Can you give examples?

**Mr. Mark Fisher:** We can drink the water, but when it's treated. There are high levels of nutrients in Lake Erie that are causing toxic algae blooms. There are 20 million pounds of plastic pollution in the Great Lakes; it's not just an oceans problem. We're still seeing restrictions on the type and amount of fish you can eat.

We're making progress, but there's a lot more that we need to do to make sure the health of the Great Lakes is beyond “fair”, which is what the status is today.

When you think about that from a federal government and funding perspective, with the new funding that was announced this year, I think we'll be investing about \$58 million a year over the next 10 years. It's estimated that the algae problem in Lake Erie alone will cost the Canadian economy \$300 million a year.

We need a lot more investment in science, in protection efforts and in restoration efforts, not just through the federal government but in working with the provinces of Ontario and Quebec as well as the cities and rural communities that share the coastline of the Great Lakes. Then, ultimately, we need to try to do more with the United States.

**Mr. Gérard Deltell:** If we want to fight pollution, we have to identify pollution and where it comes from. My point is, how can you be sure where the pollution is coming from when you have so many billions of litres of water travelling from, I would say, state to state and country to country? How do you deal with that? How can you identify the source of pollution?

**Mr. Mark Fisher:** It's fair to say that over the last decade—and technology has certainly helped with this—we can do a much better job of identifying point sources of pollution and non-point sources of pollution. For point sources, we know it's end of pipe. We know where it's coming from. Non-point, not so much, but there is technology that allows us to be able to identify where that non-point source pollution might be coming from.

As it relates to the health of the Great Lakes, the federal government has responsibility for the lakes—they're international waters—but what happens on the land within the watersheds is a provincial responsibility. Ultimately, it comes down to what the federal government and the provinces can do together to make sure that what's happening on land is not causing further harm to the health of the lakes. That's where collaborative governance—that collaborative science and management—is so important.

Increasingly, it's about working with large cities—for example, Montreal and Toronto—where, when there are heavy rain events, you still see to this day combined sewer overflows that are dumping raw sewage into the Great Lakes. That's only going to be fixed by massive infrastructure investments, which cities do not have. They need the support of the Canada Infrastructure Bank and other funding mechanisms to be able to tackle some of these infrastructure challenges that lead to some of the environmental problems in the Great Lakes.

• (1740)

[*Translation*]

**Mr. Gérard Deltell:** Thank you, Mr. Fisher, for your testimony.

[*English*]

Mr. Miltenberger, you have been part of the government. Thank you so much for your service as a member of the assembly there in the Northwest Territories.

Based on your experience, can you tell us how a territory can deal with the federal government and also with the first nations? The Northwest Territories are very specific. How did you deal with all the different jurisdictions?

**Hon. J. Michael Miltenberger:** The first thing we did in the Northwest Territories in my time—it took us about 60 years—is that we negotiated a devolution agreement with Canada to take over more of our own autonomy. We had our own self-government agreement for land, water and resource development. In my mind, we got rid of about 5,000 kilometres of red tape.

We took over responsibility with indigenous governments. We recognized that we have to work collaboratively. We figured out how to do things like co-drafting legislation for things like the Species at Risk Act and the Wildlife Act, which we did co-operatively, with many hands on the pen. It was a bill that government [*Technical difficulty—Editor*] into the assembly and it was voted on [*Technical difficulty—Editor*]

**The Chair:** I'm sorry. You're cutting out a bit, Mr. Miltenberger, but in any event, the time has run out.

We go to Mr. Ali for six minutes.

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

Thank you to all of the witnesses for being here and sharing your knowledge and experience.

Mr. Petelle and Ms. Stewart, climate change poses a threat to food security. Particularly concerning this year is the very light snow cover in some parts of the country, which means less water provided by snowmelt in the spring. If that is followed by a dry summer, crop yields might be considerably lower. I know that farmers are quite resilient in applying crop science to meet challenges. Can you tell the committee about emerging plant science technologies that might mitigate the effect of water scarcity on crops and crop yields?

**Mr. Pierre Petelle:** The question is very pertinent. If you've heard of CRISPR technology and gene editing, it's the new scientific discussion being talked about now, but in agriculture it's the here and now. Certainly we've had a lot of genetic engineering over the years to make better and more resilient crops, but now, with the promise of gene editing, this can happen much faster and is much less expensive, so the entrants can be smaller companies, public breeders and universities, not just the larger multinationals that have typically been the founders of the gene technologies up till now.

