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**Transcript of the public meeting held by  
the International Joint Commission  
on the Great Lakes Water Quality Agreement Review  
at Toronto, Ontario, on November 9, 2005  
(duration: 135 minutes)**

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**Transcription de la réunion publique tenue par  
la Commission mixte internationale  
sur l'examen de l'Accord relatif à la qualité de  
l'eau dans les Grands Lacs  
à Toronto (Ontario) le 9 novembre 2005  
(durée : 135 minutes)**

DAVID MILLER (Mayor, City of Toronto): Thank you very much, Herb, not only for your welcome, not only for holding these hearings in Toronto City Hall, in the heart of local democracy in Toronto, but also for your leadership for many, many, many years.

I'm really honoured that Toronto City Hall is hosting this consultation on the review of the Canada-U.S. Great Lakes Water Quality Agreement. I'd like to welcome our American colleagues as well; this is a joint consultation.

Toronto is the 13<sup>th</sup> in a series of 14 consultations by the International Joint Commission. As the Mayor of Toronto, I am pleased to host this meeting, and that's why I am attired, I hope, elegantly, which has nothing to do with the opening of the Royal Agricultural Winter Fair later this evening.

As the Vice-Chair of the Great Lakes and St. Lawrence Cities Initiative, I am also pleased to be a participant in this important consultation about one of Canada's most precious resources.

And I'd like to thank the co-chairs of the International Joint Commission, the Right Honourable Herb Gray, the Canadian co-chair, and Dennis Schornack, the American co-chair. We're all grateful for your commitment to this review of the Canada-U.S. Great Lakes Water Quality Agreement through this very extensive public consultation.

And I'd like to thank all of the attendees, the citizens of Toronto, for contributing to this important initiative. Anyone attending these consultations

knows the importance of the Great Lakes and St. Lawrence River to Canada, the United States, and the world.

The Great Lakes and St. Lawrence system holds 20 per cent of the world's freshwater. It's an international resource whose care and remediation is the responsibility of both of our two countries.

The first Great Lakes Water Quality Agreement was signed in 1972. Subsequent amendments recognized the need for a cooperative binational approach to maintaining the Lakes. A partnership was forged to maintain, protect, restore, and conserve this important resource.

This partnership has been successful on many important fronts, but we always need to be vigilant to identify and address emerging threats to the water system, and there is also still much work to be done to restore and protect the Lakes more effectively.

My vision for the Great Lakes and St. Lawrence River is for people to be able to drink the water, be able to swim and to eat fish found in the water. I want to achieve this not just in the pristine rural areas, but right here in the Toronto Harbour.

We're working toward clean beaches and beautiful urban waterfronts that connect the people with the lake, because it's only in this way that we can ensure that these waters are used wisely and sustainably and guarantee that they will be a viable resource for future generations. The IJC review of the Great Lakes Water Quality Agreement is an opportunity to realize this vision.

And it's very fitting that the IJC has chosen to hold its consultations in city halls across Ontario, Quebec, and the eight Great Lakes states. This choice recognizes the important role that cities and towns must play in the protection and rehabilitation of the Great Lakes and the St. Lawrence River.

It's also fitting because the first recommendation I'd like to make here this evening is that the Agreement should be revised to recognize and include local governments as full partners with other governments.

Local governments must be at the same table as the federal governments of the U.S. and Canada, the province of Quebec and Ontario and the American Great Lakes states, to identify the problems and determine solutions.

This is critical because local governments are responsible for implementing many, if not most of the solutions, through everything from stormwater runoff to wastewater treatment to land use planning and to dealing with initiatives like the big pipe that threaten water quality in our area.

Local governments are also effectively and directly communicate with and engage communities about issues like water conservation and invasive species. It is only through full partnership with local governments that Great Lakes policies and programs can attain the desired results on the ground and in the water.

My second recommendation to the IJC is that the Agreement should articulate a collective vision, mission, and goals that are agreed to both by Canada and the United States. Fundamentally, both countries must commit to taking

responsibility for the integrity of the Great Lakes and the St. Lawrence well into the future.

Thirdly, the Agreement should be revised to include the Great Lakes and the St. Lawrence River to ensure a full system approach. There is no way to separate these two connected waterways. The water quality and quantity of the Great Lakes is the water quality and quantity of the St. Lawrence. The problems and solutions must be considered for the entire system.

I am encouraged the IJC has chosen to hold consultations in Montreal and Quebec City, and I take this as a signal that the St. Lawrence is recognized as an important part of the system, and the notes that are being taken by the co-chairs give a hint as well.

Fourth, the Agreement should take a full ecosystem approach and not be limited to water quality. Invasive species, water levels, water diversions, and other issues are of great importance to the future integrity of the resource and should be recognized in the Agreement.

My fifth and final recommendation is that this review and the Agreement should be about action. There are so many jurisdictions and stakeholders with interests in the Great Lakes and St. Lawrence, and in addition, there are many more groups who are collecting data and information about the Great Lakes and St. Lawrence ecosystem. We must coordinate scientific research, policy development, and implementation to make our collective efforts as effective as possible.

As we look for new funding for remediation and maintenance of water quality, these new resources must be accompanied by a better articulation of roles and responsibilities of the partners and stakeholders, by reporting and accountability mechanisms to track progress, identify problems, and take corrective action, and by means to translate the science into policy and programs that show results.

This is truly a historic review, and it's one that shows every sign of being as significant as the first Canada-U.S. Great Lakes Water Quality Agreement. Historic opportunities are inevitably historic challenges. We have to get this right, and I know that having municipal governments at the table will help us all to get it right.

Thank you very much, and I look forward to a very productive evening.  
Thank you. (APPLAUSE)

HERB GRAY (Chair, Canadian Section, International Joint Commission):  
Now, ladies and gentlemen, the next step is for me to give some introductory comments to situate the dialogue we're going to have.

I know some of the people here were at the meeting in Midland, on Georgian Bay last night, and they'll have to bear with if something sounds similar to what they heard last night. That's the penalty you pay for coming back for a second round, but you're welcome anyway.

And I underscore what Mayor Miller said. We took part in the founding of the new Great Lakes Mayors and St. Lawrence Mayors Alliance, of which Mayor

Miller is the Vice-President, working with Mayor Daley of Chicago and the Mayor of Quebec City, and we feel these are important stakeholders, and you can sense some of the things that we're going to be talking to these governments about, the way we were vigorously taking notes when Mayor Miller spoke.

Well, I'm joined by my colleague Dennis Schornack, Chair of the U.S. Section of the International Joint Commission of Canada and the United States. We have two sections and two sets of offices in Ottawa and Washington for administrative purposes, but we are one Commission and we work together simultaneously, except that when the meetings are in Canada, I have to keep things in order, as Mr. Schornack does when the meetings are in the U.S.

Now we are here because the governments of the U.S. and Canada asked our Commission to find out what you, the people around the Great Lakes, think the governments should consider as they begin their review of the Great Lakes Water Quality Agreement in the spring of 2006.

The governments have asked us to do this because the Commission has been involved with the Agreement since its inception. In fact, the 1972 Agreement, in large part, comes out of a IJC report in 1970 on the water quality of the Great Lakes.

Now, in 1972, when the Lakes were suffering from heavy loads of conventional pollutants, the governments signed a visionary agreement that focused on reducing pollution from municipal and industrial sources, and in particular on controlling the input of phosphorus.

They recognized it would be necessary to adapt to new challenges, so in 1978, they signed a new Great Lakes Water Quality Agreement, which took an ecosystem approach and focused on persistent toxic substances.

Now a protocol was added in 1987 to set (?) the concept of the degraded conditions in a number of Great Lakes Areas of Concern and to spell out means of action to reduce critical pollutants on a lake-wide basis.

Under the Agreement, two countries have set common objectives for a variety of pollutants and have agreed to implement a range of research, monitoring, and pollution control activities. Efforts in both countries have resulted in important reductions in discharges of nutrients and toxic pollutants, particularly from municipal and industrial sources.

And under the current Agreement, our Commission reports biannually, every two years, on matters relating to water quality in the Great Lakes, including how the governments are achieving or not achieving progress toward achieving the purpose of the specific provisions of the Agreement. We have issued 12 such reports; they are all available on our Web site.

Now the Agreement has resulted in binational initiatives that have brought about important results. For instance, Canadians and Americans have set the same limits on total phosphorus loads for each lake, they have agreed that approaches to address persistent toxic substances will be guided by a philosophy of zero discharge. So both countries have made major advances in understanding the dynamics of this complex ecosystem.



Now the Agreement does provide a framework for binational goals and cooperative efforts to restore and protect the Great Lakes, but, as you all know, the governments have not made any changes to it since the 1987 Protocol, nearly 20 years ago.

There is widespread recognition that parts of the Agreement, such as the numeric objectives, are out of date. At the same time, there are new issues, ongoing issues, that require binational cooperation, such as preventing the introduction of aquatic invasive species, reducing the impacts of land use activities, and conducting research programs that will enable us to understand large-scale ecosystem changes.

Now currently, there are domestic policy initiatives underway that will frame Great Lakes restoration activities in each country. There is the Great Lakes Regional Collaboration, under a presidential executive order in the United States of America, and the forthcoming renewal in 2007 of the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem.

And that's why the forthcoming review next year of the goals of the Great Lakes Water Agreement is a highly timely endeavour.

Now the two governments are getting ready to review the Agreement, and they have asked us, in preparation for that, to hold these meetings. And we obviously believe that it's very important to hear from you all at this stage.

Now they'll begin, the two governments, the formal review in March, and they hope to make the final terms of reference for their process available to the public in early December.

Now there will be additional opportunities for input for those not able to make this meeting or those who have other thoughts after they go home. You can communicate by e-mail, by toll-free telephone, by fax, and I think it's up on the slide above us.

There will be additional opportunities for public input once the governments begin their review of the Agreement. They also have said they will consult with First Nations on a government-to-government basis.

So in our printed materials and on the slide, there are details of how to connect with us in addition to meetings like this. And we'll have a live Web dialogue for people around the basin that'll be held from November 29<sup>th</sup> through December 2<sup>nd</sup>.

So to conclude, I want to mention that when the consultations end, the IJC will write a report synthesizing all of the views it has heard. We will send all of the documents we received along with transcripts of these meetings to the governments.

And as for the meetings today, as people who were at other meetings will know, we will call you in the order we received your request to speak. Now we have, I think, 12 requests to speak, so I think that if we want to use the two hours

productively, we would ask you to try and limit your remarks to approximately five minutes.

If there are people in the audience who wish to speak who haven't signed in, please go to the desk and do so. And if in the course of the proceedings, some of you who had not originally intended to speak feel you'd like to make comments, you're welcome to do so within the time limitations for the meeting.

There is no distinction between the brown benches, where the councillors would ordinarily sit, and the blues. There aren't different ticket prices for sitting in the blues or sitting in the brown seats, you are all equally important to us with respect to expressing your views.

