



# 3

COMITÉ D'EXAMEN DE L'ACCORD

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## Rapport au Comité exécutif national des Grands Lacs : **Volume 3**

### **RECUEIL DES COMMENTAIRES**

Commentaires reçus au cours de la période de consultation publique sur la version provisoire du rapport présenté par le Comité d'examen de l'Accord  
14 mai -14 juillet 2007

**L'examen de l'Accord relatif à la qualité  
de l'eau dans les Grands Lacs**

## RECUEIL DES COMMENTAIRES

Commentaires reçus au cours de la période de consultation publique sur le rapport provisoire  
présenté par le Comité d'examen de l'Accord  
14 mai -14 juillet 2007

*Sous l'égide du Comité exécutif binational (CEB), le Comité d'examen de l'Accord (CEA) a invité la population à faire part de ses commentaires sur le rapport d'examen du 14 mai au 14 juillet 2007. Quarante-six observations provenant de parties intéressées des Grands Lacs ont été reçues. Le CEA a examiné attentivement les commentaires et apporté certains changements afin de clarifier et d'étayer le rapport d'examen.*

*Au cours de la période de consultation publique, le CEA a également reçu de nombreux mémoires qui préconisent la révision de l'Accord et qui renferment des avis et des recommandations en vue d'un nouvel Accord. Bien que le CEA estime que l'inclusion de ces avis dans le rapport va au-delà de son mandat, ses membres reconnaissent la valeur des commentaires reçus et l'importance de les présenter tels quels dans le dossier relatif à l'examen. Le CEA a été vraiment impressionné par le nombre, le contenu, la pertinence, la profondeur et le sérieux de ces commentaires..*

*Les commentaires portaient sur diverses questions : les changements climatiques, le financement, les espèces envahissantes, la responsabilité, la gouvernance, l'urbanisation, les substances chimiques préoccupantes et la santé humaine. Par exemple, en ce qui concerne les changements climatiques, les intervenants étaient d'avis que l'Accord devrait indiquer de façon explicite que les changements climatiques sont un facteur émergent à considérer dans l'établissement des cibles et des échéanciers en matière de restauration et de préservation de l'intégrité chimique, biologique et physique des Grands Lacs en raison de leur impact sur la qualité de l'eau et le volume d'eau des lacs. En ce qui a trait aux nouvelles substances chimiques, ils ont invité les gouvernements à prendre rapidement des mesures concrètes pour actualiser l'Accord en élargissant et en mettant continuellement à jour la liste des menaces émergentes et des substances chimiques préoccupantes. Les autres commentaires présentés dans le recueil sont de nature semblable.*

*Les commentaires reflètent ce que les membres de la collectivité des Grands Lacs pensent de l'Accord. Ils témoignent également du vif intérêt que suscitent l'Accord et les Grands Lacs. La période de consultation publique a fourni aux membres de la collectivité des Grands Lacs une occasion supplémentaire d'exprimer leurs points de vue sur l'examen de l'Accord. Ces points de vue, présentés dans le recueil ci-joint, ont été transmis aux Parties. Nous remercions la population des Grands Lacs de son appui au processus d'examen et de son apport pour assurer l'avenir des lacs.*

*Veillez prendre note que les adresses personnelles, les adresses courriel et les numéros de téléphone ont été enlevés de certains commentaires.*

## TABLE DES MATIÈRES

N°	Affiliation	Nom	Prénom	Poste	Page
1	Alliance for Great Lakes	Botts	Lee	Board member emeriti	3
2	Alliance for the Great Lakes	Davis	Cameron	President	3
3	The American Forest & Paper Association (AF&PA)	Schwartz	Jerry	Senior Director, Water Quality Programs	4
4	Biodiversity Project	Alexander	Peter	Executive Director	6
5	Buffalo Niagara Riverkeeper	Boyer	Barry		6
6	Canadian Federation of University Women, Ontario Council	McGregor	Linda	President	10
7	Chicago Zoological Society	Unger	Geri	Director of Regional Conservation	27
8	City of Owen Sound	Harrold	Jim	Acting City Manager	28
9	Conservation Ontario	Fox	Bonnie	Policy and Planning Specialist	29
10	Council of Great Lakes Industries	Kuper	George	President and CEO	32
11	Ducks Unlimited	Cayley	Julie	Government Affairs Manager, Ontario – Eastern Region	37
		Tori	Gildo	Director of Public Policy, Great Lakes/Atlantic Region	
12	DuPont	Reich	Robert A.	Senior Fellow	41
		Schwer	Richard F.	Senior Consultant	
13	ENGOS (64) via Great Lakes United	Jackson	John	Program Director	43
14	FreshWater Consulting	Masson	Catherine		52
15	Great Lakes and St. Lawrence Cities Initiative	Becker	Gary	Chair, Great lakes and St. Lawrence Cities Initiative. Mayor, City of Racine, Wisconsin	53
		Miller	David	Founding Canadian Chair, Great Lakes and St. Lawrence Cities Initiative, Mayor, City of Toronto, Ontario	
16	Great Lakes Indian Fish and Wildlife Commission	Zorn	Jim	Executive Director	62
17	Great Lakes United				66
18	Institute for Food and Agricultural Standards, Michigan State University	Stone	Dr. John V.	Research Scientist	73
19	International Joint Commission	Bourget	Elizabeth	Secretary, US Section;	75
		Clamen	Murray	Secretary, Canadian Section	
20	Izaak Walton League of America	Miller	Leah	Director of Watershed Programs	77

N°	Affiliation	Nom	Prénom	Poste	Page
21	Les Amis de la vallée du Saint-Laurent (AVSL)	Stainier	Andr		79
22	LOSAAC	Emo	Brian	Chair	83
23	McMaster University	Krantzberg	Gail	Director and Professor	84
24	Minnesota Pollution Control Agency	Lohse-Hanson	Carri	Lake Superior LaMP Coordinator	89
25	National Wildlife Federation	Murray	Michael	Staff Scientist	93
26	Nature Quebec/UQCN				96
27	The Nature Conservancy	Andersen, Jr.	John A.	Director, Great Lakes Program	102
28	The Niagara Parks Commission	Kernahan	John	General Manager	103
29	Ohio Coastal Resource Management Project	Chase	Edith	President	104
30	Ohio Environmental Council	Meyer	Kristy	Director of Clean Water Programs.	109
31	Ontario Federation of Anglers and Hunters	Quinney	Terry	Provincial Manager	113
32	Ontario Ministry of the Environment, Ontario Ministry of Natural Resources, Ontario Ministry of Agriculture, Food and Rural Affairs	Lieou	John	Assistant Deputy Minister, Ontario Ministry of the Environment	114
		Wilson	Kevin	Assistant Deputy Minister, Ontario Ministry of Natural Resources	
		Stark	Deb	Assistant Deputy Minister, Ontario Ministry of Agriculture, Food and Rural Affairs	
33	Public Health - City of Toronto	McKeown	David	Medical Officer of Health	119
34	Rescue Lake Simcoe Charitable Foundation	Crooks	Timothy	Treasurer	122
35	The Shipping Federation of Canada	Gravel	Caroline	Director, Environmental Affairs	123
36	Smurfit-Stone	Broome	Chris	General Manager	126
37	St. Clair River BPAAC	Clatworthy	Jim	Prof. Emeritus, Oakland Univ., Rochester, MI.,USA	128
38	Toronto Water, Toronto Water Infrastructure Management	Di Gironimo	Lou	General Manager	128
39	Town of Ajax	Allore	Paul	Director of Planning & Development Services	131
40	The Wallaceburg Advisory Team for a Cleaner Habitat (WATCH)	Hansen	Jim	Director	146
41	Wisconsin Paper Council	Wilusz	Edward J.	Vice President, Government Relations	150
42	N/A	Drag	Nate		152
43	N/A	Elphick	Len		154
44	N/A	Gilbertson	Michael		154
45	N/A	Morris	Nathan		157
46	N/A	Visser	Mel		157

**Comment Number: 1**

**Name:** Botts, Lee  
**Affiliation:** Alliance for Great Lakes

General Comments:

The draft report is a beginning toward review of the Great Lakes Water Quality Agreement but inadequate for reaching final conclusions on whether and how the agreement should be changed. The principal reason is an emphasis on problems with the existing agreement but inadequate attention to solutions, especially in the regard to institutional arrangements and governance. The critical question of the relationship between the parties to the agreement and the International Joint Commission is ignored. Failures of the agreement are described but the question of possible responsibility of the parties for the failures is not addressed except in a call for mechanisms for greater accountability. It is asserted that "The agreement lacks a clear and strong management and implementation framework. . ." but the elements needed for such a framework are not considered except for inclusion of additional participants. The parties should be advised that it is not sensible to tinker with the agreement until the fundamental governance questions are addressed, beginning with whether the two federal governments remain committed to bi-national management of the Great Lakes as a shared resource.

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**Comment Number: 2**

**Name:** Davis, Cameron  
**Affiliation:** Alliance for the Great Lakes

General Comments:

Environmental groups from around the region prepared a report called "Promises to Keep; Challenges to Meet." This website does not allow us to email the report as an attachment, but I am incorporating it by reference to these comments. It is available for download free at: [http://www.greatlakes.org/news/pdf/Promises to Keep Challenges to Meet.pdf](http://www.greatlakes.org/news/pdf/Promises%20to%20Keep%20Challenges%20to%20Meet.pdf)

**AMERICAN FOREST & PAPER ASSOCIATION**

GROWING WITH AMERICA SINCE 1861

July 13, 2007

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Dear Messrs. Marisetti and Elster:

The American Forest & Paper Association (AF&PA) is pleased to file these comments regarding the draft report **Review of the Canada – U.S. Great Lakes Water Quality Agreement**, dated April 2007. AF&PA is the national trade association of the forest, paper, and wood products industry. AF&PA represents more than 200 companies and related associations that engage in or represent the manufacture of pulp, paper, paperboard, and wood products. Many AF&PA members own and operate manufacturing facilities in the Great Lakes region, in both the U.S. and Canada.

AF&PA has tracked and participated in the Great Lakes Water Quality Agreement Review process through the Council of Great Lakes Industries. AF&PA affiliated personnel have provided input, reviewed outputs, and examined the report prepared for the Great Lakes Executive Committee (BEC). The draft report of review activities presents well organized summaries of major points made by the very large number of review participants holding varying viewpoints and perspectives. The report should be useful to the Agreement Parties as they work towards decisions on what changes should be made in the Agreement.

However, some key points appear to be missing from the discussion and some should be more prominently highlighted. These include:

- As mentioned during review discussions, the Agreement should be updated to provide for the use of risk assessment and risk management principles by the Parties as they seek to achieve Agreement objectives.
- Agreement review discussions included observations on the need for prioritization of Great Lakes ecosystem assessment, restoration, and protection needs. The report should better highlight these views.

Messrs. Marisetti and Elster

July 13, 2007

Page 2

- Discussions identified a need for flexibility in both specific objectives and the objectives themselves. The report does not appear to include the points regarding flexible objective provisions.
- The use of the Agreement to advance a sustainable development agenda for the Region was suggested by review participants. This point is not evident in the report.
- Participants stated several times during the discussions that the Parties should have the flexibility to report on progress towards meeting Agreement objectives via processes already in place or those put in place to satisfy other legislative directives. It should not be necessary to initiate a process or activity just to address an Agreement objective if a program initiated by other means can satisfy that reporting or assessment need. This point should be included in the report.
- Finally, the Agreement cannot exceed or replace the authorities established by the constitutional structures of the two Parties. Points relating to these limitations were a part of many review discussions. The report needs make more specific mention of these.

Thank you for the opportunity to provide these comments. AF&PA appreciates having been a part of the review process. We hope that activities which go forward as the Parties determine if and what Agreement revisions might be made will provide similar participation opportunities.

Sincerely,



Jerry Schwartz  
Senior Director,  
Water Quality Programs

**Comment Number: 4**

**Name: Alexander, Peter**

**Affiliation: Biodiversity Project**

General Comments:

Although I have not been personally involved in reviewing the WQA, my staff worked with several other NGO's and came to unanimous agreement on a number of recommendations. I urge you to follow the recommendations, which can be found at [www.greatlakes.org/news/pdf/Promises to Keep Challenges to Meet/pdf](http://www.greatlakes.org/news/pdf/Promises%20to%20Keep%20Challenges%20to%20Meet.pdf).

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**Comment Number: 5**

**Name: Boyer, Barry**

**Affiliation: Buffalo Niagara Riverkeeper**

**Purpose and Scope of the Agreement**

Buffalo Niagara Riverkeeper Position: The sections dealing with the scope of the Agreement should incorporate language making clear that land use practices affecting water quality are within the Agreement and subject to its management regimes.

Underlying the Review Group's specific points and recommendations on purpose and scope is a fundamental policy dilemma. On the one hand, it has been clear for several decades, as highlighted by the IJC's PLUARG reports and the substantial literature on sprawl, that water quality is significantly affected by land use practices and development patterns. This frequently means that fixing water quality requires substantial changes in land usage. At the same time, broadening the Agreement to encompass everything done on the land within the Great Lakes watershed can make it ineffective as a management tool, because trying to do everything at the same time is a good way to get nothing done.

One way to avoid this dilemma is to acknowledge that land use impacts on water quality are highly variable—greater in Lake Erie, for example, than in Lake Superior because the development pressures and hydrologic realities are so different in these two lake basins. Similarly, within any tributary watershed or sub-basin, discrete areas will have variable potential to erode or otherwise degrade water quality. To the extent that a revised Agreement uses the Lakewide Management Plans to set management and funding priorities, these variations can be accommodated in resource allocations and workplans. But we believe it is extremely important for the Agreement's sections on focus and purpose to make clear the linkage between what our societies do on land, and what happens to the waters of the Great Lakes.

We reach this conclusion because our experience working on local watershed issues indicates that having a strong binational statement of relevant norms and goals can enhance the credibility, resources, and legitimacy of both governmental and nongovernmental entities who are trying to address water quality issues on a regional basis. New York, like other states on the US side of the basin, is a strong home rule state where most land use decisions are made by small local governments with an extremely parochial focus. In this setting, having a strong set of official goals and objectives to support advocacy, outreach, and education efforts can be extremely useful—even



if, as in the case of the Agreement, there is no legal authority to compel local officials to comply with those norms.

Buffalo Niagara Riverkeeper Position: The Agreement should encompass water quantity as well as water quality.

We have several reasons for concluding that water quantity issues should be brought explicitly into the framework of the Great Lakes Water Quality Agreement:

- Water quantity and quality are technically linked, at least insofar as concentrations of pollutants are affected by the amounts of water available to disperse or dilute them.
- Levels and flows are likely to become major issues for the Great Lakes in the years ahead, as climate change is projected to cause a substantial decline in lake levels. If the Agreement fails to address these issues, it will likely become a much less relevant and important regime in the future.
- The recent history of attempts to control water bulk exports and diversions within the Great Lakes illustrates some of the problems inherent in keeping quantity issues wholly outside the Agreement structure. The principal alternative on the US side of the lakes, Annex 2001, has been very long in gestation, and remains a long way from becoming legally effective. What it has done, however, is exacerbate tensions and misunderstandings between Canada and the US.
- The IJC has a track record of careful and valuable studies of issues relating to levels and flows within the Great Lakes basin, most recently in the Lake Ontario levels study. To the extent that a revised Agreement provides enhanced visibility and accountability for programs within its ambit, this would strengthen the Commission's role in helping to balance the many competing interests affected by changing water levels. Bringing levels issues under the Agreement's reporting and public consultation mechanisms could also close a substantial accountability gap for the International Control Boards created pursuant to the Boundary Waters Treaty. During the 2004 regional power outage, for example, the International Niagara Board of Control authorized a clear violation of quantitative limits on hydropower diversions established in binational treaties. When stakeholders complained to the IJC, the Commission disclaimed all responsibility or oversight of Control Board decisions. International Boards of Control have also proven to be largely immune to judicial review in the United States, so there is virtually no way for stakeholders to call them to account for their decisions.

### **Outdated Agreement Elements**

Buffalo Niagara Riverkeeper Position: the Specific Objectives have been outdated for a long time, and should be deleted from the text of the Agreement.

The Agreement Specific Objectives have proven to be useless in practice, because the IJC, the parties, and the jurisdictions have been unwilling or unable to update them routinely as conditions in the lakes change and new knowledge emerges. They should be regarded as an early, unsuccessful attempt to assure accountability by setting measurable goals. That function can be more effectively accomplished by goal-setting outside the text of the Agreement, such as the COA agreements used in Canada, the Great Lakes Regional Collaboration initiative in the United States, and the Binational Toxics Strategy. All of these latter approaches could be improved, and they need to be supplemented by additional measures such as biodiversity metrics; but they are more relevant and dynamic performance measures than the Specific Objectives.

Buffalo Niagara Riverkeeper Position: The Agreement provisions relating to public consultation and participation are inadequate and outdated.

We agree with the Review Committee's conclusion that the portions of the Agreement relating to public and stakeholder involvement are seriously inadequate and need to be expanded and strengthened. Fortunately, the Agreement's shortcomings in this regard have not prevented the evolution of practices and processes to involve a wide variety of stakeholders and organizations—governments at all levels from national to local, tribal governments, and academic and nongovernmental entities—from playing important roles not only in advising the IJC and others on how to implement the Agreement, but also in actually taking a lead in implementation. A good example of this evolution is Buffalo Niagara Riverkeeper's service as RAP coordinator for the Buffalo River after the New York State Department of Environmental Conservation was unable to carry on this work. It is time to acknowledge in the Agreement that many of the current and emerging problems affecting the Great Lakes can only be solved by collaboration and partnerships among multiple organizations and interest groups. Strong and appropriate provisions in the Agreement can help to foster an ethic of cooperation and shared responsibility necessary for success.

### **Pressing Issues and Emerging Threats**

Buffalo Niagara Riverkeeper Position: The enumeration of emerging threats in the working group reports is an adequate summary of the major currently known threats to the ecological integrity of the Great Lakes. It is crucial for the Water Quality Agreement to provide a clear mechanism for identifying and addressing other threats that emerge in future years.

Among the list of threats identified in the Working Group reports, we would especially emphasize the importance of inadequate watershed planning and land use controls, biodiversity threats, invasive species, and climate change. Because stressors can interact synergistically and ecosystems can degrade quickly and irreversibly, it is extremely important for the agreement to provide better mechanisms not just for studying emerging threats, but for addressing them before it is too late. In other words, the Agreement needs to elevate phrases such as “anticipate and prevent” and “reverse onus” from slogans to program drivers.

### **Agreement Accountability and Implementation**

Buffalo Niagara Riverkeeper Position: A major unaddressed issue in implementing the Water Quality Agreement is the status and management of the connecting channels. Some possible

changes to the Agreement currently under consideration may worsen rather than improve the problem of restoring and protecting the connecting channels.

As a place-based organization focused on a Great Lakes connecting channel, the Niagara River, and its tributaries including the Buffalo River, BN Riverkeeper has considerable experience in trying to restore and maintain beneficial uses in these waterways. On the whole, the connecting channels have experienced some of the most contentious and least successful efforts to develop and implement Remedial Action Plans. If the Water Quality Agreement is revised to make Lakewide Management Plans more influential in directing programs, priorities and funding, as several reports have suggested, these problems are likely to get worse. Because they lie between the lake basins, the status of the connecting channels in the LaMP process typically ranges from peripheral to insignificant. Yet these areas contain heavy concentrations of population and industry, globally important natural features such as Niagara Falls, and an array of serious threats to the Great Lakes ecosystem such as lamprey breeding in the St. Marys river and the concentration of chemical plants and toxic dumps along the lower Niagara. In addition, work on these areas has to be coordinated binationally. In the aggregate, they deserve more attention and support than they have gotten from the IJC, the national governments, and the states and provinces during the past two decades of RAP work.

