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**EVIDENCE**

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**Chair**

**Mr. Harold Albrecht**



# Standing Committee on Environment and Sustainable Development

Tuesday, March 4, 2014

• (1530)

[English]

**The Chair (Mr. Harold Albrecht (Kitchener—Conestoga, CPC)):** I'll call our meeting to order. This is meeting number 15 of the Standing Committee on Environment and Sustainable Development. We're continuing our study on Great Lakes water quality. I remind members of the scope of the committee, which is outlined in the first page of the Library of Parliament briefing notes.

Today we have witnesses from the Government of Ontario: Mr. Maurice Bitran, assistant deputy minister, and Mr. Brian Nixon, director, Ministry of the Environment, with Mr. Jim Richardson, director of the Ministry of Agriculture and Food. We also have with us, from the Upper Thames River Conservation Authority, Mr. Ian Wilcox.

We're going to proceed first with the Government of Ontario for a 10-minute opening statement.

Mr. Bitran, proceed, please.

We'll have a series of questions following both presentations.

[Translation]

**Dr. Maurice Bitran (Assistant Deputy Minister, Ministry of the Environment, Integrated Environmental Policy Division, Government of Ontario):** Thank you and good afternoon.

Thank you for the opportunity to speak to the committee about Ontario's interest and work on the Great Lakes water quality.

I am joined by my colleague, Mr. Brian Nixon, director of our Land and Water Policy Branch.

[English]

The Great Lakes are of great importance to the province of Ontario. The Great Lakes are the source of drinking water for 80% of Ontarians, and the Great Lakes basin is where the great majority of Ontarians live and where most of our economic, agricultural, and social activities take place.

The Province of Ontario has long been actively protecting, monitoring and remediating the water quality of the Great Lakes. Ontario's work on the water quality of the Great Lakes is guided by a vision of the Great Lakes that are drinkable, swimmable, and fishable for generations to come.

Our current efforts in this regard are described in three main initiatives: Ontario's Great Lakes strategy, released in December 2012; Ontario's proposed Great Lakes protection act, Bill 6, currently before a committee of the Ontario legislature; and the

Canada-Ontario agreement on the Great Lakes, currently in the final phases of its eighth renewal.

I will briefly outline some of the salient aspects of these three initiatives and I will leave copies of Ontario's Great Lakes strategy for the committee.

Ontario's Great Lakes strategy provides a road map to focus tools and resources across ministries as well as priorities for action and collaboration with the broader Great Lakes community. It has six goals.

The first one is to engage and empower communities. Because the health of the Great Lakes impacts almost everyone in Ontario, it is essential to engage Ontarians and their communities in the protection and restoration of the Great Lakes. This focus on engaging and empowering communities has led to new alliances; for example, with first nation communities, reflecting their unique relationship to the lakes, the importance of traditional ecological knowledge to protect them, and a commitment to ongoing collaboration.

Activities to date include Great Lakes Guardian Community Fund awards of \$3 million to 158 community-based projects to protect habitat and species, clean up beaches and shorelines, reduce the impact of invasive species, and restore wetlands to help manage stormwater runoff. The Great Lakes as a context for learning involves the production of a conference for high school teachers designed to profile Great Lakes career opportunities.

The second goal is protecting water for human and ecological health. This goal includes a range of actions to address excess nutrients and related algae blooms as well as toxic chemicals and pharmaceuticals in the Great Lakes. This goal also addresses issues related to stormwater and waste-water discharges to the lakes.

Activities to date include: the \$17-million showcasing water innovation program for innovative water management approaches, including, for example, a project designed to increase the recycling of nutrient water in Ontario's greenhouse sector, leading to a reduction in the use of water and in the discharge of nutrient-bearing water into the lakes; more than \$660 million committed by the province for waste-water and stormwater infrastructure upgrades in the Great Lakes basin since March 2007; source protection initiatives undertaken under Ontario's Clean Water Act, including assessments of existing and potential threats to municipal drinking water sources and identification of implementation actions by local source protection committees to reduce or eliminate these threats. The province has invested approximately \$240 million in source protection activities related to the Great Lakes since 2004.

• (1535)

The third goal is to improve wetlands, beaches, shorelines, and coastal areas to protect fish and wildlife habitats and address beach impairments. Ontario is identifying and mapping significant wetlands, conducting research to improve our understanding of sources of *E. coli* contamination and causes of other beach impairments, such as nuisance algae, in order to guide beach management actions and continue efforts to remediate designated areas of concern and other areas.

Activities include the release of a new provincial policy statement that includes policy direction to increase protection of Great Lakes coastal wetlands in southern areas of the province, enhance water policies to provide increased direction to municipalities to identify shoreline areas in their official plans and apply additional protection, and consider cumulative effects in the watershed. The provincial policy statement also includes policies directing municipalities to take a coordinated approach when addressing Great Lakes issues.

Provincial ministries have inventoried, evaluated, and mapped more than 125 wetlands totalling more than 10,000 hectares. As the Canada-Ontario agreement negotiations continue, Ontario has maintained its commitment to the shared lakes objectives with Canada, including through funding of \$46.3 million to clean up contaminated sediment in Hamilton harbour's Randle Reef.

The fourth goal is to protect habitats and species. The Great Lakes basin ecosystem is home to more than 4,000 species of plants, fish, and wildlife. Recreational fishing in the Great Lakes contributes more than \$600 million to Ontario's economy each year. In order to protect one of the most biologically rich ecosystems in Canada and to continue to protect recreational opportunities such as fishing, Ontario's Great Lakes strategy includes measures to prevent the introduction and spread of invasive species, which threaten biodiversity, and to restore the habitats the Great Lakes species call home.

Activities include the following:

On February 26, the Government of Ontario introduced new legislation to support the prevention, early detection, rapid response, and eradication of invasive species in the province. If it is passed, Ontario will become the first and only jurisdiction in Canada to have stand-alone invasive species legislation.

The province has strengthened regulations, increased monitoring efforts, and collaborated with researchers to increase understanding of Asian carp biology and behaviour.

The fifth goal is to enhance understanding of the Great Lakes ecosystem and adaptation. The changing climate has emerged as a significant threat to Great Lakes water quality. For example, severe weather events associated with climate change have increased runoff to the Great Lakes, and with it the flow of pollutants from urban, industrial, and agricultural sources.

In order to improve our understanding of stressors such as climate change and enhance our ability to adapt, Ontario is increasing public access to scientific information on the Great Lakes and enhancing monitoring and modelling to understand and predict the impacts of climate change and other cumulative impacts. Ontario and its partners are offering municipalities information on how to manage risks and adapt to climate change.

For example, Ontario has provided \$145,000 to the Municipal Adaptation and Resiliency Service, or MARS, launched by mayors of the Great Lakes and St. Lawrence Cities Initiative to help municipalities accelerate local adaptation to climate change in the Great Lakes region.

The sixth goal is to ensure environmentally sustainable economic opportunities and innovation.

Ontario's Great Lakes region contains 40% of Canada's economic activity. Ontario recognizes that protecting the Great Lakes is necessary for numerous sectors of the economy. Water technology innovation and conservation practices provide tools to improve environmental sustainability while helping Ontario companies tap into the half-trillion-dollar global water technology market in order to promote sustainable economic opportunities that help Ontario protect the lakes.

Ontario's proposed Great Lakes protection act, Bill 6, is currently moving through the legislative process. It builds on what we have learned through existing agreements and would provide the Government of Ontario with a more comprehensive suite of tools to address the combined stresses on the Great Lakes at a multiple watershed scale. For example, if passed, the act would authorize the Minister of the Environment to use legally binding instruments, such as geographically focused initiatives and targets, to protect the Great Lakes.

•(1540)

Canada and Ontario have long collaborated on Great Lakes issues, and have achieved significant success in addressing algae blooms, reducing the levels of persistent toxic chemicals, such as PCBs and mercury, and working to remediate areas of concern. This strong relationship between Canada and Ontario continues with a negotiation of the eighth Canada-Ontario agreement on the Great Lakes, which concluded recently. The agreement is now in the approval phase.

We look forward to posting the new Canada-Ontario agreement for public consultation this spring. Under this new agreement, Ontario plans to work with Canada to complete cleanup actions in five of the remaining areas of concern.

[*Translation*]

To sum up, the Great Lakes are a natural heritage of key importance to Canada and Ontario. Its protection and preservation for future generations requires concerted action and significant investment. Ontario is committed to continued collaboration with Canada and other partners in the ongoing protection and restoration of the Great Lakes.

[*English*]

Together, we have improved the health of the Great Lakes in many respects. Much more remains to be done, however, and Ontario welcomes Canada's continued participation and investment in the future as a vital resource.

This concludes my remarks.

Thank you for your attention.

**The Chair:** Thank you very much, Mr. Bitran, for speaking on behalf of the environmental policy division, Government of Ontario.

We'll now move to Mr. Jim Richardson, director of Ministry of Agriculture and Food, environmental management branch.