By the way, we're relying on a tape recording to produce a transcript, so - and this is an admonition to me as much as anybody else - please make sure to speak into the microphone.

And I'd like some guidance here...should people come up here? Or are their microphones alive?

UNIDENTIFIED: People should speak from here.

HERB GRAY: They can speak from their seats. Now if people want to speak who are sitting in the blues, oh, they are to go over there...

UNIDENTIFIED: They come here, Sir.

UNIDENTIFIED: Over here.

HERB GRAY: Okay. Boy, this is official. So before I call our first speaker, I want to say that I am going to invite Chairman Schornack, if he'd like,

to make concluding remarks. I think it'd be better than to rush him. He may have some important reflections by the time we are ready to adjourn. But we do want to hear from him because we work together and it exemplifies the cooperative way the Commission has functioned for almost 100 years.

Now the first speaker is Catherine Masson, of Toronto. She'll be followed by Tom Muir. So what I am going to do is call on somebody to speak, say who is going to be on deck next, and where they have indicated they are connected with an organization, I will mention that as well.

So having said that, I invite Christine Masson to give us her comments. And my chief of staff Nick Heisler is there to assist with working the slides and other things and to pull on my coat if I happen to misspeak myself in some way. But I am sure we'll all get along quite well at this gathering, so over to you

CATHERINE MASSON: Thank you very much, Mr. Commissioner. Commissioners of the IJC, Mayor Miller, elected officials, and members of the public, the Canada-United States Water Quality Agreement is guided by the principle that the boundary and tributary waters of the Great Lakes basin ecosystem should be free of pollutants for present and future generations.

This presentation focuses on society, science, and governance in the Great Lakes, with special reference to the Lake Ontario watershed, highlighting some challenges of living with these freshwater seas while conserving their legacy for future generations.

The aim is to integrate existing hydrological approaches with the development...existing approaches, rather, with the development of a hydrological Great Lakes Water Quality Agreement.

Great Lakes citizens have yet to define effective ethical and ecological operating principles in reference to water quality and quantity, articulate moral responsibilities to future generations, and settle outstanding indebtedness to aboriginal and tribal peoples.

Canadians and Americans living in the Great Lakes basin share a diverse mix of rural, urban, and impounded catchments and coastlines. Governance by reaction is a common policy direction in North America.

The wording of the purpose statements in both the United States Clean Water Act and the Great Lakes Water Quality Agreement is to “restore and maintain the chemical, physical, and biological integrity”, in the case of Great Lakes Water Quality Agreement, of the boundary waters.

In a water cycle-related framework, both policies might have been stated differently. Despite their importance to the chemical, physical and biological integrity of the Great Lakes system, hydrology and watershed hydraulics are absent from the current Great Lakes Water Quality Agreement, although they are not absent from the interests and purvey of the International Joint Commission.

Broad international agreements such as the Great Lakes Water Quality Agreement are meant to be self-educative. It is not that governments educate, it

is that we educate ourselves through the public expression of beliefs and commitments.

The standard should be highest use, rather than beneficial use. This would link water quality to systemic linkages and water quality. Underlined on this slide are the points I am quickly going to make.

There are actually four types of water in the Great Lakes, freshwater types. These are atmospheric waters – we're well familiar with that, driving from airsheds (?), near meteorological patterns, that may deposit airborne toxic substances. Surface waters are the most visible; they encompass the Lakes and their drainage tributaries, wetlands and embayments.

Ground waters include subsurface marines, glacial-melt waters and aquifers. But we must remember metabolic waters; that's the water we carry around inside of us, catalyzing and anabolizing biochemical processes in the foodwebs of aquatic and terrestrial flora and fauna, including humans. Thank you.

The availability of good, clean water is a matter of good governance. The Great Lakes basin must be seen and understood within the context of numerous and competing public and stakeholder, scientific and policy, political/economic, socio-cultural, and environmental characteristics and issues. Contamination of these waters deprives present and future generations of a natural heritage.

The next slide is going to be a chart where I have integrated the previous slide – thank you – and also this slide that I just showed you into a hydrological analysis of the Great Lakes Water Quality Agreement. I

am not going to go through it in detail - it is going to be submitted, obviously; this is the Reader's Digest condensed version – but the purpose is to look at the Great Lakes Water Quality Agreement in a hydrological fashion to isolate its strengths and weaknesses.

Thinking through this framework allows us to see the Great Lakes basin ecosystem as a geophysical unit overlaid with international administrative and proprietarial boundaries.

Patterns of confluence taken by the lakes and rivers of the watersheds of each of the Great Lakes and the St. Lawrence River characterize them as individual hydrographic units. For example, the Lake Ontario watershed has a unique fifth downstream, first upstream place in this waterway.

Annex II of the Great Lakes Water Quality Agreement commits the parties to restoring ecological integrity through LAMPs and RAPs. They deserve all the support we can give them.

The boundary waters regime is driven by navigation, hydro power, irrigation, drinking water, sanitation, and other beneficial uses. Difficulties in ceding sovereignty to international institutions such as the IJC, charged with preventing and resolving disputes along our shared border, remain unresolved today.

Tributary equilibrium is subject to varying land and resource management practices. These influences water level fluctuations, affecting water quality. The hydrodynamics of tributary waters correlate land-based activities with lake-based results – and I'll cut to the chase.

The hydrological cycle has the potential to link binational governance with lake, watershed and basin-scale management programs by supporting natural, physical, chemical, and biological science and policy and by coordinating ethical and ecological knowledge and tools across jurisdictional boundaries located at and beyond the boundary waters.

We must address the challenges of integrating society, science, management, policy, intergenerational, and indigenous rights with governance. Water ethics direct our attention to the public expression of shared beliefs.

Ecology is the study of the interrelationships of living things in the form and survival of individuals and communities within environments.

An ethical and ecological statement of principles and practices in a renewed Great Lakes Water Quality Agreement holds the potential to elevate the stewardship of our basin to exemplary leadership in civilized social, scientific, and political conduct.

We have now entered the United Nations' International Decade for Action Water for Life 2005 to 2015. The parties should ensure formal representation and public participation in decade activities.



Intergenerational responsibilities to the human community and the natural world are 1) conservation of options; 2) conservation of quality; 3) conservation of access. The resource may exist in the future, but overuse now may diminish beneficial uses.

Indigenous peoples have inherent rights to traditional territories, including the whole circle of life, from the trees to the water to the fish to the animals. Since time immemorial, aboriginal rights arise from use and possession of the land as warranted by their own legal and social systems.

We need the political will to commit to future imperatives. In the decisions we make today, our responsibility is to honour our Great Lakes as the legacy of future generations, our obligation is to bequeath the freshwater seas the ancestors entrusted to us.

Together, let us cross the political and social waves and determine what we need to create a new Great Lakes Water Quality and Quantity Agreement.

The most interesting thing about public meetings such as this one is that the tools are always there somewhere, if we simply take the time to search for them. Now is the time to take that kind of initiative, again, for the first time.

I am just putting in my submission an example of an ecological and ethical statement of practices and principles from the Rochester people. Sorry I can't get to it further. Thank you for your care and concern for the Great Lakes.

HERB GRAY: Thank you for your presentation. If a speaker hasn't indicated on their form whether they are linked with an organization or an

academic institution, we'd appreciate knowing that as well. It's not necessary, but if they'd like to do that, they can do so.

Also, if a speaker prefers to make their presentation seated, Nick, I think that's all right as well.

Now we're up to, I guess, 16 speakers; we're just going to number 2. So I think we have time for everybody, but bear that in mind in making your presentations. And next we'll hear from Tom Muir of Burlington, Ontario.

TOM MUIR; I have a full submission here which I will give to the gentleman here. Good evening, thank you for this opportunity. I have so much time and so much to say, I'll go as fast as I can.

By way of background and for the record, my name is Tom Muir, and until my retirement last year, I worked for Environment Canada at the Canada Centre for Inland Waters in Burlington, Ontario, since 1974.

During that time, I worked extensively on Great Lakes basin problems and issues, including several references, and the Virtual Elimination Task Force. My submission here speaks from that perspective. I have a couple of general comments and then some specific ones.

I think an important thing that we need to remember when we come down to looking at this review is that the Agreement is basically...is based on the Boundary Waters Treaty, the Boundary Waters Treaty is basically about water, it's about pollution of those waters to the injury of health and property on both sides.

We have to remember that. So the enabling legislation is water-focused, pollution-focused, and injury-focused, whether we like it or not. The upshot is that any revisions in the language must respect the constitutional powers and abilities of the parties to implement and deliver the Agreement.

If you couch the Agreement in vague, ambiguous terms, that involved needed actions that are not within the powers of the parties, the federal governments, then you will in fact kneecap the Agreement. If you couch the Agreement in terms that the parties cannot deliver, then the Agreement will fail.

A couple of examples. There are views that the Agreement is not adequate, and undoubtedly, in all respects, it should be updated, and there is a new vision suggesting that it could be an ecosystem agreement or a sustainability agreement.

The problem with those things is that they're vague and ambiguous terms. Ecosystem agreement...the ecosystem concept is already in the Agreement. To call it Great Lakes Ecosystem Management Agreement, my problem is we're using language that has an inherent imprecision of meaning.

The present Agreement already has it. We don't need to add something or make it basically something that is vague and ambiguous. There is nothing more deadly to clear thinking than vagueness.

People know clearly what water is, but not many understanding with any corresponding clarity what ecosystem is. The parties have clear jurisdiction over

transboundary waters, but certainly not over the ecosystem, which is in essence everything.

A similar critical view can be applied to the ideal of a sustainability agreement. Again, with a lot of discussion and debate, it's another vague and ambiguous concept that's a buzzword.

We don't have any agreement on what sustainability means. The parties don't have jurisdiction over Great Lakes sustainability. The jurisdictional issues are Byzantine, as are the policy disconnections, contrary to any notion of sustainability.

Overall, the present language of the Agreement very clearly tells us what we need to do. The Agreement can be looked at as tools, and the tools will help the artist to excel, but you can't blame the tools for the failure of the artists.

From my own perspective, I think there have been a number of failures. The Agreement has been a good thing for the Great Lakes, I don't know where we would be without it, but the parties are not living to their end of the Agreement.

Federal water management capacity and research has been decimated since 1974. At one time, water was a dirty word in Environment Canada, starting before 1994. There has been little federal recruitment of young scientists to replace the old, particularly from my experience at CCIW. It's created a big gap and a downward manpower spiral.

Into specifics. Regarding the preamble, the parties say they are concerned...continue to be concerned about continuing injury. The Fisheries Department doesn't agree that contaminants in the Great Lakes have been injurious to fish. Health Canada denies that chemicals have ever injured human health, no matter what the contaminants are or their number.

And there is no open professional debate or dialogue on this matter of human health, and the responsibility for the effects of environmental pollution on human health does not lie on Environment Canada, and Environment Canada, and Environment Canada staff are told human health is not in their job and not in their purview, so shut up or else.