To prevent the connecting channels from falling farther behind other waterways under a revised Water Quality Agreement, the working teams should carefully consider the feasibility and desirability of defining a separate program and a separate reporting system and accountability structure for these areas.



**Comments on**  
**The Draft 2007 Agreement Review Report**  
**on the**  
**Great Lakes Water Quality Agreement**

Submitted to

Great Lakes Binational Executive Committee

**July 8, 2007**

by the  
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## **Re: The Draft 2007 Agreement Review Report on the Great Lakes Water Quality Agreement (GLWQA)**

The Ontario Council of the Canadian Federation of University Women (CFUW OC) welcomes the opportunity to comment on the Draft 2007 Agreement Review Report on the Great Lakes Water Quality Agreement (GLWQA).

Since 1995, CFUW policy has given voice to our concern about the consequences of resource depletion, the degradation of natural systems, the dangers of pollution and the destruction of fragile ecosystems.

In 2001, CFUW established a policy that

- declared that water, being a non-renewable natural resource of paramount importance, belongs to the Canadian public and its use must be regulated in the public interest;
- requested that government adopt and implement a sustainable and prudent water management policy to respond to long-term regional needs with due regard to the ecosystem and hydro-geological reality; and
- requested that government promote conservation and more efficient use of surface water and groundwater.

CFUW Ontario Council has participated in issues relating to the Great Lakes Basin since 2004. We have

- been an active member of the Government of Ontario's Great Lakes Charter Agreement Advisory Panel since 2004;
- been a member of the Water Guardian's listserv and the NGO Water Action listserv;
- submitted two formal briefs on the Great Lakes Charter Annex Agreements;
- participated in a government briefing and roundtable discussion on the 2007 Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem; and
- submitted two formal briefs on the 2007 Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem.

CFUW has policy on water issues dating back to 1967. Our policies allow us to speak as an organization to the Governments of Canada and Ontario.

## **GENERAL COMMENTS concerning the GLWQA and this REVIEW**

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The original bilateral Great Lakes Water Quality Agreement (GLWQA) was signed in 1972 by the Governments of Canada and the United States. Although the Agreement has been reviewed and updated periodically over the past 35 years and although some important steps have been initiated, real progress toward achieving the stated goals of the GLWQA has been very slow. After 35 years, the time has come to speed up that progress.

**CFUW Ontario Council appreciates the fact that, in this first major review of the Agreement in nearly twenty years, over 350 Canadians and Americans have been involved in the review representing the concerns and providing the expertise from a wide variety of sectors: governmental, private, academic, scientific, First Nations and NGO organizations.**

The International Joint Commission (IJC) made several important comments in its 13th Biennial Report on Great Lakes Water Quality (December 2006), which relate to the current Review of the GLWQA. The IJC Report pointed out that

- the Agreement must be improved so that persistent and emerging challenges to the Lakes can effectively and definitively be addressed;
- insufficient funding remains a core issue; and
- unambiguous accountability is central to the Agreement's success.

These same issues have also been recognized again and again by the reviewers in the current 2007 Draft Agreement Review.

**CFUW Ontario Council strongly supports the 21 Key Findings, Results and Recommendations of the 2007 Draft Agreement Review<sup>1</sup>; and**

**CFUW Ontario Council asks the Binational Executive Committee, and the Governments of Canada and the United States to ensure that these recommendations are heeded, and incorporated into a revised 2007 Great Lakes Water Quality Agreement (GLWQA).**

A renewed Great Lakes Water Quality Agreement in 2007 will present new challenges, new opportunities and a pressing need for definitive new action and accountability on the part of both Canada and the United States.

**CFUW Ontario Council supports a renewal of the GLWQA in 2007 in which**

- **definitive new action and accountability on the part of both the Canadian and the United States governments are recognized;**

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<sup>1</sup> Pg. 5-6, Review of the Great Lakes Water Quality Agreement, 2007.

[http://www.agreementreview.net/docs/GLWQA%20Review%20Draft%20ARC%20Report\\_En.pdf](http://www.agreementreview.net/docs/GLWQA%20Review%20Draft%20ARC%20Report_En.pdf)

- **the terms of the Agreement are updated to reflect current scientific understanding and technology with a mandate to remain current;**
- **the goals that are set are specific, measurable, accountable, results-oriented, and time-based; and**
- **a firm commitment is made by both Parties to provide adequate and time-specific funding to support and facilitate the timely implementation of the Agreement.**

## COMMENTS ON THE FIVE THEMES WITHIN THE DRAFT REVIEW

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CFUW Ontario Council will take this opportunity to comment on the current GLWQA and on some of the issues raised under the **Introduction** and **Five Themes** in this excellent and comprehensive Review.

### INTRODUCTION:

#### **Preamble<sup>2</sup> and Definitions**

While there is a clear recognition of the importance of the Great Lakes Basin waters and of the issues facing the waters, as well as a recognition of an ongoing commitment of the Parties to work together, there is no explicit recognition that it is, in fact, the **responsibility** of the Parties to do so.

**CFUW Ontario Council recommends that in the preamble of the GLWQA and within the clauses of the Protocol section, an explicit affirmation of this responsibility be added:**

*“ACKNOWLEDGING* that it is the responsibility of both the Government of Canada and the Government of the United States as signatories to the GLWQA

- to legislate strong protection for the waters of the Great Lakes Basin;
- to enforce the legislation that already exists to protect these waters;
- to develop and fund programs to counter emerging threats to the health of the waters; and,
- to develop and fund programs to remediate the waters and the aquatic ecosystems of the Basin which have been degraded;”

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<sup>2</sup> As stated in the Draft Review, the preamble contains the introductory statements to the Agreement on pages 1 and 2 of the GLWQA.

**CFUW Ontario Council agrees with the Review's concern that ground water be explicitly recognized as one of the key components of the ecosystem. CFUW Ontario Council therefore recommends that in Article 1 - Definitions, subsection (h)<sup>3</sup>, the words "including groundwater," be added to subsection (h) to read:**

"Great Lakes System" means all of the streams, rivers, lakes and other bodies of water, **including groundwater**, that are within the drainage basin on the St. Lawrence River at, or upstream from, the point at which this river becomes the international boundary between Canada and the United States;"

### **The Challenge: Making the Great Lakes Greater**

The Review asks that "measures to restore and protect the Great Lakes must be well aligned with domestic activities and laws, along with multilateral environmental commitments, many of which came about after the Agreement was last revised in 1987."<sup>4</sup>

**CFUW Ontario Council supports this recommendation for alignment, especially alignment with the commitments made under the Great Lakes Charter Annex Agreement, signed in December 13, 2005.**

## **THEME 1: THE PURPOSE AND SCOPE OF THE AGREEMENT**

### **ARTICLE II: Purpose**

The Review recognizes that "the purpose of the Agreement is fundamental to its success."<sup>5</sup>

**CFUW Ontario Council supports the focus in Article II which continues to recognize that the health of the whole ecosystem, rather than the narrow focus on the water alone, is vital to the sustainability of the Great Lakes waters.**

### **ARTICLE III: Principles**

In the Draft 2007 Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA), there is, in addition to the Article outlining the **Purpose** of the Agreement, an Article which outlines the **Principles**<sup>6</sup> upon which the actions in the Agreement will be based.

**CFUW Ontario Council *strongly* supports this section of the 2007 Canada-Ontario Agreement (COA). We *strongly* recommend that a new section entitled "Article III Principles" be incorporated into the 2007 GLWQA in this round of bilateral**

<sup>3</sup> Great Lakes Water Quality Agreement of 1978, <http://www.ijc.org/rel/agree/quality.html#art1>

<sup>4</sup> Pg. 10, Review of the Great Lakes Water Quality Agreement, 2007

<sup>5</sup> Pg. 12, *ibid.*

<sup>6</sup> <http://www.ec.gc.ca/ceparegistry/documents/agree/COA07/framework.cfm#articleIII>, accessed July 4<sup>th</sup>, 2007



**negotiations, and that subsequent Articles be renumbered. The new Article III would read:**

**“ ARTICLE III: PRINCIPLES**

1. The following principles will direct and guide the actions of the Parties under the Agreement:

(a) Accountability – remain accountable to citizens by establishing clear goals, results and commitments for this Agreement and by reporting regularly on progress in relation to environmental conditions.

(b) Adaptive Management – conduct activities with openness, continuous learning, innovation, and improvement to ensure effective and efficient management of the Agreement.

(c) Collaboration and Cooperation – ensure that the decision-making process incorporates consideration of public and Great Lakes community opinions and advice, and provide the Great Lakes community with meaningful opportunities to consult, advise and participate directly in activities that support the Agreement.

(d) Communication – ensure that effective methods are used to inform the public of the importance of the Great Lakes, the increasingly complex environmental challenges faced by the Great Lakes and ongoing efforts to overcome these challenges, and to encourage collaborative and individual action and stewardship to protect the Great Lakes.

(e) Conservation – promote the conservation of energy, water and other resources to sustain the physical, chemical and biological integrity of the Basin Ecosystem.

(f) Ecosystem Approach – make decisions that recognize the interdependence of land, air, water and living organisms, including humans, and seek to maximize benefits to the entire Basin Ecosystem.

(g) Free Exchange of Information – data will be collected once, closest to the source, in the most efficient manner possible and will be shared.

(h) Net Gain – design human development and management actions to maximize environmental benefits rather than acting only to minimize environmental costs.

(i) Pollution Prevention – use processes, practices, materials, products, substances or energy that avoid or minimize the creation of pollutants and waste and reduce the overall risk to the environment or human health.

(j) Pollution Reduction – continue to work towards the virtual elimination of persistent toxic substances and reductions in other types of pollution.

(k) Precautionary Principle – where there are threats of serious or irreversible environmental damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

(l) Rehabilitation – restore environmental quality where it has been degraded by human activity.

(m) Science-Based Management – provide advice to establish management priorities, policies and programs based on best available science, research and knowledge including traditional ecological knowledge.

(n) Sustainability – consider social, economic and environmental demands to balance the needs of the present without compromising the ability of future generations to meet their own needs.”

**CFUW Ontario Council is especially supportive of Article III (h) Net Gain.** This section makes a vitally important distinction in calling for actions which "maximize environmental benefits" rather than those actions that merely "minimize environmental harm." This is a great step forward in setting government priorities which give precedence to the integrity of the environment and the Basin ecosystem rather than to the demands of development.

We also appreciate the tone of this Article III, expressed by the use of active verbs to describe these Principles. Words like "use/ restore/ ensure/ promote/ design/ provide/ make decisions" serve to underline the action-oriented intent of the 2007 Agreement.

**CFUW Ontario Council congratulates both the Ontario and the Canadian governments for setting their priorities forth so clearly.**

**CFUW Ontario Council recommends that this new Article III be included in the 2007 GLWQA to make an equally clear statement of the Bilateral government commitment and priorities.**

### **General Discussion: Purpose**

The Review also notes that "the linkages between the purpose statement and the measures called for in the Annexes to achieve this purpose are weak, and in some cases, absent."<sup>7</sup> That is certainly a cause for concern. One of the challenges that has long been recognized in the effort to achieve progress has been the **need for more specific goals leading to more measurable results within a stated time.**

In order to facilitate closer linkage between the purpose and the action,

<sup>7</sup> Pg. 12, Review of the Great Lakes Water Quality Agreement, 2007

**CFUW Ontario Council recommends that the words "establish common priorities, goals and results that are specific, measurable, accountable, results-oriented, and time-based for the restoration, protection and conservation of the Basin Ecosystem" be inserted into the Purpose, along with reference to one of the other major threats identified - that of aquatic invasive species. The Purpose would then read:**

**“Article II: Purpose**

The purpose of the Parties is to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem. In order to achieve this purpose, the Parties agree to **establish common priorities, goals and results that are specific, measurable, accountable, results-oriented, and time-based for the restoration, protection and conservation of the Basin Ecosystem;** to make a maximum effort to develop programs, practices and technology necessary for a better understanding of the Great Lakes Basin Ecosystem; and to eliminate or reduce to the maximum extent practicable the discharge of pollutants **and the introduction of aquatic invasive species** into the Great Lakes System.”

**General Discussion: Scope**

The Review also notes that the Agreement "has fallen short by focusing more attention on chemical integrity and less on physical and biological integrity. The result is that the Agreement has been less effective in reaching chemical, physical and biological endpoints. There was also recognition that biodiversity, a component of biological integrity and an indicator of ecological integrity, is a key factor in maintaining and improving water quality."<sup>8</sup>

**CFUW Ontario Council recommends that this shortfall be corrected by adding statements supporting physical and biological integrity to the "policy" bullets in the Purpose section, as well as augmenting the issues covered by the General Objectives and Specific Objectives. These Objectives must be updated to include new and emerging threats that have been identified by past Reviews and which are dealt with in the Annexes, and to include new scientific understandings of other factors that influence water quality (such as biodiversity and groundwater).**

**THEME 2: OUTDATED AGREEMENT ELEMENTS**

The number and scope of issues raised by the Review point to an alarming and over-riding lack of political will on the part of the Governments of Canada and the United States to truly live up to the commitments made under this Agreement. There has been a refusal to "walk the talk", to acknowledge in meaningful terms the significant implications to the Great Lakes Basin water and ecosystem of their failure to act in a timely and comprehensive manner, and the potential costs of the failure to **set goals that are specific, measurable, accountable, results-oriented, and time-based.**

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<sup>8</sup> pg. 12-13, ibid

The Review states that "the Agreement's limitations in addressing newer concepts, approaches or standards have often been imposed not by the Agreement itself, but rather by the Parties choosing not to update the Agreement."<sup>9</sup> It also notes that "the majority of the Specific Objectives in the Agreement date back to 1972 and do not reflect the current knowledge base, advancements in analytical methods or modern approaches to developing water quality criteria. In addition, many Review Working Groups found that a number of the Annexes have not kept pace with scientific understanding, new issues, programs and/or current tools available. Newer, more effective management approaches are also being used in the Basin today that are no longer driven by provisions in the Agreement, such as watershed management planning, adaptive management, pollution prevention, biodiversity initiatives, and airshed management."<sup>10</sup>

**CFUW Ontario Council *strongly* recommends that the terms of the Agreement be updated to reflect the findings of the Working Group and to incorporate the seven Key Recommendations<sup>11</sup> cited in this section of the Review.**

To this end, CFUW Ontario Council further recommends that

**Annex 1- Specific Objectives**<sup>12</sup>

the Preamble be amended by inserting a new second sentence to read:

**"These Objectives will be renewed and updated as required, but at least every 5 years to incorporate new scientific understandings and methods, and to include new and emerging threats to the Great Lakes Basin ecosystem that have been identified."**

**Annex 2 - Remedial Action Plans and Lakewide Management Plans, Section 4 (v):**

the words "time-specific" be added to read:

"a selection of additional remedial measures to restore beneficial uses and a **time-specific** schedule for their implementation."

**Annex 2 - Remedial Action Plans and Lakewide Management Plans, Section 4 (vi):**

the words " including the funding sources of such measures" be added to read:

" an identification of the persons or agencies responsible for implementation of remedial measures, **including the funding sources of such measures;**

**Annex 2 - Remedial Action Plans and Lakewide Management Plans, Section 6 (a):**

the Preamble be amended by adding the words " near-shore waters and shoreline watersheds"; and by adding the sentence "Such Plans shall contain goals which are specific, measurable, accountable, results-oriented, and time-based" to read:

<sup>9</sup> pg. 16, ibid

<sup>10</sup> pg. 16, ibid

<sup>11</sup> pg.18, ibid

<sup>12</sup> The Annexes are part of the current Great Lakes Water Quality Agreement of 1978

" The Parties, in consultation with State and Provincial Governments, shall develop and implement Lakewide Management Plans for open lake waters, **near-shore waters and shoreline watersheds**, except for Lake Michigan where the Government of the United States of America shall have that responsibility. Such Plans shall be designed to reduce loadings of Critical Pollutants in order to restore beneficial uses. **Such Plans shall contain goals which are specific, measurable, accountable, results-oriented, and time-based**. Lakewide Management Plans shall not allow increases in pollutant loadings in areas where Specific Objectives are not exceeded."

**Annex 8 - Discharges from Onshore and Offshore Facilities, Section (4)(a):**

**the words "These programs and measures must include goals which are specific, measurable, accountable, results-oriented, and time-based" be added to read:**

"Each Party shall submit a report to the International Joint Commission outlining its programs and measures, existing or proposed, for the implementation of this Annex within six months of the date of entry into force of this Agreement. **These programs and measures must include goals which are specific, measurable, accountable, results-oriented, and time-based.**"

### **THEME 3: PRESSING ISSUES AND EMERGING THREATS**

**CFUW Ontario Council endorses the findings of the Review that the issues of urbanization, climate change and aquatic invasive species pose a very real threat to the integrity of the Great Lakes Basin Ecosystem and need to be addressed in the revised GLWQA. And, as we have already stated, it is vital that newly identified and emerging threats be incorporated into the GLWQA and addressed in its action plans, and that an effective process, which will more easily facilitate future updating of the Agreement, be developed.**

### **THEME 4: AGREEMENT ACCOUNTABILITY AND IMPLEMENTATION**

It is very disturbing that the Reviewers found that "the Agreement lacks a clear and strong management and implementation framework which has hindered implementation for some binational activities"<sup>13</sup> and that many actions specified within the Agreement may not have been or may not be implemented as described, or at all.

<sup>13</sup> pg. 22, Review of the Great Lakes Water Quality Agreement, 2007

This has allowed a lack of commitment to time-specific funding support by the Parties for the initiatives that are called for in the Agreement, and thus many of the programs have operated at half-speed or have been suspended pending further notice. It has led to a failure to convene the necessary binational reviews and to assess the status, progress and success of various implementation programs and action plans. It has led to an uneven, inconsistent and sometimes overlapping collection of scientific data that should be a vital driver in understanding the challenges and the best practices of remediation of the Great Lakes Basin, as well as to the lack of a single, accessible, binational, web-based platform for that data.

The intentional gathering of research and data from all sources to produce a complete "web-based inventory" will be a key driver for progress, as will its availability from a single access platform. It has led to a failure over the past 30 years to undertake the necessary updates in the document and in the action plans that are mandated under the terms of the GLWQA.

This Review provides the opportunity for the present Governments of Canada and the United States of America to demonstrate their commitment to the GLWQA by clarifying the roles of all Parties and by setting forth clear structures of accountability, reporting and support.

**CFUW Ontario Council strongly urges the Governments of Canada and the United States of America to demonstrate their commitment to the GLWQA by clarifying the roles of all Parties and by setting forth a clear management framework with clear structures of accountability, reporting, funding, support, and most importantly with a greater emphasis on implementation of the Agreement.**

## **THEME 5: INCLUDING OTHER ORDERS OF GOVERNMENT AND THE PUBLIC**

It is important to recognize that, while the formal responsibility for implementing the Agreement clearly lies with the Parties, both Parties rely on implementation partners to deliver many of the commitments under the Agreement, and that better coordination and engagement could help align and focus these efforts on issues of common concern

**CFUW Ontario Council supports the recommendation that further clarity regarding roles (beyond those of the Parties) should be included in the Articles, with specificity in the Annexes or in associated work plans developed to implement the Annexes.**

## CFUW ONTARIO COUNCIL

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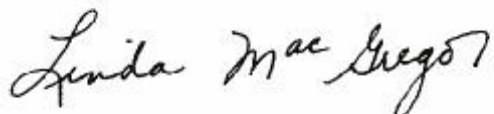
CFUW Ontario Council is made up of more than 5500 women university graduates living in 58 Ontario communities, including large urban areas as well as rural and northern towns (see Appendix B). We are non-partisan and non-sectarian and totally member-funded.

