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# Standing Committee on Environment and Sustainable Development

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Chair: Mr. Francis Scarpaleggia





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• (1100)

[English]

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

Welcome, everyone, to the second meeting of our study on federal freshwater policy.

I want to thank all the departmental officials for being here. We had our first meeting on Tuesday and heard from four departments. I guess you sense what we're trying to accomplish here, which is better coordination among departments that deal with freshwater issues at the federal level.

I'm very pleased to see the departments we have today; I think it'll be very interesting. We have the Department of Health, the Department of Indigenous Services, the Department of Agriculture and Agri-Food Canada and Global Affairs Canada.

On that note, I'd like to say that personally I've always felt that as a water nation and as a country seen as a water nation by the rest of the world, we have a role to play internationally in terms of helping the world achieve global water security. In fact, I almost see that as the new Canadian peacekeeping, in a way. We're really looking forward to hearing what Global Affairs has to say among the others here today.

Each department has seven minutes to make a statement, and then we'll go to rounds of questioning for about an hour and a half. I really look forward to what everyone has to say. Thank you again for being here.

We'll start with the Department of Health. Greg Carreau, welcome back. We've had you here before.

**Mr. Greg Carreau (Director General, Safe Environments Directorate, Department of Health):** Thank you very much, Mr. Chair and members of the committee. It's my pleasure to be here today to speak to you about the role that Health Canada plays in fresh water. My name is Greg Carreau, and I am the director general of the safe environments directorate at Health Canada.

I would like to begin by acknowledging that the land on which we are meeting today is the traditional and unceded territory of the Anishinabe Algonquin Nation.

I welcome this opportunity to discuss Health Canada's role with respect to improving water quality in Canada.

[Translation]

Health Canada is the federal government lead for human health matters related to drinking and recreational water and is responsible for pesticide regulation.

[English]

All drinking water and many recreational water sites originate from fresh water. For this reason, freshwater quality affects the quality of drinking water and recreational water. Under the Department of Health Act and the Canadian Environmental Protection Act, 1999, Health Canada developed science-based guidelines for contaminants that could be found in drinking water and recreational water.

Health Canada also regulates pesticides under the Pest Control Products Act to prevent unacceptable risks to individuals and the environment from their use. Protection of the environment under the act includes assessing and preventing unacceptable risks to fresh water. Pesticides are approved for use in Canada only after stringent, science-based evaluation that ensures risks are acceptable.

In delivering this important mandate related to fresh water, Health Canada collaborates with other federal departments and all levels of government. With respect to drinking water and recreational water, Health Canada works closely with provinces, territories and other federal departments to develop the water quality guidelines. These guidelines are non-regulatory and used by provinces, territories and other government departments to establish and implement their regulations and policies. Federal departments with responsibilities for water safety, like the Department of National Defence and the Correctional Service of Canada use the guidelines to meet their obligations.

[Translation]

When requested, Health Canada also advises jurisdictions on the potential health effects of contaminants in fresh water following spills and other contamination events.

Though not involved in the provision of drinking water in first nations communities, Health Canada provides Indigenous Services Canada with source-to-tap advice on drinking water issues.

[English]

Health Canada also supports the Public Health Agency of Canada in determining the burden of waterborne disease.

Regarding the management of pesticides, Health Canada's pest management regulatory agency closely collaborates with provinces, territories and other federal departments; non-government organizations; academic institutions; and the private sector on freshwater challenges that relate to pesticides.

Health Canada collaborates with its international partners on activities and agreements related to chemical management that lead to protection of fresh water as well, such as the Stockholm Convention and the Canada-U.S. Great Lakes water quality agreement. The department also works with international governmental and non-governmental organizations such as the United States Environmental Protection Agency and the World Health Organization on water quality issues.

• (1105)

[Translation]

Sound science is critical for Health Canada to meet its responsibilities related to freshwater, including an understanding of the drinking water supply from the source to the consumer's tap in order to promote clean, safe and reliable drinking water.

[English]

A sound scientific understanding of the presence of chemicals, pesticides and other substances in fresh water is needed to understand their potential impact on human health. The department has identified a number of emerging science issues related to fresh water, including the health effects and water treatment options of per-fluorinated substances, or PFAS for short; the causes of cyanobacterial blooms, also known as blue-green algae, in source water; the presence of bacteria, viruses and parasites in groundwater; and the presence of pesticides in source water.

To address these emerging areas, Health Canada is investing in research and monitoring and is collaborating with academics, other government departments, different levels of government and the international community.

Health Canada welcomes the creation of the Canada water agency and sees it as complementary to our work on drinking and recreational water quality as well as on pesticides. The agency's role to further scientific research and support water quality monitoring will contribute to preventing the contamination of drinking water from source to tap, thereby reducing risks to health.

Thank you, Mr. Chair. I would be pleased to answer any questions the committee may have.

[Translation]

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

Before turning the floor over to the representatives of the Department of Indigenous Services, since I've been a bit remiss, I'd like to properly welcome Mr. Cannings, who is here this morning on behalf of the New Democratic Party.

Will Mr. Barbosa or Mr. Bergeron be speaking for the department? It will be Mr. Barbosa.

You have the floor for seven minutes.

**Mr. Nelson Barbosa (Director General, Department of Indigenous Services):** Thank you.

[English]

*Kwe.* Good afternoon. *Bonjour.*

Before I begin, I would like to note that we are meeting on the traditional unceded territory of the Algonquin people.

My name is Nelson Barbosa. I am the director general of the community infrastructure branch within Indigenous Services Canada.

Thank you for inviting me to appear before the committee today.

The responsibility of managing drinking water in first nations is shared between first nations communities and Indigenous Services Canada. Indigenous Services Canada provides support for the delivery of safe, clean drinking water through its first nation water and waste-water enhancement program. The department provides advice and financial support to first nations to upgrade, repair, replace and operate first nations water and waste-water systems in order to meet established water and waste-water standards.

From 2016 onward, by 2024 Canada will have committed over \$5.6 billion to build, repair, manage and maintain water systems on reserve. Between 2016 and June of this year, more than \$3.45 billion of targeted funding was invested to support 1,213 water and waste-water projects, of which 541 are now complete and 672 are ongoing. These projects will serve 471,000 people in 591 first nation communities.

First nation communities are responsible for the planning, procurement, design, construction, commissioning and day-to-day operation and maintenance of their water and waste-water systems. Although ISC financially supports first nations to upgrade, repair and replace their water systems, ISC programs and policies play a minimal role with respect to freshwater management and protection.

However, they intersect as they relate to source water protection on reserve. Source water protection measures are an integral component of a multi-barrier approach toward the management of safe drinking water. The department's mandate focuses on improving the health and quality of life of first nations on reserve, and the department's focus has been on helping communities provide better water and waste-water services to their residents.

In terms of waste water, the department also provides funding and support to first nations to construct, operate and manage waste-water treatment systems on reserve. The key federal regulations overseeing the release of treated waste water are the “wastewater systems effluent regulations”, or WSER. These regulations are administered and enforced by Environment and Climate Change Canada under the authorities of the Fisheries Act, which prohibit the deposit of deleterious substances in fish-bearing waters.

The department is actively engaged in activities that contribute to Canada's achievement of United Nations sustainable development goal number 3 of good health and well-being, and goal number 6 of clean water and sanitation. Continued work to resolve all long-term drinking water advisories directly contributes to goal number 6, which aims to ensure that all Canadians have access to clean drinking water. In turn, this also contributes to the overall betterment of health and well-being in first nations communities.

To accomplish both goals, the department works closely with first nation partners on the operation and maintenance of their water systems. By providing adequate long-term funding and technical support, the department is actively ensuring that first nations' drinking water systems meet established standards. To report on Canada's progress in achieving these commitments, the department works closely with its partners at ECCC.

In terms of collaboration with other federal agencies, the department also works closely with Health Canada, which is responsible for the guidelines for Canadian drinking water quality. These guidelines were developed in partnership with the provinces and territories through the federal-provincial-territorial committee on drinking water and are used by most jurisdictions as the basis for establishing drinking water quality requirements in order to protect the health of people residing in Canada.

Currently there are no federal regulations governing drinking water or waste water on reserve. The Safe Drinking Water for First Nations Act, which came into force in 2013, was repealed in June 2022 due to first nations' concerns. Significant efforts are now under way to replace this act. Since the summer of 2022, the department has met with more than 140 first nations and first nations organizations to share information with, listen to and work with first nation partners to explore how to address their needs and priorities in the new proposed drinking water and waste-water legislation. The department continues to work directly with rights holders, including modern treaty and self-governing first nations, through their own representative institutions and first nations organizations, as well as the Assembly of First Nations and the First Nations Advisory Committee on Safe Drinking Water. These efforts aim to ensure that the new proposed legislation will be responsive to first nations' priorities in terms of drinking water.

ISC remains committed to ensuring sustainable access to clean drinking water and effectively treating waste water in order to build a sustainable foundation for water now and into the future.

I look forward to our dialogue and questions.

*Meegwetch. Nakurmiik. Qujannamiik. Merci.* Thank you.

• (1110)

[*Translation*]

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

I now yield the floor to Mr. Norris, from the Department of Agriculture and Agri-Food.

[*English*]

**Mr. Kevin Norris (Director, Resilient Agriculture Policy Division, Department of Agriculture and Agri-Food):** Thank you, Mr. Chair, for inviting my department to speak to the committee's study on fresh water in Canada.

My name is Kevin Norris, and I am the director of the resilient agriculture policy division, which is located in the strategic policy branch at AAFC. I'm joined by my colleague Catherine Champagne, who is an environmental scientist and the manager of earth observations in the science and technology branch.

I'd like to begin by acknowledging that I'm speaking to you today from the traditional and unceded territory of the Algonquin Anishinabe people here in Ottawa.

As members are aware, Canada's fresh water is becoming an increasingly precious resource. It plays an essential role in the well-being of Canadians and in the health and sustainability of the environment and the economy. Farmers across the country are keenly aware of how critical having a reliable, good-quality water supply is to their operations for producing high-quality food and other agricultural products, and how important it is to protect that resource.

Water management issues in agriculture tend to vary by region and by industry. For example, irrigation is essential for agriculture in areas where natural precipitation is low or variable, such as in the Prairies, whereas issues of excess moisture and the need for drainage are more pertinent in areas of eastern Canada.