So basically, while in the preamble, the parties say that they are concerned about continuing injury, in fact, their bureaucracies consistently deny and dispute such injury.

If we want just to have...I need another minute. If we need another review, we have a CEPA (?) review coming up, and I would ask you to consider that everyone is well aware of the present preoccupation with terrorism, and I believe that when you consider the stringency and resources spent on dealing with potential human terrorism, there is an obvious hypocrisy in the way that potential terrorist chemicals, those that have the potential to cause harm and injury, are managed.

Currently, you can be profiled as a person, as a potential terrorist, and you don't have to do anything. Not so for chemicals, as the present regulatory

situation indicates. You can have persistent bioaccumulative toxic pollutants and unless they are proven to cause harm, you can't do anything. They cannot be arrested, unlike humans can.

I am very serious here that the government duties to prevent harm and injury to citizens are the same in both contexts. That this situation exists bears witness to the power of the chemical and industry lobby that has managed to secure greater rights for their products and practices than all the wars of mankind have secured for the people that fight them.

A similar hypocrisy exists with respect to mad cow disease. One infected cow shuts the border and costs billions of dollars and the livelihoods of many. Take no chances here.

Is this not something to think about when we set out to review the Agreement and its main legislative foundation purpose to prevent injury to health?

In conclusion, I would say my own experience is that the environment is not a real priority of the parties, in the sense that they pay a lot of attention to it, talk about it a lot, integrate into all policy, and support it well with adequate resources befitting the reality that it cannot be separated from the health and well-being of the people, their economy and society.

And in the economy, I am absolutely amazed that the health care costs burden and all of the brain-damaged children that exist in North American society

is a budget-buster in Canada and the U.S. and a number one domestic issue, but no connection is made to environmental quality.

This is what I mean by institutional denial. Until the parties finally wake up to the bear at the door, we are all in trouble, and especially the babies and children. The emerging science is making that very clear, but the science-policy connection is the most difficult of all to make. This must change. Thank you for this opportunity to share these views with you this evening. Thank you.  
(APPLAUSE)

HERB GRAY: Thank you. I now invite to the lectern Leslie Cochrane of the Noojimawin Health Authority. She lives in Toronto. And she'll be followed by Mary Muter, in her capacity as the Georgian Bay keeper, working with the Georgian Bay Association Foundation. So Mary wears more than one hat, so we'll hear from her this evening.

And I want to...by the way, if a person would like to give their presentation seated, they're welcome to do so, and you're also welcome to present on your feet as others have done. So Leslie Cochrane, we look forward to hearing from you.

LESLIE COCHRANE (Noojimawin Health Authority): Okay, thank you for the opportunity to speak this evening. Hello, everybody. My name is Leslie Cochrane and I work at Noojimawin Health Authority. We're a health planning authority in Toronto. We represent urban and rural aboriginal peoples, so this is including First Nations, off reserve, Métis, and Inuit people.

I am here today just to use some very plain language. I appreciate the technical abilities and the scientific abilities that people are bringing to this discussion because I don't have it. But what I do have are some insights into the historical exclusion of aboriginal people at the Commission level.

As an aboriginal woman from the United States living in Canada, I feel I'm in the right place, first of all, and I'm also inherently aware that the United States and Canada are not just binational, that we're multinational, and that at the decision-making level, we need that representation demonstrated from both countries.

I think it's great that you want to include First Nations at the consultation level, but I think you can go further than that. And as our mayor stated today, we want to get this right, and I think that that's one way to go about it.

When I put a face to water quality, I think about families living in cities and I think about families living in rural communities, and I think about all of the instructions that we get around water and how dirty water can really change the way we interact with our families.

For example, we cannot relate to our children in the same way. Things that perhaps my dad wants to teach me he can't teach me anymore because our water is dirty. So I think that water quality, you need to think about the families and how clean water needs to be a priority when we're thinking about culture.

I was just reading the policy, if I can call it that, and there is a section about impairment of beneficial uses, and I think that you can go further to include



cultural expressions of traditional values in that, especially because you are using this ecological...or sorry, ecosystem approach that includes human beings and how human beings relate to the water, you could go further in that definition.

I have also read that this policy seeks to enact other legislation that will help to implement your programs and measures, and I would encourage you to look at the aboriginal health policy of Ontario in terms of health status of aboriginal people, the planning and representation, which is in section 3, which I think you need to look at.

So when I hear you thought about collective missions and goals, I'm just urging you to go further, beyond consultation, to actual inclusion, that you look at policies that actually support aboriginal health, and that you remember the face of water quality, which really comes down to families and their ability to live in a healthy way together. That's all I brought today.

HERB GRAY: And don't forget, you can submit comments by e-mail, by fax, by toll-free number, and take part in the Web dialogue. So if you haven't expanded to the extent you'd like on your remarks, you have other opportunities. We're going to hear from Mary Muter, followed by Claudette Pintwala of the Georgian Bay Association.

I might say that if I have difficulty reading anybody's handwriting and I pronounce someone's name wrong, please bear with me and correct that as you come to the microphone. So Mary, can we hear from you, please? You are the

Georgian Bay keeper, you're with the GBA Foundation, but you're not only based in Georgian Bay, but in Toronto as well.

MARY MUTER (Georgian Bay Association Foundation): That's correct, yes. Just for people who don't know, the Georgian Bay Association is an umbrella organization for 22 associations along the eastern and northern coasts of Georgian Bay, and we represent about 17,000 residents.

I am here tonight on behalf of GBA Foundation and as the Georgian Bay keeper. We are a member of the Water Keeper Alliance.

So this is Georgian Bay on a clear day, and this is the vision that most people have of Georgian Bay: beautiful clear skies and clear water, clear, clean water. But as you heard last night, we definitely have concerns about water quality. The next slide, please.

This is September 12<sup>th</sup>, the same location. This just past September, another air quality advisory day on Georgian Bay, and in this case, it was fine particulates, warm southwest winds blowing in and bringing transboundary pollution. And basically, what we want the IJC to do is to look at deposition impacts on water quality and water sediment.

I am now going to talk about the important relationship between wetlands and water quality. Wetlands on Georgian Bay and anywhere are the lungs for our water. Wetlands filter and remove pollutants and absorb nutrient loading from shoreline development. However, approximately 70 per cent of wetlands have

been lost forever in lakes Ontario and Erie due to development infilling and/or pollution. Next slide.

This was a typical Georgian Bay wetland in 1999, with enough water for fish spawning and nursery, with diverse aquatic vegetation filtering the water. This is that same wetland, 2001 to 2003, after we lost approximately four feet of water in a two-year period. Next slide.

That same wetland in 2005. This is our consulting aquatic biologist, Dr. Carl Schieffer, explaining that it will take almost a decade after reflooding for this wetland to return to its previous ecologically diverse and pristine condition.

In order to get a better understanding and to finally get the wetlands on eastern and northern Georgian Bay classified and assessed, we have linked with McMaster University and Dr. Pat Chow-Fraser, who is finally getting this important work done on wetlands. Next slide.

This is basically showing significant wetlands all around the Great Lakes, and guess where the most open, significant shoreline wetlands are? On the eastern and northern coasts of Georgian Bay. Next slide. Just keep going.

This shows the population growth on the various different Great Lakes, and you can see what's happening to Lake Michigan and Lake Erie. Not a lot of hope that wetlands will be able to be recovered there. And here's Lake Ontario. The few areas where good wetlands still exist, it's important that we try to protect and preserve them.

This is a typical Georgian Bay wetland, with steep granite shoreline adjacent to some sediment deposit where wetlands have developed. When water levels drop on these steep shorelines, the wetlands cannot move out, so we basically have dried and stranded wetlands with current low water levels. Next slide.

And this is what's happened, the wetlands get cut off...can you just hit it once more there? The wetlands get cut off, pollutants get concentrated, and so we have deterioration of water quality in these isolated areas, wetlands. Next slide.

This is Dr. Chow-Fraser's assessment of wetlands all around the Great Lakes, and guess where we have the most pristine, high-quality wetlands? Again, on the eastern and northern shores of Georgian Bay.

Dr. Fraser has graded the wetlands, and you can see they're highly degraded, very degraded, and moderately degraded. Just hit it once more. And these wetlands again mostly are on Lake Ontario and Lake Erie, and this is the kind of wetland, clogged, not usable to a great extent for fish. Next slide.

By contrast, these are some of the wetlands that Dr. Chow-Fraser has identified on eastern and northern Georgian Bay. This was only her work until 2003. She has been there now for two more summers, so these bars go on up above this as she classifies and assesses more wetlands.

My concluding comments to the commissioners are that the IJC assess depositional impacts of fine particulates from air pollution on water quality, and we ask that the IJC requests that our governments at all levels act to protect

whatever wetland habitat there is left in all of the Great Lakes, as they form the most important ecological component of the Great Lakes.

We ask that the significant role that wetlands play in protecting and restoring water quality be considered during the review of the Great Lakes Water Quality Agreement. Thank you.

HERB GRAY: Okay, thank you. (APPLAUSE) And now, Claudette Pintwala. Now, at 7:48, and the total number of speakers, including those we have already heard, has grown to 16, so we ask everybody to do your best to make your points as briefly as possible. So Claudette, are you...Claudette's working with Nick Heisler on her presentation.

CLAUDETTE PINTWALA (Georgian Bay Association): Okay, I thank you for allowing me this time to present. I am here with the Georgian Bay Association, and Mary has explained sort of our watchdog influence over the eastern and northern shores of Georgian Bay.

I am here in regards to the concern of open-net cage aquaculture, and I thank you for your acknowledgement of aquaculture and its effect of nutrient loading and other impacts as seen by its inclusion in your Guide to the Great Lakes Water Quality Agreement, Background for 2006 Government Review, page 19.

GBA's nine-member aquaculture committee members include an aquatic biologist, an ecologist, water quality analyst, a research scientist, an environmental engineer, and a water purification specialist.

The protected coves and inlets of Georgian Bay's eastern and northern shores, which are now a UNESCO-designated biosphere reserve, is seen by those in support of the growth of this industry as an ideal water body from which to culture fish, predominantly rainbow trout.

Its waters are cool in temperature and relatively pristine. The background readings for total phosphorus and dissolved oxygen are much lower than lakes Ontario and Erie, which have already been degraded by human impacts.

These oligotrophic conditions of Georgian Bay renders its assimilative capacities ideal for the open-cage waste of fish farming. Since the fish farms are in remote, water access-only areas, it is not widely known that 80 per cent of rainbow trout sold in Ontario are from Georgian Bay open net cages, and that includes stores right here in the greater Toronto area.

These are two scenarios up above, one on the left of the open cage culture that occurs in Georgian Bay, and the alternative, more sustainable closed system culture is on the right.

Instead of collecting and treated waste as required in the land-based operations, caged facilities typically rely on the free movement of water through the netting to carry away fish manure, the (inaudible) seed, which includes antibiotics and colorants.