Mr. Richardson, you have 10 minutes, please.

**Mr. Jim Richardson (Director, Ministry of Agriculture & Food, Environmental Management Branch, Government of Ontario):** Thank you, Mr. Chair, for the opportunity to speak to the committee today regarding the Great Lakes water quality, an issue that my colleague from the Ontario Ministry of the Environment, Mr. Bitran, has indicated is very important to the province of Ontario from an environmental, economic, and social perspective.

As Mr. Bitran mentioned, the Great Lakes basin is home to 98% of Ontarians. It also contains over 90% of all agricultural land in the province. This prime agricultural land supports the most diverse agricultural industry in Canada, with over 200 different commodities being produced for both domestic consumption and export. It accounts for the largest share of the total Canadian GDP in agriculture and food processing, 33.2% to be exact.

In 2010, Ontario accounted for 23.2% of all farm cash receipts in Canada, and 23.8% of all exports of agriculture and food and beverage processing in this country. The food and beverage processing industry is Ontario's second largest manufacturing sector

in terms of employment, and the greater Toronto area is one of the top three food-processing clusters in North America. Fifty per cent of the province's processors are located in rural Ontario, and processors purchase almost 65% of Ontario's food-related farm production.

Within the province, almost all of this production and manufacturing takes place within the Great Lakes basin. The Great Lakes are indeed essential to the prosperity of Ontario's agrifood industry, and a sustainable quality water supply is critical to both Ontario and Ontario's agrifood industry. The Ontario Ministry of Agriculture and Food and the Ministry of Rural Affairs recognize the importance of the Great Lakes in supporting a sustainable agricultural industry, but we also recognize that a sustainable agricultural industry must be based on a sustainable Great Lakes basin.

Understanding the interaction between agricultural production systems and the Great Lakes basin ecosystem is essential to the continued sustainability of both. This is why the Ministry of Agriculture and Food and the Ministry of Rural Affairs are focusing their efforts on three key areas to support the province's Great Lakes strategy: research, education and awareness, and stewardship practices.

The ministries fund research to develop effective best-management practices, which are then field tested and demonstrated within the sector through cost-shared stewardship programs with the support of Agriculture and Agri-Food Canada.

Research is funded through a variety of partnerships with academic institutions, conservation authorities, and farm organizations. The University of Guelph partnership supports an environmental sustainability research team, which has funded research concerning soil health, nutrient management, water quality, and water quantity. This research continues to improve our understanding of how agricultural practices interact with the ever-changing natural environment. As indicated by my colleague from the Ministry of the Environment, and I'm sure by others who have presented at this committee, there is much that we don't know about the interaction between human activities and the ecosystem of the Great Lakes basin, and how this is being further complicated by climate change, invasive species, and other factors.

The ministry's best practices verification and demonstration program endeavours to examine some of these challenges from an environmental and economic perspective by field testing new and improved practices to address such challenges as extreme weather events. It is through these research programs and working with our federal and U.S. colleagues that we are developing a better understanding of what actions we can take to support the health of the Great Lakes basin ecosystem.

The federal, provincial and territorial agricultural policy initiative, Growing Forward 2, also supports applied research and demonstration projects. The Ministry of Agriculture and Food and Agriculture and Agri-Food Canada recently announced the water adaptation, management, and quality initiative under Growing Forward 2.

This initiative will provide funding for demonstration and applied research projects that showcase innovative technologies and solutions for agricultural water conservation and water efficiency activities related to adapting to climate change, as well as the efficient use of nutrients and effective nutrient management relative to water quality. The program is intended to assist farmers to prepare for and better manage the impacts of climate change through the development of resilient farming practices, address the issues of water supply by adopting water conservation and water use practices, and improve water quality through better nutrient management practices. The program is open to the agricultural commodity groups, marketing boards, recognized industry associations and non-profit organizations, first nations groups, and universities and colleges.

● (1545)

Education and awareness are primarily driven through the promotion of the Canada-Ontario environmental farm plan, a voluntary education and awareness program that has received worldwide recognition since its inception in 1992. The program is supported through a long-term partnership between the Ontario Ministry of Agriculture and Food and the Ministry of Rural Affairs, Agriculture and Agri-Food Canada, and farm organizations represented by the Ontario Farm Environmental Coalition.

The environmental farm plan has proven to be a very effective environmental awareness program, helping to change farmers' attitudes toward the environment, raising the awareness of regulatory requirements, and promoting the adoption of best practices to address on-farm risks. The list of best management practices categories that are supported recognizes the diversity of agricultural operations in Ontario and the importance of encouraging voluntary action from the many different types of farm operations, from greenhouse floriculture to beef cow-calf to cash crop operations. The program provides an opportunity for each sector to address risks they identify through the environmental farm plan educational process.

Ontario farmers continue to demonstrate a strong commitment to the environment. Between April 1, 2005 and March 31, 2013, approximately 23,500 cost-shared environmental improvement projects have been completed on Ontario farms. This represents an investment of \$352.9 million, including \$227.9 million of the farmers' own money, \$99.1 million in federal-provincial cost-share funding from Agriculture and Agri-Food Canada and the Ontario Ministry of Agriculture and Food and the Ministry of Rural Affairs, and \$25.9 million leveraged from other provincial ministries and private foundations.

Examples of projects completed include improved manure storage and handling, enhanced well water protection, buffer strips around sensitive areas such as streams, soil erosion control works, water management plans, and improved cropping systems and precision agricultural projects.

Changing people's attitudes towards the environment in which they live and how they interact with that environment is essential to the sustained health of the Great Lakes basin. The Ontario Ministry of Agriculture and Food and the Ministry of Rural Affairs sees stewardship as critical to the success of any long-term solution. We are committed to promoting good stewardship practices through such initiatives as the environmental farm plan and the development of best management practices that reflect our changing environment. As we move forward to implement Ontario's Great Lakes strategy, stewardship will play an increasingly important role in achieving our objectives and putting in place solutions that are long lasting and transgenerational in nature.

Agriculture is an integral part of the Great Lakes basin ecosystem, and its interaction with that ecosystem is complex and dynamic. The Ontario Ministry of Agriculture and Food and the Ministry of Rural Affairs are committed to better understanding this interaction towards the development and implementation of more effective and efficient best management practices while maintaining and building a sustainable and competitive agrifood industry. To that end, we will continue to work with federal, provincial, and state agencies in support of Great Lakes water quality.

That concludes my remarks. I would be pleased to answer any questions that you have for us.

● (1550)

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

We will now move to the Upper Thames River Conservation Authority and Mr. Ian Wilcox.

**Mr. Ian Wilcox (General Manager and Secretary-Treasurer, Upper Thames River Conservation Authority):** Good afternoon. My name is Ian Wilcox, and I'm the general manager of the Upper Thames River Conservation Authority.

I want to thank the standing committee for the invitation to attend and the opportunity to provide a conservation authority perspective regarding efforts to improve the water quality of the Great Lakes.

As context, Ontario's 36 conservation authorities have been in place for more than 60 years. We work on a watershed jurisdiction to manage water and other natural resources. We are principally funded by our member municipalities but routinely work with provincial ministries and federal departments to conduct research, and most importantly, translate that research into the implementation of best practices for environmental improvement. On-the-ground implementation of best practices is our priority and strength, and measurable improvements in water quality and forest health are our outcome measures.

The Upper Thames River Conservation Authority is based in London, Ontario. Our watershed joins with the Lower Thames Valley Conservation Authority to ultimately discharge to the western basin of Lake Erie, which is the current flashpoint for water quality concerns in the Great Lakes. Our land base includes the most intensive agricultural region in Canada and more than half a million people.

With regard to your three specified questions, I offer the following responses. ● (1555)

The first is regarding priority locations in the Great Lakes basin. As you're well aware, the western basin of Lake Erie is facing a water quality crisis. Unprecedented algal blooms threaten drinking-water sources and commercial and recreational fisheries and impact other recreational uses.

Research has identified the Maumee River watershed in Ohio as the greatest single source of contamination to the western basin, and our American partners appear fully engaged in remediation strategies. On the Canadian side, the Thames River basin is the single largest contributor of contaminants to the western basin. As an analogy, it is our belief that these two watersheds must be considered the new areas of concern for remediation.

Targeted non-point source pollution control in these two watersheds offers the greatest hope for improving water quality in Lake Erie's western basin. I would also offer that Lake Erie more broadly warrants a comprehensive implementation plan. Within that scope, Ontario's Grand River watershed must also be recognized as a critical location for enhanced implementation.

Your second topic of interest concerns efforts that are currently under way or planned for remediation. My colleagues have mentioned several programs that we've all worked on together. We have a long history of research, planning, and implementation programs for the Great Lakes. Conservation authorities have participated in many of these ventures, but to be clear, our reason for participating has always been to ensure that all efforts lead to some form of on-the-ground implementation. Examples include our role on various annex subcommittees of the Great Lakes Water Quality Agreement, participation on lake-wide management plan committees and work groups, as well as being a recipient of funding for implementation under the Canada-Ontario agreement.