The challenges associated with increasing temperatures, shifting precipitation patterns and extreme climate-related events becoming more frequent and intense provide opportunities to see how we can better manage water in Canada's rural landscape. For example, this can be witnessed through recent events across the country during the 2021-to-2023 growing seasons, including impacts from droughts, extreme heat, wildfires and flooding. Region-specific challenges such as these are expected to grow in intensity and generate additional costs. Addressing them can be difficult, as potential solutions often involve multiple jurisdictions.

Canadian farms depend on a clean and reliable source of water. Nevertheless, the sector realizes the impacts it can have on fresh-water quality and quantity. Agricultural inputs such as fertilizers and pesticides play an essential role in food security by helping to drive increases in crop yields over time, while also providing social and economic benefits to Canadians. However, when these inputs are used to excess or improperly managed, agricultural production can impact the quality of water through sediment loading, runoff and leaching of excess nutrients, pathogens and pesticides. We have seen the impact of such practices on agricultural land in several areas of the country where large-scale lake and ecosystem health has been impaired, including in the Great Lakes and around Lake Winnipeg. Use of poor-quality water on farms also poses risks to food safety and animal health.

Impacts from climate change are also expected to influence production and increase risks to water quantity and quality. Anticipated seasonal shifts in temperature and precipitation impact water quantity and risk creating insecurity in on-farm water supplies. This could result in greater competition for this resource and increased reliance on costly irrigation and require effective risk management strategies and water resource management.

As a result of climate change, wetter than normal winters and springs in combination with hotter, drier summers increase the movement of nutrients, such as those from fertilizers, to surface water and groundwater. This increases the risk of algal blooms and eutrophication of surface waters and has a direct impact on water quality.

The use of beneficial management practices on farms can help mitigate these environmental impacts to water, enhance sustainable agricultural production and support climate resiliency. There are management practices that improve nutrient management or improve water use efficiency, such as precision technology, cover crops and the expansion of riparian areas. These can all contribute to reducing agriculture's environmental impact on Canada's fresh water.

Agriculture and Agri-Food Canada has a long history of researching, developing and promoting sustainable management of water resources. We conduct and fund collaborative agricultural research and technology development, provide timely data and analysis on agro-climatic conditions through the "Canadian Drought Monitor", and work with provinces and territories to accelerate the adoption of practices and programming that support climate change adaptation and water management.

The department's renewed strategic plan for science provides a vision on how future research and development will help to ensure a sustainable, resilient and profitable agriculture and agri-food sector by 2050. One of the key priorities under the strategy is to increase the resiliency of agro-ecosystems and improve soil health and water quality. For example, our current research includes improving water use efficiency through the development of more climate-resilient crop varieties and on-farm technologies.

We are also exploring nature-based solutions, such as protecting and restoring wetlands and buffers to manage water supply and agricultural runoff.

Additionally, Agriculture and Agri-Food Canada's living lab initiative is bringing together farmers, scientists and other stakeholders to co-develop, test, implement and monitor new climate-smart and sustainable agricultural practices and technologies. This will have important co-benefits for conserving water resources.

In addition to AAFC's research on fresh water, we support the adoption of beneficial management practices that reduce agriculture runoff and promote the sustainable use and management of on-farm water resources in several of our programs. This includes the agricultural clean technology program and the on-farm climate action fund.

• (1115)

The sustainable Canadian agriculture partnership is a new five-year, \$3.5-billion investment, which includes \$2.5 billion in programs and activities that are cost-shared among the federal and provincial and territorial governments. These are critical to protecting water resources and are designed to raise producers' awareness of environmental risks and accelerate the adoption of regionally appropriate on-farm technologies and practices to reduce these risks.

AAFC is also developing a sustainable agriculture strategy to set a shared direction for collective action in improved environmental performance of the sector and to support farmer livelihoods and maintain the business vitality of the sector over the long term.

Water is one of five priority focus areas under the strategy. The strategy will create connections between environmental programming and policy in agriculture—including the Canada water agency—to provide more clarity and less overlap and to fill policy gaps while considering farming realities.

AAFC is not responsible for any legislation or regulations related to fresh water. However, our continued leadership in agricultural science and innovation, as well as our ongoing collaboration with other government departments, provinces and territories, indigenous peoples and stakeholders will be essential to supporting the sustainable management of Canada's freshwater resources.

AAFC remains committed to helping the agriculture sector contribute to the protection and sustainable management of Canada's water resources, to adapt effectively to climate change and to continue to feed Canada and a growing global population.

Thank you for your time. I look forward to your questions.

• (1120)

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

We'll go now to Global Affairs and Mr. Cronin.

[Translation]

**Mr. Niall Cronin (Executive Director, United States Transboundary Affairs, Department of Foreign Affairs, Trade and Development):** Thank you, Mr. Chair.

My name is Niall Cronin. Since September 2022, I have been executive director of the U.S. transboundary affairs division at Global Affairs Canada.

Like my colleagues, I would like to begin by acknowledging that the land on which we gather is the traditional unceded territory of the Algonquin Anishnaabeg people.

[English]

The division where I work provides a broad range of analysis and advice to Global Affairs senior officials and ministers, as well as to other federal departments, on water and other issues affecting Canada's bilateral relations with the United States.

Canada's relationship with the United States is of primordial importance. As President Biden said in his address to Parliament last March, "No two nations on earth are bound by such close ties of friendship, family, commerce and culture." The President's in-person visit and the joint statement that followed confirm that our two nations stand united in this moment, finding solutions to global challenges side by side.

As noted in the March 24 statement from Prime Minister Trudeau and President Biden, the Government of Canada announced a new, historic \$420-million commitment to "protect and restore" the Great Lakes, which make up the "world's largest freshwater ecosystem." In conjunction with U.S. funding announced in the 2021 Bipartisan Infrastructure Law, our combined contributions represent "the largest single investment in the Great Lakes in history".

Canada-U.S. co-operation in this area is long-standing. Over a century ago, our nations signed the Boundary Waters Treaty of 1909, which sets out the rights and obligations of both Canada and the United States with respect to the use, protection and management of waters through which the international boundary passes, as well as waters that flow across the boundary.

The Boundary Waters Treaty established the International Joint Commission, or IJC, which is an independent binational organization consisting of six commissioners, with three appointed by each country. Through its boards, the IJC oversees the operation of dams, diversions and bridges that affect the natural level and flow of water across the boundary.

The IJC also assists with the implementation of the Great Lakes Water Quality Agreement. The two governments can refer issues to the IJC to study and make recommendations.

My team also provides advice on other Canada-U.S. treaties related to transboundary waters. These include the Columbia River Treaty, the agreement for water supply and flood control in the Souris River basin, and the 1950 Niagara treaty, which established minimum flows over Niagara Falls.

Managing transboundary watersheds is complex and spans multiple jurisdictions. My team and I regularly work with federal and

provincial counterparts, indigenous peoples, and officials from the State Department and the U.S. embassy. We collaborate closely with other federal departments and agencies that work directly on fresh water-related issues in Canada. It is through these engagements, binational agreements and our support for the International Joint Commission that we are able to address important transboundary water issues with the United States.

With that, I will be pleased to answer your questions.

Thank you again.

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

We'll go now to Mr. Kram for the opening round of questions. You have six minutes.

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

Thank you to all of the witnesses for being here today.

I remember in the early 2000s that in the community of Walkerton, Ontario, there was a major incident with the water treatment plant. There was a boil water advisory in place for a couple of weeks. People were so outraged. Some people were fired, and a couple of people eventually went to jail.

I'm surprised, then, to see on the website of Indigenous Services Canada that there are still 26 reserves across Canada that have boil water advisories in place. These are long-term boil water advisories that have just been allowed to languish for months and years.

How is it possible that we still have these boil water advisories on reserves in Canada?

**Mr. Nelson Barbosa:** Thank you for the question.

One long-term drinking water advisory is too many. I would say there are currently 28 long-term drinking water advisories in 26 communities, as you mentioned. All of those drinking water advisories have a plan in place in order to lift them. Since 2015, there have been 143 long-term drinking water advisories lifted, and another 259 short-term water advisories—which are water advisories under a year—that have been lifted.

To the question on modalities or reasons, there are largely two principal reasons that these long-term drinking water advisories are in place, and there are plans and actions to see them come to an end.

The first is infrastructure. I mentioned that by the end of next year, this department will have provided \$5.6 billion, largely in infrastructure funding to support the end of these long-term drinking water advisories, but also to support the administration of water affairs in all 634 first nations across Canada. Infrastructure is increasingly expensive. These systems, in some cases, take years to develop, plan and replace. We are committed to working in partnership with first nations in order to see the best pieces of infrastructure meet the best health and water outcomes for any particular community.

The second modality—to answer your question of “Why?”—is largely about the operations and maintenance of water systems. The operations of these facilities are managed by first nations, but they are truly complex pieces of infrastructure. We have several programs to support first nations in the administration of their water affairs.

We recognize that there are currently 28 long-term drinking water advisories. We are pleased that we have seen success over the last number of years, but we are by no means at the end of this process. We continue to work in partnership with first nations in order to see that progress come to an end.

• (1125)

**Mr. Michael Kram:** Why does it cost so much money and why does it take so much time, compared to other water treatment facilities all across Canada?

**Mr. Nelson Barbosa:** In terms of comparability, I'm not sure it costs so much more money. These water systems are similar to what you would find in a municipal environment. Some water systems cost over \$100 million and some water systems cost considerably less than that. There are 634 first nations. Clearly, funding is a key component of seeing those long-term drinking water advisories come to an end.

On the partnerships and plans that are in place, they are led by first nations and supported by Indigenous Services Canada. We are there to support the implementation of those plans and the wishes of first nations. Resources are certainly a core component of our progress in bringing long-term drinking water advisories to an end, but it's also partnership.

**Mr. Michael Kram:** Okay, but if these water treatment facilities are similar to water treatment facilities in other municipalities, why don't we see long-term boil water advisories in other municipalities across the country? Why is it always only on indigenous reserves?

**Mr. Nelson Barbosa:** I can't speak to the provincial dynamics. There are water challenges happening in provinces and territories right now. I won't speak to those effects.

I can speak to how each of the 28 advisories is different. In some cases, it's a localized response. In some cases, we're talking about it being community-wide. In some cases, we're talking about the repair of an existing piece of water infrastructure. In some cases, we're talking about a complete reconstruction. Each of these modalities is quite different.

I don't want to sound repetitive, but partnership with each particular community is why we have seen success and why that success needs to continue to grow to zero.