And contrary to land-based, closed systems as you see on the right, fish farms operating in Georgian Bay have not just been given a licence to culture the fish, they have been given an unlimited supply of our publicly-owned freshwater

resource along with free and unregulated disposal of their wastes that flow freely into the surrounding water or settle onto the lake bottom to build up in thick sludge consisting of uneaten feed and fecal matter.

This is a cage shot, and the next of my presentation is going to focus on the Environmental Commissioner of Ontario's recent release of his report. This photo was used in his report.

It shows a cage operation, and during spring thaw. This operation is in Lacloche Channel of Georgian Bay and it was shut down eight years ago and the cages were removed, primarily because there was no oxygen left in the channels of this bay and fish could not survive.

You can clearly see the outline of where those cages used to be, and why that's happening is because the methane gas is still rising up from the dissolving of the nutrients beneath those cages still happening.

Mr. Gordon Miller, who gives credibility to our claims with the GBA in his recent report, he is the Environmental Commissioner for Ontario. And in his annual reports to the legislature since 2001, he has repeatedly criticized both the Ministry of Natural Resources and the Ministry of Environment which have allowed this industry to expand since the first net cage operation began in the early 1980s without forming clear directives for monitoring and regulating these feed-lot operations.

This aerial photo I have already explained, it shows the methane gases and so on that allows the ice to melt earlier. Next slide.

To emphasize the seriousness of this issue, I share with you just some of the statements taken directly from the Environment Commissioner's 2004-2005 annual report released just two weeks ago.

Despite taking 21 months to complete its review, the Ministry of Environment's response provided little new information and only vague commitments to improve the environmental performance of cage aquaculture operations.

The Environment Commissioner of Ontario is distressed that the Ministry of Environment trivialized the applicants' concerns about total phosphorus in water as being primarily aesthetic in nature.

Although elevated phosphorus levels can cause algae blooms, they can also cause significant long-term ecosystem changes such as altering species composition, disrupting food chains and causing the death of sensitive species in an area.

The ECO believes that MOE should not be using 10 micrograms per litre as a trigger level for total phosphorus and should not be relying on a water quality guidelines that sanctions the degradation of high quality waters, better than the provincial water quality objectives' levels.

In a supplement to his report, the ECO stresses concern by saying Great Lakes aquaculture – have you changed the slide or is my time up...

HERB GRAY: (inaudible)...

DENNIS SCHORNACK: (inaudible)...



CLAUDETTE PINTWALA: Can I continue?

DENNIS SCHORNACK: You can continue (inaudible)...

CLAUDETTE PINTWALA: Thank you.

HERB GRAY: (inaudible)...this is very important.

CLAUDETTE PINTWALA: The Great Lakes cage aquaculture continues to be practiced, Ontario licences continue to be issued, and these policy documents do not explain what the de facto policies for regulating the industry.

MNR is deferring public consultation and public decisions on how to regulate this most contentious and potentially most environmentally significant sector of the aquaculture industry.

Because they are suspended in open water, the net cages of these facilities are subject to leakage through rips and tears in the netting and spilling, the nets tearing wide open due to virulent storm action.

Tens of thousands of farmed fish can and do escape with each spill. The threshold number of escaped fish requiring a report being made to the MNR is different for each application and it's subject to MNR discretion. Furthermore, compliance to reporting requirements is left reliant on the owner of the cage farm.

Included in this report, under other threats, pharmaceuticals in the aquatic environment, an emerging issue. The ECO notes that in addition to being widely consumed – we're back one more – in addition to being widely consumed by humans, pharmaceuticals are also used in agriculture to prevent and cure disease

and enhance growth, and four antibiotics are registered for use in aquaculture in Canada.

And I'm concluding now, and with these remarks, I wish to end this presentation with a request to the IJC to include open-net cage aquaculture as an emerging issue, an emerging problem in its 2006 review of the Great Lakes Water Quality Agreement.

And finally, we ask you to consider including our recommendation for government initiatives to begin to move all future proposals for Great Lakes cage aquaculture towards systems of operation that are contained and biosecure, such as the land-based aquaculture that currently exists as sustainable alternative. And thank you very much.

HERB GRAY: I thank you very much. We're now calling on speaker number six, Paul Fenton, of Toronto. Can Mr. Fenton come forward? He will be followed by Michael Gilbertson, and I can tell you who he is, but he will tell you himself (inaudible)...until very recently. Paul Fenton, to be followed by Michael Gilbertson.

PAUL FENTON: I'd like to thank you very much for the opportunity to speak in front of this Commission. My name is Paul Fenton, I'm a businessman in Toronto, and in the last few years, I've become a bit of an environmentalist regarding some of the products I am selling. I'm speaking more as a businessman and a resident of Toronto.

I was in Washington last week at the Waste Federation Show, and a lot of the things that people are talking about here seem to be all down to the almighty dollar. The first article I read in the Washington Post was that all this can be done, but it does take money.

And going back to some of the things I'd like to talk about it, and make it short and sweet, I've got a couple of products that are being used now in a place in the United States for trapping and collecting floatables.

There's a company that I represent called Fresh Tree Technologies that has a netting device that goes on the outfalls of the storm overflow system as well as inline pipings where it catches floatables.

What they have done in the last few years is they have installed about 140 of these sites in the United States and collected 3,000,000 pounds of trash yearly. I haven't seen any of these being installed in the Great Lakes area, which I am quite interested in.

I have recently had an interest from the City of Kingston, through the Ministry of Environment, that has had problems with overflows right into the lake, and this product is being specified by the Ministry of Environment for catching all of the floatables and other things that go into the lake.

They have had some very good success. But some of the information that they do have on their Web site is very interesting, and some of the expenses that seem to be incurred in implementing these kinds of devices are quite high overall.

I was reading an article here about the Clean Water Act, 30 years ago, that they had a goal of...an expenditure of about \$139 billion over the next 20 years, until the year 2006; this was the Clean Water needs survey in Congress. Now the cost of doing this now has now risen to over \$237 billion and will rise further. And at the current pace, they think they're not doing more than just treading water.

Now there are ways of trapping the runoffs and trapping the waste, and I just find that the products are out there, and I'd like to see this Commission, with all of the mayors that are involved, if one region or one town like the City of Kingston is going to do it...when I've gone to the Web site and seen how many mayors involved, from Montreal to Ontario to the United States, what I am going to do is hopefully get this information out to them.

There are other products that are available, and I know there's a commission that is hopefully going to look at the best means of doing this. Other products that are available also for some of the problems that we're having is biological activators that we can dispense into the wastewater columns to activate the micro-organisms to dissipate the waste and also eliminate odours and eliminate corrosion in the sewer systems.

So just two products, one is a company called Natural Resource Products out of Wichita, Kansas. They've had great successes in places like Hollywood, Florida, and other parts of the States where they have been able to reduce odours

and also reduce the sludge that goes into the wastewater plants, which will end up in Lake Ontario.

And I would be presenting this information to the Commission to hopefully they will look at these products as something for the future and be able to find the money to help everybody out that's concerned about the lakes and go from there. I do appreciate the time, thank you very much.

HERB GRAY: Thank you. While Michael Gilbertson is coming to the microphone, I want to urge people to follow the advice of Nick Heisler, who is sitting beside you, to keep your remarks to five minutes.

And I now call on Michael Gilbertson, and he can describe himself as a former senior member of the staff of our Great Lakes Office in Windsor. And before he begins to speak, I'd like Dr. Karen Vignostad to stand and be recognized, she has just taken over as the Director of the Office.

The director services four-year terms, alternating between Canadians and Americans, and it's now an American director's turn. So I'm not taking your time, Mr. Gilbertson, but I just wanted you to get ready and I wanted to make this comment. So we look forward to your five minutes.

MICHAEL GILBERTSON: Thank you very much, indeed. Since I left the International Joint Commission, I have been writing a thesis, and it is called the Forensic Deconstruction of the Review of the Great Lakes Water Quality Agreement.

I want to make three points about the Agreement. First, three observations. There is injury which is still occurring, there is a duty to report that injury, and there has been a process in place of diversionary reframing (?).

And I want to put this into a social, economic and political context. In 1964, there was a reference that was given to the International Joint Commission under the Boundary Waters Treaty, and they asked the question is there injury to health and property from transboundary pollution?

In 1969, the response from the IJC boards and in 1970, the response from IJC to the parties said yes, there is injury to health and property from transboundary pollution, based...and this was the basis for the negotiation of the 1972 Great Lakes Water Quality Agreement.

In the 1970s, I was studying deformities of chicks of fish-eating birds, and this led to the search for dioxins. You can see, these birds have got twisted beaks.

In the 1980s, Joe and Sandra Jacobsen went and set up the first cohort of infants of Great Lakes fish eaters. What they found was gross retardation, cognitive and behavioural anomalies, and these correlated with pre-natal PCB exposures.

In the 1990s, Health Canada and the Agency for Toxic Substances and Diseases registry went and put together a Great Lakes health effects program. They reported out, at the Great Lakes-St. Lawrence Health Conference in May of 1997 in Montreal, and those proceedings were published in February 1999.

There were 120 conference presentations. There were elevated body burdens in fish eaters, they documented neurodevelopmental deficits in children, they looked at nervous system dysfunction in adults, and there were disturbances in reproductive parameters. And they recommended that there should be a need for better public health intervention strategies to prevent injury.

Health Canada put together, as part of their program, for 17 Canadian Areas of Concern, the health data and statistics on health end points that might be related to pollution.

This was heard in an IJC workshop on community health in the year 2000, and I put together the data for the Windsor Area of Concern. There were nearly 1,000 excess deaths in the 70-year period, there were over 40,000 excess hospitalizations, and there were elevated incidences of congenital abnormalities.

Mercury is another pollutant from the 1960s. The health care database looked at cerebral palsy as an indicator of congenital Minamata disease. Male foetus is very susceptible to pre-natal exposures to methylmercury. And the IJC workshop was held in March of 2003.

There are several Areas of Concern with elevated rates of male cerebral palsy hospitalization. These coincide with historic use of mercury. The inference is that there are several outbreaks of congenital Minamata disease in the Great Lakes.

I want now to go to the duty to report injury. Article 7 of the Great Lakes Water Quality Agreement says the Commission has a responsibility to tender

advice and recommendations on problems of boundary water quality. There has been a pattern of omissions from Commission reports of the published information on injury to health.

The results of the 1997 health conference, which were published in 1999, were omitted from the 10<sup>th</sup> Biennial Report in the year 2000. The omission was described as egregious by (inaudible) of the Agency for Toxic Substances and Diseases Registry. It was included in the 11<sup>th</sup> Biennial Report as a brief table without any comment.

At the IJC community health workshop, there was no mention in the biennial reports of the disease rates in Areas of Concern that “might be related to pollution”.

At the IJC mercury workshop, there was no mention of the finding of elevated rates of male cerebral palsy hospitalization in Areas of Concern that might be related to congenital Minamata disease.

I (inaudible)...results of the research on injury to health from conferences and workshops, yet there has been a consistent pattern of omissions of information on injury to health from reports. That’s the time that I am permitted. Thank you very much.