When voting on policy, each of our clubs has one vote so that the voice of members from Thunder Bay and Renfrew and St. Thomas have the same weight as those from the Toronto and Ottawa areas. This results in well balanced policies that may be embraced by most Ontarians.

Our members put their skills and education at the service of their community and are active in public affairs, working toward the improvement of the status of women, human rights, public education, health, justice and the environment in Ontario.

CFUW Ontario Council is part of the Canadian Federation of University Women (CFUW) and has links with the International Federation of University Women (IFUW).

Respectfully submitted,



Linda McGregor  
President  
Ontario Council of the Canadian Federation of University Women  
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[mac335@sympatico.ca](mailto:mac335@sympatico.ca)

## **APPENDIX A**

### **SOME of the CANADIAN FEDERATION OF UNIVERSITY WOMEN**

#### **POLICIES ON WATER**

**Note: CFUW Ontario Council policy integrates policy passed by CFUW Ontario Council as well as that of CFUW and IFUW**

##### **1967 Water Pollution**

RESOLVED, That the Canadian Federation of University Women request the Government of Canada to give effective leadership in the following ways, as laid down in the guidelines of the Conference of Resource Ministers:

1. To establish a national abatement code as soon as possible.
2. To direct and co ordinate development of standards, supply of information, and active research related to water pollution, and
3. To continue to provide financial incentives, in order to accelerate the application of pollution control measures.

##### **1988 Drinking Water Quality**

RESOLVED, That the Canadian Federation of University Women urge the Government of Canada, to enact legislation which would establish substantive and procedural laws in order to:

1. set rigorous quality standards for ground and surface drinking water which would be updated frequently to reflect current research and increased technology; and develop strict standardized inspection, testing and enforcement procedures to uphold these standards;
2. fund research into the identification and removal of substances in the drinking water which may be harmful to human health and distribute the results of such research to the provincial and territorial authorities responsible for administering water quality legislation;
3. provide user protection by:
  - a) requiring immediate public notification of instances of water contamination and ensuring an adequate supply of safe water either by decontamination or the provision of alternate sources; and
  - b) requiring the inclusion of safe water provisions in Emergency Planning Canada and promoting emergency planning schemes at other government levels.

##### **2006 Enforcement of the Fisheries Act**

RESOLVED, That the Canadian Federation of University Women urge the Government of Canada and the Ministry of Fisheries and Oceans to enforce the Fisheries Act to eliminate the pollution of fish and their habitat in Canada's coastal and inland waters.



### 2004 Alien Invasive Species

RESOLVED, That the Canadian Federation of University Women urge the Government of Canada:

1. to establish and fully implement measures, policies and funding as recommended by the Canadian Biodiversity Convention Office in their Canadian Biodiversity Strategy to fulfill Canada's commitment to the United Nations Convention of Biological Diversity (1992) with respect to Alien Invasive Species; and
2. to coordinate the related efforts of departments of the federal, provincial, territorial and municipal governments to prevent, control and/or eradicate these species.

RESOLVED, That the Canadian Federation of University Women urge the federal, provincial territorial and municipal governments to expand and promote broader educational programs that would alert the public to the wide variety of dangers posed by alien invasive species and would inform the public of measures that can be taken by individuals to prevent, control and/or eradicate these species.

### 2001 Canadian Water

RESOLVED, That the Canadian Federation of University Women (CFUW) urge the federal, provincial and territorial governments of Canada to protect our water resources and specifically to declare that water, being a non-renewable natural resource of paramount importance, belongs to the Canadian public and its use must be regulated in the long-term public interest;

RESOLVED, That CFUW urge the federal, provincial and territorial governments to adopt and implement a sustainable and prudent water management policy to respond to long-term regional needs with due regard to the ecosystem and hydrogeological reality; and

RESOLVED, That CFUW urge the federal, provincial and territorial governments to promote conservation and more efficient use of surface water and groundwater at individual, local, provincial, territorial, national and international levels.

### 2000 Canadian Water

RESOLVED, That the Canadian Federation of University Women urge the Government of Canada and the provincial and territorial governments to take all measures necessary to ensure that large-scale freshwater commercial exports carried out by any means do not take place.

### 1993 Canadian Water

RESOLVED, That the Canadian Federation of University Women (CFUW) urge the Government of Canada to pass and enforce a Canada Water Preservation Act which will prohibit further diversion of water between drainage basins and which will ensure Canada sovereignty over its domestic water resources; and

RESOLVED, That CFUW urge the Government of Canada to resolve immediately the uncertainty surrounding the water-trade issue through the execution of a separate and binding joint diplomatic agreement, ratified by both the US Congress and the Canadian Parliament, which ensures that nothing in the Canada-US Free Trade Agreement shall apply to Canada's water resource in other than bottled form.

**1995 Sustainability**

RESOLVED, That national federations and associations (of the International Federation of University Women) should:

1. urge their respective legislative bodies to incorporate the protection of the environment as an overall goal into their basic laws;
2. help raise a general awareness of the necessity of protecting the environment, in particular by expounding the consequences of resource depletion, the degradation of natural systems, the dangers of pollution and the destruction of fragile ecosystems;
3. promote the education of girls and boys of all ages in science, technology and disciplines relating to the natural environment; and
4. encourage governments to promote the development of sustainable and ecologically sound consumption and production patterns including ecologically safe waste disposal, the re-use and recycling of resources, the reduction of air pollutants, the careful management of energy sources and the use of environmentally sound technologies.

**1990 Preservation of Wetlands**

RESOLVED, That the Canadian Federation of University Women (CFUW) urge the Government of Canada to:

1. establish a standard system of evaluation of wetlands, in co-operation with the provincial and territorial governments in order to identify wetlands which it is agreed are worthy of preservation and statutory protection. (specially significant);
2. increase its support of research on wetlands;
3. increase its efforts to make the Canadian public aware of the vital importance of wetlands; and

RESOLVED, That CFUW urge their provincial and territorial governments to:

1. a) establish a system of evaluation for wetlands consistent with the national system, and to pass legislation to protect and monitor those wetlands which have been identified as specially significant;
- b) increase their support of research on wetlands;
- c) increase their efforts to make the public aware of the vital importance of wetlands; and to
2. a) be alert to any proposed development in areas where there are wetlands which might be degraded or lost; and
- b) urge the relevant planning boards, municipal councils and like authorities at the local level to have evaluations done in order to preserve significant wetlands.

**1989 "Our Common Future"**

RESOLVED, That national federations and associations (of the International Federation of University Women) be encouraged to take action in their respective countries, and where possible, to encourage joint participation with IFUW affiliates in neighbouring countries to prevent further deterioration of our global environment by working to implement the recommendations of the Report of the World Commission on Environment and Development, "Our Common Future", (Brundtland Report) presented to the UN General Assembly in October 1987.

**1972 Solid Waste Disposal**

RESOLVED that the Canadian Federation of University Women urge the municipal, provincial and federal governments of Canada to set definite policies and programs on the disposal of solid waste.

**1970 Water Pollution and Sewage Treatment Plants**

RESOLVED "that the Canadian Federation of University Women strongly urge the Government of Canada to ensure that any proposed phosphate substitute be harmless to the environment.

RESOLVED That CFUW strongly urge the Government of Canada to assist the Provincial and Territorial Governments to finance construction, by their municipalities, of sewage treatment plants with nutrient removal

## **APPENDIX B**



### **CLUB LOCATIONS Canadian Federation of University Women ONTARIO COUNCIL**

Ajax - Pickering	Haliburton Highlands	North Bay	Saugeen
Aurora - Newmarket	Hamilton	North Toronto	Scarborough
Barrie & District	Kanata	North York	Southport
Belleville & District	Kincardine	Northumberland	St. Catharines
Brampton	Kitchener – Waterloo	Oakville	St. Thomas
Brantford	Kingston	Orangeville & District	Stratford
Brockville & District	Leaside - East York	Orillia	Sudbury
Burlington	London	Orleans	Thunder Bay
Cambridge	Markham- Unionville	Oshawa & District	Toronto
Chatham - Kent	Milton & District	Ottawa	Vaughan
Cornwall & District	Mississauga	Owen Sound & Area	Welland & District
Etobicoke	Muskoka	Perth	Weston & District
Georgetown	Nepean	Peterborough	Windsor
Grimsby	Niagara Falls	Renfrew & District	
Guelph	Norfolk	Sarnia Lambton	

**Comment Number: 7**

**Name: Unger, Geri**

**Affiliation: Chicago Zoological Society**

General Comments:

Chicago Zoological Society  
Brookfield Zoo  
3300 Golf Road  
Brookfield, IL 60513  
Tel. 708.688.8955

July 14, 2007

TO: Great Lakes Binational Executive Committee

FROM: Geri E. Unger, Director Regional and Local Conservation Initiatives

RE: Comment on Canada-U.S Great Lakes Water Quality Agreement Draft Agreement Review Report

As a member of the Zoo and Aquarium Partnership for the Great Lakes, we offer our public support for the draft of the Great Lakes Water Quality Agreement, in its updated format. Over the past 20 years emergent issues including climate change, urbanization, difficulties in cleaning up identified areas of concern, and increasing numbers of aquatic invasive species in the ecosystem, have increasingly been identified and need to be addressed. The need for the Great Lakes Water Quality Agreement to allow for rapid response to the above issues, as well as persistent toxic substances, fisheries and food chain problems, shipping and water quantity are necessary. As the Great Lakes are the heart of both Canada and the United States and necessary to the sustainable development of both populations, we are pleased to add our voice in support of the suggested provisions of the Draft Review Report for the updated Great Lakes Water Quality Agreement. The partnership suggests that it be adopted promptly by both governments, enabling enhanced efforts at the protection and restoration of the Great Lakes.

The zoos and aquariums around the Great Lakes serve 20 million visitors per year. As such we are committed to offering the public educational opportunities concerning the Great Lakes' ecology and sustainability, including the need to support for bi-national policy directives. Working through our constituencies the Zoo and Aquarium Partnership for the Great Lakes will be happy to work with the Great Lakes Binational Executive Committee towards the implementation of the updated Great Lakes Water Quality Agreement.

Please contact me should you have any questions or need additional information.

Acting City Manager  
Jim Harrold  
City Hall  
808 2nd Avenue East  
Owen Sound, ON N4K 2H4



Telephone: (519) 376-1440  
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www.city.owen-sound.on.ca

## Owen Sound

July 6, 2007

Sridhar Marisetti  
Interagency Program Coordinator  
Great Lakes Environment Office  
Environment Canada, Ontario Region  
4905 Dufferin Street  
TORONTO, ON M3H 5T4

To the Great Lakes Binational Executive Committee:

### **RE: REVIEW OF THE GREAT LAKES WATER QUALITY AGREEMENT**

The City of Owen Sound is responding to your invitation to comment on the Great Lakes Water Quality Agreement Review 2007. Water quality of the Great Lakes is very important to our community as our history, quality of life and future development depends on the health and sound management of the Great Lakes. In general the City of Owen Sound is fully supportive of efforts to work co-operatively with all levels of government in both Countries.

The City is concerned about the Great Lakes water quality and how to collectively move forward to protect and enhance this great resource. The City of Owen Sound also recognizes its impact and role in advancing water quality. The City, working with both levels of government, is committed to meeting international standards and improving the overall health of the Great Lakes.

The City of Owen Sound supports the overall direction and spirit of the draft Great Lakes Water Quality Agreement review.

Please keep us informed of the progress of the review.

Sincerely,

  
Jim Harrold  
Acting City Manager





Sridhar Marisetti  
Interagency Program Coordinator  
Great Lakes Environment Office  
Environment Canada, Ontario Region  
4905 Dufferin Street  
Toronto, Ontario M3H 5T4

July 4, 2007

Dear Mr. Marisetti,

On behalf of Conservation Ontario, the non-governmental organization representing the 36 Conservation Authorities in Ontario, thank you for the opportunity to provide comments on the Draft Report reviewing the Great Lakes Water Quality Agreement prepared by the Binational Agreement Review Committee. In addition, thank you for the opportunity to participate in the review process through representation on the Review Working Groups where a number of Conservation Authority representatives provided verbal and written comments on the Agreement. The Government(s) is commended for leading a very inclusive consultation review process.

On June 25, 2007 Conservation Ontario Council endorsed the following comments regarding the Great Lakes Water Quality Agreement Review Draft Report. In general the key findings, results and recommendations presented with the draft report are supported. Specific comments on the Draft Review Report are presented below:

- The recommendation that 'the Agreement should highlight, emphasize and facilitate **watershed planning** as an effective approach to achieving the purpose of the Agreement' is strongly supported. This recommendation is consistent with the **guiding principle** for Conservation Ontario's Position on Great Lakes Sustainability, attached: 'Apply an integrated watershed management approach to planning and implementation in order to protect and improve the Great Lakes and St. Lawrence Ecosystem'.

- Land use impacts, as the single biggest driver of in lake conditions throughout much of the Great Lakes basin, require that the watershed be used as the appropriate scale for resource management. It also underscores how important it is that the new Agreement **acknowledge the central role of tributary watersheds** in affecting open lake conditions.
- Although the current Agreement references the biological, chemical and physical integrity of the Great Lakes, its Annexes compartmentalize environmental issues and rely on 20 year old understandings of science and resource management. While the 1987 amendment to the Agreement was leading in the day, a new Agreement must **articulate and prescribe an ecosystem approach to managing the Great Lakes'** diverse natural resources.
- The current Agreement is very strategic in its focus, which has allowed for flexibility in interpretation. However, it has also resulted in a slow rate of progress for some priorities. A renewed Agreement should continue to provide strategic guidance, but would **benefit from an implementation oriented focus**. This should include the development of time bound implementation plans that articulate what priorities are for the coming period, and how progress will be resourced and monitored. This will also allow new, emerging issues to be addressed without revisiting the Agreement as a whole. Five year implementation plans may strike an appropriate balance between planning and reporting, and action.
- Ongoing Great Lakes monitoring programs confirm that open lake conditions are driven by land uses more than any other single issue. It is imperative that a new Agreement **meaningfully engage local partners, including conservation authorities and municipalities**. Conservation Ontario and the Great Lakes and St. Lawrence Cities Initiative provide established, foundational roles for this engagement.
- The report finds that federal funding for Great Lakes resource management programming has been inadequate and inconsistent. **Greater levels of funding are required to properly address the watershed protection and restoration priorities of Conservation Authorities** and other implementation partners. This is particularly true outside of Areas of Concern. Additional **resources should emphasize implementation, and monitoring programs to confirm progress and priorities**. Conservation Ontario has submitted to the Government of Canada "Healthy Great Lakes" funding proposals in this regard.



Conservation Authorities as representative of “watershed communities” are prepared to work with all levels of government and other stakeholders to meet the goals and objectives of the Great Lakes Water Quality Agreement. I would be pleased to respond to any questions you may have regarding these comments and I can be reached at ext 223 or [bfox@conservation-ontario.on.ca](mailto:bfox@conservation-ontario.on.ca).

Sincerely,



Bonnie Fox  
Policy and Planning Specialist  
Conservation Ontario

c.c. All Conservation Authorities, General Managers/CAOs

**Comment Number: 10**  
**Name: Kuper, George**  
**Affiliation: Council of Great Lakes Industries**

11 July 2007

Sridhar Marisetti  
Interagency Program Coordinator  
Great Lakes Environment Office  
Environment Canada, Ontario Region  
4905 Dufferin Street  
Toronto, Ontario M3H 5T4

Mark Elster  
Senior Program Analyst  
USEPA  
Great Lakes National Program Office  
77 W. Jackson Blvd. (G-17J)  
Chicago, IL 60604

Dear Sridhar and Mark:

This letter contains the comments of the Council of Great Lakes Industries regarding the Agreement Review Committee (ARC) draft report to the Great Lakes Binational Executive Committee (BEC) entitled Review of the Canada – U.S. Great Lakes Water Quality Agreement, April 2007.

CGLI appreciates this opportunity to comment on the draft and urges the Governments to continue maintaining the open communication links to stakeholders established by the BEC throughout the balance of the Agreement review process.

Volume 1 of the report, the summary of the Water Quality Agreement (Agreement or GLWQA) review proceedings, is a well organized, concise description of the review process and – for the most part – the discussions that took place. The description and categorization of the points raised into key thematic areas is very helpful in articulating review workgroup outputs. This is a skillful consolidation of information, gathered from the large group of individuals with diverse interests and points of view. We believe this report provides output which will be of value to those who must make decisions regarding potential Agreement revisions.

However, and perhaps of necessity, some specific points and details provided by industry representatives and others during the discussions do not come through as clearly in the consolidated synthesis as CGLI would have preferred. These comments highlight those points.

Theme 1: The Purpose and Scope of the Agreement:

CGLI Comment: The report should mention that the pursuit of the “ecosystem approach” should be advanced through a risk-based analysis.

Comment Rationale: The points listed under this heading on page 5 and in the discussion on pages 12 through 15 describe various opinions provided by participants and reach the appropriate conclusions regarding the multiple Agreement scope interpretations and the need for an “ecosystem approach.”

However, one important point brought into these discussions, but not mentioned in the report, was that the pursuit of the “ecosystem approach” should be advanced through a risk-based analysis. This would provide for prioritization of actions that will be needed to make important decisions regarding the competing issues raised through the multi-dimensional “ecosystem approach.”

This need was raised during the deliberations of Working Groups A, B and F. It is a key need since resources available to the Parties in the future will likely be even more limited than they have been in the past. Only through a risk-based prioritization process can decisions be made on which issues need to be addressed first.

## Theme 2: Outdated Agreement Elements:

CGLI Comment: Missing from the summary document is mention of the discussions about the need for balancing resources outlined in the Agreement with resources required by out-of-Basin regions also under the care of each of the parties. The fact that resources are finite and need to be prioritized should be included.

Comment Rationale: The draft correctly reflects the conclusions reached by the working groups that many portions of the existing Agreement are out of date. It also presents the advantages foreseen by review participants for revising Agreement language to make it less time sensitive and more reflective of the long term nature of a policy guiding document. However, missing from the summary document is mention of the discussions held regarding the need for balancing resources outlined in the Agreement with the resources required by out-of-Basin regions also under the care of each of the Parties.

These concerns were raised during Working Group A, B, and the Special Issues Working Group deliberations.

Volume 2 includes the questions and some of the responses provided by reviewers regarding resources committed towards Agreement objectives. The responses were not surprising. Obviously, more resources are always needed or desired. But, a point made during the review was that the Agreement should be written from a perspective that acknowledges that resources are finite and need to be prioritized. Provisions put into the Agreement should be carefully evaluated so that the resources needed to meet the objectives are reasonable and obtainable so that resources can be allocated on a staged or most critical basis. It must also recognize that priorities will change over the life of the Agreement as problems are addressed and new ones arise. These points are not reflected in either the summary document or Volume 2 of the report.

These concerns were raised during the Working Group A and B discussions.

### Theme 3: Pressing Issues and Emerging Threats:

CGLI Comment: The report should mention the suggestions made to broaden the Agreement scope to advance the principles of sustainable development within the Region.