Conservation authorities have also created their own implementation programs. For example, the Upper Thames River Conservation Authority's clean water program secures funding from foundations, the private sector, municipalities, and provincial and federal partners to offer incentives to private landowners for water quality best management practices. Examples of eligible projects include erosion control measures, remediation of faulty septic systems, restriction of livestock from watercourses, clean water diversions, and nutrient management plans. This very successful program has been in place for more than 10 years. The intent has been to provide a stable umbrella incentive program for local landowners that uses, but is immune from, the cycle and confusion of short-term incentive programs.

Our regional clean water program has supported more than 3,000 projects on private lands, with a total investment of more than \$14 million. Federal funding has supported 7% of the program's total costs, meaning the benefits have been more than 14 times the value of the federal investment. The ability of conservation authorities to leverage funding is a standard practice and creates value added for any participating partner.

Our clean water program has changed individual attitudes and behaviour and provides environmental benefits for the landowner, the watershed, and ultimately the Great Lakes. Greater benefits are limited only by funding and capacity.

The most important of your questions, however, relates to recommending best practices that will facilitate further remediation of areas of environmental concern within the Great Lakes basin. Historically, the approach to implementation of best management practices has been incentive based, voluntary, and targeted at rural constituents.

Conservation authorities have been a principal delivery agent for these programs for decades and combined with our technical assistance, they have been very successful from the perspective of landowner participation, satisfaction, and maximizing available funding. However, if actual lake and tributary water quality is our true outcome measure, they have been inadequate.

Current science is clear that water quality in Lake Erie is deteriorating. Within the Thames River watershed, our own watershed report cards demonstrate that, at best, our and your investment in water quality implementation programs has only managed to maintain water quality as status quo. This is not an outcome that any of us should be content with. Additional work is required. To that end, conservation authorities are advocating for the following.

First, additional funding for incentives and implementation is required. Science has proven that existing best management practices are effective; however, the current level of investment for implementation is inadequate to effect measurable improvements in water quality. The nine conservation authorities in the Lake Erie basin have worked together in the past to lobby for an increase in funding and capacity for implementation of best management practices, but to date we've been unsuccessful in securing significant new funding. In addition, the four conservation authorities in the western basin—again, the flashpoint—the Essex, Lower Thames, St. Clair, and Upper Thames, have recently agreed to collaborate to pursue enhanced and stronger implementation measures for this critical area of Lake Erie.

Second, research into new implementation technologies is also required. Environmental conditions have changed over time with elevated water temperatures and more extreme drought and flood events complicating water quality conditions. Research designed to develop new and more effective best management practices should always be encouraged to maximize any investments in implementation.

Finally, a broader and stronger policy approach is needed. Historical reliance on voluntary incentives and technical assistance-based policies has achieved a degree of success and does have a strong role in the implementation programs moving forward; however, consideration must be given to stronger regulatory policies as a complement. While there can be sector-based resistance to these classical command/control regulatory tools, the regulatory policy category also includes tools that focus on training, certification, and cross-compliance between programs, all of which are effective, as well as more publicly palatable. The current state of Lake Erie's water quality, as well as the impaired health of contributing tributaries, makes it clear that a stronger and expanded policy approach to complement voluntary incentive-based programs is required.

I appreciate that the suggestions provided here require a significant financial investment. However, 60 years of experience with implementation by Ontario's conservation authorities has demonstrated that the science and best management practices are largely in place to improve the water quality of the Great Lakes. The implementation infrastructure, which includes technical experts, relationships, and communication tools, is also in place through conservation authorities and other partner agencies.

The remaining keys to improving Great Lakes water quality are a significant increase in incentive funding for implementation and the development of complementary and stronger implementation policies.

I'd like to thank you for your time and the opportunity to share these perspectives.

Like the other panel members, I am certainly available for any questions.

● (1600)

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

We're going to move now to our opening round of seven minutes of questions. We'll begin with Mr. Woodworth.

**Mr. Stephen Woodworth (Kitchener Centre, CPC):** Thank you, witnesses, for your attendance today. I was writing furiously, but I know I'll have to go back and reread the transcript to get all the details. You've given us a lot of information.

I'd like to start by asking a little bit about the Randle Reef project that you mentioned, Mr. Bitran. It was, I think, a \$46.3-million project. I think you mentioned that. I wondered if you could give us some details, particularly around the Government of Canada contribution to that project and what it has accomplished.

**Dr. Maurice Bitran:** Randle Reef is an area in Hamilton bay that has contaminated sediment from long-term steel and other operations nearby. It has been an area of cooperation between the governments of Canada and Ontario, some local governments, and also companies in the area.

I understand that the contribution of the Government of Canada is also in the amount of \$46.3 million, matching the provincial investment. There is also, I understand, further contribution from a steel company in the area. There's also word from the local municipality. It involves the building of a dry dock where the

sediment will be taken up, cleaned, and isolated from the rest of the harbour.

**Mr. Stephen Woodworth:** Do you have an anticipated timeline for completion of that particular project, for where it's at?

**Dr. Maurice Bitran:** I don't think so. The work has just started.

**Mr. Stephen Woodworth:** Is it a problem that the sediment and the chemicals in the sediment leach out into the water? When this is cleaned up, what effect will that have on the quality of the water in the Hamilton area?

**Dr. Maurice Bitran:** The contamination in the area is mostly coal tar, which contains polycyclic aromatic hydrocarbon. There are carcinogenic compounds in it, so it is a concern for aquatic life in the harbour. Yes, waves and shipping would disturb the sediment and move that around, dispersing the toxins.

After the cleanup of the tar ponds in Nova Scotia, which is in progress, this is the largest coal tar contaminated sediment site in Canada.

**Mr. Stephen Woodworth:** I think it was you who mentioned as well that the new Canada-Ontario water agreement will specifically target or complete the cleanup of five areas of concern. Did I get that right, and if so, could you give me some further detail on that?

Whether it's from you or one of your colleagues, I'd like to know which five areas will specifically be subject to that agreement and if you have any notion of a target as to a timeline for their cleanup.

**Dr. Maurice Bitran:** The effort is to continue the restoration of the areas of concern. Over the next five years, the goal is to complete priority actions for the delisting of five areas of concern: Nipigon Bay, Peninsula Harbour, Niagara River, Bay of Quinte, and the St. Lawrence River at Cornwall.

**Mr. Stephen Woodworth:** Very good; that's the target over the next five years.

As I understand it, up to this point in the history of these efforts, there have only been four or five delisted areas of concern to date.

**Dr. Maurice Bitran:** It's five, that's correct.

**Mr. Stephen Woodworth:** So in effect this new initiative will double the number of areas of concern that are being addressed. Is that correct—another five on top of the ones that have already been dealt with?

**Dr. Maurice Bitran:** These efforts are to achieve the delisting of the areas of concern, and it's anticipated that the goal of delisting them will be achieved by 2025. Sometimes you do all the remediation that it is possible to do and then you have to leave the site to recover over time. The delisting will take place when the ecosystem is totally restored, but the cleanup activities and the restoration activities are finished sometime before that.

● (1605)

**Mr. Stephen Woodworth:** Thank you.

I often hear from constituents who have been alarmed by reports that there is no longer any protection for water in Canada. I have the idea that the Ontario government has a pretty vigorous water protection policy and that there is in fact in Ontario a regulatory approach toward the protection of water in Ontario.



Am I right about that?

**Dr. Maurice Bitran:** I would say that Ontario has a very rigorous water protection system. I will let my colleague Brian Nixon talk to that, being as it's his specialty, but it is composed of source protection legislation and testing legislation. As well, the recommendations from the Walkerton commission have all been implemented. I would say it's among the best in the world.

Brian, do you...?

**Mr. Brian Nixon (Director, Ministry of the Environment, Integrated Environmental Policy Division, Government of Ontario):** Through you, Mr. Chair, after the Walkerton tragedy, subsequent governments committed to implement all of Justice O'Connor's recommendations. I think it's fair to say that from a drinking water perspective, Ontario now has one of the most robust safety nets in the world, not just in North America. Mr. Bitran talked today about not only Ontario investments but also the strategies the government has put in place both legislatively and from a policy perspective to focus not just on drinking water but also on broader water ecosystems in the province, so the protection is very substantial.

**Mr. Stephen Woodworth:** Thank you.

**The Chair:** You're just about three seconds from the end of your time, Mr. Woodworth.

**Mr. Stephen Woodworth:** And you just used it up for me.

**The Chair:** I did.

**Mr. Stephen Woodworth:** I'm very grateful for your generosity.

**The Chair:** We're going to move now to Mr. Bevington for seven minutes.

**Mr. Dennis Bevington (Western Arctic, NDP):** Thank you, witnesses, for coming here today.

I'm going to focus a bit on the Upper Thames River, because I think I'm a little bit more experienced with rivers than with lakes.