**Mr. Michael Kram:** Okay, but if the mayor or the city councillors of Walkerton, Ontario, allowed their boil water advisories to go on for years and years, they would get fired the next time they had to run for re-election.

Is there a similar mechanism for first nations communities? Who gets fired when these projects are dragging on for far too long?

**Mr. Nelson Barbosa:** Indigenous Services Canada partners with first nations, and first nations implement the response. I won't

speak to the governance practices that happen in first nations communities or in self-governing first nations.

There are interim supply options when a long-term water advisory is in place. For example, one that's often pointed to is bottled water. That is an option in order to provide water in lieu of having it from the tap, but there are other options as well. Many communities have reverse-osmosis systems in order to provide water in lieu of water from taps. There can be interim measures to replace or repair existing infrastructure while other infrastructure is replaced.

The binary choice of having a boil water advisory or a long-term drinking water advisory and not having water from the tap is sometimes not the case. There can be interim supply options. There can be bottled water provided to the community, based on the request of the chief and council, while long-term solutions are put in place. The plan considers not only the long-term replacement of the particular asset or infrastructure in question but also what the interim supply will be in order to provide water now while also looking at the long-term picture.

• (1130)

**The Chair:** Thanks. That was a good line of questioning, I think.

We'll go now to Ms. Taylor Roy.

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

Thank you to all our witnesses for being here.

I too am interested in this question of the boil water advisories. I'm very proud to hear that since 2015, 143 long-term advisories and 259 short-term advisories have been lifted. Perhaps you can explain a little bit more about the relationship between Indigenous Services Canada and the first nations themselves and about their governance in terms of moving forward with these projects.

You mentioned that there are plans in place for all of these and that there is funding in place. It seemed that the last questions were about whose responsibility it was. I'm assuming that our government is working nation to nation with these first nations and that they are the ones who make the decisions about how it's done, when it's done and what is done. Is that correct?

**Mr. Nelson Barbosa:** In terms of leadership in the water space, first nations, as I mentioned in my remarks, ultimately bring water advisories into place and lift them. In order to do that, they oversee procurement, infrastructure and the operation and delivery of their water systems.

Partnership is critical, and I think that's why we've seen success since 2015. As you've mentioned, we've supported the first nations in administering their own affairs and lifting 143 long-term drinking water advisories and preventing more long-term drinking water advisories by lifting 259 short-term water advisories. Partnership is where we're seeing success, and I think we can really point to that in terms of the progress made to date.

Ultimately, the plans being put in place are plans that are being put forth by first nations and rights holders themselves, and the role of ISC is multi-faceted. Funding is one of those things, which the previous line of questions really got to. However, it's also technical expertise in ensuring that the right piece of infrastructure meets the service needs of a particular community, as well as partnership with colleagues that are around the table here today to support, kind of, the guidelines, safety and regulations for that water.

In totality, partnership is critical now more than ever. Partnership is really why we've seen success, and I think that partnership will hopefully get us to the point where one day we can be in front of you here at this table and say that we have reached zero in terms of long-term drinking water advisories.

**Ms. Leah Taylor Roy:** Thank you very much. I think we'll all look forward to that day very much.

My next question is for Greg Carreau from Health Canada.

I'm interested in the.... I won't try to say them; I'll just say PFAS. I'm interested in what we are doing about these forever chemicals. I know that there's a lot of work that has been done—there are reports—but do you think that there is more to do, and do you believe that there is an issue with these chemicals in our drinking water?

**Mr. Greg Carreau:** The government has been doing quite a bit in the area of PFAS, starting in the early 2000s, by assessing some subclasses of those chemicals that are used in commerce and are sometimes found in drinking water supplies. Pursuant to the assessment of those subclasses, regulations and prohibitions were put in place under the Canadian Environmental Protection Act.

**The Chair:** I'm sorry. There's a point of order.

**Mr. Dan Mazier (Dauphin—Swan River—Neepawa, CPC):** Just for clarification, what are we talking about? Can you define what PFAS are, please?

**Mr. Greg Carreau:** Indeed. I apologize.

PFAS, or perfluorinated compounds, are a broad class of chemicals—upwards of 5,000 chemicals—used in a variety of applications, including in aqueous film-forming foams. They have been found through contamination events in drinking water supplies, thereby finding their way into some drinking water. From a broad perspective, between 2006 and 2015, Health Canada, in collaboration with Environment and Climate Change Canada, has taken action under the Canadian Environmental Protection Act to prohibit many subclasses of that broad class of substances. More recently, it published a report on the state of the PFAS, a comprehensive review of the science of those 5,000 chemicals in which it was proposed that there were risks to both health and the environment.

From a drinking water—

• (1135)

**Ms. Leah Taylor Roy:** I'm sorry. Go ahead.

I am hoping, Mr. Chair, that this explanation with regard to the point of order does not take from my time.

**An hon. member:** Well, she could have cut him off—I don't know.

**The Chair:** Okay, let's continue with this.

**Ms. Leah Taylor Roy:** Thank you.

**Mr. Greg Carreau:** I'll be brief.

With regard to drinking water, Health Canada has also put in place drinking water quality guidelines for two classes of these chemicals. Then, more recently, it published a draft objective that is a broad approach to mitigating potential health risks from the broad class of these chemicals in drinking water.

**Ms. Leah Taylor Roy:** Can I just intervene? I have a specific question about that.

I know that certain ones have been put on the toxic substances list and that others have been eliminated. However, there have been substitutions, and there are still concerns about those substitutions. I think that there was, at one point, a suggestion made to look at this whole class of chemicals. Is that being considered?

**Mr. Greg Carreau:** Indeed, that is being considered.

Currently the broad class is being considered, both for assessment and for potential management under the Canadian Environmental Protection Act for commercial uses, industrial uses and broad uses across Canada. In the drinking water context, that broad class is being considered through the drinking water objective, which sets a guideline or a number for which treatment can be achieved for that broad class of chemicals.

**Ms. Leah Taylor Roy:** Okay, that's great. Thank you so much.

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

**The Chair:** You have another 45 seconds, I guess.

**Ms. Leah Taylor Roy:** I want to ask Agriculture and Agri-Food Canada a question as well. It relates to the challenges that you spoke about with fertilizer application and control and the effect that it's having.

What more can be done? It's very broad, but what do you think is the most impactful thing that could be done now by farms to help manage the runoff that we're seeing into some of the freshwater lakes, particularly when you're talking about the increase in phosphorus and the algae blooms, which I know are of great concern to all of us?

**Mr. Kevin Norris:** I'll just say quickly that increasing the adoption of on-farm beneficial management practices that are available through our cost-sharing partnership with the provinces and territories is a good first step. AAFC also has ongoing research in this area.

**The Chair:** Thank you.

We'll go now to Madame Pauzé.

[*Translation*]

**Ms. Monique Pauzé (Repentigny, BQ):** Thank you, Mr. Chair.

I thank the witnesses very much for being here.

Mr. Barbosa, I may have a question for you later. Not so long ago, I listened to a report that said that 10 kilometres from Edmonton, so really close to this city, lives a first nation that doesn't have access to drinking water. You can even see the big buildings in Edmonton from there, but there's still no water coming out of the taps. This concerns me. I'll come back to it shortly.

For now, I'll talk to Mr. Carreau from Health Canada instead.

In your opening remarks, you all said there was collaboration. If that's the case, I don't understand why we want to create a Canadian water agency that's supposed to improve collaboration. There's a problem here. In fact, several examples illustrate the lack of communication and collaboration between government departments.

I'll give you a very concrete example. Last July, we learned that drinking water in the borough of La Baie was contaminated with PFAS, which we were talking about earlier. Activities at the Bagotville military base were the cause. We're talking here about more than 3,000 homes and 8,000 people exposed to these contaminants.

Military bases are the responsibility of the federal government, as is Health Canada. Correct me if I'm wrong, but Health Canada may be concerned about this risk to human health. However, the federal government has not shown its nose in this matter. If it has, it's only very recently. It was the municipality of Saguenay that took matters into its own hands, releasing \$6 million.

I find this a good example of the lack of coordination.

If, in this framework, federal departments don't feel involved when they are directly involved, how can you say that a Canadian water agency is going to do better?

• (1140)

[English]

**Mr. Greg Carreau:** Thank you very much for the question.

I will first speak to the example you brought forward.

Indeed, Health Canada and the federal government collaborated very closely with the Province of Quebec and officials from the city with respect to the contamination of the water supply that you referenced. Health Canada provided strong scientific guidance and support and collaborated with other government departments, including the Department of National Defence, to support the Province of Quebec as well as the City of Saguenay in this case.

More broadly, Health Canada—

[Translation]

**Ms. Monique Pauzé:** I'll stop you there, Mr. Carreau, because I have to say that the information I had was very recent. This event happened in early July. According to my information, it was the City of Saguenay that had to advance the funds. My understanding is that the federal government may be acting late.

Could a Canadian water agency do better? That's the question I was asking. Can you just give me a yes or no answer? Then I'll have another example for you.

**Mr. Greg Carreau:** Thank you for the question.

[English]

Indeed, as per my opening remarks, Health Canada believes that the creation of the water agency will help interdepartmental collaboration in better understanding the pollutants and contamination in fresh water supplies, which will ultimately lead to the protection of the health of Canadians through drinking water.

[Translation]

**Ms. Monique Pauzé:** That answer suits me.

I'm going to ask you another question, Mr. Carreau, but I'm also going to address Mr. Norris from Agriculture and Agri-Food Canada.

Do you or do you not have some control over your regulatory agency, which you praised a bit in your speaking notes?

**Mr. Greg Carreau:** Could you repeat the question, please?

**Ms. Monique Pauzé:** Do you have any control over the PMRA, that is, the regulatory agency, yes or no?

[English]

**Mr. Greg Carreau:** For the provision of drinking water, provinces, territories and municipalities have the regulatory control, not Health Canada.

[Translation]

**Ms. Monique Pauzé:** I'm referring, rather, to the regulatory agency. You mentioned it in your speaking notes. For my part, I'll tell you—

**The Chair:** Excuse me. You mean the one that deals with pesticides, right?

**Ms. Monique Pauzé:** That's right.

**The Chair:** That was confusing. So you're talking about the PMRA.

**Ms. Monique Pauzé:** Yes, I'm talking about PMRA, the Pest Management Regulatory Agency.

Not long ago, a few months after the fact, we were made aware of a lack of transparency, rules that were absolutely ineffective, a committee whose co-chair had resigned and a refusal by the agency to listen to researchers while consulting lobbyists. Indeed, the newspapers started talking about the "Tiger Team". In the end, the PMRA was more concerned with protecting pesticide manufacturers than health. This was the conclusion reached in the various articles I consulted.