Comment Rationale: The draft correctly reflects discussions held regarding questions that are being raised about “emerging chemicals of concern” and other threats identified through the broader “ecosystem approach” assessment. However, the report does not mention suggestions that the parties consider broadening the Agreement scope further, using the GLWQA as a policy instrument to advance principles of sustainable development within the Region.

CGLI conducted a workshop (funded by a grant from U.S. EPA Office of Research and Development) on this topic in which several members of the ARC participated. Conclusions from this workshop were described in detail in the project report and submitted to the ARC. In summary, the conclusions reached by the 37 workshop participants (all Great Lakes Regional policy experts) and through the review and comment process involving more than 200 additional leaders representing governments, business, industry, environmental groups, and citizens from the Region included:

- Unanimous agreement that sustainable development principles
- (environmental, economic, and social elements) are all important
- Regional policy considerations.
- Utilizing the GLWQA as a sustainable development vehicle may be
- too much of a challenge, and is perhaps not feasible.
- Governments should avoid “social engineering” and pitting one
- agency against others over “control” of such a broad policy area.
- Sustainable development principles must be included in any
- revision of the GLWQA.
- It is important to include social and economic factors while
- setting environmental policy of any kind.

Additional important points from workshop discussions and Regional leader follow-up included:

- Achieving sustainable development is a key goal.
- The basic elements of sustainable development, i.e. environmental,
- economic, and social well being, were agreed upon and should be
- addressed equally.
- Although the group had difficulty in articulating specifically
- what sustainable development is or should look like, the
- environmental well-being of the Great Lakes Region cannot be
- sought or explored without also seeking positive economic and
- social attributes.

Key points that grew from the synthesis at the end of the workshop session regarding where future versions of the Agreement must lead us included:

- We will not be able to demand absolutes.
- We will have to get away from the notion that just because a
- chemical is present it is bad.
- We will need to replace “zero discharge” and “virtual elimination”

- with objectives that are protective, are also measurable, and
- consider cost.

These conclusions, findings, and synthesized points were presented to the Special Issues Working Group and Governance and Institutions Working Group.

#### Theme 4: Agreement Accountability and Implementation:

**CGLI Comment:** The report should include language noting that the Agreement does not acknowledge that programs put in place by the Parties to address Agreement objectives can provide legitimate means for reporting and consultation.

**Comment Rationale:** The discussion regarding accountability and reporting correctly identifies the concerns expressed, and acknowledges that specific reporting targets may not have always been adhered to by the Parties. It also describes the vague nature of some Agreement language regarding Accountability and Implementation. However, missing are points explaining that the Agreement does not acknowledge that programs put in place by the Parties to address Agreement objectives (i.e. the GLI, GLBTS, SOLEC, COA, etc), can provide legitimate means for reporting and consultation. Separate reporting and consultation events are not always needed. In addition, administrative procedures in both the Canadian and U.S. government processes provide additional opportunities for reporting and consultation. The report should be more explicit in stating that these processes can be used as Agreement reporting vehicles.

These comments were made by industry during the deliberations of Working Group A and the various discussion groups in the Special Issues Working Group.

#### Theme 5: Including Other Orders of Government and the Public:

**CGLI Comment:** The limitations on just what the Agreement can do to drive and police Party actions within the Basin needs to be a part of report discussions.

**Comment Rationale:** The report recognizes the concerns expressed by review participants regarding involvement of Tribal, State/Provincial, and local governments in Agreement implementation. It also addresses the need for strong public involvement and consultation needs.

Not directly addressed in the report, however, are concerns raised by participants in two additional areas.

1. The Parties to the agreements are sovereign governments bound by the provisions of their own constitutions and legal structures. There are limitations on and specific procedures for reaching agreements with other governments. There are also limitations on the authority to delegate powers to regional structures that may be established through signed agreements. The report should acknowledge that not everything sought in the way of accountability by some review participants can be provided through a revised Agreement.

2. The Parties are indeed National governments. The National programs that they establish to protect and restore natural environments apply (unless otherwise specified) to all of the respective

territories of the Parties, including the Great Lake Region. The Agreement should recognize the existence of these National programs and acknowledge the critical role that they play in obtaining Agreement objectives.

These concerns were raised in the deliberations of Working Group A, the various discussion groups in the Special Issues Working Group, and the Governance and Institutions Working Group.

Thank you once again for the opportunity to provide these comments and for the commitment of the significant resources that it has taken to conduct this comprehensive review. Our Region will be better served as a result.

We look forward to continuing to work with the Parties as they make critical decisions regarding the future of the Great Lakes Water Quality Agreement and its continuing role in assuring environmental, social and economic sustainability policy in our Region.

Sincerely,

George H. Kuper

President and CEO



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July 13, 2007

Mark Elster  
USEPA Senior Program Analyst  
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and

Sridhar Marisetti  
Interagency Program Coordinator  
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Dear Mark Elster and Sridhar Marisetti:

Ducks Unlimited is dedicated internationally to conserving, restoring and managing wetlands and associated habitats for North America's waterfowl. These habitats also benefit other wildlife and people. Ducks Unlimited Inc. (DUI) and Duck Unlimited Canada (DUC) work collaboratively towards our common purpose. This collaborative relationship is particularly valuable in our shared Great Lakes resources and challenges. This submission to the Agreement Review Committee of the Great Lakes Water Quality Agreement is a joint sub/collaborative effort between DUC and DUI representing our common interest in resorting and maintaining the integrity of the Great Lakes Basin ecosystem.

DUC and DUI are dedicated to the conservation, restoration and management of North American wetlands and their associated upland habitats for the benefit of people, waterfowl, and other wildlife. DUC and DUI deliver a variety of conservation programs designed to protect North America's most valuable and threatened wetland habitats and restore wetlands degraded by human activity.

The Great Lakes Water Quality Agreement has been an important part of international Great Lakes management for the past 35 years. We commend the governments and people of Canada

and the US on having the foresight to engage and in recognizing the need to review and update this innovative agreement.

We have reviewed the original agreement and the report of the Agreement Review Committee (ARC) and submit the following comments for ARC consideration:

1. We support opening up the GLWQA to revitalize and strengthen it, so that the governments make a stronger commitment to protect the chemical, physical, and biological integrity of the lakes. We support the need for an updated/modernized/revise GLWQA provided the governments of Canada and the United States commit to maintaining and strengthening the provisions in the current agreement. It is time for a modernized action-oriented agreement that incorporates the concept of adaptive management, ensuring the agreement can evolve to address upcoming issues during the next 35 years. Without this intensity of purpose the waters of the Great Lakes will succumb to the impacts of increased populations and associated stressors. There needs to be an emphasis on sustainability of the act and of the implementation actions.
2. As part of the review, the governments should ensure that a neutral, professional, and detailed assessment of progress and performance to date under the Agreement is carried out before decisions are made on how to proceed with revitalization of the Agreement.
3. Regarding the scope of the GLWQA, we recommend that the governments adopt the recommendation of the IJC: "The Agreement's focus should remain on water quality, but take account of a broader array of stressors that impact on it." We also suggest that the current status and health of watersheds, including wetlands, floodplains, human impacts and climate change, be included as stressor indicators.
4. New principles and approaches should be added to or expanded in the Agreement, including a strong section on implementation of strategies that advance water quality objectives and ecosystem health. This includes principles and approaches regarding prevention of negative impacts and taking a watershed approach to implement solutions. We believe there should be enhanced recognition of the relationship between water quality/water quantity and recognition that management protocols for water quantity might very well be a sound way of dealing with water quality issues. The review of the GLWQA should include greater focus on implementation of "on the ground" solutions, which is severely lacking in the current document. We support ARC in identifying the need for adequate sustainable resources for action/implementation.
5. We support and agree with the ARC discussion around the need for stronger focus on land use policy. In Ontario, there are examples of Provincial scale land use policies that have been initiated to protect valuable natural features. Local and regional land use decision makers need to be adequately resourced, including with the information, and science about Great Lakes water quality, to ensure they are making and implementing sustainable land use decisions. There is an urgent need for long-range comprehensive planning/smart growth planning with specific reference to the watershed planning to minimize loss of natural areas. Growth planning will continue to be business as usual unless alternative planning mechanisms are adequately resourced, and adopted.



Protecting our natural capital, economic prosperity and the health of our environment are intrinsically linked. (See DUC publications "*the value of natural capital in settled areas in Canada*" [www.ducks.ca/aboutduc/news/archives/pdf/ncapital.pdf](http://www.ducks.ca/aboutduc/news/archives/pdf/ncapital.pdf) and "*Natural Values*" [www.ducks.ca/conserve/wetland\\_values/pdf/nvalue.pdf](http://www.ducks.ca/conserve/wetland_values/pdf/nvalue.pdf))

6. The governments should commit to full public involvement in any significant decisions regarding changes to the GLWQA. In addition, the GLWQA should recognize and define the role of the Tribes, First Nations and Metis in Agreement activities. The GLWQA should better define the role of the provinces, states, and local governments in Agreement activities. The key commonality in the areas where the successes through the GLWQA have been greatest has been the public and NGO involvement, ownership and buy in. The development and review of the modernized agreement must expand the public and NGO, regional/local governments and authorities consultation and involvement from the development stage. Commitments in the GLWQA should be written in a way that leads to implementation by fostering enforceability and accountability. This means that commitments in the Agreement should set clear goals, quantifiable objectives, specific strategies, and a process to assess impacts, in an adaptive management format.
7. Under Theme 5-*Including Other Orders Of Government And The Public*, the report recognizes the "*increasing significant role*" that Non-government stakeholder groups play in the development, design and implementation of the agreement. These groups have the potential to enhance the science and operational capacity of government organizations at all levels and the Parties to the Agreement. We believe that the role of these organizations should be recognized within the recommendations on this Theme. To that end we would suggest that Recommendation 1, Theme 5 should be amended to add the following to the first sentence "*(4) Non-Government stakeholder groups with a declared interest in the goals of the Agreement.*"
8. The current agreement has resulted in significant successes towards the purpose of "...restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem". Few people, unless directly involved, are aware of the agreement and its successes. We recommend a significant marketing and communication effort be made to:
  - share and celebrate the success and achievements to date,
  - enlighten people as to the true value and positive impact that has already been realized,
  - develop and appreciation in the affected publics' mind of the enormity of the agreement tasks and entice them to buy in to helping get there by supporting the Agreement's purposes.

This needs to be an ongoing process of reporting on progress and success and on the areas where challenges are not being met so the public/stakeholders feel hopeful and involved.

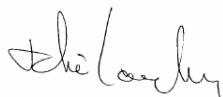
9. There is recognition that Annex 13 needs to be reworked substantively and that it must be more focused in its treatment of wetland protection and restoration. DUC/DUI supports this and feels there needs to be a focus on the need to enhance protection of wetlands and other natural features through the creation of enhanced public policies. The potential to

produce aquatic ecosystem benefits from wetland restoration and to create aquatic ecosystem detriments from wetland loss is not fully recognized. (See DUC publication “Beyond the Pipe” [www.ducks.ca/aboutduc/news/archives/pdf/pipefull.pdf](http://www.ducks.ca/aboutduc/news/archives/pdf/pipefull.pdf)). Wetlands play many roles beyond those they are recognized for in the current agreement (habitat, water quality, flood attenuation, mitigation of climate change etc) and as such we recommend included them in a separate annex.

10. The governments should demonstrate their commitment to a revitalized GLWQA having the Agreement approved and signed by the highest appropriate government officials and the appropriate aboriginal representatives. This also includes having some mechanism for the statutory parties to make financial commitment to the Agreement.

On behalf of Ducks Unlimited Inc. and Ducks Unlimited Canada, we appreciate the opportunity to comment on the GLWQA review process. Please don't hesitate contacting us if we can be of further assistance.

Sincerely,



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**Comment Number:** 12  
**Name:** Reich, Schwer, Robert, Richard  
**Affiliation:** DuPont

July 13, 2007

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Mark Elster  
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Dear Sridhar and Mark:

This letter contains the comments of the DuPont Company regarding the Agreement Review Committee (ARC) draft report to the Great Lakes Binational Executive Committee (BEC) entitled Review of the Canada – U.S. Great Lakes Water Quality Agreement, April 2007. DuPont appreciates this opportunity to comment on the draft report. We have been actively involved in the Great Lakes Water Quality Agreement review process over the past 16 months. Bob Reich participated on Review Working Group B – Toxics, and Dick Schwer participated on RWG C - RAPs and LaMPs and RWG E – Sediment Related Issues. We have done this in conjunction with many other industry participants through an effort lead by the Council of Great Lakes Industries (CGLI), and we support the CGLI comments on the draft Report on the Review of the GLWQA that were submitted on July 11.

We believe that the ARC has done a good job of synthesizing the major findings, results and recommendations into five key themes that describe the outcome of the review process in a form that should be useful for the Parties in determining how to proceed. However, we also agree with the CGLI comments that there are some significant points that came out of the RWG deliberations that have not received enough recognition in the draft report. These include:

- Risk based assessments should be used to guide decisions regarding management actions pursued to accomplish GLWQA objectives.
- Program planning by the Parties aimed at accomplishing GLWQA objectives must include prioritization of needs.
- The GLWQA must be made sufficiently flexible so that when issues are resolved and new priorities set, the activities of the Parties can also be changed.

- Any revision of the GLWQA must include recognition and use of sustainable development principles, including environmental, social and economic needs of the Basin. All must be given consideration when measures for meeting GLWQA objectives are developed.
- The GLWQA should specify that programs to provide environment protection on a National scale that the Parties may have in place, or put in place, may also satisfy GLWQA objectives. Separate programs should not be mandatory or expected if National efforts are adequate to meeting these objectives.

Sincerely,

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Senior Fellow

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Senior Consultant

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## **The Future of the Great Lakes Water Quality Agreement: The ENGO Perspective**

July 14, 2007

Submitted by:

**American P.I.E. (Public Information on the Environment)  
Audubon, Minneapolis Chapter  
Canadian Auto Workers, Durham Regional Environmental Council  
Canadian Auto Workers, Local 27, Environment Committee  
Canadian Auto Workers, Local 1520  
Canadian Auto Workers, Windsor Regional Environment Committee  
Canadian Environmental Law Association  
Canadian Institute for Environmental Law and Policy  
Citizens Campaign for the Environment • Citizens Concerned for Michipicoten Bay  
Citizens for Alternatives to Chemical Contamination • Citizens for Renewable Energy  
Citizens' Network on Waste Management • Duluth Audubon Society  
Environmental Advocates of New York • Environmental Defence  
Erie County Environmental Coalition • Friends of Milwaukee Rivers  
Friends of Whiskey Island • Georgian Bay Association  
Great Lakes Aquatic Habitat Network and Fund • Great Lakes United  
Illinois Council of Trout Unlimited • Indiana Toxics Caucus  
Indiana Wildlife Federation • Institute for Agriculture and Trade Policy  
Lake Erie Region Conservancy • Lake Ontario Waterkeeper • Lighthouse Point  
Group Local Enhancement and Appreciation of Forests  
London and District Labour Council • Mankato Area Environmentalists  
Milwaukee Riverkeeper • Minnesota Center for Environmental Advocacy  
Minnesota Conservation Federation • Minnesota Environmental Partnership  
National Wildlife Federation • Nature Québec  
Ohio Coastal Resource Management Project • Ohio Environmental Council  
Ohio League of Conservation Voters • Ontario Toxic Waste Research Coalition  
Protecting Our Water and Environment Resources • Quinte Watershed Cleanup Inc.  
Rescue Lake Simcoe Charitable Foundation • Save Lake Superior Association  
Save the Dunes Council • Save the Oak Ridges Moraine • Save the River!  
Sierra Club, Great Lakes Office • Sierra Club of Canada • Sierra Legal  
Sixteenth Street Community Health Center  
South Cook County Environmental Action Coalition  
Southeastern Minnesotans for Environmental Protection • Stratégies Saint-Laurent  
Sweetwater Alliance • The Watershed Center of Grand Traverse Bay  
Tip of the Mitt Watershed Council • Wallaceburg Advisory Team for a Cleaner Habitat  
Watershed Action for Environmental Responsibility  
Western Lake Erie Association / Waterkeeper • Wisconsin Great Lakes Coalition  
York Region Environmental Alliance**

## **The Future of the Great Lakes Water Quality Agreement: The ENGO Perspective**

In response to the Binational Executive Committee's (BEC) invitation to comment on their draft review of the Canada-U.S. Great Lakes Water Quality Agreement (GLWQA), the sixty-four groups who submit this brief congratulate the members of the binational Agreement Review Committee (ARC) for pulling together a summary that we believe fairly reflects the discussions carried out during 2006.

Therefore, in this brief, instead of focusing on the ARC document, we present our preliminary position on revision of the Agreement. As the review and possible renegotiation continues over the next couple of years, we will present more details on these policy directions.

### **1. We support opening up the GLWQA to revitalize it, provided the governments make a commitment not to weaken provisions currently in the Agreement.**

The GLWQA has made a very significant contribution over the past 35 years to improving environmental conditions in the Great Lakes. We believe, however, that the GLWQA needs to be revitalized because it is now less of a driver of Great Lakes programs than it previously was. Certain provisions are out of date and new understandings of some of the problems have arisen. In addition, the governments are paying less attention to the Agreement than they previously did.

Therefore, we believe that the GLWQA should be revised.

However, we do not believe the existing Agreement should be abandoned and replaced by a completely new agreement. Many important provisions of the GLWQA have not yet been fully implemented. In addition, the principles stated in the Agreement, such as ecosystem, virtual elimination and zero discharge, are as vital now as when they were first put into the Agreement. Therefore, if the governments decide to open up the Agreement, they should make a commitment not to weaken any of the provisions currently in it.

### **2. The governments should commit to full public involvement in any significant decisions regarding changes to the GLWQA, including:**

- **An opportunity to comment on advice from Environment Canada and the U.S. Environmental Protection Agency to Foreign Affairs and International Trade Canada (DFAIT) and the U.S. Department of State**
- **An opportunity to comment on preliminary positions of DFAIT and State Department**
- **Formal public hearings on a complete draft of proposed revisions to the Agreement, if it is revised**
- **Formal status as observers at the negotiating table during negotiations.**

Thus far, this review of the GLWQA has been conducted in an open manner. In the fall of 2005, the International Joint Commission (IJC) held fourteen public meetings and estimates that 4,100 people participated in their process. Throughout 2006, the governments chaired nine review working groups; they estimate that 350 people participated in those groups.

In their draft review report, the ARC recommends that the “public should be consulted in any revision of the Agreement.” The consultation processes thus far have not been based on government proposals for possible revisions. Thus, while very welcome, public involvement opportunities to date are far less important than those requested above. The decisions over the next couple of years will be the critical ones in determining whether to revise the Agreement and the content of any revised Agreement.

Therefore, we urge the governments to make specific commitments—now, before the first key government steps are taken—as to the opportunities that will be provided for input.

The four mechanisms provided in our recommendation are the minimum that we urge the governments to commit to. These mechanisms have precedents in the last revision of the GLWQA, in 1987. Among other steps, Environment Canada held three public meetings on the Canadian side of the Great Lakes basin on the draft amended agreement; the U.S. EPA held four public meetings on a similar document. In addition, five environmental non-government representatives were appointed as official observers to the negotiations and directly participated in the discussions during the formal bilateral negotiating session.