That's a very promising technology, but again, the regulatory environment that I mentioned in my remarks is really critical, because we've been working for seven years, paving the way for gene editing so that CFIA and Health Canada can accept a submission and know how to approve and regulate it. That's the part I think we really need a collective, whole-of-government approach on. If we want Canada to be at the forefront of innovations and some of these technologies, including drought-tolerant crops, crops that are better adapted to some of the climate stressors we have, and short-stature crops that are more resilient to wind—there are all kinds of innovations—we have to make sure our regulatory environment enables those products. Part of the work we do, really, is to create that environment for our members.

• (1745)

**Mr. Shafqat Ali:** Ms. Stewart, do you want to add something to that?

**Ms. Terri Stewart:** No, I'm good. Thank you.

**Mr. Shafqat Ali:** To Mr. Petelle, Ms. Stewart and Mr. Fisher, we had some testimony during this study that expressed concerns about the lack of incentive for farmers to prevent agricultural runoff into rivers, streams and lakes, and the resulting threats to water quality. Can you suggest how this situation might be improved?

**Mr. Mark Fisher:** I think this question came up a bit during the last session, with Nutrien.

We work with a partnership collaborative in Ontario called ALUS, which is the acronym for Alternative Land Use Services. It's a fantastic program that is able to engage farmers and other partners directly to look at edge-of-field solutions, which could be taking out marginalized land and putting in habitats that are positive for addressing climate change and for biodiversity. Because the farmers are making a decision to take that land out of production, they're getting compensated for that, just as they would for selling a crop.

When we look at these types of innovative programs in which a farmer is able to get a benefit for taking that marginal land out of production, and we see that nature benefits as a result of that, I

think that's a win-win for both the farmer and government. Because they work and they're farmer-driven, I look at how the government plays a role in enabling and providing funding for those types of programs.

**Mr. Shafqat Ali:** Thank you.

Mr. Fisher, how do you think Canada can build a plan to protect and restore the Great Lakes over the next 50 years, as they continue to face challenges from a growing population and industrial activity?

**Mr. Mark Fisher:** That's another great question.

As I mentioned before, the health of the Great Lakes is increasingly driven by what is happening in the watershed and upstream. I think that, over the next 50 years, if we're really going to understand change and risks to the lakes, we're going to have to do a better job, at least in the case of Ontario, of working hand in hand with the provincial government, with large cities and with rural communities to make sure that we understand what those risks are with respect to point sources of pollution, non-point sources of pollution and the impacts of climate change on the Great Lakes coastlines, and try to tackle these issues in a collaborative way.

There's no way we're going to be able to address these issues if the federal government is doing its thing, the province is doing its thing, and cities are trying to manage at the city level. I think it's really going to come down to collaborative science, understanding the risks and challenges that we're going to face in the next 50 years, collaborative governance, co-investment and trying to work together to get ahead and get out in front of some of these challenges. Not one level of government alone is going to be able to solve the issues that we're facing.

[Translation]

**The Chair:** Ms. Pauzé, you have the floor.

**Ms. Monique Pauzé:** Mr. Chair, before you start the clock, I want to know whether there will be a second round of questions, given that we currently have six minutes.

**The Chair:** There will be a second round of questions, but it will be shorter.

**Ms. Monique Pauzé:** Okay. That's fine.

I would like to thank all the witnesses for being here.

Mr. Bouchard, at the end of your opening remarks, you raised the issue of jurisdictions. The different levels of government are always straddling jurisdictions and squabbling over them. Mr. Miltenberger said that most water-related decisions are made at the local level. He succeeded in getting indigenous people and municipal officials to sit at the same table. It's clearly a local jurisdiction.

Does it make sense for the federal government to create the Canada water agency?

**Mr. Jimmy Bouchard:** Thank you for your question, Ms. Pauzé.

The issue of whether it makes sense remains unresolved. Granted, decentralizing jurisdictions and powers from Ottawa to Quebec and the municipalities is a tricky business. The control of navigation on bodies of water is a fairly simple, eloquent and striking example. I know that Ottawa announced last fall that it wanted to make changes. Along with my current job, I'm also a municipal councillor for the city of Saguenay. I have led this fight simply to control boat speeds on the various bodies of water. These are small lakes, not large bodies of water. This remains a federal responsibility.