Basically, it's also a matter for Agriculture and Agri-Food Canada, because industry is said to be recommending higher thresholds for certain insecticides and pesticides, such as neonicotinoids.

If the experts leave the advisory committee table, how do your respective departments plan to participate in the mission to protect riparian buffer strips and watersheds in agricultural areas?

[English]

**Mr. Kevin Norris:** On the question of raising the maximum residue limits, that's outside of my responsibility, but I can take it back to the department.

**The Chair:** Can you send us something in writing?

**Mr. Kevin Norris:** Yes.

[*Translation*]

**Ms. Monique Pauzé:** I would be grateful.

I'd like to get back to the Canada Water Agency.

What budgets have been allocated to the agency's mission of coordinating drinking water and groundwater contamination, particularly by pesticides and insecticides approved by the PMRA, and therefore by Health Canada, if I understand correctly?

[*English*]

**Mr. Kevin Norris:** AAFC is continuing to collaborate with EC-CC to identify linkages between the water agency and the freshwater action plan to the agricultural sector. As you mentioned, pesticides are an important issue, and we definitely recognize that pesticides play an important role for producers in securing crop and yield and in quality research. We also know that producers are good stewards of the land, but, unfortunately, pesticides do impact water quality.

At AAFC, we do have a pest management centre. This plays an important role in undertaking research and science on the sustainable use of pesticides, including the risks of pesticides as well.

• (1145)

[*Translation*]

**The Chair:** Thank you, Ms. Pauzé. Your time is up.

Mr. Cannings, you have the floor.

[*English*]

**Mr. Richard Cannings (South Okanagan—West Kootenay, NDP):** Thank you all for being here today. I don't normally sit on this committee, so it's been wonderful to hear about this topic of water, which is obviously a very big and complicated subject, but also a very important one. I wish I had all day to talk to every one of you.

I'll start with Mr. Cronin, because he mentioned the mighty Columbia River, which is very important, certainly in the western context. All of my riding basically drains into the Columbia River. The Columbia River Treaty is a huge issue there. It's being renegotiated. It has been renegotiated for years now, with climate change, with increasing thoughts around ecosystem function, and with indigenous knowledge and indigenous partnerships.

However, this year, with climate change, we saw the Arrow Lakes basically dry up because all that water had to be sent to the United States under the treaty, so citizens of Nakusp, for instance.... You know, all that area was flooded in the sixties. It caused great pain and hardship then, but at least they got a functioning lake out of it for recreation. This year, that disappeared, more or less.

I'm wondering how Global Affairs is dealing with this question of climate change and ecosystem function with regard to that renegotiation. Where are we at with the whole renegotiation process?

**Mr. Niall Cronin:** With regard to the Columbia River Treaty and the Columbia River, I agree 100% on its importance. Mr. Chair, you may have seen that in the joint statement following President

Biden's in-person visit, there was a reference to the two countries' commitment to modernizing the Columbia River Treaty, to accelerating work on the treaty. On the negotiations, Canada works very closely with the Province of British Columbia and with the three first nations whose traditional territories are in the basin.

We've also taken to heart efforts to engage local communities, something that wasn't done when the treaty was first negotiated in the 1960s. We want to hear those concerns and bring those to our American partners across the negotiating table to ensure that we get a modernized agreement that works for Canada and that also is reflective of issues related to climate change and making sure that this ecosystem function is a part of the modernized agreement. It is another, I think we could say, leg of the three-legged stool holding up the treaty: flood risk management, power generation and ecosystem function. Those are the priorities that we're pursuing in the negotiations with the United States.

**Mr. Richard Cannings:** Thank you.

Quickly, I'll turn to Agriculture and Agri-Food Canada.

My father worked for Agriculture and Agri-Food Canada for his whole career, so I'm very thankful for the work that you do, especially in the research department. There's a big research station just next to my riding, in Summerland.

In the Okanagan Valley, where I live, the big issue is climate change. One of the big issues, other than wildfires, is the availability of water. We have an agricultural land reserve in British Columbia. Now the orchard owners, the vineyard owners, the farmers are suggesting that maybe we need an agricultural water reserve, because they're very concerned that water availability is very restricted in one of the best agricultural areas of Canada.

I'm wondering what Agriculture and Agri-Food Canada is looking at on that issue, because it's of real and critical importance.

**Dr. Catherine Champagne (Environmental Scientist, Department of Agriculture and Agri-Food):** Thank you for the question.

Climate change is an important pillar of our strategic plan for science. It's trying to focus investments around building more resilient agricultural systems, including more water resilience to extremes in climate. It's also promoting, adopting and testing best management practices to help retain water in the soil and to ensure that agricultural productivity remains consistent under a changing climate.

We've invested in a number of living labs projects under the agricultural climate solutions program. This includes a site in British Columbia where our scientists are working with farmers directly and with non-governmental agencies that work with the farming community to design best management practices that are workable and feasible in each community and that meet the specific concerns in each of those regions to ensure that there's both the scientific evidence to promote the adoption of these practices and a confidence within the community that these new practices will help support resilient agriculture in the future.

• (1150)

**Mr. Richard Cannings:** Thank you.

**The Chair:** The time is pretty much up.

**Mr. Richard Cannings:** Okay. Thank you very much.

**The Chair:** Thank you for those good questions.

We'll go now to the second round, starting with Mr. Leslie.

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

The Canadian Agri-Food Policy Institute released a report last week entitled "A National Agri-Food Water Action Plan". One of its key takeaways was that "Canada has a fragmented and siloed model for water management. Data collection and reporting is far from standardized or complete."

I appreciate AAFC's comments, Mr. Norris, on the importance of water. The challenges do exist when we shoo away water in the spring and we need it in the summer, so it's not necessarily regionally specific in that sense.

My question is to AAFC. Recognizing that it is so vital for farmers, for all types of agricultural producers and for the wet industries that are so important to rural communities, what is AAFC doing to actually develop programming that will aid farmers with drainage and with irrigation, and secondarily to aid food processors in those wet industries to make sure our communities have the necessary water and waste-water infrastructure so that we can continue to expand those industries?

**Mr. Kevin Norris:** Thanks for the question.

I recall that there is a shared jurisdiction, as many of you probably know, between the federal, provincial and territorial governments. The provinces and territories have the primary jurisdiction over land and natural resource ownership.

As I mentioned in my opening remarks, the Sustainable Canadian Agricultural Partnership is a massive investment of \$3.5 billion. It just recently launched on April 1 of this year.

Under that programming, there are regionally-appropriate beneficial management practices that are available to address a multitude of agri-environmental issues, including water.

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

You're right. The role of the provinces is vital, particularly in water. It seems like the relationship is, I would say, in a rocky place in the need to work together on water management. Why aren't the

provinces at the table for the sustainable agriculture advisory council?

**Mr. Kevin Norris:** The sustainable agriculture advisory committee is composed of federal and sector stakeholders; however, there were specific ongoing discussions with provinces and territories bilaterally, and specific PT sessions were held during development of the strategy.

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

Your colleague mentioned resiliency. Moisture and drought resiliency can be achieved through gene-editing technologies. We've seen many other countries around the world, our trading partners, making large advancements. They're coming into production. Soybeans in the United States are an example. We've also seen many other benefits that can come from this technology.

We've received regulatory guidance from Health Canada. We're still waiting on the feed side of things.

What has AAFC been doing to pressure Health Canada to actually come through with this regulatory guidance to ensure that we can have this come into production in Canada soon?

**Mr. Kevin Norris:** Unfortunately, gene editing is outside of my scope. I can get back to you on that one. I do know that we work closely with Health Canada on a multitude of issues—

**Mr. Branden Leslie:** I'll ask the Department of Health.

Why is it taking so long? You've already approved regulatory guidance for human consumption. Why is the feed part taking so long?

**Mr. Greg Carreau:** Thank you very much for the question.

I'll have to get back to you with specifics on that.

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

I'll stick with the Department of Health.

On PMRA, you've had a pilot program for the last couple of years on water monitoring, working with some agricultural groups and stakeholders, which I think is very important.

I think there was a loss of trust when Environment and Climate Change Canada was on private land last summer with black SUVs without invitation. As you look forward, there seems to be a movement towards citizen science for water monitoring.

Recognizing that the limits of detection are so small and that the chain of custody for proper procedures in water monitoring is so vital, how can you expect to expand the water monitoring program without using paid professionals? How much would that cost? Is it really reasonable to rely on trusted agronomists to work with farmers on their privately owned land versus focusing on citizen scientists?

• (1155)

**Mr. Greg Carreau:** Thank you for very much for the question.

I agree. With pesticides, water quality monitoring and, more generally, research and science more broadly, citizen science can be an important and powerful tool to generate data that government departments as well as academics and other partners can use.

It's an important piece of a broader complementary approach to investments in science, meaning that citizen science would not be the exclusive mechanism by which we would generate science. We would certainly invest internally with our research and monitoring capacities, as well as with academics and other partners, thereby insuring a comprehensive review from all science. We would not be relying on one specific source uniquely.

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

There were 99 current-use pesticides detected out of 1,205 samples in this pilot program thus far. I notice that there is some reference, but not a specific reference, to levels of concern. However, when the front-end loaded part of detection.... If somebody were to go to read that website, they would be worried that there was something detected, but if it's at such a low level of parts per billion, it doesn't actually really matter at the end of the day.

How does the department go about managing how Canadians view this information, and are potentially concerned about it, without an accurate context around the monitoring and the findings?

**The Chair:** Answer fairly briefly, please, if you could.

**Mr. Greg Carreau:** Excuse me, Mr. Chair?

**The Chair:** Give a fairly brief answer, please.

**Mr. Greg Carreau:** Sorry. Yes.

Health Canada, through its drinking water quality guidelines, as well as the Pest Management Regulatory Agency, does provide concentration limits that would be harmful to human health. It provides that context between measurable levels and levels that have been identified as a potential health risk.

[*Translation*]

**The Chair:** Thank you.

Before turning the floor over to Mr. Ali, I would like to assure you that tests were conducted with him and determined that the sound quality was acceptable for the interpreters. I wanted to make that clear. In fact, I should do so at the beginning of every meeting, as Ms. Pauzé did well to remind me.