HERB GRAY: Thank you. (APPLAUSE) The next presenter will be John Jackson, representing Great Lakes United, and he comes to us from Kitchener. Mr. Jackson, would you come forward, please? And then we’ll hear from Sarah Miller, of the Canadian Environmental Law Association.



JOHN JACKSON (Great Lakes United): Thank you. I am director emeritus of Great Lakes United, also been a board member for about 24 years now of Great Lakes United, also have been heavily involved in the St. Clair River Cleanup Plan, of the Area of Concern there, as well as the Lake Superior Binational Program for Zero Discharge.

I want to bring forward three issue areas or three sort of thoughts that I hope the governments will take into account as they go through their review process and consider what they should do in terms of the future of the Water Quality Agreement.

The first is that I hope they will make sure that the Water Quality Agreement continues to be a forward-thinking document. My fear – and having seen so much of this happen around RAPs and LAMPs, for example – is that what the Agreement might become is simply a compilation of programs that the governments are already doing or have in the works to do.

That will not be adequate. The Water Quality Agreement must push us forward towards new solutions to the problems. Virtual elimination, zero discharge in the existing Agreement really forced us to really try to figure out new solutions to how to deal with toxics. Now we need to make sure that we continue in that way.

We need to be thinking of the Water Quality Agreement as something that will work for us for the coming 20 years, and therefore it must be very forward-thinking and very leading-edge in terms of what we do with it.

The second point I hope the governments will take into account as they go through their review next year is that the problems in terms of the failure of the Water Quality Agreement to achieve all that we want it to achieve may not simply be in the words of the Agreement, but what is the role in terms of failure of the governments to implement the Agreement.

And we really need to make sure in the review that we look at the implementation issues, and are there things that we need to change in order to make any agreement that we sign really have an effect and achieve our objectives?

Let me give you one example of this. Currently, the Ontario Public Advisory Council, which is made up of representatives from public advisory councils for each of the RAPs of the Areas of Concern around the Great Lakes, we're doing a study in terms of what are the achievements that have happened through the RAPs, but also what are the failures and what can be done to try to achieve those.

And I've been conducting the interviews with each of the RAP areas around this. A theme that's really come out very quickly already is people saying to us that a major part of why the implementation of the agreement go up and down is the failure of the governments to consistently support the process.

So, for example, Lake Superior, we had this excellent Lake Superior office that really held together and pushed the RAPs forward; suddenly, that office was taken away from us by the governments.

And that sort of problem has arisen throughout the Great Lakes and throughout our experience. So the governments must be there consistently bringing forward and start to solving the problems.

So in doing the review, we have to look at what is it in terms of the implementation that's the problems, and what can we do, if we're looking at changes to the Agreement, to try to increase the accountability mechanisms to make sure that the implementation really happens?

The final comment that I want to make is to make sure that the Agreement keeps pushing us in what it has done quite successfully in terms of this being something that's truly basin-wide, that it's not two federal governments working separately; again, the role of the IJC in making sure that we truly continue to operate in a binational way.

Our experience over the last few years around the Annex in terms of issues around water use, water export, water takings (?), have really raised the sort of fears that we have around the continuation of binationalism.

It's hard to tell from day to day whether it's going to end up just being an agreement among the Great Lakes states, with Ontario and Quebec on the outside because of the difficulty of coming to agreements. We want to make sure it continues to be truly binational.

And finally, we want to make sure, as was mentioned earlier, that it also recognizes that this is a multinational Great Lakes area, that we aren't simply talking about the two federal governments, but we're also talking about the roles

of the First Nations and Tribes, who are, you know, a critical part of the Great Lakes.

So thank you. Those are things that we hope the governments will really bring forward very strongly as they do their review. And certainly, over the next year, as the review process is happening, we'll be pleased to bring forward specific recommendations in terms of our suggestions on how these problems can be addressed. Thank you. (APPLAUSE)

HERB GRAY: Chairman Schornack (inaudible)...Mr. Jackson?

DENNIS SCHORNACK: John, don't depart, I'm going to ask you a question.

HERB GRAY: (inaudible)...comment here, sometimes we have to say something to ask a fact or...

DENNIS SCHORNACK: I'm just going to ask a really short question.

JOHN JACKSON: Yes.

DENNIS SCHORNACK: That the current boundary in the Agreement says that the Great Lakes basin stops at the international section of the St. Lawrence...

JOHN JACKSON: We've noticed that, but we really think that's (inaudible)...

(VOICES OVERLAP)

DENNIS SCHORNACK: No, I'm just asking if your organization supports changing that definition of the boundary...

JOHN JACKSON: Definitely, definitely.

DENNIS SCHORNACK: ...because we've had two consultations that are actually outside of the basin as defined in that.

JOHN JACKSON: And we're really pleased that you've done that. The St. Lawrence River, it's all part of an integrated system, and therefore we really want that to be extended.

DENNIS SCHORNACK: Okay, thanks. I just wanted to get you on the record on that, so...

HERB GRAY: Thank you. Sarah Miller, to be followed by Lois James of the Rouge Family Foundation. So we're at the ninth speaker, Lois James will be the tenth. And we're making good progress, so we look forward to the comments of all of you in the time put aside for us.

SARAH MILLER (Canadian Environmental Law Association): Thank you. I am here tonight representing the Canadian Environmental Law Association, which is a public interest legal clinic here in Toronto and has been involved for almost 30 years in Great Lakes water quality and quantity issues.

I'm not the resident expert, however, at CELA in the Great Lakes Water Quality Agreement. As many of you here might know, our executive director, Paul Muldoon, is, and he is taking a much-needed vacation at the moment, but did want me to tell you that he and fellow author Lee Botts (?), who have just written a book on the history of the Great Lakes Water Quality Agreement that's to be released this month, are hoping to meet with commissioners in order to go

through their findings of their very exhaustive study of the Agreement and the lessons that can be taken forward for the next review.

I myself have been involved more on the ground with the remedial action plans. I was involved in the Toronto RAP that preceded the official provincial-federal RAP that actually got done in a miraculous year and a half back in 1986 and 1987, and with the Hamilton Remedial Action Plan for ten years.

And recently, I have worked more on Great Lakes water quantity issues, and I'm going to bring some of my experience on being involved in very recent negotiations on the Great Lakes Charter Annex, because I think there's some lessons to be learned from those negotiations that are going to be very key to your success in approaching the Agreement.

I have come to the conclusion, I think, working for over 25 years in the Great Lakes, that we're saddled with some very dated agreements that are not adequate to take us into the future with the necessary tools that we're going to need for the challenges that we're going to be facing.

And politics is standing in the way of making these agreements living and vital documents. We're, on one hand, very paralyzed by fear that if we open up these agreements, they are going to be weakened.

I think it's very curious tonight that we're talking about scoping the review...of the upcoming review rather than just getting on with the review. In my mind, this is an indication that, I guess, the Great Lakes Water Quality Agreement that once was thought to be a jewel in the Great Lakes and the

primary document that everyone advocated for is now very vulnerable, and I think it's vulnerable for three reasons.

I think the failure of the governments to act on the goals and on the recommendations that the IJC has made are key, and also the diminishment of public involvement over time.

I think the lack of progress on the most key principle, which is virtual elimination in the Great Lakes, is the major failure of the Agreement. In fact, we pioneered this principle in the Great Lakes and other regions have taken it and run with it and integrated it into their programs, like the Reach program in Europe that requires substitution of safer chemicals for ones known to be harmful.

And we have virtually eliminated virtual elimination. We've made very little progress on getting rid of the chemicals we know are in the Great Lakes, but also on the ones that...the 20,000 chemicals that are added each year to our environment.

I think that the promise that the remedial action plans would be the work plans, the work horses that would result in change for the Great Lakes has failed. The public put two decades into remedial action plans and many are struggling to keep them alive still.

But virtually, in Ontario, the public has dismissed...they were dismissed because the government had concluded that no one was really responsible for the major sources of the contamination to the lakes, and that was contaminated

sediments, that we are indeed just going to wait for natural healing to somehow take care of the biggest problem in the Great Lakes.

The next Agreement really must find a way to measure this wishful thinking and eliminate the risks from these contaminated sediments.

The suggestion has been repeatedly made that the IJC needs a public advisory committee that could see the public concerns reflected in the Commission's work and that that work is made more transparent to the public, and I think that this is something that you have to address in this round of looking at the Agreement.

We were very heartened to hear Mr. Schornack say that governments don't live in the Great Lakes, fish in the Great Lakes, or drink water from the Great Lakes. People do, and people develop their intimate wisdom from their own place on their local watersheds.

Here in Ontario, we, as a result of the Walkerton tragedy, are going to have our first source protection watershed-based laws passed this fall. But regrettably, despite the efforts of many people in this room, the Great Lakes are not included in that regime yet.

We still have been unsuccessful in convincing the government that the source of drinking water for one-quarter of Canadians should be part of the source protection regime framework.

The institutional arrangements in Ontario have to be part of what you look at with the Great Lakes Water Quality Agreement. The Canada-Ontario



Agreement, which is due to be renegotiated in 2007, has to revert to becoming an equal cost-sharing arrangement, which it is no longer operational as it was originally envisioned to be.

I think that the next iteration of the Agreement should require the parties to report to their legislatures at least biannually on progress under the Agreement and how they have spent funds allocated to the Great Lakes.

In conclusion, Michael Gilbertson has done a very moving job of talking about health in the Great Lakes. I think that health has to be central to the next iteration of the Great Lakes Water Quality Agreement.

I was very disappointed to see Health Canada remove those reports on the Areas of Concern from their Web site when they should have in fact been moving forward to answer the key questions.

Why are the people in the industrialized city Area of Concern of Windsor getting premature aging diseases and life-threatening diseases one decade earlier than the other Area of Concern citizens in the equally industrialized city of Hamilton?

Finally, I'd like to just touch on my experience with the recent negotiations of the Great Lakes Annex, because they have been (inaudible)...very, very concerned about equity in the Great Lakes basin.

For the first time, we are seeing programs like the restoration proposals and the Collaboration in the U.S. coming forward without any international components.

Even after all of these years of sharing the stewardship of the Great Lakes, there has been still very little understanding or tolerances of difference in the two countries in their governance systems, and I think that this climate is going to make your task very much harder.

I'd like to also say that new ideas are going to be very hard to get into the Great Lakes Water Quality Agreement, although I am sure every thinking person in this room would like to see precautionary principle and climate change addressed in the Agreement.

There are very powerful forces that have a lot of resources at their disposal that are working very hard to make sure those things aren't in the Great Lakes Annex and will be working very hard to make sure they're not in the Great Lakes Water Quality Agreement.

I'd just like to say, in conclusion, while it's not clear what form the review of the Agreement is going to take, CELA certainly will be there to try to make it be central to all things important to water quality in the Great Lakes basin. Thank you. (APPLAUSE)

HERB GRAY: I'd now invite Lois James of the Rouge Family Foundation to come to the microphone, or to speak from where she is, if the microphone is working.