**3. As part of the review, the governments should ensure that a neutral, professional, detailed assessment of progress and performance under the Agreement is carried out before decisions are made on how to proceed with revitalization of the Agreement.**

Since June 2004, we have been urging BEC to ensure that a detailed independent review of the GLWQA is carried out. The review working group process has not replaced the need for such a review. The ARC report is based on the extensive knowledge of the many people on the conference calls. But that knowledge was not always comprehensive and the varying levels of expertise on the calls were not conducive to the detailed discussion necessary for the ARC report to be said to constitute an expert review. The ARC report did not include a detailed assessment of what progress was achieved and not achieved under each section of the Agreement; nor does it include neutral professional judgments on the appropriate future direction of the Agreement.

The study conducted by the National Research Council of the United States and The Royal Society of Canada prior to the amendment of the Agreement in 1987 is frequently referred to as an essential input into that review and renegotiation process. Twenty years have passed since that independent review so a similar new review is needed. Many are now talking about amendments to the Agreement that are more extensive than those in 1987. Surely this means that another independent study such as the one prior to 1987 is essential.

**4. Regarding the scope of the GLWQA, we recommend that the governments adopt the recommendation of the IJC: “The Agreement’s focus should remain on water quality, but take account of a broader array of stressors that impact on it.”<sup>1</sup>**

There is considerable discussion as to whether the scope of the Agreement should be changed and on the extent of any such changes. Some have proposed that it become a Great Lakes Ecosystem Agreement, which would address all environmental issues in the basin. Others have

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<sup>1</sup> International Joint Commission, *Advice to Governments on their Review of the Great Lakes Water Quality Agreement*, August 2006, p. 11

proposed that it become a Great Lakes Sustainability Agreement, which would balance social, economic and environmental considerations.

We believe that the GLWQA should not become the only or even the prime agreement for addressing Great Lakes issues. We fear that an agreement that tried to address all issues would become an agreement that would be so dense and expansive that it would be impossible to implement and would wash out any focus, or be so general in nature as to be non-specific and, as a result, useless. In addition, there are other existing agreements, such as the Convention on Great Lakes Fisheries, and potential agreements that have valuable roles to play. We believe that, provided there is communication amongst those implementing these various agreements, it is best to keep each agreement separate and more focused.

Therefore, we recommend that the GLWQA retain its focus on water quality, but with a somewhat broader view of what impacts water quality.

The understanding by scientists and policy makers of the factors affecting water quality has increased since the Agreement was last revised. Therefore, we recommend that the GLWQA be revised to add new stressors or to reflect a better understanding of stressors already in the Agreement. The stressors that we believe should be added or given a greater emphasis include: invasive species, pollutants of recent concern (endocrine disruptors, carcinogens, neuro-developmental toxicants, flame retardants, pharmaceuticals, phthalates, perfluorinated compounds, perfluorooctane sulfonate, bisphenol A, nanoparticles), air pollution from sources beyond the Great Lakes basin, radionuclides, groundwater pollution, fish farms, intensive agricultural operations, urban development, water levels, and climate change.

#### **5. The GLWQA should be revised to include the entire St. Lawrence River.**

Currently the GLWQA includes the St. Lawrence River only up to the point where it ceases to be the border between Canada and the U.S., which is near Cornwall and Massena. This is inconsistent with the ecosystem approach in the GLWQA. Therefore, we urge that the entire St. Lawrence River be included in the Agreement.

The Agreement is based on the Boundary Waters Treaty of 1909. As a result, some argue that the Agreement can apply only to boundary waters, which means that the St. Lawrence River cannot be included once it passes Cornwall-Massena and is wholly located within Canada. However, Lake Michigan, which is wholly within the United States, is already included in the Agreement as it is part of the Great Lakes Basin ecosystem. Therefore, it is inconsistent to artificially chop off the ecosystem part way down the St. Lawrence River.

#### **6. New principles and approaches should be added to or expanded in the Agreement.**

##### **Prevention**

It is now well recognized that prevention is both more effective and less expensive than remediation in protecting human and ecosystem health. Prevention should be a key principle in any revised Agreement.

In order to achieve a preventive approach, the precautionary approach and reverse onus should



be added to the GLWQA. The precautionary approach is the “principle of taking a cautious, environmentally conservative approach to avoid and prevent pollution, according to threats of serious or irreversible damage, even with a lack of full scientific certainty.”<sup>2</sup> Reverse onus is “a concept to require the producer, user or discharger of a substance to demonstrate that neither the substance nor its degradation products or byproducts are likely to pose a threat to the ecosystem.”<sup>3</sup>

#### Watershed approach

The watershed approach should also be given much more emphasis in the Agreement. A watershed approach focused on the major tributaries to the Great Lakes should be the core organizing mechanism for protecting the waters of the Great Lakes because it is through these tributaries that many of the stressors enter the Great Lakes and St. Lawrence River.

#### 7. New science provisions should be added to the GLWQA, including:

- **Identifying indicators for the various goals in the Agreement**
- **Commitment by the governments to gather enough data to be able to report on status of these indicators**
- **Supporting research that will give warnings on emerging stressors**
- **Ensuring that the monitoring and research results are widely available and easily accessible in a timely manner.**

Successful protection and restoration of the Great Lakes and St. Lawrence River basin depends on the presence of adequate and consistently funded monitoring and scientific research. In the past the Great Lakes basin has been at the forefront of this type of monitoring and research. Unfortunately, funding cuts over the past fifteen years have had a devastating impact on this critical knowledge base. Therefore, revitalization of the Agreement also must include a revitalization of Great Lakes monitoring and science.

A strong connection between monitoring, science and policy-makers is essential if these features are to be effective in protecting the basin’s environment. It is for this reason that we have put in the recommendation regarding easy and timely access to monitoring and research results.

#### 8. A strong public role should be embedded in the Agreement, including:

- **Public initiative options, such as a citizen petition mechanism**
- **Public representation on all IJC boards and the creation of a citizens’ advisory board to the IJC**
- **Commitment to create public advisory committees for government initiatives or programs related to the Great Lakes, and/or inclusion of the public on program steering committees**

A recurring theme in the ARC report of April 2007 is the need to include provisions in the GLWQA through which the governments commit to public involvement. We recommend that, in

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<sup>2</sup> IJC, *Eighth biennial report on Great Lakes water quality*, 1996

<sup>3</sup> IJC, *Eighth biennial report on Great Lakes water quality*, 1996

addition to providing for this through a general commitment, the governments should commit to specific public involvement provisions. These should include mechanisms that allow the public to take the initiative in prompting actions, such as citizen petitions that require reviews by the federal governments or the IJC.

The public also should be assured of more meaningful participation in IJC activities. Citizen experts in the appropriate fields should be included on the IJC's existing boards, that is, the Water Quality Board, the Science Advisory Board, and its Council of Great Lakes Research Managers. In addition, a new citizens advisory board should be set up for the IJC. This board should advise the IJC commissioners on the adequacy of government programs to achieve the goals of the GLWQA and make recommendations on how these programs could be improved.

In addition, the governments should commit through the Agreement to include the public in meaningful ways in their domestic programs on Great Lakes matters. This should include a commitment to set up public advisory committees for their GLWQA-related programs and/or to include representatives of the public on their steering committees for these programs.

#### **9. The GLWQA should recognize and define the role of the Tribes, First Nations and Metis in Agreement activities.**

Approximately 350,000 descendants of the first peoples of the Great Lakes basin live in 110 nations on approximately three million hectares of federally recognized reserve land in the Great Lakes-St. Lawrence River basin. Many more of their descendants live off the reserves, most of them in urban centres. These aboriginal peoples have rights as sovereign independent governments.

The unique role of the Tribes, First Nations and Metis in protecting and restoring the Great Lakes should be recognized in the GLWQA. Among other mechanisms, this should include their participation as IJC commissioners and membership on all IJC boards. The specific provisions related to the Tribes, First Nations and Metis should be worked out through extensive discussions with these peoples.

#### **10. The GLWQA should define the role of the provinces, states, and local governments in Agreement activities.**

The roles of the provinces and states are at times mentioned in the existing GLWQA, but not in a comprehensive and focused way. This aspect of the Agreement needs to be strengthened, since the provinces and states operate many of the programs that are essential to achieve the goals of the Agreement. The provinces and states should be fully included in the negotiating process in order to obtain their buy-in to the activities that they will need to carry out.

Local governments, such as cities, towns, villages, townships, counties, and regions, are not currently mentioned in the GLWQA. Yet, as the members of the Great Lakes and St. Lawrence Cities Initiative note, "Municipal governments are on the front lines of Great Lakes water management." Achieving the Agreement's goals has involved and will continue to require billions of dollars in expenditures on municipal infrastructure alone. The essential role of municipal governments should be recognized in the Agreement.

**11. Commitments in the GLWQA should be written in a way that leads to implementation by fostering enforceability and accountability. This means that commitments in the Agreement should:**

- **Have specific targets and timetables for achieving those targets**
- **Replace words such as “seek” and “strive” with “achieve”**
- **Include a commitment to put the targets and timelines in the Agreement into each country’s legislation**
- **Include provisions for regular reporting to the public on progress towards the targets and timetables**

The main recurring theme in the ARC report is that the governments have failed to implement the existing GLWQA. The main changes that need to be made to the Agreement are ones that will improve the likelihood of existing and new commitments being carried out. Those changes listed above are a minimal and beginning list of provisions that should be put into the Agreement to foster implementation. Some of our previous recommendations, such as citizen rights to petition, would add to the accountability and enforceability necessary to ensure implementation of the Agreement.

**12. Provisions for periodic independent audits of progress generated by the Agreement should be strengthened, and government responses to those audits should be made more specific.**

In one of its most important provisions, the Agreement provides the rudiments of government accountability by requiring the IJC to regularly report on progress under the Agreement. However, there is widespread dissatisfaction with the way in which the IJC has lately been carrying out its reporting role. Among other problems, the IJC has been hampered in carrying out this role by the failure of the governments to submit the necessary data for the IJC to conduct these assessments.

Reviews of the issue of governance are currently underway that will help us come to a conclusion on revisions that should be made to the IJC to better fulfill this role and as to whether additional mechanisms are needed. Later we will propose solutions to this need for an independent audit. For now, we recommend two steps to improve accountability under the Agreement and make it more feasible to conduct proper audits:

- The governments should commit to provide the necessary data, in a timely manner, to auditors of progress.
- The governments should commit to regularly report on progress for each of the commitments in the Agreement.

### **13. The governments should demonstrate their commitment to a revitalized GLWQA by:**

- **Having the Agreement approved and signed by the appropriate government officials (the prime minister and president at a minimum) and the appropriate aboriginal representatives**
- **Making financial commitments adequate to achieve the goals of the Agreement.**

The main goal we hope to achieve through the review and possible revision of the GLWQA is revitalization of the Agreement that draws public and political attention back to the need for basin-wide ecosystem protection. To help in achieving this, the governments should state their commitment to the existing or revised Agreement in a high-profile way.

### **Conclusion**

The thirteen recommendations in this brief lay out the direction that the sixty-four groups listed below believe should be taken to revitalize the Great Lakes Water Quality Agreement. As the review and possible renegotiation continues over the next couple of years, we will contribute more detailed recommendations. We look forward to engaging in ongoing discussions with the governments on these matters.

For further information or to discuss this matter, please contact John Jackson at (519) 744-7503 or [jjackson@glu.org](mailto:jjackson@glu.org).

Submitted by:

America P.I.E. (Public Information on the Environment) – Northfield, Minnesota  
Audubon, Minneapolis Chapter – Minneapolis, Minnesota  
Canadian Auto Workers, Durham Regional Environmental Council – Oshawa, Ontario  
Canadian Auto Workers, Local 27, Environment Committee – London, Ontario  
Canadian Auto Workers, Local 1520 – St. Thomas, Ontario  
Canadian Auto Workers, Windsor Regional Environment Committee – Windsor, Ontario  
Canadian Environmental Law Association – Toronto, Ontario  
Canadian Institute for Environmental Law and Policy – Toronto, Ontario  
Citizens Campaign for the Environment – Buffalo, New York  
Citizens Concerned for Michipicoten Bay – Wawa, Ontario  
Citizens for Alternatives to Chemical Contamination – Lake, Michigan  
Citizens for Renewable Energy – Lion's Head, Ontario  
Citizens' Network on Waste Management – Kitchener, Ontario  
Duluth Audubon Society – Duluth, Minnesota  
Environmental Advocates of New York – Albany, New York  
Environmental Defence – Toronto, Ontario  
Erie County Environmental Coalition – Erie, Pennsylvania  
Friends of Milwaukee's Rivers – Milwaukee, Wisconsin  
Friends of Whiskey Island – Cleveland, Ohio  
Georgian Bay Association – Toronto, Ontario  
Great Lakes Aquatic Habitat Network and Fund – Petoskey, Michigan  
Great Lakes United – Montréal, Québec, and Buffalo, New York

Illinois Council of Trout Unlimited – Highland Park, Illinois  
Indiana Toxics Action – Gary, Indiana  
Indiana Wildlife Federation – Zionsville, Indiana  
Institute for Agriculture and Trade Policy – Minneapolis, Minnesota  
Lake Erie Region Conservancy – Erie, Pennsylvania  
Lake Ontario Waterkeeper – Toronto, Ontario  
Lighthouse Point Group – Two Harbors, Minnesota  
Local Enhancement and Appreciation of Forests (LEAF) – Toronto, Ontario  
London and District Labour Council – London, Ontario  
Mankato Area Environmentalists – Mankato, Minnesota  
Milwaukee Riverkeeper – Milwaukee, Wisconsin  
Minnesota Center for Environmental Advocacy – St. Paul, Minnesota  
Minnesota Conservation Federation – St. Paul, Minnesota  
Minnesota Environmental Partnership – St. Paul, Minnesota  
National Wildlife Federation – Ann Arbor, Michigan  
Nature Québec – Québec, Québec  
Ohio Coastal Resource Management Project – Hiram, Ohio  
Ohio Environmental Council – Columbus, Ohio  
Ohio League of Conservation Voters – Columbus, Ohio  
Ontario Toxic Waste Research Coalition – Grimsby, Ontario  
Protecting Our Water and Environment Resources (POWER) – Georgetown, Ontario  
Quinte Watershed Cleanup Inc. – Belleville, Ontario  
Rescue Lake Simcoe Charitable Foundation – Shanty Bay, Ontario  
Save Lake Superior Association – Two Harbors, Minnesota  
Save the Dunes Council – Michigan City, Indiana  
Save the Oak Ridges Moraine (STORM) – Aurora, Ontario  
Save the River! – Clayton, New York  
Sierra Club, Great Lakes Office – Madison, Wisconsin  
Sierra Club of Canada – Toronto, Ontario  
Sierra Legal – Toronto, Ontario  
Sixteenth Street Community Health Center – Milwaukee, Wisconsin  
South Cook County Environmental Action Coalition – Chicago, Illinois  
Southeastern Minnesotans for Environmental Protection (SEMEP) – Preston, Minnesota  
Stratégies Saint-Laurent – Québec, Québec  
Sweetwater Alliance – Traverse City, Michigan  
The Watershed Center of Grand Traverse Bay – Traverse City, Michigan  
Tip of the Mitt Watershed Council – Petoskey, Michigan  
Wallaceburg Advisory Team for a Cleaner Habitat (WATCH) – Wallaceburg, Ontario  
Watershed Action for Environmental Responsibility – Hamilton, Ontario  
Western Lake Erie Association / Waterkeeper – Oregon, Ohio  
Wisconsin Great Lakes Coalition – Oostburg, Wisconsin  
York Region Environmental Alliance – Thornhill, Ontario

**Comment Number:** 14  
**Name:** Masson, Catherine  
**Affiliation:** FreshWater Consulting

*[This comment has not been included because it is copyrighted and marked "for discussion purposes only."]*



July 12, 2007

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Dear Ms Marisetti and Mr. Elster,

Thank you for the opportunity to comment on the Agreement Review Committee's (ARC) Draft Report to the Great Lakes Binational Executive Committee on the Review of the Great Lakes Water Quality Agreement (GLWQA). The Great Lakes and St. Lawrence Cities Initiative (GLSLCI) would like to commend the ARC for its diligent work in recording the comments and concerns of the Great Lakes community with respect to the future of the GLWQA.

The report accurately reflects the comments and concerns of stakeholders, and the GLSLCI is in full agreement with the conclusions reached in report. GLSLCI would like to highlight a number of issues:

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## 1. Need to Renegotiate the GLWQA

The report leaves little doubt about the strong consensus that the GLWQA is in need of renegotiation. Over the 20 years since the last changes were made to the agreement, the Great Lakes Basin has undergone massive changes—explosive urban growth in some areas resulting in near shore collapse, deindustrialization in other areas leading to a decrease in pollution, increased atmospheric and aquatic temperatures due to climate change, the introduction of invasive species, and the discovery of chemicals in very low concentrations that may have an impact on the normal reproductive capacity of species that rely on the lakes as their concentration increases. Governance of the lakes has also undergone dramatic changes. Public investment in the Great Lakes from senior governments has levelled off, and declined in some areas, the role of local government has expanded.

The outdated GLWQA simply cannot address these challenges in its current form. These changes demand a response in the form of a modernized, revitalized Great Lakes Water Quality Agreement that reflects a renewed bi-national commitment to protect the vast Great Lakes eco-region.

## 2. Role for Cities

The Cities Initiative agrees with the ARC's conclusions that the Great Lakes Water Quality Agreement should recognize the critical role and essential participation of the municipal level of government.

Despite many commitments in GLWQA that would have substantial financial, administrative and political implications for cities, there is no prescribed mechanism for municipal input into the GLWQA. This explains in part the slow progress on aspects of obligations that are directly linked to municipal operations. The Cities Initiative is offering its assistance in bridging this gap, in the hopes of speeding up progress towards these stated goals.

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The GLSLCI calls on the Parties to work with cities to develop a structure for formal municipal participation in the development and implementation of a renegotiated GLWQA.

The Cities Initiative is also fully supportive of a more inclusive process to included stakeholders more directly in the development and implementation of the GLWQA.

### 3. Funding Essential Great Lakes Infrastructure and Projects

It is essential that the senior governments and Great Lakes municipalities explore shared funding commitments to meet objectives of the GLWQA, particularly to address legacy costs.

Currently, there is little dedicated funding for municipal infrastructure and other projects that are essential to meet GLWQA commitments. While municipalities are committed to full cost recovery for their water and wastewater services, including maintenance and renewal, the greater challenge is historical infrastructure deficiencies that are impacting the Great Lakes, such as combined sewer overflows and leaking, aging distribution systems contributing to significant water loss. The anticipated impacts of climate change make such investments all the more pressing.

There is also great need for more dedicated funding to meet Remedial Action Plan objectives. The slow progress in delisting Areas of Concern continues to frustrate communities. Cities alone cannot bear the cost of remediating these areas.

It is these types of commitments that will require a federal-provincial-state-municipal funding partnership to be achieved. To that end, the Cities Initiative requests that there be explicit mention of resources for municipalities in GLWQA.

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Before such a commitment can be made in the GLWQA, it will be necessary to define and quantify the level of investment required. The Cities Initiative has begun some of this work. In order to document the level of investment by local governments in protection and restoration spending, we have initiated a spending survey across the basin with the help of the Great Lakes Commission and the Joyce Foundation. The surveys will go out in July and the results will be available early next year. This survey will provide part of the picture of investment in restoration and protection spending. A survey is also required that would measure the needs for investment, particularly concerning legacy costs. The Cities Initiative would welcome the opportunity to work with the US and Canadian federal governments to undertake such a study.

Then, as part of the recommended formal process for municipal participation, the federal governments and the Cities Initiative should establish a process to define project eligibility, cost sharing arrangements and the amount of funding required for essential Great Lakes infrastructure and projects.