I am interested in some of the things you've identified. Quite clearly you consider this to be one of the areas of great concern in the Great Lakes. The World Wildlife Fund gave you an overall poor score on the river. They especially noted water flow. Are there lots of diversions out of the river? Does the flow rate change quite dramatically over the course of the year?

**Mr. Ian Wilcox:** Thank you for the question.

Not only did World Wildlife Fund give us a poor score, we gave ourselves a poor score in our own report cards for water quality as well. The Thames River basin is incredibly developed. Most of the wetlands that would have been in place historically, which moderate flow and maintain flow through dry summer periods, have been drained. Very few remnant wetlands are left.

The solution 50 years ago was to develop flood control infrastructure, first of all to prevent flooding. Those dams and reservoirs are maintained by the conservation authority, but their secondary purpose is what we call flow augmentation. They're designed to capture the spring runoff, which hopefully will happen soon. Then through the course of the summer we discharge water to

try to ensure water levels are stable and supportive of ecosystem health.

The watersheds are also very intensively farmed. Field tile drainage is everywhere. That is very efficient and very effective at drying the land for agricultural production, but again it does not retain a lot in the way of a water supply through the summer to continually recharge the streams and water courses.

**Mr. Dennis Bevington:** So is the demand for water in the system very high?

**Mr. Ian Wilcox:** Sorry, I didn't get to that part.

Actual water takings are quite low in our watershed for agricultural purposes. It's not used even for domestic purposes. Water supply in our watershed is either provided by ground water or it's piped from the Great Lakes. In fact, water takings for consumptive uses are relatively low compared to those in our neighbour watersheds like the Grand River in Kitchener-Waterloo.

• (1610)

**Mr. Dennis Bevington:** What would you say is the change in...? Does the land take on more water then?

**Mr. Ian Wilcox:** In all honesty, the principal reason would be the loss of wetlands. We've lost over 80% of the wetlands. Wetlands provide a very, very important function of retaining water just as a dam or a reservoir would. In the spring, wetlands retain the water and slowly discharge it. Through the course of the summer, the wetlands are gone for the most part. It's just a function of the land use, not necessarily because of water takings.

**Mr. Dennis Bevington:** Okay.

I have a question here about this southwestern landfill. This might go more to the future pressures on the river system, but there are some concerns about this new landfill site. Do you do future casting for the river basin, anticipating what the additional pressures are going to be on the river system? Do they come into account when you're looking at what other people are contributing? In other words are you looking at a—

**The Chair:** Mr. Bevington, apparently we're having some trouble with interpretation.

**Mr. Dennis Bevington:** I'm sorry if I'm a little too complicated.

**Voices:** Oh, oh!

[Translation]

**Mr. François Choquette (Drummond, NDP):** Mr. Chair, could you check whether the French interpretation is working?

[English]

**The Chair:** It's working fine for me. The English is coming through for me. Is anyone else picking up the French? Okay?

Mr. Bevington, we did stop the clock for you.

**Mr. Dennis Bevington:** Fair enough.

You've said that you've been unable to make a lot of progress in improving the water situation there, but are you also looking at what the future is going to bring—more development, more population, and more impacts on the water system—when you're talking about regulation? Or are you mostly in a reactive mode, where you look at the situations that actually happen rather than forecasting in order to develop regulations or land use policies?

**Mr. Ian Wilcox:** That's a great question with kind of a complicated answer. For forecasting for the future, I would say certainly that's a big part of our job. A large responsibility is flood control, maintaining flows and protecting people and their property. From a forecasting point of view, we certainly are involved in collaborations with the University of Western Ontario and different organizations about future environmental states and what that might mean for water supply and for flood risks throughout the watershed. Yes, we do that.

If your question is more specifically about whether we are forecasting and anticipating future development, future population growth, certain types of land use, or certain types of development, I would say that we do not engage in that specifically. However, when we have a proposal or a development like the southwest landfill that's being proposed, we are certainly fully engaged in the whole environmental assessment process and in providing comments. We are a commenting agency that does bring the science forward about what the potential impacts of those developments can and will be.

On forecasting, we're not reactive in the sense that you build the landfill and then we figure out if there's going to be a problem. We certainly are engaged in answering that question before the development is finally approved through our land use planning process, but we do not go so far as to try to anticipate 20 or 30 years from now what the population, the different land uses, or the different developments might be.

**Mr. Dennis Bevington:** Well, here's what my question would be. If you look back, if you had said years ago that you wanted to improve the river and you anticipated that the population in the region was going to go up so that you would need fairly stringent requirements in order to improve the river, would that have made a difference to the problem you see today?

•(1615)

**The Chair:** A short answer, please.

**Mr. Ian Wilcox:** Mr. Chair, we are engaged in those activities. The showcasing water innovation program was mentioned by my colleagues here. We are engaged in a water management plan right now in trying to anticipate population growth for the next 20 years generally through the watershed. We did the same thing in the 1970s through the Thames River basin study.

We have conducted those studies and tried to anticipate to some extent. Our experience is that the reality of what happens is usually a little different from what the plans anticipate, but frankly, in our watershed.... I'll be clear. The Thames River basin is what I'm putting forward as a critical area. The population growth is not a significant driver like it is closer to the GTA or even to the Grand River watershed. Population growth is very slow and steady. The problems we see today in the Thames River basin are the same problems we had in the 1970s.

**The Chair:** Thank you.

We were a minute over there.

**Mr. Dennis Bevington:** Thank you very much.

**The Chair:** We're going to move now to Mr. Storseth for seven minutes.

**Mr. Brian Storseth (Westlock—St. Paul, CPC):** Mr. Chair, I'll be sharing some of my time with Mr. Sopuck.

I have to admit, Mr. Richardson, that being from Alberta, I had very little knowledge when it came to the Great Lakes and in fact Lake Simcoe when I first came up here, other than what I learned in school. Our colleague from Barrie, Mr. Patrick Brown, has been a strong advocate of Lake Simcoe. He is constantly educating me and other colleagues on the importance of the lake, especially the Lake Simcoe cleanup fund.

It's my understanding that our government has been a constant contributor to this fund, and obviously subsequently to the Lake Simcoe and southeastern Georgian Bay cleanup fund.

Could you speak to the results of these funds and how they've helped contribute with remediation efforts?

**Mr. Jim Richardson:** Environment Canada and Agriculture and Agri-Food Canada have been active participants in the Lake Simcoe protection plan, initially through, as you suggest, funding on the lake, and currently funding through the Georgian Bay-Lake Simcoe initiative.

Much of the work within the agricultural sector has gone towards enhanced best practices. Starting with the Canada-Ontario environmental farm plan, which was a focus in the area, we've topped that up through supplemental programs to increase the attractiveness of the plan and implement a number of best management practices programs.

In addition to the farm-by-farm programs, they've contributed towards research activities. Currently we're in discussions with them on issues surrounding waste-water treatment from agricultural operations, whether it's in the Holland Marsh, which is Canada's centre for organic vegetables, in the potato fields that are found on the edges of the watershed, or in the sod-growing districts in the southeast corner of the watershed.

In all of those we're looking at programs to manage waste water effectively from both an environmental and a cost perspective, to control drainage to prevent low flows in the summer and address water quality issues, and to adopt innovative technologies that look at things like recirculation for processed waste water from potatoes and carrot processing, etc.

**Mr. Brian Storseth:** Thank you very much.

You talked about the environmental farm plan. I assume this is a voluntary program. What kind of uptake do you have, percentage-wise or numbers-wise, with the environmental farm plan?

**Mr. Jim Richardson:** I can't quote you the numbers on the watershed basis for Lake Simcoe, but in Ontario there are about 59,000 farms in the province, and 23,000 best practices have been funded over about 13,000 different farms.

We find that for every dollar that Canada and Ontario put in through the Growing Forward 1 program, we leverage about \$3 to \$4 of farmer investment in best practices. That's only for those people who actually come to us for money. Some people take the workshops and go do the work on their own.

•(1620)

**Mr. Brian Storseth:** Yes, absolutely. Thank you very much for that.

Mr. Nixon, you talked about the regulatory approach that the Province of Ontario has, and its being one of the pinnacles of the country. Could you tell me something that stands out to you that would make it surpass, say, many of the other provinces, or something that the other provinces perhaps should be looking at?

**Mr. Brian Nixon:** Mr. Chair, I guess it started with the Safe Drinking Water Act, which the government of the day committed to putting in place. It focused on a complete overhaul of regulatory.... It put strong regulations in place for the treatment of drinking water and the licensing of operators of those systems. It established a drinking water quality management standard and a chief drinking water inspector for the province. Annual reports that have come out have demonstrated since that time that we have, I think, 99.9% quality drinking water coming out of the tap, which is a significant achievement.

There are things of that nature. Initially the focus was on drinking water, and subsequent to that time, as has been mentioned today, the focus has been around protecting sources of drinking water to prevent contamination from getting into the system, which then has to be treated. Again, I think it's fairly leading-edge in terms of the focus that has been placed through legislation and regulations and through work locally with conservation authorities like the one for the Upper Thames and others to develop plans for the protection of those sources.