DENNIS SCHORNACK: The yellow button, push the yellow button.

LOIS JAMES (Rouge Family Foundation): There.

DENNIS SCHORNACK: There you go.

LOIS JAMES: Thank you very much. I am a resident of eastern Toronto. I live on the Little Rouge River and I have been there 40 years, and I can't say how much we needed the presence of the IJC since I have lived there.

And I soon became a volunteer, and we began to create a watershed association, and I would like to hope that you can encourage the formation of watershed associations in all of the systems feeding into the Great Lakes.

We sit in the center of the GTA, the greater Toronto region, and there are many local governments there, and this is a challenge we have not been able to tackle successfully.

Specifically, we understand the full ecosystem approach, but we find the local governments in our watershed don't seem to get it. They might use the words, but they don't get what that means and what a challenge it is.

Ontario regulatory bodies are on greatly reduced budgets in the last, say, 10 or 12 years, maybe more. Some are dependent on the financial support of local governments, and this is kind of frightening because we don't have other regulatory bodies.

And the province, in fact, went so far as to pass on approval authority to some of these local governments, and their motivation is not the same as the Ministry and I don't think they can do that. And I wish you would be aware of it and perhaps discourage it.

I would like IJC please to require...local planning must be based on watershed planning. The provincial and state planning acts should mandate this, and so far, they haven't.

And I can say from what others have observed, in Ontario, even aboriginal sites have been destroyed with no intervention by any regulatory body.

Now what the result is is that in the GTA, urban sprawl has been rampant, and it continues, even though everybody knows how expensive it is and how destructive it is.

Regional governments will bring in infrastructure that guarantees development of every blade of grass in the entire area, because developers will buy out everything that is available and that they are allowed to.

And we haven't been able to compete with that. We make briefs to all of these many local governments and we haven't...we really will find one councillor that will be a bit green, but we cannot sway the power of the development money.

And I don't know what you can do about that, and I don't know how it is across the lake, but I hope it's not as bad as it is in the GTA.

Can we keep water in our rivers? We don't know. Some of these developments with big pipes...because when you're going to pave an entire region, you need lots of sewage and water supplies.

But we need help. I live on the Little Rouge River and I have never seen it as low as it was this year. And it isn't just the rain lacking...they are pumping the aquifer dry.

We have wells within a great distance that have gone dry and ponds that were aquifers before on their small regional area that no longer function. This is serious, and there doesn't seem to be any regulatory body to do anything about it.

So I appeal to IJC to do what you can. Our volunteer watershed association needs your help. And the failure of governments to implement the Great Lakes Water Quality Agreement, as was said by the last two speakers, is very discouraging to the volunteer movement.

And I'm appalled to hear that Health Canada has removed things from their Web site that are so vital.

And I've learned so much from all of the briefs; there's some excellent ones that have been given. And it's a privilege to come and add to my knowledge and education. Thank you, Sirs.

HERB GRAY: Thank you very much. And now we'll here from John L. Hopkins, of the Integration Construction Monitoring Committee, with the Ash (?) Bridges Bay Treatment Plant, and then we'll hear from Gail Krantzberg of McMaster University.

JOHN L. HOPKINS: Thank you. It seems that my neighbour is reporting where some developers have put in great big drainage lines, which although they're pipes, there's just as much water flowing on their outside of their drainage system as is inside, and there should really be none at all, it should be all part of a sewage system and not part of a drainage system. But anyhow, that's happening, and I think somebody has to fix it.

At the annual meeting in Kingston, Ontario, in June-July of this year, there was a lot of talk about Devil's Lake in North Dakota. It has not often overflowed as its shores (inaudible)...Winnipeg, Manitoba, that they don't want their Dakota hungry fish to reach Canada.

And they will in due course, because every now and again, we get a flood from the Great Lakes come near their shorelines, and another decade or two, they will drop by a few meters. And that is natural, so what can we do?

The people from Dakota thought that they could balance the metallic waters from Trail, B.C., which is an area where there's a smelter, and the water from Trail in the river there – not quite sure what its name is now – carries iron and copper and lead and zinc, and they don't do very healthy things to the fish in the western U.S.

So what we have to do is the people that are guilty of whatever the guilt is, whether it's sending bacteria or something from one spot to another, have to get their local experts to smooth out the (inaudible). Technical (inaudible)...

(TAPE CHANGES SIDES)

...that really, technical offices are better than political push in solving this (inaudible). Thank you.

HERB GRAY: Thank you very much. I now call Dr. Krantzberg to the microphone. I want to tell you that we have 18 speakers, including those who have already spoken, and so the list is effectively closed because we're (inaudible)...really go past 9:00.

So after Dr. Krantzberg, we have a Member of Parliament, Peter Van Loan, Member for York-Simcoe, and he's on deck after Dr. Krantzberg.

GAIL KRANTZBERG (Director, Great Lakes Regional Office, International Joint Commission): Good evening, commissioners, ladies and gentlemen, residents of the Great Lakes basin.. It's a pleasure to see you again, Chairman.

I will be quite brief. I really just have three points in this phase of public consultation prior to the parties starting their review, as per the reference given to you to consult with us firstly.

Thirty-three years ago, the Great Lakes Water Quality Agreement introduced a number of innovative bilateral institutional arrangements, such as a unique role for you, the IJC, to assist in the implementation of the Agreement, in addition to some more traditional roles and advice and recommendations to parties and their programs and policies.

All this was specified under Article 7, and it's really the assist function that is unique to a commission or a bilateral organization like yourselves.

A second institutional arrangement were the bilateral institutions of the Great Lakes Regional Office, which I am pleased Karen is here to take the lead on, the Water Quality Board, the Science Advisory Board, who are there to advise and assist the Commission under Article 8.

So I draw your attention to these two articles because I think they're of fundamental importance for the parties to look at. The assist role is enviable, but

vague. Under strong Commission leadership, it's an enabling clause. Under a cautious Commission, it's a rationalization for inertia.

Some would argue further that a Commission that's responsible for evaluating the parties' progress in implementing the Agreement must find itself in conflict of interest if it's also assisting those which it evaluates. This, of course, is nonsense.

The parties must make clear the meaning and expectations embodied in Articles 7 and 8 so that the Commission's actions regarding the bilateral institution and the Regional Office satisfy the expressed requirements of the parties through these articles.

These articles are vague, they seem to be contradictory. The Commission is owed a clear explanation of what the parties expect of them under those articles.

Further to that point, the parties have given lead responsibility, although disputed authority, to Environment Canada and the EPA for the implementation of the Agreement.

The chairs of the Water Quality Board are from Environment Canada and the U.S. EPA, and the remainder of the Board is populated with government officials. Hence, the Water Quality Board members are charged with reviewing the programs and policies of themselves.

Now I have deep respect for the Water Quality Board members, some of whom might be here, but I've worked with for many years and actually served on



the Water Quality Board. It is, though, an objectionable paradox that must be redressed, I believe, during the review of Article 7...Article 8, sorry.

Secondly, in the U.S., we have witnessed an astonishing and laudable effort on the Great Lakes strategies through the Great Lakes Regional Collaboration.

The Collaboration now faces a highly uncertain legacy, given its \$20 billion price tag in the wake of Katrina. Even without the fiscal consequences of Katrina, many Great Lakes pundits question any substantive infusion of Great Lakes investment would be forthcoming.

You also mentioned and others here that Canada is entering into a discussion of the renewal of COA, Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem, after Canada has gone through a largely unsuccessful effort to acquire \$1 billion over ten years for the Great Lakes-St. Lawrence River-Gulf, the St. Lawrence program.

Such ordeals on both sides of the border can seriously deplete morale and energy, so this is a call to arms. For those of you – and this message is to the government – for those of you who will be tasked with the review, seek out pragmatic, constructive thinkers to help you, be energized to find a contemporary agenda and use innovative methods to embrace this huge opportunity.

We are at a threshold. We can turn this into a boon, we can avoid mediocrity in collaborative Great Lakes renewal, but only if the desire is within us to take on this task.

Finally, I urge the governments, the Commission, and those who believe we have a responsibility to these big waters to learn the language of sustainability. I understand Tom Years (?) point about the term.

But by this, I mean that the three components of sustainable development that are specified as economic and social cohesion, protection of ecosystem and natural resources, and the balanced competitiveness of this region must be a central driving force for a future-looking Great Lakes Water Quality Agreement.

We all our current behaviour is unsustainable. Let's engage in discourse on how far we should innovate the Great Lakes Water Quality Agreement for the 21<sup>st</sup> century and let's be bold about it. We owe this to our successors and to ourselves. Thank you. (APPLAUSE)

HERB GRAY: I now call on Peter Van Loan, MP, followed by Jim Mahon, of London, Ontario. And he'll be followed by Marilyn Barker, of the Bay Area Restoration Council, and that's in Hamilton (?). So I'd like to call on the distinguished Member of Parliament to approach the microphone.

PETER VAN LOAN (Liberal Member of Parliament, York-Simcoe): Thank you very much. My name is Peter Van Loan, I am the Member of Parliament for York-Simcoe, and I am here today ask the International Joint Commission to recommend the identification of Lake Simcoe as an Area of Concern as defined by the Great Lakes Water Quality Agreement.

Now I have been working together with numerous groups and organizations, all of whom have been committing significant efforts to improving the environmental health of Lake Simcoe.

We chose to just have one person come as a speaker rather than have a dozen to be efficient, so I hope you might indulge me an extra minute or two if that's necessary.

Lake Simcoe is the most significant feature of my constituency, which is essentially a horseshoe around the south end of the lake, and there are approximately 300,000 people now living more or less on the shores of Lake Simcoe.

Now as our knowledge and practice of environmental protection (inaudible), we have become increasingly practiced in an ecosystem approach to environmental protection and operated on a watershed basis, and in fact, that watershed basis is the very basis on which the IJC operates.

My request to you today is to exercise that jurisdiction to recognize the critical environmental needs of one of the largest bodies of water within the Great Lakes basin, a body of water that's fully interconnected with the boundary waters that the Great Lakes represent, and that's Lake Simcoe.

And what I want to set out are three things, in simple terms. Firstly, that the protection of Lake Simcoe is in fact part of your mandate pursuant to the Great Lakes Water Quality Agreement.

Secondly, that the health of Lake Simcoe is both affected by impacts from other parts of the Great Lakes basin and also has downstream impact on the Great Lakes and the St. Lawrence waterway.

And thirdly, that the Lake merits identification as an Area of Concern, that the Commission should recommend that to the partner governments.

Now I want to start firstly with your mandate. And you are of course aware that the Great Lakes Water Quality Agreement mandates as follows: that you are to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes basin ecosystem.

Now the Great Lakes basin ecosystem and the Great Lakes basin both clearly have definitions that include Lake Simcoe, and as such, your mandate extends to include it.