The Canada water agency is a good thing. However, I'm afraid that it will cause further conflict and issues around the division of jurisdictions among the Quebec government, the Canadian government and the municipalities. I think that the desire is commendable. That said, I'm afraid that it will cause even more issues.

• (1750)

**Ms. Monique Pauzé:** I'm glad that you raised the issue of transportation and the Department of Transport. To prepare for the study, we sent questions to all the departments involved. The Department of Transport responded to each question that this matter didn't apply to them.

I want to quickly address the issue in the La Baie area concerning water contamination by PFAS or PFOS perfluorinated compounds. The source of that contamination is allegedly the Bagotville military base.

There still isn't any way to eliminate substances harmful to health through water filtration. However, there may be technology such as ion exchange, nanofiltration or reverse osmosis that could remove up to 90% of these toxic substances.

Do municipalities the size of Saguenay have the resources to implement this technology to treat fresh water polluted with eternal pollutants?

**Mr. Jimmy Bouchard:** Thank you for your question.

This is a major issue at home in Saguenay. We've been working on this matter for a number of months. First, I'll focus on the procedure. There isn't any procedure right now. I understand that various cases in other parts of Canada could potentially fall under the responsibility of the federal government. However, there isn't any established procedure. This forces cities and municipalities to live with a certain amount of uncertainty. It isn't easy financially.

You're asking me whether cities such as Saguenay have the resources to tackle this type of issue. In Saguenay, we're fortunate to have an experienced team of public servants and municipal employees. In terms of human resources capacity, we're doing quite well. However, in terms of financial capacity or resources, it's a different story.

For the sake of transparency, I must say that we've worked well with the government on the first part involving the temporary treatment of water potentially contaminated by the Bagotville military base. One remaining issue is the search for a new source of drinking water and, ultimately, the treatment of this source. This is expected to cost some tens of millions of dollars.

**Ms. Monique Pauzé:** On that note, I wanted you to talk about funding.

As you already said, contamination falls under federal responsibility. Should the federal government fund the work required to restore the area's drinking water?

**Mr. Jimmy Bouchard:** Obviously—

**Ms. Monique Pauzé:** That way, the polluter pays principle applies.

**Mr. Jimmy Bouchard:** Yes, exactly. It makes sense.

The Government of Canada is currently having some trouble acknowledging its responsibility. I'm not saying that it isn't doing so. However, it's challenging to obtain some form of acknowledgement of responsibility. Once this responsibility has been acknowledged, in my opinion, the Government of Canada must cover the costs.

As I said, the municipality and the Government of Canada have reached a certain level of agreement on part of the matter. However, a number of issues remain. I spoke earlier about some tens of millions of dollars. This estimate seems right. This puts financial strain on the municipality. I said earlier that this creates a certain amount of uncertainty. We have budgets to balance. It's quite challenging for a city such as Saguenay to manage everything and to navigate, no pun intended, these troubled waters.

The Government of Canada must take responsibility. It must first acknowledge its responsibility, and then provide the funding needed to resolve the issue over the long term.

**Ms. Monique Pauzé:** Yikes!

In your opening remarks, you said that the government must act on two fronts, and that there wouldn't be any jurisdictional issues. First, it must improve assistance programs for the construction of boat washing stations. Second, it must implement legislation governing the regulations for boats.

Can you quickly describe the potential positive and long-term impact of these two recommendations?

**The Chair:** Please be brief.

**Mr. Jimmy Bouchard:** In a strange coincidence, today Quebec announced \$6.4 million in funding for washing stations. Ottawa currently doesn't provide any funding.

In the Lac-Saint-Jean area, a \$1.1 million project is under way to install about 15 washing stations. Quebec is providing \$115,000 and Ottawa \$0. This type of program must be established. Some regulations can be quickly introduced, such as requiring boat operators to remove drain plugs and to treat and filter ballast water during transport. These are all Transport Canada's responsibilities.

• (1755)

**The Chair:** Thank you.

Ms. Collins, you have the floor.

[*English*]

**Ms. Laurel Collins:** Thank you, Mr. Chair.

I want to thank all the witnesses for being here.

I'll go first to Mr. Miltenberger.

You cut out a bit at the end of your last response, so I want to give you an opportunity to finish your thought.

**Hon. J. Michael Miltenberger:** Thank you.

Quickly, I want to make the point that in the Northwest Territories, we figured out a way that recognizes the fact that we have to work collaboratively with indigenous governments. We figured out that we can write public legislation through a co-drafting process, for example. It's a critical piece, because indigenous governments are huge landowners. They're a level of government that often gets left out.