**Mr. Brian Storseth:** Have you been able to carry that over with regard to first nations inside the province of Ontario?

**Mr. Brian Nixon:** We have worked with the federal government on pilot projects within Ontario for demonstrated innovative water technologies on reserve. That was a pilot program we worked closely with the federal government on in the past couple of years.

It's recognized that each province has its own regulatory system in place for the protection and management of drinking water, and Ontario is no different.

**Mr. Brian Storseth:** What measurable results do you have out of this program you just talked about?

**Mr. Brian Nixon:** I'm sorry, I don't have those in front of me. I believe the program is still in play in terms of working those pilots out.

**Mr. Brian Storseth:** No problem. If you do come across—

**Mr. Brian Nixon:** I certainly can get that information for you.

**Mr. Brian Storseth:** Thank you very much.

How much time do I have, Mr. Chair?

**The Chair:** I'm very generous and I'll let you have 15 seconds from Mr. Sopuck.

**Voices:** Oh, oh!

**The Chair:** We'll move over to Mr. McKay.

**Hon. John McKay (Scarborough—Guildwood, Lib.):** Thank you, Chair, for that seven minutes and 15 seconds.

Thank you, all, for your presentations here.

Our ambassador in Washington, Mr. Doer, recently said that water is the new oil and that the dispute over water will make Keystone look like child's play.

The Great Lakes basin is probably going to be the epicentre of that dispute in the foreseeable future. This is not just a theoretical possibility, because there is a small city in Wisconsin that's applying for a transfer of water from the Great Lakes basin to its basin. I don't know what it is, but it's not the Great Lakes basin.

This is my question for the folks from Ontario: Do you have a policy and what is that policy? Also, what jurisdictional authorities do you have, or potentially do you need, with respect to interbasin transfers?

**Mr. Stephen Woodworth:** On a point of order, Mr. Chair, I didn't want to raise this until I actually heard Mr. McKay's question. There was quite a preamble to it.

The concern I have is that I'm really quite interested in Great Lakes water quality. That's why I asked for this study. I suppose I don't begrudge Mr. McKay an interest in the question of international water transfers, but I don't believe it's relevant to the study, and I would prefer to hear evidence from the witnesses about Great Lakes water quality. So, I would ask you to disallow the question for lack of relevance to this study.

•(1625)

**The Chair:** Mr. McKay, I would agree that the focus of this study is clearly on water quality.

**Hon. John McKay:** Well, if there's no quantity, there's no quality.

**A voice:** That's correct.

**Hon. John McKay:** So, that is, frankly, an irrelevant objection. So the question is in order, and I frankly don't think it's up to other members to decide what is or is not relevant to a question.

**The Chair:** Mr. McKay, could you just focus—

**Hon. John McKay:** Mr. Chair, look at the three areas. Identifying locations: Well, the whole basin is in play here. Reviewing the efforts that are planned: I'm asking specifically what is the policy and what's the jurisdiction? Recommending best practices: I'm asking, because this train is coming down the tracks.

**Mr. Stephen Woodworth:** Mr. Chair, frankly, Mr. McKay and I get along well enough that I won't take it as an insult that he characterizes my point of order as irrelevant.

I have not heard Mr. McKay suggest anything in his question about water quality. I don't think that the issue of transfers of water licence automatically results in water quality issues. There has been no foundation laid at all to suggest any connection between these issues whatsoever.

**The Chair:** Mr. McKay, I'm going to ask you to proceed to water quality issues, please.

**Hon. John McKay:** In terms of the water quality issues, what would be the effect of transferring between watersheds?

**Mr. Brian Nixon:** Mr. Chair, from a water quality perspective, my colleague Mr. Richardson is a former colleague from the ministry.

Ontario has specific laws in place that restrict the taking of water, both from the Great Lakes and obviously from groundwater sources. We have a Great Lakes charter, which is an agreement between Quebec, Ontario, and the Great Lakes states, that completely restricts the movement of water on a quality basis outside of the Great Lakes basin.

**Hon. John McKay:** How does that work? Does an entity make an application? When you say there's a charter, is that a legally enforceable charter?

**Mr. Brian Nixon:** It's a non-binding agreement among the parties.

In terms of Ontario's system—and the question was asked earlier, Mr. Chair, about the type of regulatory system we have in place—we have a fairly robust what's called the permit to take water program dating back to the 1960s, I believe, under the Ontario Resources Water Act, which sets limits on how much water can be taken, establishes rules for the review of those takings, and requires a permit, an application, scientific review, and that sort of thing.

**Hon. John McKay:** Is that within the watershed itself though?

**Mr. Brian Nixon:** That's for any water taking in Ontario above 50,000 litres a day.

**Hon. John McKay:** Okay, but all of Ontario is within the Great Lakes watershed though, is it not?

**Mr. Brian Nixon:** Yes.

**The Chair:** All of Ontario is not within the Great Lakes watershed.

**Hon. John McKay:** I was just going through that.

**The Chair:** All of the watershed is in Ontario.

**Hon. John McKay:** Yes, that's correct.

So would that 50,000 litres a day only apply to cities or municipalities or whatever, even businesses, within Ontario's jurisdiction? Or does it apply to the eight Great Lake states somehow?

**Mr. Brian Nixon:** That's Ontario's law, Mr. Chair.

**Hon. John McKay:** Okay.

What about this charter that you have with the eight states plus Quebec? How does that apply?

**Mr. Brian Nixon:** It restricts the movement of water outside of the Great Lakes basin and sets out requirements for movement of water between basins of each of the Great Lakes.

• (1630)

**Hon. John McKay:** How would the example that I cited apply to this Great Lakes charter?

**Mr. Brian Nixon:** I think I've indicated that the agreements we have in place with our neighbouring jurisdictions plus Ontario law itself would prevent the movement of water out of the basin into what has typically been southern jurisdictions that are seeking water.

**Hon. John McKay:** They're seeking 900,000 gallons a day. That's a pretty serious amount of water.

**Mr. Brian Nixon:** It's going to be subject to public review, I believe, under the terms of the charter, and debate and probably intervention potentially through the courts, depending on the decisions that are made. Each of the parties to that agreement have the ability to challenge decisions made within those jurisdictions in the courts.

**Hon. John McKay:** Does Ontario have veto rights?

**Mr. Brian Nixon:** I'm sorry, Mr. Chair. I'm not familiar with that level of detail. Perhaps Mr. Richardson may be.

**Mr. Jim Richardson:** The agreement provides a right to be consulted for any large consumptive takings or exports from the basin, and a right to be heard. It provides certain legal remedies. It would not constitute a veto power, but it does allow you to be heard. It's a reciprocal process, so each of the states and the two provinces have granted that privilege to each other, to act in the best interests of the watershed.

**Hon. John McKay:** Have each of the provinces and the states granted that to each other?

**Mr. Jim Richardson:** Yes, of the Great Lakes states.

**Hon. John McKay:** So if Michigan, for instance, didn't like what was proposed here, does it have a right to be consulted?

**Mr. Jim Richardson:** It has a right to be consulted, and be heard, and given a legal standing in the process. The process varies for each jurisdiction.

**Hon. John McKay:** Is there a tribunal that hears the application?

**Mr. Jim Richardson:** There is a regional body that coordinates the process, but the hearing is in the local jurisdiction.

**Hon. John McKay:** So, in this instance we're talking about a transfer out to Wisconsin. So is Wisconsin the jurisdiction?

**Mr. Jim Richardson:** Yes. If it's Wisconsin that the water taking occurs in. I'm sorry, I'm not familiar with the particular application you're speaking to. Let me turn it around and say that if Ontario were to do this, when we went out for public consultation, it would give the Great Lakes states the opportunity to comment in our public consultation process. As well as that specific, it also lays out a number of undertakings that deal with conservation practices, consistency of approval standards, return of water quality, and water quantity to the extent practical.

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

We move now to Madame Freeman for five minutes.

[Translation]

**Ms. Mylène Freeman (Argenteuil—Papineau—Mirabel, NDP):** Thank you, Mr. Chair.

My question is for the witnesses from the Government of Ontario.

Do you think we should do a study on the quality and level of water in the Great Lakes?

**Dr. Maurice Bitran:** On the water quality?

**Ms. Mylène Freeman:** When a study is done on water quality, should the water level also be studied?

[English]

**The Chair:** Sorry, Madame Freeman.

The committee agreed to the criteria that I pointed you to at the outset of our meeting today, and I would encourage us to continue. I don't think it's up to the witnesses to define the scope of this committee study. The committee has agreed to the scope.

At this point, I'm asking you to confine your questions to water quality. That's what our witnesses came prepared to discuss today. They're not prepared to discuss quantity, and I would ask you not to put them into that situation. Please proceed.