And if you look at the maps that I have attached to that submission in front of you, you will see where Lake Simcoe is located and that it is in fact a quite central part of the Great Lakes basin.

Now, secondly, in terms of linkages and impacts, a review of the surface and groundwater flows throughout the Great Lakes basin demonstrates conclusively that the Lake is both a victim of environmental degradation from upstream sources and subsequently a contributor to negative downstream impacts.

Lake Simcoe is connected to the Great Lakes through the Trent-Severn Waterway and other waterways both to Lake Ontario and to Lake Huron-

Georgian Bay, and as well, it is obviously connected through several tributaries throughout the Lake Simcoe watershed.

We have seen that those waterways can also serve as two-way vectors for environmental degradation, particularly with the introduction of invasive species recently.

So when you look both geographically and at the water flows, you can see the very central role and function of Lake Simcoe.

Now while your original authority once related many years ago just to boundary waters, our understanding of the interconnectedness of the ecosystem has grown and the ecosystem approaches, the IJC has expanded its jurisdiction and appreciation of that.

We look at Lake Michigan, for example. It is a body of water fully surrounded by the United States on all sides, distinguishing it from the other Great Lakes, not being a boundary water yet it is obviously a body of water that has attracted great attention from the IJC, and that's appropriate.

Similarly, when one looks at questions such as size, you will see that Lake Simcoe is in fact larger than Lake St. Clair, another body of water that has attracted significant attention for understandable regions from the International Joint Commission.

So that being said, while size isn't a determining factor in whether or not it attracts your attention, a body of water the size of Lake Simcoe does contribute

significantly to its impact and potential effect on the Great Lakes basin ecosystem and the role it plays within.

So in simple terms, you're dealing with a highly interconnected ecosystem in which Lake Simcoe plays a significant role and that the health of that lake and its role in the ecosystem is something that should draw vigilant protection that the International Joint Commission can provide.

Which leads me to the third issue I wish to address, which is that the Lake does merit identification as an Area of Concern. Under Annex II of your Great Lakes Water Quality Agreement, the definition for Area of Concern is a geographic area that fails to meet the general or specific objectives of the Agreement where such failure has caused or is likely to have caused impairment of beneficial use or of the area's ability to support aquatic life.

Sadly, Lake Simcoe satisfies that test in objective scientific terms to be identified as an Area of Concern. And part of your role in the IJC is to recommend identification of Areas of Concern.

Section III of Annex II sets that out, and that is that the parties, which is of course the two federal governments, in cooperation with state and provincial governments and the Commission, shall designate geographic Areas of Concern. The Commission, in its evaluation role, shall review progress in addressing Areas of Concern and recommend additional areas for designation by each party.

And it's that responsibility I am asking you to exercise today and request that you recommend to the government of Canada that Lake Simcoe be designated as an Area of Concern.

Scientific basis for its identification as an Area of Concern is multiple (?) and, I think, quite undisputed. Firstly – you know, I'll just talk about two of those areas - the first which has been an area of focus for the IJC traditionally is phosphorus loadings and lake eutrophication.

And phosphorus loadings into Lake Simcoe have for many years been far above the natural state, perhaps two to three times. Natural estimated appropriate loadings would be 30 metric tonnes a year, and the current loadings are as high as 100 tonnes a year, according to some estimates.

And the effect, the result has been the stimulation of high concentrations of algae and weed growth and the negative impacts that are associated with that, the slow death of a lake, as a (inaudible) would describe eutrophication, and it's had a significant impact on aquatic and plant life. It meets the test of whether or not the area's ability to support aquatic life is impaired.

Now in the lake, those impacts are seen most dramatically at the south end, in Cook's Bay, which is the southern panhandle of the lake. It's got a narrow geographic configuration, it's got a shallow depth, and it's got runoff, particularly from the very rich market garden area of Holland Marsh, not only from fertilizer inputs, but just from those rich soils. And that is where the eutrophication effects are seen most severely.

But it's also...the good news is that it's an area, because of those focus sources, that would be particularly amenable to remediation efforts, and that would result in significant improvements.

The second area that we have seen recently is that of alien invasive species. It's an ongoing issue, the introduction of those species. We've seen it with the zebra mussel, the quaga mussel, crap, and others that have historically arrived. Recently, we've had the round goby arriving at the shores and in the tributaries, but not quite there. And in my submission, you can see a little bit on some efforts by the province to address that round goby invasion.

But those invasive species introductions...actually, Lake Simcoe, through those tributaries, serve as a short (inaudible) vector into the upper Great Lakes for those invasive species, and those efforts with Lake Simcoe can be very helpful to the overall ecosystem.

So I want to conclude by asking that you do recommend the lake as an Area of Concern. You know that that will open the door to opportunities for significant environmental funding federally.

And I believe it will have - I think if you investigate, you will agree - a very positive effect on the entire Great Lakes basin ecosystem if the problems currently facing Lake Simcoe are adequately addressed. Thanks very much.

HERB GRAY: Thank you, Mr. Van Loan. Would Jim Mahon please come forward? He's based in London. And after that, again, Marilyn Baxter, of



the Hamilton Bay Area Restoration Council, and she'll be followed by Paul Ebell (?) of Toronto.

JIM MAHON: Thank you, and thank you for pronouncing my name right. I'm not used to having it pronounced right, being spelled M-a-h-o-n, so thank you.

I make my comments on behalf of Canadian Auto Workers Local 1520 and the London (?) District Labour Council. I didn't come with an organized presentation, though I will submit comments, but I did want to make a couple of points tonight.

One, Sarah Miller talked about the fact that the Great Lakes Water Quality Agreement, though signed 33 years ago, was viewed as a jewel, and it still is considered a model throughout the world of a partnership between two countries.

And for the most part, it's still a fantastic agreement. What we need, however, is a commitment on behalf of the Canadian and American government to be serious about implementing the Agreement.

It was mentioned by Mr. Gray in his opening comments regarding the recognition of zero discharge, and certainly, zero discharge, at one time, the citizens on both sides of our border looked at it as recognition of getting rid of mercury and certain toxins in the lakes.

That has all but been forgotten, I think, at this point in time by the governments and many citizens, but it is a term that holds a lot of potential for doing something about the problems in our lakes.

Michael Gilbertson (?) talked about the Areas of Concern and mentioned the health reports that were done on the Areas of Concern. They, as he mentioned, have been virtually ignored.

And when we look at the Areas of Concern that have been identified on the Canadian and American side, it's appalling that 33 years later, that so little progress has been made.

What we need is political commitment. And I recognize that the IJC's hands are tied to a certain degree without that government commitment, but that commitment truly is needed for any new or revised Agreement to go forward and make progress.

There has been some changes since the Agreement was initially signed. As a number of people have mentioned, invasive species have become a huge problem, and we really need to get tough if we're going to save our lakes from invasive species.

Factory farms have been a problem that have given huge nutrient loadings in many rivers and many lakes. Given the fact that we're looking at 20 per cent of the world's freshwater supply, we really need to get tough and do something.

As one of the other speakers mentioned, water diversions are very much a concern. Devil's Lake was mentioned, but we have two diversions from the Arctic into the Great Lakes, and of course, the Chicago diversion. I mean, the Agreement should consider the effect of these transfers.

Climate change poses huge issues for the future. Any new Agreement should consider the effect of climate change.

It was mentioned of the St. Lawrence River being part of the ecosystem of the Great Lakes, and I'm really glad to see recognition of that fact because it is truly part of the same system.

And I'll want to conclude by saying that recognition of tribes and First Nations in a multinational approach to a new Agreement would certainly be a positive step forward and certainly would send a message not only to both our governments, but to countries worldwide that we're serious about including recognition of our native countrymen.

And finally, we need a strong International Joint Commission to take the new Agreement forward. Thank you.

HERB GRAY: Thank you. I invite Marilyn Baxter to come forward. (APPLAUSE) And followed by Paul Abell, and he's followed by Andrew McCammon.

Now I want to mention that we're being given the hook by the television there, shutting off at 9:00. That's a message to all of us. So I know all of your presentations are valuable, but I urge brevity, and you have other ways to make sure we have all of your comments. So I call on Marilyn Baxter, of the Bay Area Restoration Council.

MARILYN BAXTER (Bay Area Restoration Council): Good evening, commissioners. The Bay Area Restoration Council is at the center of efforts by

citizens to restore the Hamilton Harbour and its watershed, and our mandate is to promote the Remedial Action Plan and assess its implementation.

So this evening, I'd like to comment on two different aspects of the Agreement, and one is on its effectiveness. Is the Agreement helping to restore and maintain the integrity of the Great Lakes?

I'd like to say, in the case of Hamilton Harbour, yes, it is. The RAP is working well for us because of our consistent stakeholder approach, and it is supported by COA.

The recent commitment by senior levels of government to work together for funding strategies was demonstrated. However, it will be needed to be continued over the next few years if Hamilton is to be de-listed, and it's required for the governments to put funding into this program.

There are three major initiatives still to be done: contaminated sediment, phosphorus control, and the sensitive and valuable habitat areas in the marshes and wetlands.

As we saw in one of the earlier presentations the map of the wetlands across the Great Lakes, and there aren't very many in Lake Ontario, so (inaudible)...and western Lake Ontario is the main nursery habitat for fish and other animals and wildlife, and it is being restored, but it isn't finished yet.

The second comment is on the scope of this review, what is critical to the Great Lakes ecosystem and what needs to be addressed. And I'd like to mention

the problem of non-native aquatic invasive species because they are causing havoc, and they cannot be addressed at the local level.

So we urge the governments to set up binational goals and objectives to implement the regulations to stop new introductions of the aquatic invasive species to the Great Lakes from the ballast waters and (inaudible).

Treat them, treat the aquatic invasive species like a persistent toxic substance, as they are indeed the cause of biological pollution. Current control efforts for lamprey and carp are extensive (?) and control is impossible for anything smaller than the carp or lamprey.

There are...Transport Canada's green ship program. I don't know the status on that. Perhaps it needs some invigoration.

So updating the Annex VI on the pollution for shipping sources is required, but more importantly, it's time to act on the threat of the invasive species. Thank you very much.

HERB GRAY: Thank you. I now call forward Paul Abell.

PAUL ABELL: Thanks for this opportunity to speak. I speak not really on a technical level at all, but from personal experience that I want to share, that I think is very important for the IJC to consider as it moves forward.

When I first heard about the IJC, it was a couple of years ago, when reading a book about the Great Lakes and the state of them (inaudible)...today, where they've come from and so forth. And it was my first introduction on a

technical level to what the IJC and other organizations have been doing to help the Great Lakes, restore them, through the years.

But I first go back to childhood experience. I've lived on Lake Ontario, I grew up in Oakville, I played on the lake, and I remember thinking how absurd it was that we would drive 2.5 hours to Lake Huron to go swimming.

We would play on it, we would dam it up, but there was also a time of year in the spring – I forget if it was May or June or July – but the (inaudible) would come up onto the shore and be dead in the thousands.