#### 4. Pressing Issues and Emerging Threats

There are four major issues that need urgent attention, and must be addressed in the GLWQA. These include:

- Climate change
- Invasive species
- Nearshore impacts from urban and agricultural runoff
- Source water protection

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### *Climate Change*

There is already evidence that warming in the Great Lakes and St. Lawrence basin is accelerating year-round evaporation, stressing aquatic habitat and causing more extreme weather episodes. Both of these trends are expected to be accelerated and accentuated into the future.

The GLWQA must acknowledge the threats posed by climate change to the Great Lakes and St. Lawrence. A comprehensive study on the anticipated impacts of climate change on the basin is needed, both to inform decision-makers and to create public awareness. There is also a need for ongoing work between the Parties and amongst other levels of government and stakeholders on monitoring and adaptation strategies.

### *Invasive Species*

It is encouraging to see the draft 2007-2010 Canada-Ontario Agreement on the Great Lakes Basin Ecosystem goal of 'Reducing the threat of aquatic invasive species to Great Lakes aquatic ecosystems and species'. The GLSLCI recommends going further- by adopting a long term 'zero new introductions of invasive species' goal. The GLWQA should adopt such a goal and specific commitments to meet this goal.

Comprehensive bi-national action and monitoring to eliminate ballast water and sediment introduction into the Great Lakes must be included in the GLWQA. This must include mandatory measures to regulate the management of non-pumpable water in ships with no ballast on board. Approximately eighty percent of vessels entering the St. Lawrence seaway declare no ballast on board. In addition to preventing the irreversible ecological damage of invasive species, there is a significant financial incentive to act now. The U.S. Aquatic Nuisance Species Taskforce has estimated that the impact of invasive species to the Great Lakes basin could cost over U.S. \$138 billion by 2050.

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### *Nearshore impacts from urban and agricultural runoff*

A 2005 paper prepared by a group of eminent Great Lakes scientists, entitled, 'Prescription for Great Lakes Ecosystem Protection and Restoration', highlighted the negative cumulative impacts of chemical and nutrient loadings, shoreline and near shore land use changes, and hydrologic modifications on the aquatic nearshore ecosystem. The authors concluded that the nearshore was at 'a tipping point of irreversible change'.

Commitments and government coordination related to nearshore aquatic ecosystem protection need to be reviewed and strengthened if we are to avert reaching the tipping point.

### *Source water protection*

Despite the fact that the Great Lakes are a source of drinking water for 40 million people, and drinking water is the main way that Great Lakes citizens regularly interact with the Great Lakes, the GLWQA does not contain much in the way of explicit commitments to protect the Great Lakes as a source of drinking water.

Much is underway at the federal and state level in the US, and at the provincial level in Canada to protect sources of drinking water. It is now time to integrate commitments related to drinking water source protection directly into the GLWQA that are binding on the Parties. The draft 2007-2010 Canada-Ontario Agreement respecting the Great Lakes basin ecosystem has taken an important first step in moving in this direction.

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## 5. Agreement Accountability and Implementation

The ARC report does not address the issue of governance in a comprehensive way. This is clearly an area that must be addressed as part of a renegotiated GLWQA.

A number of recent reviews of the Great Lakes Water Quality Agreement have determined that its governance framework is in need of a fundamental rethink. These include recommendations and commentary from the International Joint Commission, the Environmental Commissioner of Ontario, and the Binational Executive Committee's workshop on governance.

Questions of accountability, the binding nature of goals and objectives, the nature of the oversight function of the Management Committee, and the role of municipalities, First Nations and stakeholders in the COA process, are all issues in need of consideration.

Commitments should include specific results and timelines to achieve the purpose and goals in the Agreement; and the Parties should clearly designate responsible entities.

The Agreement should also be flexible enough to respond to new scientific information.

## 6. Other Issues

### *Areas of Concern*

It has been over 20 years since the Areas of Concern were identified, and the progress in remediating these sights has been painfully slow. The presence of these AOCs has a direct impact on the economic and social wellbeing of the cities in which they are located.

A renegotiated GLWQA needs to include financial commitments and a strategy and schedule for delisting the remaining AOCs.

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### *Publicly Accessible information*

The next GLWQA should include specific commitments on the part of the Parties to gather and make available publicly understandable information on the quality of the Great Lakes and future trends. While SOLEC is a valuable source of scientific information, the Parties have not taken the next step to make this scientific information understandable to the public. Publicly accessible information is essential to engage the public, to gain public support for investments in the Great Lakes, and to gain credit for government actions that are being taken to protect the Lakes.

Accessible information is also essential to inform policy decisions made at the federal, state and provincial, and municipal level.

### *Public Buy-In*

Given the importance of the next GLWQA it is important that there is public buy-in and participation in the process to review the agreement, a process that is that is transparent, includes a meaningful role for cities, First Nations, and stakeholders, and gives ample time for input.

### *Including the St. Lawrence*

While the St. Lawrence River is not a bi-national waterway, it is hydrologically connected to the Great Lakes. It is also used as an international navigation corridor to access the Great Lakes. It therefore makes sense to consider the Great Lakes and the St. Lawrence as one water system.

There is interest amongst members of the GLSLCI to consider formalising cooperative efforts to protect the Great Lakes and St. Lawrence as part of a unified water system. Such a formal cooperative agreement could either be done under the GLWQA or under a Memorandum of Understanding associated with the Agreement. The Cities Initiative would be interested in exploring such a cooperative partnership with the Parties and the relevant state and provincial governments.

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Thank you once again for the opportunity to provide comments on the ARC's GLWQA review report. The Cities Initiative would welcome the opportunity to discuss these comments further with the Parties and the Bi-national Executive Committee.

Sincerely,

/S/

Gary Becker

Chair

Great Lakes and St. Lawrence Cities Initiative

Mayor, City of Racine, Wisconsin

/S/

David Miller

Founding Canadian Chair

Great Lakes and St. Lawrence Cities Initiative

Mayor, City of Toronto, Ontario

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## GREAT LAKES INDIAN FISH AND WILDLIFE COMMISSION

P. O. Box 9 • Odanah, WI 54861 • 715/682-6619 • FAX 715/682-9294



### • MEMBER TRIBES •

#### MICHIGAN

Bay Mills Community  
Keweenaw Bay Community  
Lac Vieux Desert Band

#### WISCONSIN

Bad River Band  
Lac Courte Oreilles Band  
Lac du Flambeau Band  
Red Cliff Band  
St. Croix Chippewa  
Sokaogon Chippewa

#### MINNESOTA

Fond du Lac Band  
Mille Lacs Band

July 13, 2007

Mr. Mark Elster, Senior Program Analyst  
United States Environmental Protection Agency  
77 W. Jackson Blvd. (G-17J)  
Chicago, Illinois 60604

Re: Agreement Review Committee's Report to the Binational Executive Committee on  
Review of the Great Lakes Water Quality Agreement (Agreement)

Dear Mr. Elster,

GLIFWC staff submit the following comments on the Agreement Review Committee's (ARC's) Report to the Binational Executive Committee relating to the review of the Great Lakes Water Quality Agreement (Agreement). As you know, GLIFWC is an agency exercising delegated authority from 11 federally recognized Indian tribes in Michigan, Minnesota, and Wisconsin.<sup>1</sup> These tribes retain reserved hunting, fishing and gathering rights in territories ceded to the United States in various treaties, including portions of the Great Lakes basin. The purpose of GLIFWC member tribes' ceded territory treaty rights is to guarantee that the tribes may continue their hunting, fishing, and gathering way of life (or "lifeway") in a manner that meets their subsistence, economic, cultural, medicinal, and spiritual needs. As always, GLIFWC's comments on this report should not be construed as precluding comments by individual member tribes from their own sovereign perspectives.

In terms of the Great Lakes, and in particular Lake Superior, GLIFWC member tribes hold a cultural and spiritual connection to these bodies of water. GLIFWC's member tribes believe that all life is sacred and they recognize and rely upon the interrelatedness of all things in the environment, both biotic and abiotic. Many things considered "non living" by western scientific standards (for example water, rocks and certain geological features) are referred to as living beings or entities by the tribes and are revered spiritually and culturally.

The successful implementation of the tribal lifeway depends on effective ecosystem protection and management that protects the diversity of life. Because the ceded territory treaty

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<sup>1</sup> GLIFWC member tribes are: in Wisconsin – the Bad River Band of the Lake Superior Tribe of Chippewa Indians, Lac du Flambeau Band of Lake Superior Chippewa Indians, Lac Courte Oreilles Band of Lake Superior Chippewa Indians, St. Croix Chippewa Indians of Wisconsin, Sokaogon Chippewa Community of the Mole Lake Band, and Red Cliff Band of Lake Superior Chippewa Indians; in Minnesota – Fond du Lac Chippewa Tribe, and Mille Lacs Band of Chippewa Indians; and in Michigan – Bay Mills Indian Community, Keweenaw Bay Indian Community, and Lac Vieux Desert Band of Lake Superior Chippewa Indians.



Mr. Mark Elster

July 13, 2007

Page 2

rights depend on clean and abundant natural resources, tribes have a meaningful stake in the management of the Great Lakes basin. In addition, because the tribes' commitment to the protection and effective management of the Great Lakes is entirely consistent with the purpose of the Agreement (that is, to restore and maintain the basin ecosystem's chemical, physical, and biological integrity), tribal treaty rights present significant opportunities to advance the effective implementation of the Agreement. Ultimately, GLIFWC will judge the success or failure of the Agreement in terms of how it protects the natural resources upon which its member tribes rely.

As an initial matter, GLIFWC has truly appreciated the opportunity to participate in the review of the Great Lakes Water Quality Agreement to date, both as part of the ARC and several of the Review Working Groups. We are encouraged by the way in which the Great Lakes community has come together in this process. The Agreement is an important and forward looking document that is principally sound, but that could benefit from judicious updating by the Parties.

The more specific comments that follow are organized by report "theme."

**THEME 1: THE PURPOSE AND SCOPE OF THE AGREEMENT.** The overall purpose of the Agreement is entirely consistent with GLIFWC's member tribes' vision for a healthy Great Lakes basin, and so we agree with the report's conclusion that the purpose remains sound and relevant, and should be fully translated into all aspects of the Agreement.

GLIFWC staff agree that the Agreement's role as a principal driver for restoration activities in the Great Lakes basin is less clear than it was, in part due to the outdated nature of many of the Agreement's provisions. However, for the Agreement to regain this leading role, the IJC will need to aggressively pursue its own role as the "Principled Leader," the voice of conscience to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem. To do this, the IJC must:

- maintain institutional credibility by providing an impartial forum for research and debate on important environmental issues,
- advocate, based on sound science, for the principles (such as weight of the evidence and reverse onus) that will advance the goals of the Agreement,
- remind the governments of their commitments, while recognizing that those governments will be the ones who ultimately have to either do, or not do, the work involved, and
- recognize the political realities, but not be deterred.

As to the Agreement's scope, an ecosystem approach represents the most comprehensive and integrated way to reach the Agreement's purpose. A focus only on specific pollutants in open water can never hope to achieve the purpose of the Agreement. If the Agreement is reopened, ecosystem approaches should be specifically endorsed and a strong mandate for activities beyond the open waters should be included.

Mr. Mark Elster

July 13, 2007

Page 3

The groundwater of the Great Lakes basin should be included in the definition of the Great Lakes Basin Ecosystem. Groundwater recharge areas must be protected to ensure the replenishment of water in terms of quality and quantity to the ecosystem. As water quantity and quality issues receive increased attention, and water use and management becomes an increasingly pressing issue, the Agreement should reflect this priority.

**THEME 2: OUTDATED AGREEMENT ELEMENTS.** It seems appropriate to write the Agreement Articles in a way that ensures their long term effectiveness, while allowing the Annexes to evolve to reflect current conditions, challenges and opportunities. A process for reviewing and revising Annexes should also be in place. The recommendation to emphasize watershed planning as an effective approach to achieve the purpose of the Agreement is a good one, and one that is consistent with the ecosystem approach recommendations referred to under Theme 1, above. However, the recommendation might be reworded to add “and implementation” after the words “watershed planning” in order to be clear that planning in itself is not sufficient.

**THEME 3: PRESSING ISSUES AND EMERGING ISSUES.** Aquatic invasive species and climate change are clearly two issues that should be addressed but that the Agreement is not currently equipped to handle. The governance and institutional frameworks should be strengthened in a way that allows emerging issues to be addressed in a timely manner. In addition, a process to address existing pressing issues should be put into place.

**THEME 4: AGREEMENT ACCOUNTABILITY AND IMPLEMENTATION.** As we have noted throughout the Agreement review process, the governance and institutional frameworks must provide for effective coordination with other governments and specifically from our perspective, tribes. We appreciate the report’s recognition of the tribes’ role as governments whose actions can help accomplish the purpose of the Agreement. However, several things should be made clear with regard to accountability and implementation, particularly as they relate to tribes.

Nothing in the Agreement should be interpreted to specifically regulate the activities of other governments, preempt the ability of other governments to exercise particular duties, or undermine the sovereign authority of another government. In addition, whether or not other orders of government have “implementation of the Agreement,” as a specific part of their mandate, as they exercise their particular authority, and as those actions affect whether and how the Agreement is achieved, they must be part of the coordination and collaboration effort. Finally, the Agreement must not create an “hourglass” structure through which funding or programs must flow. Other orders of government must have the ability to help accomplish the purpose of the Agreement in whatever way is most opportune and should not be constrained by any particular accountability mechanism, however well intentioned.

Several principles are important when considering how such coordination is best accomplished when dealing with tribal governments. The problem of tribal participation is not limited to a lack of recognition. Tribes generally have not had the infrastructure and funding to participate consistently and effectively. The sheer number of tribes has also posed problems related

Mr. Mark Elster  
July 13, 2007  
Page 4

to effective and manageable participation. However, the tribes are catching up, and must be integrated into the process by which the Agreement is updated, and ultimately implemented.

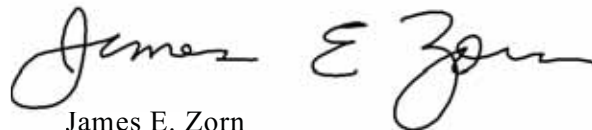
**THEME 5: INCLUDING OTHER ORDERS OF GOVERNMENT AND THE PUBLIC.** In general, many of the comments made above about accountability and implementation in relation to tribes are applicable in this section as well. The goal should be consistency, full and effective coordination and consultation, not preemption or obstacles to progress.

Tribes, first nations, local municipalities, non-governmental agencies, and the general public are properly identified as key players needed for implementation of priorities and objectives of the Agreement. These entities need further support and resources to complement the work they have been doing over the years. In addition, these entities should be involved in all aspects of the Agreement including the periodic reviews, implementation, and potential revisions of the Agreement or its Annexes.

In general, the Agreement would benefit by emphasizing the value of and continuing role for existing programs. Given the level of effort that is already being put into Great Lakes restoration and protection, whether through the Lakewide Management Planning (LaMP) processes or the Remedial Action Planning (RAP) processes, the good efforts already underway cannot and should not be undone or undermined if the Agreement is reopened. A top priority should be full implementation of the LaMPs. As the report states, the LaMPs represent collaborative, coordinated, consensus based efforts by federal, state and tribal government agencies, with input from the public, and already contain comprehensive documentation of each basin's restoration and protection needs. Full implementation of LaMPs and RAPs would go a long way toward achieving the purpose of the Agreement.

Miigwetch (Thank you) for your attention to these comments. We look forward to additional discussion and consultation as the review of the Agreement proceeds. Please feel free to contact me or Reggie Cadotte, GLIFWC Policy Analyst if you have any questions or would like to discuss these issues further.

Sincerely,



James E. Zorn  
Executive Administrator

cc: GLIFWC Board of Commissioners  
Ann McCammon Soltis, Director, Division of Intergovernmental Affairs  
Reggie Cadotte, Policy Analyst



July 11, 2007

In response to the Binational Executive Committee's invitation to comment on their draft review of the Canada-U.S. Great Lakes Water Quality Agreement (GLWQA) by July 11, 2007, we congratulate the members of the binational Agreement Review Committee (ARC) for pulling together a summary that we believe fairly reflects the discussions carried out during 2006.

Therefore, in this brief, instead of focusing on the ARC document, we present our preliminary position on revision of the Agreement. As the review and possible renegotiation continues over the next couple of years, we will present more details on these policy directions.

**1. We support opening up the GLWQA to revitalize it, provided the governments make a commitment not to weaken provisions currently in the Agreement.**

The GLWQA has made a very significant contribution over the past 35 years to improving environmental conditions in the Great Lakes. We believe, however, that the GLWQA needs to be revitalized because it is now less of a driver of Great Lakes programs than it previously was. Certain provisions are out of date and new understandings of some of the problems have arisen. In addition, the governments are paying less attention to the Agreement than they previously did.

Therefore, we believe that the GLWQA should be revised.

However, we do not believe the existing Agreement should be abandoned and replaced by a completely new agreement. Many important provisions of the GLWQA have not yet been fully implemented. In addition, the principles stated in the Agreement, such as ecosystem, virtual elimination and zero discharge, are as vital now as when they were first put into the Agreement. Therefore, if the governments decide to open up the Agreement, they should make a commitment not to weaken any of the provisions currently in it.

**2. The governments should commit to full public involvement in any significant decisions regarding changes to the GLWQA, including:**

- **An opportunity to comment on advice from Environment Canada and the U.S. Environmental Protection Agency to Foreign Affairs and International Trade Canada (DFAIT) and the U.S. Department of State**
- **An opportunity to comment on preliminary positions of DFAIT and State Department**
- **Formal public hearings on a complete draft of proposed revisions to the Agreement, if it is revised**
- **Formal status as observers at the negotiating table during negotiations.**

Thus far, this review of the GLWQA has been conducted in an open manner. In the fall of 2005, the International Joint Commission (IJC) held fourteen public meetings and estimates that 4,100

people participated in their process. Throughout 2006, the governments chaired nine review working groups; they estimate that 350 people participated in those groups.

In their draft review report, the ARC recommends that the “public should be consulted in any revision of the Agreement.” The consultation processes thus far have not been based on government proposals for possible revisions. Thus, while very welcome, public involvement opportunities to date are far less important than those requested above. The decisions over the next couple of years will be the critical ones in determining whether to revise the Agreement and the content of any revised Agreement.

Therefore, we urge the governments to make specific commitments—now, before the first key government steps are taken—as to the opportunities that will be provided for input.

The four mechanisms provided in our recommendation are the minimum that we urge the governments to commit to. These mechanisms have precedents in the last revision of the GLWQA, in 1987. Among other steps, Environment Canada held three public meetings on the Canadian side of the Great Lakes basin on the draft amended agreement; the U.S. EPA held four public meetings on a similar document. In addition, five environmental non-government representatives were appointed as official observers to the negotiations and directly participated in the discussions during the formal bilateral negotiating session.

**3. As part of the review, the governments should ensure that a neutral, professional, detailed assessment of progress and performance under the Agreement is carried out before decisions are made on how to proceed with revitalization of the Agreement.**

Since June 2004, we have been urging BEC to ensure that a detailed independent review of the GLWQA is carried out. The review working group process has not replaced the need for such a detailed independent review. The ARC report is based on the extensive knowledge of the many people on the conference calls. But that knowledge was not always comprehensive and the varying level of expertise on the calls were not conducive to the detailed discussion necessary for the ARC report to be said to constitute an expert review. The ARC report did not include a detailed assessment of what progress was achieved and not achieved under each section of the Agreement; nor does it include neutral professional judgments on the appropriate future direction of the Agreement.