[Translation]

**Ms. Mylène Freeman:** Actually, I was referring to the water level, not the quantity. If we want to be technical, we will use the terms I have already used.

Honestly, I was simply asking...

[English]

**The Chair:** Madame Freeman, if you choose to go down this route, I will give your time to the next questioner.

• (1635)

[Translation]

**Ms. Mylène Freeman:** I simply wanted to ask the witnesses...

[English]

**The Chair:** Quantity and levels are synonymous as far as the study of this.... We're going to work on water quality.

[Translation]

**Ms. Mylène Freeman:** Okay.

Ontario has implemented projects to deal with the destruction of wetlands. So we can talk about wetlands and coasts and the riparian habitat. What action are you taking in that respect?

[English]

**Dr. Maurice Bitran:** I mentioned some work on wetlands during my presentation.

As was indicated before, the wetlands are very important because they're a habitat for wildlife and fish. Therefore, we're mapping the significant wetlands in the province. This mapping leads to understanding them, cataloguing them, and undertaking work to improve them.

[Translation]

**Ms. Mylène Freeman:** My question had to do with the details of what is currently being done.

[English]

**Mr. Brian Nixon:** Mr. Chair, Mr. Bitran's comments reference a provincial policy statement. That policy statement governs control of land use in the province and includes provisions to protect significant wetlands.

Our sister ministry, the Ministry of Natural Resources, has a wetland classification system that is reflected in the policy statement. In turn, there are prohibitions on development within wetlands that fall at the higher levels of that classification. The most significant wetlands in Ontario, particularly those that have an impact on things

like water quality and the quality of the Great Lakes, are protected under that policy. Municipalities and others who are undertaking decisions around land use, up to and including property owners, are subject to those policies.

**Ms. Mylène Freeman:** I'm going to switch to English because I'm not entirely sure.... Is the question I'm asking not relevant?

The question I'm asking is, what actions are being taken to protect wetlands by the Government of Ontario?

**The Chair:** Mr. Richardson.

**Mr. Jim Richardson:** My ministry administers the Drainage Act. In the last year we've worked with the conservation authorities of Ontario, the drainage superintendents in Ontario, who are usually municipal employees in charge of drainage in their rural municipalities, and the Ministry of Natural Resources to put forward protocols to better manage the contentious issues between drainage, fisheries protection, and wetlands protection, in a fashion that respects the needs of all participants and gives some predictability to the process.

**The Chair:** Thank you very much, Madame Freeman.

We'll move now to Mr. Sopuck for five minutes.

**Mr. Robert Sopuck (Dauphin—Swan River—Marquette, CPC):** I found these presentations most interesting and informative. I want to compliment all of you on them.

Mr. Wilcox and Mr. Richardson, I was especially pleased at your strong focus on agriculture. I represent a western Manitoba constituency with a lot of farmland. The issues you described are near and dear to my heart.

Mr. Wilcox, you used the phrase “incentive based, voluntary, and targeted” incentive programs, and I—

**The Chair:** Excuse me, could we just have attention, please, we're having one of our witnesses being asked a question.

Mr. Sopuck.

**Mr. Robert Sopuck:** I very much approve of those words because having dealt with a lot of farmers myself in a previous life, and now, I think that's a wise way to go.

You said that additional funding would be required for incentives to really make that style of programming work. That tells me that in your mind the issue is actually one of scale. It's not that we don't have the right tools; it's an issue of scale. Is that correct?

**Mr. Ian Wilcox:** That's absolutely correct. We're trying to put a house fire out with a garden hose.

**Mr. Robert Sopuck:** Okay.

Under our national conservation plan—this committee held hearings; it's being developed—I would assume you would strongly support what the committee talked about, the creation of large-scale, incentive-based conservation programming on private land.

• (1640)

**Mr. Ian Wilcox:** I'm not familiar with the program but—

**Mr. Robert Sopuck:** But the concept....

**Mr. Ian Wilcox:** —from what you've said, absolutely.

**Mr. Robert Sopuck:** The national conservation plan was an election commitment of our government, and those of us around the table here, on all sides of the House, concluded that an incentive-based program should be a part of that program.

I was interested in your point, Mr. Wilcox, about broader and stronger regulations to complement the incentives. I'm directing my comments to the privately owned agricultural landscape only. What specific regulations do you want to see beefed up or new regulations put in place?

**Mr. Ian Wilcox:** It's a great question.

I have to refer to the work of my colleagues and the work of even the International Joint Commission. This has been a big discussion recently.

There are certain practices; voluntary incentive programs only go so far. There are practices that have a major impact.

I'll just pick on a few. Winter spreading of manure, for example, is an issue; the requirement to have cover crops to prevent more erosion and phosphorus delivery in the spring; and septic system inspections, routine inspections, or inspections at the time of title transfer, if there is a sale. Those types of specific practices can be regulated.

Beyond that, I'm lumping also into this what I call cross-compliance. I think you've heard a few things here. We have an incentive-based program that we deliver, the clean water program, but we require any landowners, before they're eligible, to complete an environmental farm plan, which Mr. Richardson talked about. It's not a traditional form of regulation, but the cross-compliance, you have to have the conservation farm plan in place first before you're eligible for any help from incentives.

**Mr. Robert Sopuck:** I'm glad you clarified that because cross-compliance in the American agricultural policy framework usually means that a producer wouldn't be eligible for income support programs unless they.... So that's not what you're talking about in terms of cross-compliance.

**Mr. Ian Wilcox:** No.

**Mr. Robert Sopuck:** Okay, great. That's most helpful.

In terms of the regulatory approach, with what you listed there and what you omitted, you don't want to regulate farmers' use of their own land, in terms of the decisions they make on their own land to make their farms more efficient and more economical for them and their families.

**Mr. Ian Wilcox:** I don't think we're at that point. I don't think that's efficient or effective in the long run.

**Mr. Robert Sopuck:** Yes. I strongly support what you just said.

In terms of on-farm incentive-based programming, would you like to see Ontario and Canada adopt U.S.- and European-style farm programs, where environmental conservation is a significant part of their agricultural policies?

**Mr. Ian Wilcox:** Again, our work is more local. I'm not as familiar with national and international. Absolutely, we're moving in that direction, but it has been 30-40 years of slow progress. Again, when I'm talking about stronger policies, if there's a requirement to

participate in conservation farm planning for whatever cross-compliance measure, I would support that, absolutely.

**Mr. Robert Sopuck:** Thank you.

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

We'll move now to Mr. Choquette for five minutes, please.

[Translation]

**Mr. François Choquette:** Thank you, Mr. Chair.

My first question is for the representatives from the Ministry of the Environment and the Ministry of Agriculture and Food.

As you know, the Canada-Ontario agreement is still being negotiated. Many groups are asking what is going on with this agreement. When will it be signed? Are you involved in the current negotiations?

**Dr. Maurice Bitran:** I am the lead negotiator for Ontario. We are pleased to have concluded negotiations with my colleague from Environment Canada. The process to have the agreement approved by the authorities of both governments is currently under way.

**Mr. François Choquette:** So it is recent. Has the agreement been signed?

• (1645)

**Dr. Maurice Bitran:** Yes, recently.

**Mr. François Choquette:** That is very good news. I know many people and groups who will be pleased to hear that.

There has not been an agreement since 2012. During negotiations, did you still receive funding from the federal government to continue to ensure the water quality?

**Dr. Maurice Bitran:** This was the eighth agreement negotiation. Some processes are under way, even during negotiations. These negotiations have taken a lot of time, but they did not have a negative impact on the work that the province and the federal government are doing on the Great Lakes water quality.

**Mr. François Choquette:** Thank you very much.

A little earlier, you spoke about the importance of climate change. I think that Ontario has the municipal adaptation and resiliency service. Can you tell us a little bit about that program in relation to water quality in the Great Lakes?

**Dr. Maurice Bitran:** It is an information program for the municipalities. There is a website and a training program for municipalities to implement efforts to prevent the negative effect of climate change, such as severe storms and things like that.

**Mr. François Choquette:** If I understand correctly, the responsibility for the Experimental Lakes Area has been transferred to the Government of Ontario. A lot of work was done on the phosphorous in those lakes. What is happening with that? Will you continue to do research? Will there be research to improve the water quality in the Great Lakes?

**Dr. Maurice Bitran:** One of my colleagues is responsible for this file. Indeed, the experimental station has been transferred and the Ministry of the Environment has signed an agreement with an institute to continue to operate the scientific station. Lastly, research is being done not only on the water quality, but also on the quality of the lake environment. How can the lake recover, for example, from contamination?

**Mr. François Choquette:** Will that help us in our work to fight for the water quality in the Great Lakes? Will it apply? Will consideration be given to the water quality in the Great Lakes when this research is done?

**Dr. Maurice Bitran:** I'm not really aware of the details of the research, but I suppose that a few aspects might be related to the water quality in the Great Lakes.

**Mr. François Choquette:** I think all the committee members are interested in knowing whether there are studies that might help improve the water quality in the Great Lakes.