And then there would be seaweed...not seaweed, sorry, algae that would accumulate on the shore and we've had fun throwing rocks into it when it was dry and crusty in the sun and watch it explode.

And it wasn't until a couple of years ago and reading this book that I realized the importance of the IJC and its role in helping to protect and restore his lake, in a small way, with the Agreement back in the early '70s to reduce phosphorus loading and deter the industries and so forth.

And it's because I don't see a lot of it around anymore, around the lake. There is some, mind you, but not to the extent that I experienced when I was young.

My wife and I had the privilege a couple of years ago to set out on a journey around Lake Superior bicycling, and it was sparked by our living in Thunder Bay and wanting to experience the lake that we lived on. We've been

now living in Toronto for a few years, and thought, well, how absurd, we didn't do this for Lake Ontario, we know nothing about New York.

And the reason I bring this up and the relationship to all of this is that all of this is very technical, very legal, and I think it's fine, but I think what sparked our interest in this journey is what sparked our interest in Lake Superior, was the appreciation...by travelling around the lake, you started to gain a new appreciation for the communities around the lake, the people, the water quality issues.

We discovered numerous wetlands beyond (inaudible) Paradise, which is our small gem in Ontario, but New York State, around Rochester, has tonnes and tonnes. And we were just amazed by what this lake has to offer.

And I think it's so unfortunate that we don't take those childhood experiences like I had growing up on the lake and we don't know how to somehow make it so that we appreciate the lakes...when Mayor Miller talked about earlier and said once (inaudible)...place which we live on, we fish on, we swim in, we drink the water from – thank God we have water from Lake Ontario and not some bottled water here.

But I think it's only if we, at a personal level, the common person, if we're to do anything long-term for these goals, to prevent aquatic invasive species and other large-scale, massive environmental disasters, then we have to somehow wake up to the reality that we have to appreciate this lake, appreciate the communities around it.

Thank God for the Rochester ferry, that Toronto is arrogantly not taking any interest into. But you know, IJC is great, but I think the IJC in going forward has to start looking on a personal level.

It seems to be that it's come up here very theo...over a scientific level, and it has to start thinking in a more preventative level and relating on a very intimate, personal level that equates...speaks of appreciation and awareness as opposed to just large-scale environmental action. So, thanks. (APPLAUSE)

HERB GRAY: Thank you very much. I now call on Andrew McCammon, to be followed by Selina Young of the Métis Nation and a graduate student, I believe, at York University. And the last speaker, Simon MacLeod.

And if I slip away before the last speaker, please accept my apology, because Chairman Schornack will very capably take over and make concluding remarks and end things in a very proper manner.

ANDREW MCCAMMON: Good evening and thank you very much for this round of consultations and for coming to Toronto. Bienvenue à Toronto, Monsieur Schornack.

My name is Andrew McCammon. I chair, but am not representing tonight, a small watershed group called the Taylor Massey Project. If anybody has a pen and wants to look us up, we're at [www.thetmp.org](http://www.thetmp.org).

We work at a watershed level. I'm not able to speak on behalf of my organization because we have just completed 16 events this year, the last one was



this Sunday. We've had almost 1,100 people out in cleanups, educational walks, tree plantings, so we work great the local level.

And it's very important to us that the vision at the big level is carried forward. That has been the job of the IJC and the Great Lakes Water Quality Agreement for the last 15 years.

And certainly, we agree with John Jackson's comments about visioning for the future and being brave and bold. This is not the time to back off, but it is the time to vision the future and bravely.

So I want to thank the IJC for its past efforts in that regard and urge them to continue in the future. But I've got a couple of quick comments, I'll try to rush through them, and my watch isn't working. I would have three sets of thanks, four problems I want to identify, and three recommendations.

The first thanks I just basically gave, it's to the IJC for its vision and to continue it. Also at the macro level, I want to pay particular tribute to Environment Canada for their approach to watershed health and articulating that a healthy watershed is one with 25 per cent natural cover.

This is a concept which came out fairly recently. It was adopted aggressively in Toronto at some of the local agencies, particularly the conservation authority are adapting it to address the head waters, so we will achieve significant watershed protection in Toronto.

And it's really amazing how quickly that's happened, because on some of the other issues that we have known well and have been working on, such as

water quality, persistent toxic bioaccumulating chemicals, the action has been less rapid, and one has to wonder why and identify where the motivations are.

I also want to thank the City of Toronto for its \$1 billion vision of the Wet Weather Flow Master Plan. This is in stark contrast to really the lack of clear political and financial support from, unfortunately, the federal and provincial governments with respect to water quality in the Toronto RAP.

And the City of Toronto, Mayor Miller earlier tonight commented about writing the municipalities into the future, and I think this is extremely important. It's the local municipalities that are closest to the people, it's where it will be delivered.

So we really...I personally really believe, and will try to get this through the board and make a formal submission, that the IJC's role is to set the vision and encourage the parties to allocate policy and programs and finances and the provinces and the municipalities to do the work. You guys can't do it all. You don't have the staff that the other agencies do.

The problems that we see...my watch isn't working, I don't want to go over. How am I doing? I don't get a three-minute warning?

The AOCs (inaudible)...in all of the documentation from the IJC have tiny little boundaries. You can't contain the problems in those boundaries. You're not adopting watershed management upflow and you're not pretending AOCs extend beyond their tiny little boundaries. They really have to be expanded.

The AOC management, reporting, and civic engagement process as it currently stands is totally inadequate. This is the first RAP meeting in Toronto in over 18 months. And in spite of a pledge by the local RAP to have an annual clean water summit, we haven't had one for three years. Thank you for coming.

The three stages of RAP remediation are also unfortunately inadequate. We need for more stages. And there's been lots of talk about 2A, 2B, 2C, so I think you really have to be more creative in terms of how you identify the RAPs and their progress and how we move towards de-listing.

And finally, beyond the AOCs and the RAPs, there's no real overall sense of the health of the Great Lakes. It is up there in the fuzzy theoretical terms, the fish advisories, the chemicals that we know about.

But I look at the...I would like to see a comprehensive listing of the state of polluted water and the volume of chemicals coming in, and I would like to see that depicted graphically.

I would love to see sets of maps potentially expanding the AOC tiny boundaries I referred to and identifying the lakes in something similar to the terrorist color barding of the current Homeland Administration. Is Lake Ontario orange or is it red? Where are we?

This information is not graphically presented and it doesn't allow people to get significantly engaged. So I think you should move to some more advanced GIS graphics and reporting from the parties.

Three quick recommendations. I think the IJC should encourage the parties to in turn encourage excellence and expanded community engagement in watershed management and the RAP processes. Two, to develop the threat matrix I briefly described for the lakes.

Three - and this is key, and nobody's really mentioned it tonight – but to recommend to the parties the allocation of the necessary financial and staff resources to do the job. Thank you very much. (APPLAUSE)

DENNIS SCHORNACK: Okay, thank you very much, Andrew. I have Selina Young, to be followed by – get my glasses out here – Simon MacLeod. And that would pretty much conclude the list of speakers for this evening. So for those, Selina, go right ahead.

SELINA YOUNG: Thank you. I'd also like to thank you for holding this meeting and allowing our voices to be heard.

I come here today wearing a variety of different hats. First, I am a Métis person, a member of the Métis Nation of Ontario. I also grew up halfway between Lake Ontario and Lake Erie, on the Grand River.

I also worked for a number of years as a scientist at Environment Canada at the Canada Centre for Inland Waters. And as indicated earlier, I am now a graduate student studying water quality science and policy linkages or lack thereof.

I apologize as I do not have a formal presentation, but I wanted to stress a few key points, a lot of which have already been brought up. I feel these must be addressed in any upcoming review.

First, inclusion of the public more formally, with opportunities for two-way communication, including First Nations, Tribes, Métis, and off-reserve aboriginals, as well as municipalities. I will not go further into this because I feel that the Mayor and Leslie Coffey (?) presented these issues brilliantly already.

Second, proper implementation of adaptive watershed management, specifically focusing on that word, implementation. Don't just use it, clearly define it, identifying implementation pathways, for example.

Third, and finally, I would like to see something done to make any new Agreement or revised Agreement truly binational, versus what I believe the current Agreement is, and that is bilateral. This review and the upcoming review offers the opportunity to revisit the binationality of the Great Lakes Water Quality Agreement. Thank you.

DENNIS SCHORNACK: Thank you very much. And thank you for being patient and then also brief in your remarks. And of course, you can always submit written material whenever you wish. That brings us to our last speaker who has endured this meeting, and that is Simon MacLeod, if he is still here. Oh, here he is.

SIMON MACLEOD: Hi, I'm Simon MacLeod and I'd like to say a few points on how the water level in Georgian Bay has gone down extremely low.

First of all, around 1994-1995, around our area, the water started to go down, and I'm sure it's not just Georgian Bay that's gone down extremely.

Like one of the speakers said, wetlands have been going down and this must affect...excuse me, fish and other natural resources like swamps and swans.

I think the IJC should do something about the water levels. And also, we all have choices, but we should do the right thing to do about them. Overall, these are most of my points I had and thanks for listening to me. (APPLAUSE)

DENNIS SCHORNACK: Thank you very much, Simon. That would conclude the list of people who have expressed an interest in speaking tonight. I want to just say, by way of concluding, that I want to thank everybody here for coming, and especially...and even those people who chose not to speak.

The presentations were really quite exceptional. I have done...of the 14 consultations we have been holding around the basin, this is my sixth that I have attended, and I guess I'm partly...I guess I'm chairing this one now, so four of them I have chaired.

So I would have to say, of all of those six – and I don't know, I'll have to check with my other commissioners on their view – but this one has been, for me, very educational.

And again, I want to thank you for taking the time and for caring about these waters to prepare comments and to submit what I think have been some very interesting observations and some very good recommendations to the Commission.

I'll note that the Commission has also plans to submit its own recommendations to the two governments. That will come somewhat later, I think, in the process, probably more like next spring.

But we have asked our various boards – we have various advisory boards that serve us in many capacities – to look at the Agreement from a scientific perspective, from a governance perspective, and from a number of different perspectives, including some angles that we hadn't anticipated before, for example one that was raised earlier tonight with respect to air deposition of toxic substances into the lakes.

And so we're going to be concluding this process in terms of public consultations here on November 30<sup>th</sup>. And I think that the slide that was above us or behind me or wherever noted that we are having a Web dialogue on November 29<sup>th</sup> through December 2<sup>nd</sup>, and you are welcome to participate in that.

And I would encourage anybody who has not submitted any kind of written comment or who has not spoken but yet wants to be heard on this matter in a formal way by the IJC, submitting your comments to the two governments, to do so soon and to take advantage of the various avenues that we have made available to you to comment.

So with that, we will adjourn tonight's session. And again, I want to express my personal thanks, and on behalf of the Commission, our thanks for your willingness to get engaged, to make comments, to stand up in front of your

fellows and to let us know what you think. So with that, we are adjourned.

(APPLAUSE)

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