**Ms. Laurel Collins:** Thank you so much.

Can you expand a little and talk a bit more about what you saw when you...? In your role with the Government of Northwest Territories, what did you see as some of the challenges on water governance between the territorial government and the federal government, and in your role with the Centre for Indigenous Environmental Resources, how does that interact with Métis nations and first nations?

**Hon. J. Michael Miltenberger:** Thank you.

First, it's clear that water, in all its forms, is a national issue. It's not a federal issue. It's a national issue.

The things that are happening, such as the Canada water agency, are steps that we think are good ideas.

There is no common table right now to bring respective water jurisdictions to in order to solve big, common water issues. It's not a case of fighting over jurisdiction but rather of bringing your jurisdictions to the table to fix problems that we all acknowledge no one government can do alone.

**Ms. Laurel Collins:** Thanks so much.

We've heard some pretty horrific testimony from first nations and Métis communities in northern Alberta that have been impacted by the devastating tailings ponds leaks. In your opinion, what are some of the ways the federal government can stop events like this from happening in the future?

**Hon. J. Michael Miltenberger:** I'd point out, of course, that I live in Fort Smith. We're north of Fort Chip, so we share the problems and concerns that Chief Tuccaro raised.

For the Mackenzie basin, there is the Mackenzie River Basin Transboundary Waters Master Agreement, which was negotiated with the support and direction of the federal government. It is a very good agreement, which has led to bilateral agreements being negotiated between the partners of the Northwest Territories and Alberta, the Northwest Territories and B.C., and the Northwest Territories and Saskatchewan. They have agreed on water monitoring and quality-quantity issues so that everybody has comfort in knowing we can manage those affairs and issues in the Mackenzie basin—the biggest one being that there is enough water for environmental flows.

That's an approach that we think has value in other parts of Canada where such agreements don't exist.

**Ms. Laurel Collins:** Thanks so much for that.

When it comes to the interaction between the federal or territorial governments and corporations that are disregarding nature and the environment, and having these impacts on indigenous communities, do you see any additional role for us, as federal legislators?

**Hon. J. Michael Miltenberger:** I think carrying on with the Canada water agency—and taking the advice to make it effective so it has the resources, authorities and capacity to bring all the jurisdictions to a national table—is important.

I think we recognize that our legislation, as a country, is way out of date. The Canada Water Act needs to be looked at to capture a lot of the discussion and concerns raised today. The big thing is to constantly remind everybody—provinces, territories, Canada and indigenous governments—that this is a national issue and the only way we're going to solve it is if people come to the table with their jurisdictional problems.

• (1800)

**Ms. Laurel Collins:** Thanks so much.

You've outlined how, when it comes to climate change and water management, the status quo is not working, and you've said that we need this kind of change.

The B.C. provincial government has noted commitments to working directly in partnership with first nations and Métis communities on water governance and management. They've also established a freshwater security fund and are working with indigenous communities to ensure their needs are met.

Have you heard about this? If so, what are your thoughts, and what kind of lessons do you think the rest of Canada, specifically the federal government, can learn from these kinds of projects?



**Hon. J. Michael Miltenberger:** In fact, CIER and the CLI process are currently engaged in the Okanagan, where we are going to be meeting next month with the mayors and chiefs once again. They have told us that this is the first time they've ever been in the same room together to talk collaboratively on a co-governance basis, at the ground level, about these significant problems and challenges that exist in the Okanagan.

If they can get their thinking clear as municipalities and indigenous governments, it's easier to pivot to talk to the province about all the support they're prepared to give that type of process, where solutions can be generated where the problems occur.

**The Chair:** Thank you.

We'll go to a second round. I'm going to truncate the second round by shaving 40% off the time, so that means they are basically three minutes.

Mr. Leslie.

**Mr. Branden Leslie:** Thank you, Mr. Chair.

Mr. Petelle and Ms. Stewart, I appreciate that you mentioned some of the technological advancements our sector has seen, and those that seem to demonize farmers and the associated industries. I don't think I have a full understanding. You mentioned GPS sensors.

Could you expand on some of the tech that has made advancements and that you expect to come down the pipeline—not in terms of gene editing yet, but in terms of the application of crop protection products to more efficiently use water?