Could you ask your colleague to send the committee that information?

**Dr. Maurice Bitran:** I will get the information and send it to the committee.

**Mr. François Choquette:** Thank you very much.

I don't have much time left, but I would have liked to speak with Mr. Richardson about the famous joint committee.

[English]

**The Chair:** I'm sorry, Mr. Choquette, but you only have about five seconds, so I think we'll move on.

[Translation]

**Mr. François Choquette:** Right. Perhaps I will come back to it later.

[English]

**The Chair:** We'll come back to you in a few minutes.

We'll move now to Mr. Toet, for five minutes.

**Mr. Lawrence Toet (Elmwood—Transcona, CPC):** Mr. Chair, unlike my colleague Mr. Storseth who tries to be generous, I actually am generous, and I'm going to give my full five minutes to Mr. Woodworth.

**Voices:** Oh, oh!

**Mr. Stephen Woodworth:** Thank you very much, Mr. Toet and Mr. Chair.

I'll return to the witnesses. I want to assure them that the only axe I have to grind in this study is to investigate the question of how we can get the Great Lakes water basin to a position where it is swimmable, drinkable, and sustainable. Whatever other political axes may be out there, I'm not here to deal with them.

Along that line, I'd like to go to Mr. Wilcox for a moment.

The Government of Canada introduced a new program a year or two ago, the recreational fisheries conservation partnerships program. I wonder if you're aware of it, Mr. Wilcox, and whether or not there have been any applications received. It's designed to encourage local participation in the improvement of waterways and

the improvement of fisheries in the province. I wonder if there has been anything in your watershed in that regard.

• (1650)

**Mr. Ian Wilcox:** Mr. Chair, I am not familiar with the program. I apologize. Certainly we do work through the Ministry of Natural Resources for fisheries enhancement work, but that program specifically I am not familiar with.

**Mr. Stephen Woodworth:** I'm going to put you on my list to send you some information, because I think you'll be interested in it once you see it.

**Mr. Ian Wilcox:** That would be great.

**Mr. Stephen Woodworth:** The next question I will ask will be for Mr. Richardson.

As I said before, I was writing pretty quickly, but I missed a few of the details regarding the farm cost-share programs that you mentioned in your remarks, Mr. Richardson. I had noted that there were 23,500 projects and that there was a total of about \$352.9 million, which involved provincial and federal money leveraged with private money.

I wondered if you could give me some further details, the name of that program, the timeline, when it was established, and how long it has been going such that we've accumulated 23,500 projects. Did I get that figure right? Are there any other details that you can give me about that, please?

**Mr. Jim Richardson:** Yes, certainly.

Mr. Chair, the formal name of the principal program I was referring to is the Canada-Ontario farm stewardship program. Colloquially, it's usually called the environmental farm plan. It's a joint federal-provincial program between Agriculture and Agri-Food Canada and the Ontario Ministry of Agriculture and Food under the Growing Forward 2 framework. It started off with the agricultural policy framework that ran for five years, Growing Forward 1, which was completed in 2013. We are in the first year of the Growing Forward 2 framework.

The statistic I can provide for you with respect to just this program is that we funded, in Growing Forward 1, so that's in that five-year timeframe from 2009 to 2013, 6,797 completed projects, with a gross cost of \$117 million, of which the joint federal-provincial cost share was \$29 million.

**Mr. Stephen Woodworth:** Were those equal contributions or not?

**Mr. Jim Richardson:** The program generally runs on a sixty-fourty basis, with the 60% being provided by the federal government.

**Mr. Stephen Woodworth:** Sixty per cent by the federal government?

**Mr. Jim Richardson:** Yes.

**Mr. Stephen Woodworth:** When I heard 23,500, did I just hear wrong or was that something else?

**Mr. Jim Richardson:** There are slightly different ways of calculating. Those were 23,500 best practices.

**Mr. Stephen Woodworth:** Best practices spread over 6,000 or 7,000 projects, actually. Thank you very much.

To go back to you, Mr. Wilcox, you gave us some excellent recommendations regarding the issue of western Lake Erie, the algae blooms, and targeted non-point control. Along the way, I think a phrase you used was a comprehensive Lake Erie plan. I am interested in hearing from all the witnesses about what effort, if any, has gone on up to this point to come up with a comprehensive Lake Erie plan.

**The Chair:** We'd love to hear from all the witnesses but Mr. Woodworth, your time is up. Maybe the witnesses can hold that question. I don't know if Mr. Carrie wants to incorporate that into his or not.

We'll move back to Mr. Choquette for five minutes.

[*Translation*]

**Mr. François Choquette:** Thank you, Mr. Chair.

I'll come back to my question on the famous report of the International Joint Commission entitled "A Balanced Diet for Lake Erie". The commission seems to think that agricultural practices and phosphorous are largely responsible for the pollution of Lake Erie. We talked about it a little off mic.

I would like to know what you think about this report. What measures does the Ontario Ministry of Agriculture intend to take as a result of the report?

[*English*]

**Mr. Jim Richardson:** The report prepared by the International Joint Commission and in which the Ministry of the Environment and the Ministry of Agriculture and Food participated is founded on work by the Science Advisory Board and the Water Quality Board. It states that if you look across the Great Lakes with respect to nutrients, Lake Erie, in particular its western basin, is in trouble.

A lot of the environmental conditions are dictated by the morphology, the shape of the lake. You can think of Lake Erie as actually three small lakes joined together: the western basin, which is very shallow, the central basin, and the eastern basin. In the western basin, the water mixes constantly. The two main tributaries to the basin are, as Mr. Wilcox suggested, the Maumee and Sandusky rivers coming from the United States, and the Detroit River coming through the international border.

The Maumee and Sandusky watersheds are developed extensively in agriculture, particularly row crops, corn, bean, wheat. They have identified that as the single largest contributor of phosphorus to that area. In aquatic systems, phosphorus is a very important nutrient. If you add phosphorus, things grow. It is considered to be the limiting nutrient and the most significant. That's why the discussion is focused on it.

If you recall back in the 1960s and 1970s, Lake Erie was referred to as the dead lake and through a lot of binational work, it was recovered. By the time I started practising in the 1980s, it was a lake in recovery and there were actually discussions that the phosphorus levels were getting too low. Since the 1990s, a number of things have changed. It seems to be related to the presence of invasive species, zebra mussels and quagga mussels, and changes in the food web. While we are still meeting those original objectives in the open water for phosphorus, now it looks like—and this is a theory, not a

fact—what was an acceptable level of phosphorus 15 years ago is no longer acceptable.

The other thing the report points out is that traditionally phosphorus exists in two states in water: dissolved and particulate phosphorus. The particulate phosphorus is usually associated with soil particles and in agriculture situations, runoffs, and erosion. Through much of the last century, the focus was on controlling total phosphorus. What the International Joint Commission report is suggesting is that we need to turn our attention to dissolved phosphorus now as being the most biologically significant, in that if you add dissolved phosphorus, algae grows really well.

In Ontario, I think we could say that they have many of the issues correct although they've extrapolated the data from American practices and American studies, which don't necessarily track the same in Ontario. We use different agriculture practices. We have somewhat different soils and the definition of large in the United States is much different from the definition of large in Ontario, order of magnitude quite oftentimes.

The best practices, the things that you can do to balance the proper use of phosphorus and other nutrients in the lake, those translate well across the borders. Under the Great Lakes Water Quality Agreement which came into effect a year ago, there is an annex that deals specifically with nutrients and it asks for a number of steps to be taken. We are participating with Ohio and a number of the binational jurisdictions on that task force.

Simply speaking, they're setting new objectives for the lake that will address these ecological endpoints, like harmful algal blooms, dissolved oxygen depletion, and cladophora growth as a first step that's to be done by 2016.

We're looking at a review of best practices across the jurisdictions, what works best where, and we're coming up with domestic action plans. That's already part and parcel of the Great Lakes Water Quality Agreement.

● (1655)

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

Thank you, Mr. Choquette.

We'll move now to Mr. Carrie for five minutes.

**Mr. Colin Carrie (Oshawa, CPC):** I'd like to start with Mr. Wilcox.

Since 2010, our government has been partnering with you in certain projects. I was wondering if you could provide some detail with regard to some of these projects, namely the Lake Erie binational nutrient management strategy, the Great Lakes nutrient initiative, and the Lake Erie lakewide action and management plan.

Could you give us a few more details on those?

● (1700)

**Mr. Ian Wilcox:** Yes, certainly.



Those projects you've mentioned are managed by federal and provincial partners. Conservation authorities, I have to be clear, are unique entities. We are mainly municipally driven, municipally funded, in terms of scale, very small scale, certainly from our provincial colleagues. About 20 years ago it became very obvious that we have a large role to play in these types of planning exercises, nutrient management strategies, and the rest, because we are an on-the-ground delivery agent.