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

[*English*]

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

Thank you to all of the officials for being here today.

My question is for Global Affairs Canada.

What is Canada's position on the international human right to water? How has this position evolved? What is Canada doing to implement that right abroad?

**Mr. Niall Cronin:** One moment, Mr. Chair. I'll just check my notes. I was briefed by colleagues who work in the human rights division before coming.

Mr. Chair, Canada recognizes the human right of everyone to safe drinking water and basic sanitation as essential to the right to an adequate standard of living, and therefore implicit under Article 12 of the International Covenant on Economic, Social and Cultural Rights.

Canada interprets the right to safe drinking water and basic sanitation as the right to a sufficient quantity and safe quality of reasonably affordable and accessible water for personal and domestic uses.

Water and sanitation services should be physically and economically accessible on an equal and non-discriminatory basis.

Canada recognizes that a lack of water, sanitation and hygiene affects women disproportionately, as they often have the primary responsibility to collect and manage water resources.

Canada works through multilateral fora like the Group of Friends of Water at the UN and also through the G20 to advance this right.

Thank you.

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

**The Chair:** Can I just...? I'll stop your time.

I don't know if that really answered the question. It was valuable information, but I think what Mr. Ali was asking about—and correct me if I'm wrong—is the evolution of Canada's position on the international human right to water, because for a while, it didn't recognize that right at the UN but then changed its position, and so on.

However, I understand that you might not have that information on hand, so I would ask that the department submit a briefing note on the evolution of Canada's position on this issue and the reasons that it changed at one point. I would just request that this information be submitted in writing.

You made an interesting point about how ensuring that the human right to water, or water security, dovetails with Canada's feminist foreign policy. That's why I've always thought that if we could create a foreign policy pillar for water, it would be very consistent with the feminist component in our global foreign policy.

I'm sorry to interrupt. I couldn't help myself, Mr. Ali, but I didn't take any time away from you.

• (1200)

**Mr. Shafqat Ali:** Chair, I think you have explained it very well. That's exactly what I was looking for.

My other question is again to Global Affairs Canada. How does the department engage with the international community on the issue of freshwater security? Does the department work bilaterally with other nations on freshwater issues? Please provide specific examples.

**Mr. Niall Cronin:** Certainly.

Thank you, Mr. Chair.

To the first point about the evolution of Canada's position, I can certainly take that back, but I really do want to, if I may, with respect, manage the committee's expectations. We're certainly in a position to talk about our position today and what we're advancing, rather than debating previous policy positions the government took.

To the question of how Canada works bilaterally and multilaterally with other states on freshwater issues, I can certainly speak to our experience with the United States, the close collaboration we have with the State Department and our engagement with the International Joint Commission. I think the International Joint Commission has been recognized as a world model for how two nations can effectively manage transboundary water issues.

I mentioned the UN Group of Friends of Water. There was also the UN Water Conference last March, where Canada played a prominent role. Also, the IJC commissioners participated in that conference, which was another great way to show the world the strength of the Canada-U.S. relationship and the model that, in some areas, can serve for other countries.

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

Again to Global Affairs, how does the department monitor actual and potential situations of international conflict around access to fresh water?

**Mr. Niall Cronin:** I think the issue of global conflict is certainly front and centre in all of our minds. Certainly at the department, we've played an active role, whether it's looking at issues related to the war in Ukraine or the conflict between Israel and Hamas. Across the department, through our numerous geographic bureaus and through our network of embassies, high commissions and consulates around the world, we're very alive to the potential for conflict and certainly report back through headquarters and across the interdepartmental community when issues arise that need to be flagged.

**The Chair:** Thank you.

I would like to underscore, though, Mr. Cronin, that this committee sent out requests to a whole slew of departments about 18 months ago, asking for written briefs in answer to some very specific questions. We never received anything from Global Affairs. There was a reminder sent as well. Twice we contacted Global Affairs for somewhat of a robust brief in advance of this study. I just wanted to underscore that.

I'm not imputing blame to anyone, but it is frustrating for the committee. I don't think Global Affairs was the only department, but most of the departments did accede to our request.

We'll go now to Madam Pauzé.

• (1205)

**Mr. Shafqat Ali:** Chair, I want to request that they send a detailed response to this third question. It was more a general response than a specific one.

**The Chair:** That is noted.

**Mr. Shafqat Ali:** I would appreciate that. Thanks.

**The Chair:** Thank you.

[*Translation*]

Ms. Pauzé, you have the floor for five minutes.

**Ms. Monique Pauzé:** How much time do I have, Mr. Chair?

**The Chair:** I'm sorry, I made a mistake. You have the floor for two and a half minutes.

**Ms. Monique Pauzé:** It was too good to be true.

I'm going to come back to the issue of pesticides.

According to what is reported in a document prepared by the Library of Parliament, Health Canada will continue to develop a "framework that will support the design and implementation of a national program to monitor pesticide levels in Canada's lakes, rivers and groundwater."

You are currently working on the development of this framework. I'm concerned about who is being consulted in the preparation of this framework. Is PMRA being consulted? It must be said that this agency is known for always listening to industry and raising the permitted thresholds for pesticides and insecticides. We also know that an expert from this agency even resigned this summer.

Who are you consulting to develop this framework?

[*English*]

**Mr. Greg Carreau:** Thank you for the question.

The Pest Management Regulatory Agency has a strong role in regulating pesticides in Canada and collaborates very closely with non-governmental organizations, academics and the public. More recently, the Pest Management Regulatory Agency has announced an initiative to transform the agency to ensure that the agency undertakes its regulatory authorities in a robust and comprehensive way and has sought feedback from the public, as well as other government departments, municipalities and different levels of government, to inform the efforts around transforming the agency and ensuring strong regulatory oversight of pesticides in Canada.

[*Translation*]

**Ms. Monique Pauzé:** Do I understand that you're going to be tougher on the agency, which reports to your ministry? I hope so.

Earlier, it was said that the Department of Agriculture and Agri-Food and the Department of Health intended to participate in the mission to protect riparian buffers and watersheds in agricultural areas, and that the Canada Water Agency would also play a role.

Can you tell me what budget is allocated to the Canada Water Agency for this mission?

[*English*]

**Mr. Kevin Norris:** I can't comment on the budget for the water agency. I will have to defer to ECCC on that, as they're the lead for the federal government.

[*Translation*]

**Ms. Monique Pauzé:** Mr. Carreau, do you have an answer to my question?

[English]

**Mr. Greg Carreau:** As my colleague mentioned, the authority on the budget for the Canada water agency would lie with Environment and Climate Change Canada. They would be better positioned to respond to that question.

[Translation]

**Ms. Monique Pauzé:** So, I'll keep my question about the budget for later.

Do I have any time left, Mr. Chair?

**The Chair:** No, you used up all the time you were allotted.

[English]

Mr. Bachrach, you have two and a half minutes, please.

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

I have a question for Health Canada.

In 2019, Health Canada changed its guidelines around manganese levels in Canadian drinking water. This has implications for many small municipalities that have higher concentrations of manganese. I wonder if, prior to changing the guidelines, Health Canada did any analysis around the number of municipalities that may be out of compliance with the new guidelines, and what the cost implications would be for those municipalities.

**Mr. Greg Carreau:** Thank you very much for the question.

The update of the manganese drinking water quality guideline was done in very close collaboration with provinces and territories because of implications for small communities and regions across Canada that may have higher levels of manganese, which may present challenges to them. In establishing the drinking water quality guidelines, that aspect was certainly considered to ensure that meeting the maximum acceptable concentration is achievable across the country. That again was done in close collaboration with all provinces and territories.

**Mr. Taylor Bachrach:** I guess the challenge here, and this something I frequently hear from small communities, is that the government changes requirements, but often that change doesn't come with any corresponding funding so that these municipalities can address the new requirements. This is right across the board, whether it's municipally owned airports or fire departments or drinking water and waste-water infrastructure.

The challenge is that some small communities don't actually have water treatment plants because they have clean water that comes right out of the ground and they're able to meet the other health guidelines without too much of a problem. Now you change the manganese guidelines, and all of a sudden they have a challenge on their hands that potentially requires them to build a water treatment plant that cost tens of millions of dollars. These are communities where their entire tax roll is just a few million dollars per year.

The larger question for the federal government is this: How can you expect communities to meet these guidelines, given their limited financial tools and given the fact that the implications for their budgets are totally unrealistic?

• (1210)

**The Chair:** Answer very briefly, please.

**Mr. Greg Carreau:** Thank you for the question.

Funding for infrastructure is beyond Health Canada's mandate, but certainly the Health Canada drinking water quality guidelines are reflective of available science, and when they're changed, they're changed as a result of a known and scientific understanding of the risk to Canadians. Therefore, the guidelines would need to be addressed to that new science to protect Canadians.

**Mr. Taylor Bachrach:** Is there a conversation with infrastructure in that process?

**Mr. Greg Carreau:** There is.

**The Chair:** Okay. Thank you.

We'll go now to Mr. Deltell.

[Translation]

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

Ladies and gentlemen, welcome to the House of Commons. We thank you very much for your service to Canada, each in your own department. We greatly appreciate it.

A little while ago, we talked about the water problem at Bagotville, which is of concern to all of us. I would like to remind you that, on October 6, the MP for Chicoutimi—Le Fjord had a summit meeting with the person who can act directly in this situation, namely the Minister of National Defence. Following this meeting between the MP and the minister, it was agreed that a decision would be announced as soon as possible. But it's already been three weeks. We are following the matter very closely, to ensure that it is followed up and, above all, that the problem is resolved. That's why the Conservative MP for Chicoutimi—Le Fjord has referred the matter to the person who makes the decisions, namely the Minister of National Defence.

You'll recall that two days ago, we tabled a motion to debate the problem of waste water discharge into the St. Lawrence River in Montreal, among other places. We started the debate, but unfortunately our other colleagues decided to put an end to it. But just because they decided not to talk about it doesn't mean we won't. It's a very worrying subject. It's a very worrying subject, especially as this problem is increasing quite significantly in Quebec.

In Quebec, there were over 36,000 spills by municipalities in 2021 and over 57,000 last year. If, unfortunately, the trend continues, this bad habit of ours will continue.

On this subject, there was a spill in Quebec City. We know full well that this is the responsibility of the province, which has an agreement with the municipalities, and we respect that, but the reality is this. In a Radio-Canada report, an expert in environmental biotechnology and decontamination at Toronto's York University said: "There will be adverse effects on the river in the years to come."