**Mr. Pierre Petelle:** I think that, certainly, the more data that is available on the farm, in terms of where the product is.... We have no interest in pesticides ending up where they don't have their effect, and neither does the farmer. Some of the precision technology, where the actual nozzles are turning on and off and detecting weeds instead of the crop.... Seeing some of those innovations available now is pretty mind-blowing. All those techniques are designed to apply the product where it's going to have the most effect and potentially lessen the impact of off-field movement. Drones and GPS data are helping the farmer know exactly, almost to the square foot on their field, what that piece of soil needs in terms of nutrients or pest pressures.

All that information and knowledge is making agriculture more and more sustainable every day.

**Mr. Branden Leslie:** Thank you.

It sounds like a good field trip for this environment committee to go and see some of these technologies in person.

You mentioned data and how that's often, in the case of the farmer or the agronomist, used to help identify nutrient use and things like that. In terms of water monitoring data, though, what's your perspective on how we can ensure that we are correctly collecting data that is going to be accurate and that our decisions regarding crop protection products are scientifically based, not following ideology or any other parameter outside of what the science says?

**Ms. Terri Stewart:** To answer that question, I would like to take just a few moments to talk about why we even monitor the water at all. The water monitoring data can provide a real-world picture of the potential exposure to inform Health Canada's risk assessments in terms of pesticides that may or may not end up in the water.

Currently, Canada does not have a consistent national water monitoring program. In the absence of this information, the PMRA defaults to overly conservative assumptions, often resulting in the cancellation of uses that would otherwise not be a regulatory concern. This reduces the competitiveness of Canadian growers and compromises their ability to combat both existing and future pests.

In terms of a national, government-run program, having such a framework really would ensure quality and consistency in terms of methods of detection and sampling collection, use of thresholds that are in line with what is used by Health Canada, sampling done across Canada—including different agricultural areas—and being able to do it at a consistent frequency so that they can conduct trend analysis to understand the levels over time.

• (1805)

**The Chair:** Thank you. Is what you're reading part of your brief, so that we can capture it?

**Ms. Terri Stewart:** No, it's not, but we can provide it.

**The Chair:** If you could send it in writing, that would be great.

[*Translation*]

Ms. Chatel, you have the floor for three minutes.

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

I'll turn to Mr. Miltenberger.

Your words are wise. You said that water was first and foremost a national issue, and that we shouldn't waste our time fighting over water jurisdictions. Instead, we should bring governments with jurisdiction to the table to work together to better protect our water and nature.

I'll give a nod to my Bloc Québécois colleague, who I hope will take note. She emphasized the need to include local communities in decisions. Quebec signed the agreement of the 15th conference of the parties to the United Nations Convention on Biological Diversity, or COP15. Target 22 of the agreement clearly states that local communities and indigenous peoples must play a key role in decisions regarding the protection of nature, including water in particular.

In the Northwest Territories, you saw great success when governments came together to make the right decisions. Drawing on this experience, do you have any advice for the Canada water agency? It must take the same steps to protect water, which you so eloquently referred to as a national issue.

[English]

**Hon. J. Michael Miltenberger:** Yes. Let me offer these quick comments. I agree. It's a very good question.

The issue in all these matters that we deal with here, it seems to me, is with political will.

The Canada water agency, right now, is being developed as a federal initiative. One of the concerns we have in the Northwest Territories, for example, is that there's no real oversight or involvement of the provinces, territories or indigenous governments at the political oversight level, where you're creating the political conditions for the Canada water agency to succeed.

That's a critical piece, and that table—not fighting over jurisdiction, but looking at how you can bring your jurisdictions together and make them more effective by collaboration—is a real step that I think needs to be dealt with. The Canada water agency needs to have the tools that are currently scattered, as we hear, all across government. Monitoring is a perfect example.

[Translation]

**Mrs. Sophie Chatel:** Thank you, Mr. Miltenberger.

Mr. Petelle or Ms. Stewart, we heard talk about including local communities. In my opinion, farmers are part of these local communities.

Do you have any advice for the committee on how the Canada water agency can also include the voice of farmers, in keeping with its goal of working with all levels of government and communities?

I believe that my time is up, Mr. Chair.

**The Chair:** Yes.

The witnesses could send us a written note on this topic. This will give them time to think the question through and to prepare a useful document.

Ms. Pauzé, you have time for a question.