It's always been our intent, our role, to participate in planning exercises. The ones you've talked about we've worked with Environment Canada, the Ministry of the Environment, Natural Resources, Agriculture and Food, to assist with planning exercises, whether that's community engagement... Again, we are small organizations. We like to believe we know people by their first name and can engage them in trying to bring these higher level planning exercises down to their front door.

We participate in the planning and in the information dissemination, but again, as I tried to provide in my opening comments, our role has always been to push, to make sure that plan equals work done on the ground. So in each of the cases you've mentioned, our role is to push it to implementation. I'll be very blunt, if there's funding associated with anyone, we're there with our hands out to make sure we can use and leverage that funding to get work done on the ground.

There's a whole variety of programs. There are the ones you've mentioned, the ones my colleagues have mentioned up here, where our role is to be there during the planning. We've been challenged in the past because there are 36 conservation authorities and when it comes to the Great Lakes there aren't enough seats around the table, so we've worked to regionalize our representation. But again, that's our only purpose in being there, to make sure. On the nutrient management strategy, for example, we have already changed our clean water program to elevate funding levels for nutrient retention plans. The report that was mentioned previously, just released from the IJC, we are again looking at our own implementation plan to see if we can modify it to take advantage of the latest policy and science.

**Mr. Colin Carrie:** Thank you very much for that.

I wanted you to comment on something too. I think Mr. Richardson brought it up, the Drainage Act.

One of the things I've heard over and over is that the educational component is huge. My friend Mr. Sopuck always brings up the importance of wetlands and this Drainage Act, when you're talking about partnerships.

I was wondering if you had any stats on the rate at which wetlands are now being drained and if you have any statistics with regard to the U.S.A. as well. I was wondering if you could comment. Also, Mr. Richardson, I'm wondering if you have any information on that. It seems as if these wetlands are the lungs of the Great Lakes. With our different partners there seem to be competing jurisdictional issues sometimes that we have to look at.

**Mr. Ian Wilcox:** The Drainage Act could have a whole meeting on its own, I'll say. I'll skip right to the wetlands.

At this point there should be no further draining of wetlands. In Ontario's land use planning policy, as Mr. Nixon has described, we

have regulations in place that prevent development, drainage of wetlands, through the Ministry of Natural Resources. That's for provincially significant wetlands. Conservation authorities also have their own statutory powers under the Conservation Authorities Act. We protect all wetlands. There is no development, no drainage of wetlands. I would argue, except in very rare circumstances, no further wetlands are being drained. The Drainage Act applies to areas apart from wetlands. I think Ontario, our jurisdiction, has done a good job.

I don't have information about the U.S. side, but I can certainly let Mr. Richardson comment further.

**The Chair:** Very briefly.

**Mr. Jim Richardson:** I don't have specific stats. Certainly we fund some portions of wetlands work under the Drainage Act where it's agricultural, and the vast majority of our budget has now gone to maintenance rather than construction of new drains. I agree with Mr. Wilcox that the rules largely prevent the draining of new lands, particularly any that are considered valuable.

On the U.S. side, the focus seems to be shifting from creating new wetlands for drainage to using wetlands to control water quality. There are some projects going that are looking at not just how much water is coming out of the drains, but the quality of the water that's discharged, and that goes back to that focus on dissolved phosphorus.

• (1705)

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

Thank you, Mr. Carrie.

We'll move now to Mr. Sopuck for five minutes.

**Mr. Robert Sopuck:** In terms of water quality, we get the impression from what we heard last week and what we read that point-source issues and the issue of toxics, while they're serious, are on their way to being dealt with.

Can we say, Mr. Richardson, that the next challenge is dealing with phosphorus inputs from non-point sources? Is that what the program should focus on?

**Mr. Jim Richardson:** Yes, from my perspective that's certainly what's in the context of the Great Lakes Water Quality Agreement. Nutrients were identified as a new priority. It has been there before, but it's certainly a much higher profile than in the past.

**Mr. Robert Sopuck:** Mr. Wilcox, you made the point that no more wetlands should be drained. I think I heard you say that no more are being drained. Are you saying to us that on privately owned agricultural land a producer is prevented from draining a wetland, specifically in a private land agricultural case?

**Mr. Ian Wilcox:** That's what I'm saying. Yes.

**Mr. Robert Sopuck:** Last time I asked about regulations on land use, so there are regulations in place that control land use on the privately owned agricultural landscape.

**Mr. Ian Wilcox:** Yes.

**Mr. Robert Sopuck:** I've heard of a program in Norfolk County called alternate land use services. Have you heard of that program?

**Mr. Ian Wilcox:** Yes.

**Mr. Robert Sopuck:** Is that the kind of model you would like to see spread across Ontario?

**Mr. Ian Wilcox:** That's a great question. We call the program ALUS.

**Mr. Robert Sopuck:** Yes.

**Mr. Ian Wilcox:** It's an incentive-based program. I'll be very honest. We struggle with the program because it provides a level of compensation that exceeds any program we've delivered, and it's an ongoing form of compensation to the landowner for the societal good that's being derived from whatever change he has made to his management and land use. I would say that I would advocate for anything that encourages further conservation. I struggle with the funding model associated with the ALUS program.

**Mr. Robert Sopuck:** I was involved with that program in a previous life. That funding model pays producers the opportunity cost. That is exactly what the European and the American programs pay. I would think that it's about time Canada stepped up to the plate and had programs of that same scale. That ALUS program is very strongly accepted by the agricultural community, isn't it?

**Mr. Jim Richardson:** Through you, Mr. Chair, certainly in the Norfolk region it has gained a lot of traction. Again, it's probably my jaded experience with a lack of funding for incentive programs. ALUS prescribes a model that has funding levels beyond what we've seen, but I'll tell you, if there is a political will to fund a program to that scale, then we're behind it all the way.

**Mr. Robert Sopuck:** Well, you never know.

**Mr. Jim Richardson:** That's true.

**Mr. Robert Sopuck:** Are you familiar, Mr. Richardson, with the New York City water supply watershed example? Upstream farmers were provided with incentives to change farming practices, and the subsequent improvement in water quality improved the drinking water quality for New York City. Is that something you're familiar with?

**Mr. Jim Richardson:** At a very superficial level, yes, I think you've captured it accurately.

**Mr. Robert Sopuck:** Again, that's like the ALUS program in Norfolk County, which is working, and the New York City water supply example is working. Would you say, Mr. Richardson, that this is the kind of programming that we should see on a much larger scale across Ontario and indeed across the country?

**Mr. Jim Richardson:** I echo Mr. Wilcox's comments that it's a very popular program. It does good work and it's very expensive. Part of the challenge going forward is finding an economic model. If you turn it into that kind of incentive program, you quickly get out of my level of expertise and start going into trade issues. You have to talk with somebody who knows more than I do about the economic model associated with that.

**Mr. Robert Sopuck:** Again, in a previous life I was involved with these kinds of programs, and all countries have agreed under the WTO that those are green box programs. So we're very safe on the trade side because the U.S. and Europe have had this kind of

programming for decades now. Canada is the only country that does not. I think there's lots of room to grow there.

• (1710)

**The Chair:** You have 30 seconds.

**Mr. Robert Sopuck:** I think I'll pass. Thank you.

**The Chair:** We have about two minutes.

Mr. McKay, do you want to take a crack at two minutes?

**Hon. John McKay:** Thank you for your generosity, sir.

**The Chair:** Well, I can make it a minute and a half.

**Voices:** Oh, oh!

**Hon. John McKay:** I thought it would be for your edification, Chair, that I looked up the purposes of this charter. It states:

The purposes of this Charter are to conserve the levels and flows of the Great Lakes and their tributary and connecting waters; to protect and conserve the environmental balance of the Great Lakes Basin ecosystem; to provide for cooperative programs,... etc.

It looks like level means quality and quality means level. There doesn't seem to be much difference in the minds of the people who wrote this charter.

The threshold is five million gallons, or 19 million litres. Can you give me an example of that in Ontario?

**Mr. Brian Nixon:** Mr. Chairman, largely those would be municipal sources coming out of the Great Lakes. For example, the city of London draws its water from Lake Huron.

**Hon. John McKay:** When the city of Toronto drew that water out of Lake Ontario to cool off all of the towers, is that an example of that kind of process?

**Mr. Brian Nixon:** They would have had to seek a permit.

**Hon. John McKay:** Thank you.

**The Chair:** I want to thank our witnesses for being with us.

Mr. Richardson.

**Mr. Jim Richardson:** Mr. Chair, may I make a slight correction?

To Mr. Woodworth's point, the 23,500 dealt with the timeframe 2005 to 2013. I misspoke.

**Mr. Stephen Woodworth:** Projects or best practices?

**Mr. Jim Richardson:** Projects.

**The Chair:** Thank you for that clarification.

Again, I want to thank our witnesses for being with us today. Thank you for your patience with us and for the great information you shared, both in your opening statements and in your responses to questions.

We're going to suspend just for a minute or two, and we'll reconvene in camera to take care of some committee business.

*[Proceedings continue in camera]*







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