My question is for Mr. Carreau, from the Department of Health.

Do you agree with the York University expert that waste water dumping will have long-term effects?

[*English*]

**The Chair:** Mr. Longfield seems to have his hand up. Is that a point of order?

Mr. Longfield, your hand is up.

**Mr. Lloyd Longfield (Guelph, Lib.):** Thank you, Mr. Chair. I didn't hear you call my name. Sometimes it takes a moment for the microphone to kick in.

**The Chair:** Is it a point of order?

**Mr. Lloyd Longfield:** Yes.

The debate that we had on this in our last meeting was adjourned. I'm hoping that the answers received by the committee then could be used in the study we're currently doing.

**The Chair:** I stopped your time, Mr. Deltell.

Basically, if I understand it, Mr. Longfield is asking for the consent of the committee to use the evidence from our discussion on the issue in the last meeting and of course in this meeting, in response to Mr. Deltell's motion, as input for the study report. I can't imagine there would be any objection to that, and not from Mr. Deltell, I'm sure.

There seems to be consensus. Thank you, Mr. Longfield.

We'll resume Mr. Deltell's line of questioning.

**Mr. Greg Carreau:** Thank you very much for the question.

As it relates to the discharge of waste-water effluents, that would be under the purview of Environment and Climate Change Canada, and we would defer to officials from that department to respond to that question.

• (1215)

[*Translation*]

**Mr. Gérard Deltell:** I understand, Mr. Carreau, but you're from the Department of Health. You have overall responsibility for the health of Canadians. Now, an expert from York University says that waste water discharges, particularly into the St. Lawrence River, can have harmful effects.

Is the health of Canadians well and truly protected, while the government continues this practice?

[*English*]

**Mr. Greg Carreau:** Thank you very much for that question.

As I've mentioned previously, the responsibility for providing clean, safe and reliable drinking water to the public generally rests

with the provinces and territories, and municipalities generally oversee the day-to-day operations of the treatment facilities.

Through the application of treatment facilities, municipalities, in close collaboration with provinces, territories and the federal government, do provide mechanisms to reduce pollutants that may be introduced into drinking water supplies, including those that may be introduced through waste-water effluent discharges.

**Mr. Gérard Deltell:** We also want to recognize that, unfortunately, the government continues to have this practice. We are not on that side.

[*Translation*]

The article mentions that waste water contains contaminants—

**The Chair:** Forgive me for interrupting, Mr. Deltell, but I see Mr. Longfield still has his hand raised.

Mr. Longfield, is this from earlier?

[*English*]

**Mr. Lloyd Longfield:** No, I put my hand up since we're debating this motion again that Mr. Deltell has put on the table. When it's my turn to speak, I'd like to have the floor.

**The Chair:** There's no motion. Mr. Deltell hasn't introduced a motion.

**Mr. Lloyd Longfield:** I misunderstood. I'm sorry. I thought he was reintroducing his motion.

Very good. Thank you. I'll put my hand down.

**The Chair:** No, he's not doing that. He's reintroducing the topic but not the motion.

Go ahead, Mr. Deltell.

**Mr. Gérard Deltell:** This is just a clear indication that we should talk about that more than ever.

[*Translation*]

Mr. Chair, allow me to get back to the thread of the conversation.

[*English*]

What we are seeing right now is that this government didn't keep to the rules that, yes, we can't do that, and this is not good for the health of this country.

[*Translation*]

Monsieur Carreau, here's what this article says about the spill that took place this summer in Quebec City:

Waste water contains chemical contaminants: pesticides, pharmaceuticals and contaminants such as plastic.

It also contains pathogens: coliforms and other harmful bacteria.

How can Canada's Department of Health tolerate such a practice?

[*English*]

**Mr. Greg Carreau:** Thank you very much for the question.

Again, with relation to discharge of waste-water effluents and those decisions, those are in the purview of Environment and Climate Change Canada, so I'd defer to my colleagues in response to that line of questioning.

However, I can say that from a drinking water perspective and for the protection of health, Health Canada does indeed have strong health guidance on pesticides, chemicals, plastics and other pollutants that may be present in fresh water to ensure that provinces, territories and municipalities put in place treatment to ensure that those pollutants are reduced to a level that is acceptable and that thereby they protect the health of Canadians.

Thank you.

[Translation]

**Mr. Gérard Deltell:** I will continue reading the article:

These contaminants can become trapped at the bottom of the river and find their way into the food chain, being absorbed by fish, micro-organisms, animals and humans.

Let's leave aside everyone's various responsibilities. Mr. Carreau, is it a good thing, yes or no, to discharge waste water into rivers, when we know that pesticides can contaminate the water people will use?

**The Chair:** Mr. Carreau, I would ask you to give a brief response, because we need to move on to Mr. Longfield.

[English]

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

Thank you for the witnesses—

**The Chair:** I'm sorry, Mr. Longfield. Mr. Carreau still has a brief answer to give, and then we'll go to you.

I'm sorry. Maybe I didn't express myself clearly.

**Mr. Greg Carreau:** Thank you.

Again, I would defer to my colleagues at Environment and Climate Change Canada with respect to the specific questions on discharge. However, from a fish consumption issue that was raised in the line of questioning, indeed Health Canada does have very specific guidance and health information to prescribe to ensure the safe consumption of fish that may be in contaminated areas.

**The Chair:** Thank you.

Go ahead, Mr. Longfield.

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

I'm going to direct my questions to Mr. Barbosa, particularly in terms of the progress on boil water advisories.

I believe we started our term in 2015 with about 108 boil water advisories. They then went up to 143, probably because we tightened up regulations, I'm going to guess. You can maybe comment on that.

It's also to say that in 2023, we had nine boil water advisories added and six lifted; in 2022, we had seven added and 11 lifted; in 2021, we had seven added and 28 lifted. We continue to have long-term boil water advisories being introduced.

Could you comment on the dynamic nature of boil water advisories and what we're doing to try to prevent them in the future?

• (1220)

**Mr. Nelson Barbosa:** Thank you for the question. That's a great question.

On part one of the question, in terms of the totality of lifts, in 2015, there were approximately 110 long-term drinking water advisories, and each of the long-term drinking water advisories is very fluid; some are added over time and some are removed. The overall intent is to see a net reduction, and we're seeing a historic level of progress and a historic level of funding in recent years.

In terms of the reason there might be advisories added or removed, in some cases, as I mentioned, we're seeing that there can be quick repairs to systems in order to permit longer-term responses.

There are two major factors in terms of lifts, but I think there are two static numbers that I would really want to point to. One is to ensure that the short-term lifts do not become long term. We're seeing approximately 260 since 2015. Those numbers matter, and those numbers add up to impact many Canadians in terms of their quality of living and their quality of life.

**Mr. Lloyd Longfield:** That's terrific. Thank you.

I've visited several first nations to look at this issue since being elected. I went up to Sioux Lookout and talked with the NAN, the Nishnawbe Aski Nation. An elder there said to me, "Stop poking holes in Mother Earth. Then we won't have boil water advisories." I think he was referring to starting with clean water instead of continuing to contaminate the water.

As we saw, the Chippewa from Fort Chipewyan came to us as a committee to talk about the Kearsarge spill pollution getting into their stream. I know that pollution from industry has been the main contributing factor in other areas. What are we doing to try to fill a policy gap that we may have in terms of provincial jurisdiction over water in provinces and federal jurisdiction to get clean water for first nations?

**Mr. Nelson Barbosa:** I would point to two immediate responses.

One is the importance of source water protection and having source water protection plans that extend beyond the current jurisdiction of Canada's confederation. Water flows, and the need for that water to be safe transcends jurisdiction. There is source water and there are sources of water on reserve, and those should be as clean as sources of water that are off reserve. Partnership is critical. There are many source water protection plans that first nations have with local municipalities in order to talk about the shared jurisdiction and shared prosperity over water.

On the second point, in terms of contamination, this was a huge part of the engagement we've had with hundreds of first nations in bringing forth new legislation to have a robust regulatory and standards regime on reserve. This talks about the shared jurisdiction and the shared prosperity over water, but it also talks about legal mechanisms that first nations can have over their own affairs based on their rights over their lands.

We continue to have this dialogue with first nations in order to build the most robust legislation possible prior to bringing it forward, but certainly source water protection, the availability of appropriate resources and the interactions between provinces, territories and rights holders are critical.

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

I've spoken with grand chiefs in Ontario. We did a round table at the University of Guelph and we talked about Walkerton—I talked about Walkerton—and they said that this wasn't their standard, that the Ontario standard is not their standard, and that they wanted to have their standard. Could you comment on that, please?

**Mr. Nelson Barbosa:** I would completely agree. I think a new regulatory regime, a new legislative regime—the one we're actively engaging on right now—should be predicated on first nations' rights.

There are robust water legislation and regulatory portfolios in this country, including in Ontario post-Walkerton, and they are some of the most aggressive in the world, but should first nations want to bring forward their own laws on their own lands, we are hopeful they will have jurisdiction to do so. That's been a healthy part of the conversation we've had with first nations over the last two years in order to build a legislative regime that respects the rights of first nations on their lands and their rights to bring forward legislation and regulations that respect their autonomy over their affairs.

• (1225)

**The Chair:** Thank you.

We'll go to the last round. We start with Mr. Mazier.

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

Thank you to the witnesses for coming here today.

As a little bit of a preamble, we were talking in the previous committee meeting about dumping raw sewage into the rivers and lakes and the impacts of that. Then, of course, the Liberals, NDP and Bloc shut down that discussion. That's the preface to where we start this conversation today.

My first question is for Agriculture and Agri-Food Canada and Mr. Norris.

There was mention of the importance of water quality for agriculture. Is the dumping of raw sewage impacting water quality for agriculture?

**Mr. Kevin Norris:** I would have to defer that to ECCC, which is in charge of measuring water quality.

**Mr. Dan Mazier:** Ms. Champagne, you're from the environmental side. I would think you would have something to say.

**Dr. Catherine Champagne:** I can say that it is an active area of research. Our scientists have projects to look at the impact of various amendments to soils on soil and water quality, plant health and livestock health, but we don't have regular territorial jurisdiction on monitoring water quality.

**Mr. Dan Mazier:** I guess it was just.... Is the dumping of raw sewage impacting water quality for agriculture? It's a simple question.