**Ms. Monique Pauzé:** Before asking my question, I'll say something to Mr. Petelle and Ms. Stewart.

Your members produce chemicals that many regulators believe pose dangers. These dangers include acute poisoning, chronic illness in humans and toxicity to bees and other wildlife.

I imagine that you would agree with the need for more transparent regulations. We're proposing a public system to ensure traceability and accountability. I think that it would lend credibility.

Mr. Bouchard, my last question is for you.

You spoke about the per capita basis guiding the distribution of public funds for the clean water and wastewater fund. It seems that other parameters could be considered. What are these parameters?

• (1810)

**Mr. Jimmy Bouchard:** Thank you for your question, Ms. Pauzé.

The clean water and wastewater fund is a program linked to the federal infrastructure plan. The goal of this infrastructure plan is to ensure economic growth and job creation, which is a good thing. I think that it's a noble goal. However, the environmental impact of projects should be taken into consideration. In my opinion, the program's main goal must be changed.

If the main consideration for distributing these funds is the per capita basis, obviously preference will be given to projects that have a lower environmental impact. For example, in the case of the clean water and wastewater fund, there are ways to extend water systems or to supply new plants for economic development purposes. This comes at the expense of other projects that have a much higher environmental impact, such as pumping stations that would prevent waste water from being discharged directly into the environment.

I'll use the following image to show the people here. Saguenay, the city that I represent, is two and a half times larger than the island of Montreal. It has as many pumping stations, overflows and infiltration plants as the city of Montreal. However, its population is 15 times smaller.

As you can see, we can't succeed if we work this way.

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

[English]

Ms. Collins, you have time for one question, but you're on mute, I think.

There's also a button on the headset I'm told, on the ear.

That's much better. We have contact now.

**Ms. Laurel Collins:** I just switched it to the internal microphone, so I'm wondering if the interpreters are able to interpret well.

**The Chair:** Unfortunately, no.

**Ms. Laurel Collins:** I'll cede my time. It's okay.

**The Chair:** Okay, thank you.

Go ahead, Mr. Mazier.

**Mr. Dan Mazier:** How long do I have, three minutes?

**The Chair:** Yes.

**Mr. Dan Mazier:** Thank you.

My questions are for CropLife.

How could the federal government best support plant science to reduce the amount of fresh water needed to grow food?

**Mr. Pierre Petelle:** I mentioned gene editing as one example. There are crops that are being developed in more arid countries that will have an applicability to the Prairies, which are under severe drought conditions. There are crops being developed that have double the root mass of regular crops so that you're storing more carbon in the soil. I mentioned short-stature crops that are more resilient to strong winds and other weather events. As I said, on drought tolerance and saline tolerance, there's a problem in Manitoba and other parts of the country with high salinity soils over time.

These innovations are at our doorstep. What I mentioned the government can do is to enable the regulatory environment. Instead of looking at ways to try to block these things, they can find a way to bring them to market and make sure that it's done in a safe way. We're not afraid of a regulatory environment to make sure that the environment and health are protected, but let's do it in a way that's reasonable and predictable.

**Mr. Dan Mazier:** I think that's the challenge, right? We've been talking about what the regulatory avenue is for this to happen.

Could you submit basically a paper on that, the difference between gene editing, CRISPR and all of these new technologies versus the old mutagenesis model that we call non-GMO? It's a much more intrusive and prehistoric model, basically. Could you supply that information to us—

**Mr. Pierre Petelle:** Yes.

**Mr. Dan Mazier:** —and then relate it back to water, what it does for our food production systems and how it makes it more efficient?

How long has it been in trying to get this regulatory regime in place in Canada, to get the gene editing in place?

• (1815)

**Mr. Pierre Petelle:** As I said, we started about seven years ago to have discussions with the regulators. I think it took a couple of years just to get their attention. This wasn't on the doorstep yet, but the last few years have been encouraging and frustrating at the same time.

I think we're at the 11th hour. The last policy, we're hoping, will be published in March or April, we're told by the department. That will conclude the regulatory guidance for our members and others on how to bring these products to market in Canada.

At that point, we will probably be the number one jurisdiction in the world in terms of predictability and scientific criteria, but there's been some blood on the floor to get there.

**Mr. Dan Mazier:** Thank you very much.

**The Chair:** Mr. Longfield, you have the floor.

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

Thanks again to the witnesses.

I'm going to start with Mr. Miltenberger.

Last week I met with Steven Nitah of the Łutsël K'édé Dene nation. He's a past chief. He also told me about the collaborative process that had been used up in your area.