The study conducted by the National Research Council of the United States and The Royal Society of Canada prior to the amendment of the Agreement in 1987 is frequently referred to as an essential input into that review and renegotiation process. Twenty years have passed since that independent review so a similar new review is needed. Many are now talking about amendments to the Agreement that are more extensive than those in 1987. Surely this means that another independent study such as the one prior to 1987 is essential.

**4. Regarding the scope of the GLWQA, we recommend that the governments adopt the recommendation of the IJC: “The Agreement’s focus should remain on water quality, but take account of a broader array of stressors that impact on it.”<sup>1</sup>**

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<sup>1</sup> International Joint Commission, *Advice to Governments on their Review of the Great Lakes Water Quality Agreement*, August 2006, p. 11

There is considerable discussion as to whether the scope of the Agreement should be changed and on the extent of any such changes. Some have proposed that it become a Great Lakes Ecosystem Agreement, which would address all environmental issues in the basin. Others have proposed that it become a Great Lakes Sustainability Agreement, which would balance social, economic and environmental considerations.

We believe that the GLWQA should not become the only or even the prime agreement for addressing Great Lakes issues. We fear that an agreement that tried to address all issues would become an agreement that would be so dense and expansive that it would be impossible to implement and would wash out any focus, or be so general in nature as to be non-specific and, as a result, useless. In addition, there are other existing agreements, such as the Convention on Great Lakes Fisheries, and potential agreements that have valuable roles to play. We believe that, provided there is communication amongst those implementing these various agreements, it is best to keep each agreement separate and more focused.

Therefore, we recommend that the GLWQA retain its focus on water quality, but with a somewhat broader view of what impacts water quality.

The understanding by scientists and policy makers of the factors affecting water quality has increased since the Agreement was last revised. Therefore, we recommend that the GLWQA be revised to add new stressors or to reflect a better understanding of stressors already in the Agreement. The stressors that we believe should be added or given a greater emphasis include: invasive species, pollutants of recent concern (endocrine disruptors, flame retardants, pharmaceuticals, nanoparticles), air pollution from sources beyond the Great Lakes basin, radionuclides, groundwater pollution, fish farms, intensive agricultural operations, urban development, water levels, and climate change.

#### **5. The GLWQA should be revised to include the entire St. Lawrence River.**

Currently the GLWQA includes the St. Lawrence River only up to the point where it ceases to be the border between Canada and the U.S., which is near Cornwall and Massena. This is inconsistent with the ecosystem approach in the GLWQA. Therefore, we urge that the entire St. Lawrence River be included in the Agreement.

The Agreement is based on the Boundary Waters Treaty of 1909. As a result, some argue that the Agreement can apply only to boundary waters, which means that the St. Lawrence River cannot be included once it passes Cornwall-Massena and is wholly located within Canada. However, Lake Michigan, which is wholly within the United States, is already included in the Agreement as it is part of the Great Lakes Basin ecosystem. Therefore, it is inconsistent to artificially chop off the ecosystem part way down the St. Lawrence River.

#### **6. New principles and approaches should be added to or expanded in the Agreement.**

##### **Prevention**

It is now well recognized that prevention is both more effective and less expensive than remediation in protecting human and ecosystem health. Prevention should be a key principle in any revised Agreement.

In order to achieve a preventive approach, the precautionary approach and reverse onus should be added to the GLWQA. The precautionary approach is the “principle of taking a cautious, environmentally conservative approach to avoid and prevent pollution, according to threats of serious or irreversible damage, even with a lack of full scientific certainty.”<sup>2</sup> Reverse onus is “a concept to require the producer, user or discharger of a substance to demonstrate that neither the substance nor its degradation products or byproducts are likely to pose a threat to the ecosystem.”<sup>3</sup>

#### Watershed approach

The watershed approach should also be given much more emphasis in the Agreement. A watershed approach focused on the major tributaries to the Great Lakes should be the core organizing mechanism for protecting the waters of the Great Lakes because it is through these tributaries that many of the stressors enter the Great Lakes and St. Lawrence River.

#### 7. New science provisions should be added to the GLWQA, including:

- **Identifying indicators for the various goals in the Agreement**
- **Commitment by the governments to gather enough data to be able to report on status of these indicators**
- **Supporting research that will give warnings on emerging stressors**
- **Ensuring that the monitoring and research results are widely available and easily accessible in a timely manner.**

Successful protection and restoration of the Great Lakes and St. Lawrence River basin depends on the presence of adequate and consistently funded monitoring and scientific research. In the past the Great Lakes basin has been at the forefront of this type of monitoring and research. Unfortunately, funding cuts over the past fifteen years have had a devastating impact on this critical knowledge base. Therefore, revitalization of the Agreement also must include a revitalization of Great Lakes monitoring and science.

A strong connection between monitoring, science and policy-makers is essential if these features are to be effective in protecting the basin’s environment. It is for this reason that we have put in the recommendation regarding easy and timely access to monitoring and research results.

#### 8. A strong public role should be embedded in the Agreement, including:

- **Public initiative options, such as a citizen petition mechanism**
- **Public representation on all IJC boards and the creation of a citizens’ advisory board to the IJC**
- **Commitment to create public advisory committees for government initiatives or programs related to the Great Lakes, and/or inclusion of the public on program steering committees**

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<sup>2</sup> IJC, *Eighth biennial report on Great Lakes water quality*, 1996

<sup>3</sup> IJC, *Eighth biennial report on Great Lakes water quality*, 1996

A recurring theme in the ARC report of April 2007 is the need to include provisions in the GLWQA through which the governments commit to public involvement. We recommend that in addition to providing for this through a general commitment, the governments should commit to specific public involvement provisions. These should include mechanisms that allow the public to take the initiative in prompting actions, such as citizen petitions that require reviews by the federal governments or the IJC.

The public also should be assured of more meaningful participation in IJC activities. Citizen experts in the appropriate fields should be included on the IJC's existing boards, that is, the Water Quality Board, the Science Advisory Board, and its Council of Great Lakes Research Managers. In addition, a new citizens advisory board should be set up for the IJC. This board should advise the IJC commissioners on the adequacy of government programs to achieve the goals of the GLWQA and make recommendations on how these programs could be improved.

In addition, the governments should commit through the Agreement to include the public in meaningful ways in their domestic programs on Great Lakes matters. This should include a commitment to set up public advisory committees for their GLWQA-related programs and/or to include representatives of the public on their steering committees for these programs.

### **9. The GLWQA should recognize and define the role of the Tribes, First Nations and Metis in Agreement activities.**

Approximately 350,000 descendants of the first peoples of the Great Lakes basin live in 110 nations on approximately three million hectares of federally recognized reserve land in the Great Lakes-St. Lawrence River basin. Many more of their descendants live off the reserves, most of them in urban centres. These aboriginal peoples have rights as sovereign independent governments.

The unique role of the Tribes, First Nations and Metis in protecting and restoring the Great Lakes should be recognized in the GLWQA. Among other mechanisms, this should include their participation as IJC commissioners and membership on all IJC boards. The specific provisions related to the Tribes, First Nations and Metis should be worked out through extensive discussions with these peoples.

### **10. The GLWQA should define the role of the provinces, states, and local governments in Agreement activities.**

The roles of the provinces and states are at times mentioned in the existing GLWQA, but not in a comprehensive and focused way. This aspect of the Agreement needs to be strengthened, since the provinces and states operate many of the programs that are essential to achieve the goals of the Agreement. The provinces and states should be fully included in the negotiating process in order to obtain their buy-in to the activities that they will need to carry out.

Local governments, such as cities, towns, villages, townships, counties, and regions, are not currently mentioned in the GLWQA. Yet, as the members of the Great Lakes and St. Lawrence Cities Initiative note, "Municipal governments are on the front lines of Great Lakes water management." Achieving the Agreement's goals has involved and will continue to require billions of dollars in expenditures on municipal infrastructure alone. The essential role of



municipal governments should be recognized in the Agreement.

**11. Commitments in the GLWQA should be written in a way that leads to implementation by fostering enforceability and accountability. This means that commitments in the Agreement should:**

- **Have specific targets and timetables for achieving those targets**
- **Replace words such as “seek” and “strive” with “achieve”**
- **Include a commitment to put the targets and timelines in the Agreement into each country’s legislation**
- **Include provisions for regular reporting to the public on progress towards the targets and timetables**

The main recurring theme in the ARC report is that the governments have failed to implement the existing GLWQA. The main changes that need to be made to the Agreement are ones that will improve the likelihood of existing and new commitments being carried out. Those changes listed above are a minimal and beginning list of provisions that should be put into the Agreement to foster implementation. Some of our previous recommendations, such as citizen rights to petition, would add to the accountability and enforceability necessary to ensure implementation of the Agreement.

**12. Provisions for periodic independent audits of progress generated by the Agreement should be strengthened, and government responses to those audits should be made more specific.**

In one of its most important provisions, the Agreement provides the rudiments of government accountability by requiring the IJC to regularly report on progress under the Agreement. However, there is widespread dissatisfaction with the way in which the IJC has lately been carrying out its reporting role. Among other problems, the IJC has been hampered in carrying out this role by the failure of the governments to submit the necessary data for the IJC to carry out these assessments.

Reviews of the issue of governance are currently underway that will help us come to a conclusion on revisions that should be made to the IJC to better fulfill this role and as to whether additional mechanisms are needed. Later we will propose solutions to this need for an independent audit. For now, we recommend two steps to improve accountability under the Agreement and make it more feasible to conduct proper audits:

- The governments should commit to provide the necessary data, in a timely manner, to auditors of progress.
- The governments should commit to regularly report on progress for each of the commitments in the Agreement.

**13. The governments should demonstrate their commitment to a revitalized GLWQA by:**

- **Having the Agreement approved and signed by the appropriate government officials (the prime minister and president at a minimum) and the appropriate aboriginal representatives**

- **Making financial commitments adequate to achieve the goals of the Agreement.**

The main goal we hope to achieve through the review and possible revision of the GLWQA is revitalization of the Agreement that draws public and political attention back to the need for basin-wide ecosystem protection. To help in achieving this, the governments should state their commitment to the existing or revised Agreement in a high-profile way.

## **Conclusion**

The thirteen recommendations in this brief lay out the direction we believe should be taken to revitalize the Great Lakes Water Quality Agreement. As the review and possible renegotiation continues over the next couple of years, we will contribute more detailed recommendations. We look forward to engaging in ongoing discussions with the governments on these matters.

**Comment Number: 18**

**Name: Stone, Dr. John V.**

**Affiliation: Institute for Food and Agricultural Standards, Michigan State**

General Comments:

I am a Co-Principal Investigator on an NSF Grant focused on the social and ethical dimensions of nanotechnologies in food and agriculture, and it is in this capacity that I offer the following observation. Page 276 offers the first mention of nanotechnology (i.e., noting that the agreement does not address "emerging contaminants such as pharmaceuticals, flame retardants, personal care products, and nanoparticles and nanotechnology"). As a matter of semantics, 'nanotechnology' is a cover term for a variety of technologies of differing character operating at the nano-scale. Thus, it is more appropriate (and will aid in later specificity of related issues) to use the plural 'nanotechnologies.' That said, various nanoPARTICLES may or may not prove to be contaminating and/or toxic in one way or another -- and the uncertainty surrounding these should be of monumental concern. But framing the TECHNOLOGIES per se that produce them as 'emerging contaminants' opens an interesting and very important regulatory issue, namely the use of product versus process standards for nanotoxicity. For example, suppose you have two loaves of bread, one containing nano-encapsulated nutrients engineered to release their payloads at certain prescribed points in the digestive tract and thereby maximize nutritional efficiencies, the other produced by wheat grown in fields which utilized nano-enhanced fertilizers, insecticides, and/or pesticides. In the former, nanoparticles may be detectable in the product itself; the latter would contain no such evidence, and yet potentially harmful nanoparticles have been released into the environment. Are both loaves considered 'nano?' Using a product standard, the answer would likely be 'no,' as no nanoparticles would be detected in the second loaf. Using a process standard, the answer would likely be 'yes,' as both were prepared using some form of nanotechnology. If, for the purposes of the GLWQA, nanoTECHNOLOGIES are considered 'emerging contaminants,' then I suspect you'll be moving toward a process standard for regulating processes that utilize a nanotechnology which may or may not result in the release of detectable nanoparticles. I suspect the agrifood and other industries would be interested in this. Concomitantly, findings from our agrifood nanotechnologies grant suggest various nanotechnologies and associated unique regulatory uncertainties may be implicated at multiple points along a supply chain -- from product development in the laboratory, to production use on-site and in-field, to processing and packaging, to transport and retail tracking and monitoring, to consumer usage and waste stream management. To understand the potential pathways to environmental contamination, one will need to understand the production and flow of these nanoparticles through their respective supply chains, just as one would track their flow through hydrological systems. And finally, talk of nanotechnologies ought not be restricted to contamination issues, as these same technologies are presently being enlisted, for example in nanofiltration systems, to mitigate and remediate 'conventional' sources of environmental contamination. In any event, I don't expect The Agreement will answer these issues, but I do hope that it is sensitive to the breadth and depth and general complexity they introduce. Talk of nanotechnologies should not be taken lightly, certainly more than one mention in a 450-page document, and attention should be given to both its potential peril and promise for Great Lakes water management. Thank you for your consideration and your efforts on our collective behalf.

Volume 2 Comments:

I am a Co-Principal Investigator on an NSF Grant focused on the social and ethical dimensions of nanotechnologies in food and agriculture, and it is in this capacity that I offer the following

observation. Page 276 offers the first mention of nanotechnology (i.e., noting that the agreement does not address "emerging contaminants such as pharmaceuticals, flame retardants, personal care products, and nanoparticles and nanotechnology"). As a matter of semantics, 'nanotechnology' is a cover term for a variety of technologies of differing character operating at the nano-scale. Thus, it is more appropriate (and will aid in later specificity of related issues) to use the plural 'nanotechnologies.' That said, various nanoPARTICLES may or may not prove to be contaminating and/or toxic in one way or another -- and the uncertainty surrounding these should be of monumental concern. But framing the TECHNOLOGIES per se that produce them as 'emerging contaminants' opens an interesting and very important regulatory issue, namely the use of product versus process standards for nanotoxicity. For example, suppose you have two loaves of bread, one containing nano-encapsulated nutrients engineered to release their payloads at certain prescribed points in the digestive tract and thereby maximize nutritional efficiencies, the other produced by wheat grown in fields which utilized nano-enhanced fertilizers, insecticides, and/or pesticides. In the former, nanoparticles may be detectable in the product itself; the latter would contain no such evidence, and yet potentially harmful nanoparticles have been released into the environment. Are both loaves considered 'nano?' Using a product standard, the answer would likely be 'no,' as no nanoparticles would be detected in the second loaf. Using a process standard, the answer would likely be 'yes,' as both were prepared using some form of nanotechnology. If, for the purposes of the GLWQA, nanoTECHNOLOGIES are considered 'emerging contaminants,' then I suspect you'll be moving toward a process standard for regulating processes that utilize a nanotechnology which may or may not result in the release of detectable nanoparticles. I suspect the agrifood and other industries would be interested in this. Concomitantly, findings from our agrifood nanotechnologies grant suggest various nanotechnologies and associated unique regulatory uncertainties may be implicated at multiple points along a supply chain -- from product development in the laboratory, to production use on-site and in-field, to processing and packaging, to transport and retail tracking and monitoring, to consumer usage and waste stream management. To understand the potential pathways to environmental contamination, one will need to understand the production and flow of these nanoparticles through their respective supply chains, just as one would track their flow through hydrological systems. And finally, talk of nanotechnologies ought not be restricted to contamination issues, as these same technologies are presently being enlisted, for example in nanofiltration systems, to mitigate and remediate 'conventional' sources of environmental contamination. In any event, I don't expect The Agreement will answer these issues, but I do hope that it is sensitive to the breadth and depth and general complexity they introduce. Talk of nanotechnologies should not be taken lightly, certainly more than one mention in a 450-page document, and attention should be given to both its potential peril and promise for Great Lakes water management. Thank you for your consideration and your efforts on our collective behalf.

## INTERNATIONAL JOINT COMMISSION UNITED STATES AND CANADA



July 12, 2007

Jim Vollmerhausen  
Regional Director General  
Environment Canada, Ontario Region  
4905 Dufferin Street  
Downsview, ON M3H 5T4

Gary V. Gulezian  
Director, Great Lakes National Program Office  
Environmental Protection Agency  
77 W. Jackson Blvd. (G-17J)  
Chicago, IL 60604

Dear Messers Vollmerhausen and Gulezian:

We are writing to you in your capacity as co-chairs of the Binational Executive Committee in order to advise you that the International Joint Commission is concerned about the lack of sufficient attention to nearshore waters in the current review of the Great Lakes Water Quality Agreement, and recommends that this critical area be addressed more thoroughly in the remainder of the review period. The Commission is prepared to assist in this endeavor.

The nearshore area serves a vital ecological link between watersheds, tributaries, wetlands, groundwater, and the offshore waters of the Great Lakes, and supports critical habitat for fish, invertebrate, and wildlife populations. In addition, the nearshore is where most people live, work and play.

However, nearshore waters also are where perturbations most often first appear, including water-quality degradation, water-level changes, and the effects of climate change on ecosystem health. Beach closings, nuisance algal growth, establishment of alien invasive species, and habitat loss are just some of the symptoms of these developments, and act as harbingers of future changes in offshore waters.

Despite their vital importance, the current Agreement contains few specifics on nearshore waters. The Commission views this as an issue significant enough to warrant opening the Agreement on this basis alone for substantive revisions or replacement to provide the means to address the critical science, resource management, governance and policy needs related to the nearshore waters.

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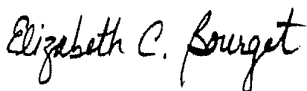
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In its 2006 report, *Advice to Governments on their Review of the Great Lakes Water Quality Agreement*, the Commission stated that, "Nearshore waters have been comparatively ignored, despite the fact that their condition impacts significantly on quality of the offshore waters of the Great Lakes." For this reason, the Commission recommended that its proposed Binational Action Plan "should include provisions for developing and implementing programs that target the nearshore waters." More recently, Commissioners issued a Directive to their Great Lakes advisory groups, instructing them to organize their work under a nearshore waters framework during the Commission's next biennial Priorities Cycle, which begins in October 2007.

The Commission acknowledges that several Agreement review working groups did touch on nearshore issues in the course of their activities. However, it is concerned that the report of the Agreement Review Committee, which was established by the Binational Executive Committee to conduct the review, does not adequately deal with these matters. Therefore, the Commission urges that, from this point on, consideration of the nearshore be more actively integrated into the remaining Agreement review activities under a consolidated nearshore or coastal management heading.

This letter represents an official submission during the ongoing public comment period on the report of the Agreement Review Committee. Later this year, the Commission will follow up with further substantive advice, based on input from its advisory groups, on how a revised or new Agreement could effectively address the nearshore waters of the Great Lakes. The Commission looks forward to discussing these matters with governments on October 19, 2007, during its forthcoming semi-annual meeting in Ottawa.

Sincerely,



Elizabeth C. Bourget  
Secretary  
United States Section



Murray Clamen  
Secretary  
Canadian Section

**Comment Number: 20**

**Name: Miller, Leah**

**Affiliation: Izaak Walton League of America**

General Comments:

Dear Members of the Great Lakes Binational Executive Committee:

In response to the Binational Executive Committee's invitation to comment on the draft review of the Canada-U.S. Great Lakes Water Quality Agreement (GLWQA) by July 11, 2007, the Great Lakes Committee of the Izaak Walton League provides these observations.