**Mr. Kevin Norris:** Again, I think I have to defer to ECCC, which does the water quality.

**Mr. Dan Mazier:** To follow up on Mr. Deltell's questioning on health, here is another simple question: Does Health Canada support the dumping of raw sewage into Canadian lakes and rivers, yes or no?

**Mr. Greg Carreau:** Again, questions related to the decisions made on waste-water effluents are under the purview of Environment and Climate Change Canada, and we'd defer to that.

Health Canada works with provinces and territories to ensure that there's guidance in place and that there are guidelines and treatment to be able to deliver safe water to all Canadians based on the pollutants we see in source water contamination.

**Mr. Dan Mazier:** Why are those regulations in place? Why would you have a regulation in place to stop raw sewage dumping?

**Mr. Greg Carreau:** Again, I would defer to my colleagues at Environment and Climate Change Canada.

**Mr. Dan Mazier:** Would it have any impact on health at all?

**Mr. Greg Carreau:** From a health perspective, again, we work with provinces and territories to ensure that drinking water treatment can ensure safe water delivery to Canadians across the country.

**Mr. Dan Mazier:** Mr. Barbosa, are you aware of the federal government's sustainable development strategy?

**Mr. Nelson Barbosa:** I am, yes.

**Mr. Dan Mazier:** On page 84 of the Liberal government's 2019-22 strategy, it states, and I quote, "By March 31, 2021, all of the long-term drinking water advisories on the public systems on reserve are to be resolved". It says, "all of the long-term".

Has the government fully achieved this target?

**Mr. Nelson Barbosa:** There are currently—

**Mr. Dan Mazier:** Is it yes or no?

**Mr. Nelson Barbosa:** There are currently 28 long-term drinking water advisories in Canada on first nations lands.

**Mr. Dan Mazier:** Is that a no?

**Mr. Nelson Barbosa:** There are currently 28.

**Mr. Dan Mazier:** Okay. I'll repeat the question.

"By March 31, 2021, all of the long-term drinking water advisories on public systems on reserve are to be resolved". Is that yes or no? Has that target been fully achieved, yes or no?

**Mr. Nelson Barbosa:** If the question is, “Were the timelines met?”, then there are currently 28 long-term drinking water advisories. If the question is—

**Mr. Dan Mazier:** Has the target been met, yes or no?

**Mr. Nelson Barbosa:** There are currently 28 long-term—

**Mr. Dan Mazier:** Fully met.... There are 28, so “no” is the answer.

**Mr. Nelson Barbosa:** There are currently 28 long-term drinking water advisories in Canada.

**Mr. Dan Mazier:** No, the target has not been achieved.

**The Chair:** Mr. Mazier, I think you're badgering the witness—

**Mr. Dan Mazier:** Okay.

**The Chair:** —and that's not of your ilk. You're too nice a man for that.

**Mr. Dan Mazier:** I find it quite interesting when you're talking about first nations. I have 14 first nations in my riding. I talked to one of them, and it was interesting. All around, there are 38 municipalities as well. It's a very rural area. All those municipalities have a water system, a drinking system, installed, yet the first nations don't. I guess, when they originally went to the municipalities and said, “Hey, can we have some drinking water here?”, they didn't qualify. They wouldn't allow them back into the system. They couldn't bootstrap themselves onto the existing system, so they had to redesign that.

In your work, you said you're starting to find out some things, and there are still 28 left because we haven't met our mandates. Are there any barriers you've identified that we should get on with and get rid of, as a committee, when it comes to water?

• (1230)

**The Chair:** Answer very briefly, please.

**Mr. Nelson Barbosa:** I would say that many municipalities and first nations work in partnership in order to share water resources. I spoke about source water protection, but there are also shared infrastructure resources happening across the country. I wouldn't point to your examples as ubiquitous.

I would also point to the fact, maybe going back to the previous questions, that first nations manage their own jurisdictions and their affairs for water. In some cases, first nations want to see their own supply and their own infrastructure built on their own lands, and we are ready to support that, and we do. For each long-term drinking water advisory....

There are 634 first nations in this country—

**The Chair:** We'll have to stop there.

**Mr. Nelson Barbosa:** —and water reality is different for them.

I appreciate the questions.

**The Chair:** We go, with pleasure, to Mr. van Koeverden.

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

Thanks again to all of the witnesses for joining today. Thank you for your work and for your expertise on these very important issues.

Again, on boil water advisories, Mr. Barbosa, if I could go to you first, according to the ISC website, as has been mentioned, the project is complete, and the advisory is lifted in 84% of communities that had a boil water advisory. For a further 9%, that lift is pending, but there's clean water flowing from the tap, which leaves 7% for either the projects under construction or the studies under way.

As you said at the very top, and I agree with you, even one boil water advisory, particularly a long-term one, is one too many. Could you give us a sense of how many people this is impacting? I know the website is quite detailed, but do you have an idea, even just a ballpark number, of how many people are still in that 7% group?

I just want to highlight that 93% of those communities now have clean water, which is great progress. The job is not done yet, but quite a lot of progress has been made. Give us a ballpark number of how many first nations are still impacted.

**Mr. Nelson Barbosa:** It's a great question, and we're happy to provide a written response in terms of the impact on the remaining 7% of the population.

In addition to some of the points you're raising, we anticipate that about 32% of the remaining long-term drinking water advisories will be lifted by year-end.

Again, first nations control their jurisdictions. They are the ones who bring drinking water advisories in place and lift them. Progress is being made, and we hope that the progress will continue to year-end and get to zero.

We're happy to provide a written response on the 7%.

**Mr. Adam van Koeverden:** Thank you, Mr. Barbosa. I recognize that asking for numbers at a meeting like this is challenging.

It's clear to me and I think to all Canadians that long-term negligence and neglect from successive governments have contributed to the failing infrastructure in many rural, indigenous and remote communities. Back in 2006, the Harper government committed to a clean water strategy, and around 2007 there were about 100 boil water advisories across Canada in first nation communities. There were also over 1,700 individual boil water advisories in other communities across the country.

I was looking for information on how many boil water advisories are currently in Canada at large. Do you have any indication about how many Canadians don't have clean drinking water?

**Mr. Nelson Barbosa:** In the off-reserve context, I do not have that number offhand.

**Mr. Adam van Koeverden:** Based on what I read online, the situation has been improving, so funding municipalities and making sure that they have access to that infrastructure money and things like the municipal gas tax have clearly given some municipalities the ability to plan ahead and do that construction.

For my part, thank you for your work, and I look forward to some of those numbers.

My next—

• (1235)

**The Chair:** I'm sorry, Mr. van Koeverden; would you like Mr. Barbosa to submit that in writing?

**Mr. Adam van Koeverden:** He said he would.

**The Chair:** Okay, I missed that; I apologize.

**Mr. Nelson Barbosa:** I'm happy to provide the answer on the 7%. I'm not sure that our department has access to the totality of the Canadian landscape outside of on-reserve numbers, but I'm happy to provide on-reserve numbers for sure.

**Mr. Adam van Koeverden:** Based on what I read online, percentages for the reason there's a boil water advisory in municipalities are available, but the number isn't. I think that I did access numbers from the previous decades.

Concerning drought and climate change.... This is really to anybody who's interested in talking about food security. I have one more small question, so please give me a moment, if that's okay.

Food costs are rising, and the main reason is climate change. It's irrefutable. Other people might want to say that there are other reasons for expensive food in Canada, but there's expensive food in the United States as well and around the world, and one of the main reasons is climate change. The main thing that is required for crops is irrigation or rain. When that's not available, crops fail. When pests are allowed to run rampant, crops fail, and food costs go up.

Can somebody just briefly touch on the importance of fighting climate change and of irrigation in the context of food security and making sure that food continues to be affordable for Canadians?

**Dr. Catherine Champagne:** I can say, from the perspective of Agriculture and Agri-Food Canada, that this is something that we actively look at and that climate change is an important pillar of our current research and programming.

We actively monitor drought across Canada in partnership with the United States and Mexico, and this is a key tool for making sure that we have preparation for understanding how this is going to impact our annual crops produced each year, which impacts our food supply and our costs, as you mentioned.

The other pillar that we focus on is improving practices, so we provide advice to farmers so that in times when there are shortages of water, we have an active tool box that will encourage resiliency and allow farmers to have a broader tool box of things that they can draw on to make them more resilient to these types of extremes. We're focusing on prediction and mitigation.

**The Chair:** Time is up.

**Mr. Adam van Koeverden:** I was hoping for 30 seconds.

**The Chair:** You're already way over.

Ms. Pauzé, you have the floor.

[*Translation*]

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

Mr. Barbosa, I'll come back to you.

Earlier, I gave you the example of an indigenous community located less than 10 kilometres from Edmonton, whose members can't even turn on the tap to get drinking water. Yet we're in a supposedly wealthy G20 country.

The problem of safe drinking water on first nations reserves was recently the subject of a collective action. However, I understand that a settlement agreement has been reached that includes the creation of the first First Nations Advisory Committee on Safe Drinking Water, including \$20 million in federal assistance through 2025.

Can you explain how an advisory committee with \$20 million at its disposal will guarantee access to safe drinking water for indigenous communities?

**Mr. Nelson Barbosa:** Thank you for the question.

[*English*]

There was a settlement agreement established in December of 2021 to end litigation regarding long-term drinking water advisories. *Grosso modo*, that settlement agreement committed \$8 billion until 2025 in order to support safe drinking water, including \$6 billion for infrastructure and for operations and maintenance, which I spoke to, and approximately \$2 billion to support community and individual responses.

Among other commitments that had non-monetary aspects, one was the establishment of the first nations advisory committee on safe drinking water. This committee is now active and is supporting ISC in a number of efforts, but also primarily in the consultation on the establishment of potential new legislation.

There are—

[*Translation*]

**Ms. Monique Pauzé:** I'll stop you there, Mr. Barbosa.

So you think the \$20 million for the advisory committee is going to work miracles or, at the very least, help.

I'll come back to the Canada Water Agency, because they too must have concerns in relation to indigenous nations. Now, I think it was Mr. Norris, in his speech, who talked about avoiding overlap.

Where are we with this? There's the advisory committee. There's the Canada Water Agency, which may also have concerns about first nations.

• (1240)

**Mr. Nelson Barbosa:** Thank you for the question.

[English]

On the \$6 billion related to infrastructure, those resources are factored into the plans on long-term drinking water advisories, but I would like to bring to the attention of the committee that the reduction of long-term drinking water advisories and seeing them get to zero is one fabric or one element of the work we do.