Is that a process that you have a patent on or that you can share with the committee as we look at the Canada Water Act coming up for review? That collaborative process might be very valuable for us to consider.

**Hon. J. Michael Miltenberger:** Thank you.

Mr. Nitah and I were MLAs together as well, and we've been doing work together. He was involved [*Technical difficulty—Editor*] when we negotiated the Thaidene Nene National Park, so the political will is there.

It's transportable to anywhere, which is why CLI is going around where we are with that model. It's because it gets together two orders of government that don't normally talk to each other. First nations—

**Mr. Lloyd Longfield:** Is there something you can submit?

He also mentioned that Michael McLeod had been involved, and he's an MP as well now.

**Hon. J. Michael Miltenberger:** Yes. We have many documents on the CIER website that we can capture for you and share with the committee.

**Mr. Lloyd Longfield:** Thank you so much. I'm dying to see it myself. I said that's a model we could all learn from, so thank you.

Mr. Petelle and Ms. Stewart, my last question is to you.

First of all, congratulations to Lorne Hepworth on being inducted into the Agricultural Hall of Fame. Your predecessor at CropLife did some incredible work—work on the Guelph statement in particular, on the sustainability of agriculture and what's done to make sure that the right amount of product is being put on the plants, whether it's fertilizer, pesticides or control products.

I heard in our last meeting and now again today that monitoring water involves more than just water; it also involves soil monitoring and air monitoring. Is that something you can help us with in terms of technology? Is there some direction you could point us as a committee that we could include in our report?

**Mr. Pierre Petelle:** From a scientific perspective, water monitoring to look for point source pollution is a very good surrogate for determining whether or not the measures in your regulatory structure, your on-field buffer strips and your vegetative strips are working. I think water monitoring gives you a very good picture of whether those things are working or not.

Soil monitoring is usually more to give the farmer the information they need. I mentioned that per square foot, it tells them exactly what the nutrient needs are right down to the smallest part of their field. The data needs are different, but there are technologies and there are companies that are being invested in that are looking at exactly how to measure that at a field level in real time and give the data to your phone.

It's an incredibly innovative time in agriculture right now.

**Mr. Lloyd Longfield:** These details we could maybe have included in a footnote in our report. It would be helpful.

**The Chair:** Thank you very much. Thank you to the witnesses for your insights and information.

Go ahead, Ms. Collins.

**Ms. Laurel Collins:** I wanted to test to see if my microphone is working—

**The Chair:** I think it is now.

**Ms. Laurel Collins:** —and if I could potentially use my last minute before we finish.

**The Chair:** Sure, go ahead with a very quick question, because you did cede your time.

Anyway, go ahead.

**Ms. Laurel Collins:** Yes, rather than asking them questions, since we're done with the witnesses, I was wondering if maybe we could unanimously support the motion to bring the Minister of Environment and Climate Change to appear—

• (1820)

**The Chair:** Yes, of course. Do we unanimously...?

I think you won't find any objection, because—

**Ms. Laurel Collins:** I have a quick tweak to add the department officials for the second hour.

**The Chair:** —I've spoken to the minister's office, and he's set to come on the 19th.

**Ms. Laurel Collins:** Okay.

**The Chair:** It's all done. It will be with the officials as well, obviously, because that's how we normally do it.

**Mr. Dan Mazier:** Is it set for two hours?

**The Chair:** I don't know if the minister will be here for two hours, but he's been invited, and it's in his calendar.

**Mr. Dan Mazier:** How about the expenses for our trip?

**The Chair:** Those have not been issued by the process that tabulates all of this.

Anyway, going back to you, Ms. Collins, yes, we all agree with your motion. There's no objection to your motion, because it's de facto going to happen anyway.

**Ms. Laurel Collins:** Wonderful.

[*Translation*]

**The Chair:** Ms. Pauzé, did you have something to add?

**Ms. Monique Pauzé:** Yes. I wanted to remind you that there will be a subcommittee meeting on Thursday.

**The Chair:** Yes, indeed.

[*English*]

Just to let you know, we're not having a full meeting on Thursday. We're having a subcommittee meeting to do a bit of planning. I'll see the subcommittee members, but not the rest of you.

When we get back after the break, the minister will be our guest.

Again, I want to thank the witnesses for their insights and information, and the members for their questions.

I wish everyone a very good evening. Thank you very much.

The meeting is adjourned.







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