There are many communities, and each of them has different water systems and different water realities. There is a lot of focus put on long-term drinking water advisories, but ISC's role is to support the establishment in getting to zero and supporting all water systems across this country, of which there are certainly more than 28.

On the interrelationship between the Canada water agency and ISC, we have regular contact with Mr. Wolfish, with whom you spoke earlier this week, on the establishment of that agency and also on the engagement modalities and the co-development of the CWA.

Thank you so much.

**The Chair:** Thank you.

Mr. Bachrach, you have the floor.

I'm sorry; it's Mr. Cannings.

**Mr. Taylor Bachrach:** My colleague Mr. Cannings has a question.

**Mr. Richard Cannings:** Thank you.

I'd like to pose this question to Mr. Carreau.

This spring we passed the new Canadian Environmental Protection Act here, which included, for the first time, the right for Canadians to live in a clean and healthy environment, but that only extended to the confines of CEPA.

I have a private member's bill, Bill C-219, on the Canadian environmental bill of rights, which would extend that to all other federal pieces of legislation that deal with a clean environment.

I'm just wondering if you could comment on those other pieces of legislation that Health Canada or others might deal with and help regulate clean water in Canada. What other pieces of legislation, besides CEPA, would that encompass, and why is it important to extend that right to those pieces of legislation?

**Mr. Greg Carreau:** Indeed, I was here at this table helping on Bill S-5 and the amendments to the Canadian Environmental Protection Act in the introduction of the right to a healthy environment.

Health Canada's Canadian drinking water quality guidelines are published under the authorities of the Canadian Environmental Protection Act and do, then, provide the basis upon which provinces and territories implement those guidelines in their policies and regulations.

With respect to the right to a healthy environment, Health Canada and Environment and Climate Change Canada are collaborating on the development of a framework that will be subject to public consultation and will provide an understanding of how the Minister of Health and the Minister of the Environment and Climate Change Canada can implement those authorities in the administration of the act, as well as intersectionality with other pieces of legislation that may be pertinent to the protection of health and the environment of Canadians.

**Mr. Richard Cannings:** Are you saying that CEPA protects that right across all federal pieces of legislation, whether it's about pesticides or the Fisheries Act and things like that?

**Mr. Greg Carreau:** No, the right to a healthy environment is in the confines of the Canadian Environmental Protection Act; however, in the administration of the protection of health and the environment from chemicals, it is very much a whole-of-government approach, using the authorities under the Pest Control Products Act, the Food and Drugs Act or the Canada Consumer Product Safety Act, which provide a whole-of-government approach to the management of chemicals that may be of concern for the Canadian environment.

**The Chair:** Thank you.

Mr. Kram is next.

**Mr. Michael Kram:** Thank you, Mr. Chair.

I'd like to come back to Mr. Barbosa about the boil water advisories.

Mr. Barbosa, in your opening statement, I believe you said that the Safe Drinking Water for First Nations Act, which came into force in 2013, was repealed in June 2022 due to first nations' concerns. The Safe Drinking Water for First Nations Act sounds like a pretty good act to me. Could you elaborate on what some of those concerns were that you mentioned in your opening statement?

**Mr. Nelson Barbosa:** Thank you for the question.

While the act was passed, there were never any regulations brought into place to bring that legislation into regulatory force.

The concerns raised by first nations were multivaried. I would say the two primary ones were the lack of adequate consultation with first nations on the establishment of that act in that period and also the lack of a robust understanding of how first nations rights, and management of source water protection, would be codified as part of that legislation.

• (1245)

**Mr. Michael Kram:** It was also my understanding that one of the provisions of that act was that if a first nation was not providing clean, safe drinking water to its residents, then the federal government could intervene and authorize a third party to set up a water treatment plant and to provide the water on its own. Is that one of the concerns that were raised as well?

**Mr. Nelson Barbosa:** I wouldn't say that was a paramount concern. I would say certainly consultation on source water protection and rights were the first and foremost. I would also note that, as per a previous question, one element of the settlement agreement on safe drinking water was to repeal the previous legislation and to bring into place new legislation based on co-developed principles.

**Mr. Michael Kram:** Okay, but the new legislation is not in place yet, correct?

**Mr. Nelson Barbosa:** The engagement is ongoing, and we hope to bring that forward soon. The engagement process on potential new legislation is under way.

**Mr. Michael Kram:** If we had finalized the regulations for the Safe Drinking Water for First Nations Act a decade ago, is it safe to say that some of the 28 long-term drinking water advisories might be eliminated by now, instead of losing a decade by reinventing the wheel, so to speak?

**Mr. Nelson Barbosa:** That's a hypothetical question. I couldn't answer that question.

I could say that legislation, particularly as it impacts first nations on their lands, should be co-developed, and also that we should recognize first nations voices in the development of legislation now and in the future.

**Mr. Michael Kram:** Thank you, Mr. Chair.

I would like to give the rest of my time to Mr. Mazier.

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

Thank you, Mr. Chair.

Mr. Norris, the Prime Minister stated that the government will be updating the water act and that this could have significant impacts on agriculture in general all across Canada. Does the department have any indications of how these proposed changes would impact agriculture?

**Mr. Kevin Norris:** Not at this point. I would defer comment on the water act to Environment Canada, but we do work closely with them on a lot of agri-environmental issues, including water.

**Mr. Dan Mazier:** How many provincial agriculture ministers has your minister and the department met with to talk specifically about the water agency?

**Mr. Kevin Norris:** I would have to get back to you on that.

**Mr. Dan Mazier:** Can you table that, please?

**Mr. Kevin Norris:** Yes.

**Mr. Dan Mazier:** I might also, on the chair's comments, follow up on what departments actually reported so that we could prepare for this meeting. Eight departments provided responses, which totalled 110 pages to look through. Agriculture provided one page, and it didn't even answer the questions.

I would beg of you, please, to go back to the minister, answer the questions and provide those answers to the committee, because it really does speak volumes to just how much disregard the minister has for this committee and for this important subject of water in agriculture, which is appalling to say the least.

Thank you.

**The Chair:** Thank you.

We'll finish with Madame Chatel.

[*Translation*]

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

I'll be sharing my speaking time with my colleague Mr. van Koverden, if possible.

As chair of the Liberal rural caucus, I talk to a lot of farmers in Canada, and I know that climate change has a huge impact on agricultural production and projections. In fact, I found what Ms. Champagne was saying earlier about drought projections and the agreements with the United States and Mexico on the subject very interesting.

Water shortages are a major concern for farmers, but there are various other phenomena that affect their productivity. These include heat waves and droughts, of course, but also the emergence of new diseases and insects, deteriorating soil quality, depleted water tables and increased competition for water supplies.

As we know, Canadian households rely heavily on farming done in the southwestern United States. I was reading some very worrying studies about the level of drought there for the next decade. So we won't be able to rely on U.S. agricultural production to fill our grocery baskets. I'm very concerned about that.

Ms. Champagne and Mr. Cronin, in the face of these significant challenges, how do your departments intend to address climate risks impacting agriculture and food security, plan accordingly and ensure that Canada is well positioned to deal with them?

• (1250)

[*English*]

**Dr. Catherine Champagne:** Just to address a couple of things that you mentioned, we work very closely with the United States Department of Agriculture on collaborating on the monitoring and forecasting of drought and on ensuring that we're using consistent techniques to have good projections of food quantity.

We also work with the global agricultural monitoring community and the Food and Agriculture Organization to ensure that food price volatility is based on scientific information and projections and that food speculation prices are put in to minimize the risk.

As a department, we also focus heavily on developing practices to advise farmers on how they can protect crop yields going forward and, as you mentioned, soil quality and groundwater as well. Our new strategic plan for science has a specific focus on soil and water quality and their linkages with the long-term impacts of climate change and extreme weather.

I would say, from a programming point of view, that we have a number of business risk management programs that are also in place to support farmers when there are no other mechanisms for adaptation in maintaining food supply.

[*Translation*]

**Mrs. Sophie Chatel:** Thank you very much.

I'd like to leave some of my time to my colleague, but first, Ms. Champagne, I'd like to ask you to explain in writing the work you're doing with Mexico and the United States. I'm very interested.

Mr. Cronin, we're going to live in a world where several regions of the planet will run out of water, which will lead to conflict. From your department's perspective, how can we better position and protect Canada against these risks? I'd appreciate a written response.

I now leave the rest of my speaking time to my colleague.

[*English*]

**Mr. Adam van Koeverden:** Thank you to my colleague.

Just very briefly, Mr. Barbosa, we did a little checking, and it turns out that 17 of the remaining 28 boil water advisories in first nations communities are novel, so they are continuing to rise. Does that sound about right?

**Mr. Curtis Bergeron (Director, Strategic Water Management Directorate, Department of Indigenous Services):** There are seven long-term drinking water advisories that have reoccurred, yes.

**Mr. Adam van Koeverden:** They get solved, but then they break again.

Very briefly, Mr. Carreau, I'm interested in this research that I've seen about the content of lithium in our drinking water and the impact it has on people's moods and their mental health and the incidences of other things that you'd like to prevent in society.

I don't want to inflame the conversation here, but there is all this interesting research out there about how how much lithium is in our

drinking water in various communities—and it's in nature; it's not spurious—and the incidence of things like murder in those communities. There's a really stiff relationship between those two things. Is that something that your department has ever looked into?

**Mr. Greg Carreau:** Thanks for the question.

Indeed, Health Canada pays a lot of attention to emerging science and works with the World Health Organization, the Environmental Protection Agency and other partners around the world in monitoring emerging science. The research that you mentioned has certainly been part of that broader surveillance of emerging science on drinking water.

[*Translation*]

**The Chair:** Thank you all for a great discussion, especially...

[*English*]

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

As a follow-up for Mr. Barbosa, I mentioned barriers and working interjurisdictionally.

Could you supply the committee with an update on any barriers between the regional municipalities and the indigenous communities, and how they can't work together? Maybe we can clear a pathway so that these projects can move forward more expeditiously.

[*Translation*]

**The Chair:** Thank you. That is not a point of order, but any questions that bring out good information are welcomed.

So, thank you all for a great discussion, and especially all the witnesses, who have come to talk about a complex and sometimes difficult subject. We are grateful for their presence and for all they do on a daily basis to try to ensure better freshwater management in Canada.

I wish everyone a good day.





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