First, we believe updating and renewal of the GLWQA, last amended in 1987, is advisable. The importance of an agreement between Canada and the U.S. to protect and restore the health of the Great Lakes can't be overstated. The waters, lands, fisheries and other resources of the Basin are a treasure that both nations must do more to defend. The challenges and opportunities identified in the original GLWQA in the 1970s and in the amended document of 1987 have changed dramatically, and this requires a fresh version of the agreement.

Second, we strongly urge that an updated and renewed agreement be designed to promote, most of all, public understanding of the goals sought in new efforts to protect and restore the Great Lakes Basin and public accountability for the governments that are charged with carrying out those efforts.

Furthermore, we believe a concise, clear statement of the problems to be fought, the goals to be attained, and the deadlines by which they are to be attained is preferable to the more typical lengthy, complicated text which sets broad, diffuse goals and seems almost designed to frustrate public participation. We have no objection to annexes or technical documents that would support this concise, clear statement, but the agreement itself should be several pages in length at most.

Third, we believe citizens who care about the Great Lakes need a clear statement of the most critical challenges facing the Basin as part of this battle plan. In our view, the next version of the GLWQA should define them thus:

- Biological pollution from aquatic invasive, non-native species;
- Continuing habitat loss and degradation;
- Conventional, toxic, and emerging pollutants;
- Diversion of water outside the Great Lakes basin.

Each of these major challenges lends itself to clear goals by the governments. The introduction of additional invasives must be halted by a date certain – and near. Until that time, a moratorium prohibiting ocean-going vessels ("salties") from entering the Great Lakes needs to be in place. Critical habitat must be restored in definable quantities by definable times, and the loss of habitat must be checked. The impact of conventional pollutants must be contained through measurable government investments in wastewater treatment and toxic pollutants must be curbed through the phaseout of emerging chemicals of concern and the improvement of chemical policies in both the U.S. and Canada. Responsibility for fulfillment of each of these tasks must be accepted by the two governments in the revised GLWQA and agencies within the governments should be given a mandate and resources to fulfill the tasks in a separate implementing document.

In other words, we reject a revised GLWQA that emphasizes appealing statements and visions expressed in generalities with no clear accountability for achieving them. Such statements and visions don't promise health for the Great Lakes, they only postpone the date by which health can be achieved.

We specifically ask, in addition, that the revised GLWQA include a mechanism for independent citizen review and evaluation of the progress in its implementation, and an annual report to the Great Lakes public on progress or lack of same. A Great Lakes Accountability Board, consisting of concerned citizens from Canada and the U.S., should be empowered to hold hearings, do fact-finding and issue these reports. This mechanism itself is more likely than any platitudes to drive implementation of the GLWQA.

Thank you for this opportunity to comment on the GLWQA.

Sincerely,  
Jill Crafton and Jim Sweeney  
Co-Chairs  
Great Lakes Committee  
Izaak Walton League of America

Founded in 1922, the Izaak Walton League of America protects America's outdoors through community-based conservation, education, and the promotion of outdoor recreation. The League has more than 40,000 members and supporters nationwide. The Great Lakes Committee includes Izaak Walton League members from each of the Great Lakes states.

### Theme 3 Comments:

Third, we believe citizens who care about the Great Lakes need a clear statement of the most critical challenges facing the Basin as part of this battle plan. In our view, the next version of the GLWQA should define them thus:

- Biological pollution from aquatic invasive, non-native species;
- Continuing habitat loss and degradation;
- Conventional, toxic, and emerging pollutants;
- Diversion of water outside the Great Lakes basin.

Each of these major challenges lends itself to clear goals by the governments. The introduction of additional invasives must be halted by a date certain – and near. Until that time, a moratorium prohibiting ocean-going vessels (“salties”) from entering the Great Lakes needs to be in place. Critical habitat must be restored in definable quantities by definable times, and the loss of habitat must be checked. The impact of conventional pollutants must be contained through measurable government investments in wastewater treatment and toxic pollutants must be curbed through the phaseout of emerging chemicals of concern and the improvement of chemical policies in both the U.S. and Canada. Responsibility for fulfillment of each of these tasks must be accepted by the two governments in the revised GLWQA and agencies within the governments should be given a mandate and resources to fulfill the tasks in a separate implementing document.



Theme 4 Comments:

We reject a revised GLWQA that emphasizes appealing statements and visions expressed in generalities with no clear accountability for achieving them. Such statements and visions don't promise health for the Great Lakes, they only postpone the date by which health can be achieved.

We specifically ask, in addition, that the revised GLWQA include a mechanism for independent citizen review and evaluation of the progress in its implementation, and an annual report to the Great Lakes public on progress or lack of same. A Great Lakes Accountability Board, consisting of concerned citizens from Canada and the U.S., should be empowered to hold hearings, do fact-finding and issue these reports. This mechanism itself is more likely than any platitudes to drive implementation of the GLWQA.

Theme 5 Comments:

We specifically ask, in addition, that the revised GLWQA include a mechanism for independent citizen review and evaluation of the progress in its implementation, and an annual report to the Great Lakes public on progress or lack of same. A Great Lakes Accountability Board, consisting of concerned citizens from Canada and the U.S., should be empowered to hold hearings, do fact-finding and issue these reports. This mechanism itself is more likely than any platitudes to drive implementation of the GLWQA.

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**Comment Number: 21**

**Name: Stainier, André**

**Affiliation: Les Amis de la Vallée du Saint-Laurent (AVSL)**

## **Examen de l'Accord Canada-É.-U. relatif à la qualité de l'eau dans les Grands Lacs**

### **COMITÉ D'EXAMEN DE L'ACCORD**

#### **Version provisoire du rapport au Comité exécutif binational des Grands Lacs**

*(Le présent rapport, rédigé par le Comité d'examen de l'Accord (CEA), constitue une synthèse des constatations tirées des résultats obtenus et des recommandations formulées par neuf groupes d'examen et un atelier sur la gouvernance et les institutions, ayant pour mandat d'examiner l'Accord relatif à la qualité de l'eau dans les Grands Lacs (l'Accord). Les opinions exprimées dans la présente version provisoire du rapport d'examen ne sont pas nécessairement celles du gouvernement du Canada ou du gouvernement des États-Unis, de leurs ministères ou organismes, des États ou provinces ou de toute autre organisation ou entité.)*

### **SOLLICITATION DES COMMENTAIRES DU PUBLIC (avril – juillet 2007)**

**COMMENTAIRES**  
**(juillet 2007)**  
**sur**  
**LA VERSION PROVISOIRE DU RAPPORT PRÉSENTÉ AU COMITÉ EXÉCUTIF**  
**BINATIONAL DES GRANDS LACS**  
**Examen de l'Accord relatif à la qualité de l'eau dans les Grands Lacs**  
**([www.binational.net/glwqa\\_2007\\_f.html](http://www.binational.net/glwqa_2007_f.html))**

**Présentation**

Fondé en 1986 et comptant environ une centaine membres le long du Saint-Laurent au Québec, l'organisme *Les Amis de la vallée du Saint-Laurent* (AVSL) se consacre à la protection et à la promotion des richesses environnementales du Saint-Laurent dans l'ensemble de son parcours. Son action en est principalement une de sensibilisation des collectivités riveraines, des décideurs et des usagers et d'intervention dans les débats publics; elle est orientée vers la protection et la mise en valeur des écosystèmes et vers l'harmonisation des usages au bénéfice du plus grand nombre.

Ces dernières années, les AVSL ont participé à plusieurs consultations portant sur le système Grands Lacs – Saint-Laurent. Mentionnons celles sur l'Entente sur les ressources en eaux durables du bassin des Grands Lacs et du fleuve Saint-Laurent (Conseil des Gouverneurs des Grands Lacs), sur le Rapport du Groupe d'étude international sur le lac Ontario et le fleuve Saint-Laurent (C.M.I.), sur l'Étude des Grands Lacs et de la Voie maritime du Saint-Laurent (Transports Canada et Département des transports des États-Unis).

Nous nous réjouissons de l'initiative prise par le Comité exécutif binational des Grands Lacs de soumettre à une consultation publique le rapport provisoire (le rapport) de l'examen binational de l'Accord relatif à la qualité de l'eau dans les Grands Lacs (l'Accord) et nous sommes heureux de participer à cette consultation.

Nous tenons tout d'abord à souligner combien le rapport se démarque par sa clarté, sa concision et la facilité de le consulter. Nous appuyons dans l'ensemble ses constatations, ses analyses et ses recommandations et nous souhaitons que l'Accord soit révisé de la façon, essentiellement, proposée par lui. Nos commentaires, toujours sommaires, porteront sur certains des « principaux résultats, constatations et recommandations » dans l'ordre de leur présentation par thèmes.

**Thème 1 : Objet et champ d'application de l'Accord**

3. Quant à la portée géographique de l'Accord, il nous paraît essentiel de mettre fin à l'exclusion de « la portion (du fleuve Saint-Laurent) sise au delà de la frontière internationale à Cornwall » (page 14). C'est sur tout le parcours du fleuve Saint-Laurent que l'eau de celui-ci est constituée, d'abord totalement, ensuite partiellement, d'eau reçue des Grands Lacs. Tout ce qui touche à la qualité de l'eau des Grands Lacs a donc sa répercussion sur l'eau du Saint-Laurent. Les interventions touchant la qualité de l'eau des Grands Lacs doivent donc être faites en tenant compte de leurs effets sur l'eau du Saint-Laurent. Pour qu'il en soit ainsi, il est nécessaire que le Saint-Laurent soit intégré à l'objet des études menées aux fins de l'application de l'Accord et que les autorités, experts et intervenants du Saint-Laurent soient associés à ces études.

5. Quant à la proposition, en matière d'élargissement de la collaboration, de tabler « sur les progrès réalisés (...) sous l'égide de l'Accord Canada-Québec sur le Saint-Laurent », il convient d'observer que cet accord est officiellement limité dans le temps (dans sa phase actuelle, il se terminerait en 2010). La collaboration du gouvernement du Québec et du gouvernement du Canada, région du Québec, dont nous comprenons qu'elle devrait être permanente, ne devrait pas être comprise et entendue comme se faisant exclusivement sous l'égide de cet accord.

### **Thème 2 : Éléments périmés de l'Accord**

De façon générale, nous retenons surtout – et y apportons notre appui - de la discussion et des propositions sur ce thème tout ce qui est dit de la souplesse, de l'adaptabilité, de l'actualisation qu'il est absolument nécessaire d'introduire dans les dispositions et dans la mise en application de l'Accord afin d'être en mesure de faire face aux conditions et aux enjeux actuels et futurs. C'est notamment dans cet esprit que devraient être comprises les recommandations 2 et 5.

6. À l'importance de la planification de la gestion par bassin versant, il faut ajouter l'importance de « la tenue des consultations élargies généralement associées aux activités menées dans le bassin des Grands Lacs » mentionnée dans le texte, page 15.

7. Nous estimons particulièrement pertinente la mise en évidence des sources internationales de pollution touchant l'écosystème du bassin des Grands Lacs (et du Saint-Laurent).

Nous suggérons de s'inspirer beaucoup, dans la mise à jour de l'Accord, de ce que « le bassin est aujourd'hui le théâtre d'approches de gestion plus récentes et plus efficaces qui ne sont pas couvertes par les dispositions de l'Accord, telle la planification de la gestion par bassin versant, la gestion adaptative, la prévention de la pollution, les initiatives sur la biodiversité ou la gestion du bassin atmosphérique » (page 16).

### **Thème 3 : Problèmes pressants et menaces émergentes**

1. Quant à l'urbanisation comme enjeu pressant à prendre en compte, nous suggérons qu'on le comprenne plus explicitement comme étant d'abord et à la base un enjeu d'aménagement du territoire.

Un enjeu à ajouter selon nous est celui des effets possibles sur la qualité de l'eau des Grands Lacs de la diminution physique des quantités de cette eau. Cette eau est présentement menacée dans ses quantités à la fois par le réchauffement climatique et par les sollicitations possibles de dérivations massives en dehors du bassin (sollicitations pouvant d'ailleurs être liées aux effets du réchauffement climatique).

Un autre enjeu maintenant bien émergé mais contre lequel on ne sait pas encore comment réagir de façon systématique et opérationnelle est celui des sédiments contaminés. Il mériterait étude et plan d'action.

### **Thème 4 : Reddition de comptes et mise en application**

3. Nous retenons surtout comme essentiel, si l'on veut être opérationnel, de préciser les échéanciers à respecter et désigner clairement les entités responsables.

### **Thème 5 : Mise à contribution des autres ordres de gouvernement et du public**

1. Le gouvernement du Québec devrait faire partie des gouvernements dont le rôle vital et la participation essentielle seraient reconnus.

2. Oui, « participation du public à la mise en œuvre de l'Accord », et donc, plus que seulement sa consultation. Les faits d'ailleurs le montrent, et le texte le reconnaît (pages 25-26), la société civile et ses organisations contribuent grandement et depuis longtemps au maintien et à la restauration de la qualité de l'eau des Grands Lacs.

Il est important également de s'assurer, en matière de connaissances, d'analyses et d'expertises, de bénéficier de l'apport du public de manière permanente et pas seulement de manière ponctuelle. La formule des comités aviseurs permanents a fait ses preuves en la matière et devrait être appliquée en ce qui touche la révision, la mise en œuvre et le suivi de l'Accord.

#### **Addendum : Réflexion sur « Groupe d'examen G, Annexe de la navigation, Résumé » (Rapport, pages 46 à 49)**

Le contenu de ce résumé est assez déconcertant. D'une part, il semble en ressortir qu'en matière de navigation, on en est arrivé, par l'adoption de législations et réglementations diverses et par la mise en œuvre de bonnes pratiques, à une situation plutôt satisfaisante en ce qui touche l'impact de la navigation sur la qualité de l'eau des Grands Lacs. Mais d'autre part, on semble chercher à mettre fortement de l'avant que tout cela ne s'est pas fait en liaison avec la mise en application de l'Accord, peut-être même en opposition avec celle-ci.

Il est difficile de comprendre la pertinence et l'utilité d'une réflexion orientée ainsi. Pour des observateurs non spécialisés de la navigation comme nous, cela nous porte à penser qu'il vaudrait peut-être mieux que, pour un certain temps au moins, les responsables et intervenants de l'Accord mettent leurs priorités ailleurs que du côté de la navigation. Qu'ils laissent aux responsables et intervenants de celle-ci de poursuivre leurs efforts en matière d'impacts sur la qualité de l'eau, sous la poussée notamment de ce qui cherche à se faire et se fait au niveau international.



André Stainier

**Comment Number: 22**

**Name: Emo, Brian**

**Affiliation: LOSAAC**

My name is Brian Emo. A retired Mechanical Engineer, I have since 2002 been a citizen member and latterly chair of a committee (LOSAAC) established by Region of Halton to investigate all aspects of the nuisance algae problem along Halton's L Ontario shoreline.

This has involved monitoring extensive research in the nearshore waters from Rattray Marsh in Mississauga to Burlington Beach. The research work has been carried out by Environment Canada (CCIW - Burlington), a team from the Biology Department of University of Waterloo, and staff/consultants to Conservation Halton. In this we have looked at many aspects of nutrient supply to lake waters via point sources (WWTP's) and non point sources, including extensive surveys of storm drain systems, watershed characteristics, stormwater management. issues.

Thus I consider I have sufficient knowledge of some Great Lakes issues to comment on the GLWQA draft report. Please note that these are my views, and I'm not commenting on behalf of the LOSAAC or Region of Halton.

My comments are:

1. Reporting & Monitoring. Knowledgeable reporting & monitoring are critical to managing and maintaining the condition of the lakes.

All parties to the agreement need to recognise the importance of this, and commit adequate resources to discharge their reporting responsibilities to their GLWQA partners and the population of the GL basin. Priority should be given to reinstating the reporting of the annual Phosphorous loading to the lakes.

2. Phosphorous and Non-Point source Pollution: Monitoring the nearshore waters is more important than ever. The proliferation of zebra mussels has significantly altered the traditional regime of nutrient phosphorous exchange with the offshore waters, while improved water clarity provides more area for Cladophora to grow. The result is more nuisance algae in nearshore waters and deposited on beaches to decay.

I strongly support the recommendation by the Group D RWG that "a nearshore algal surveillance program be established, and that the 1970's models be revised to reflect ecosystem structure and function change (role of invaders)that have occurred in the lakes."

Respectfully submitted,

Brian Emo

**Comment Number: 23**

**Name: Krantzberg, Gail**

**Affiliation: McMaster University**

General Comments:

We, the Great Lakes community, have waited 20 years for a review of the GLWQA that could generate change. Well, that is not entirely so. In 1998/9, governments did undertake a review of the language in the Annexes but not the Articles. Since government staff were directed (myself included, at the time) not to consider the Articles, that meant that the scope and purpose of the Agreement was not to change, nor were the institutions of the IJC and the relationships with government. Despite that significant omission, in my opinion, some excellent work was done. Ambiguities were clarified, initiatives that were no longer needed were removed, new priorities were added, and reporting requirements were examined. But the review ended silently, not, as is often professed, because we concluded we should just get on with implementing the GLWQA and not make changes. The review did not end because the work was not valid, or because changes were not needed. The review ended without any changes because the governments kept their doors closed to the public, especially to “stakeholders”. Stakeholders were rightfully suspicious that any change could water down the already aged GLWQA.

It seems that seven years later, perspectives have changed. Maybe that is because of growing concern over stressors for which the GLWQA is silent and for which we seem unable to find solutions. Maybe it is because of frustration with the lack of progress on implementation.

Regardless of cause, the ENGO community, Mayors of the Great Lakes St. Lawrence Cities Initiative and the IJC favour the review. Canada and the United States governments favour the review. And so the review has begun with no indication, though, as to where it will go.

According to BEC “As its charge required, the ARC has synthesized the findings of the RWGs into a draft Agreement Review Report summarizing the results of the technical review, including recommendations for consideration...The draft Agreement Review Report has been approved for release for a sixty-day public comment period, led by the Great Lakes BEC.”

The BEC continues: “the public comment period presents an important opportunity for members of the Great Lakes community to be heard on the findings of the 2007 Review before the Review draws to a close. All comments are welcomed until the close of the public comment period on July 14, 2007.”

“After the close of the sixty-day comment period on July 14, 2007 the ARC will review and consider (author’s emphasis) all of the public comments received as they finalize the draft Agreement Review Report. A compendium of all comments received will be appended to the final Agreement Review Report and submitted to the BEC for consideration at its Fall 2007 meeting. The Report will subsequently be transmitted to the Governments of Canada and the United States who will determine next steps in the Agreement Review.”

Let’s explore these statements.

There is no mention and hence, no assurance of an obligation on the part of BEC to address comments received. How comments will be evaluated is not apparent, and what type of response those submitting comments can expect is not plain. What is also obscure is the nature of the comments sought. Are comments sought regarding an opinion expressed? Elements that the review missed? Substance of the review findings or process for undertaking the review? Matters of governance and institutions? Scientific clarity? Is the ambiguity intentional?

The web site purports “the public comment period presents an important opportunity for members of the Great Lakes community to be heard on the findings of the 2007 Review before the Review draws to a close.” The Great Lakes community has witnessed and some have engaged in a year of teleconference discussions based on opinion by, as BEC states, experts and nonexperts alike. That no resources were made available by the Parties to conduct in person, researched and vetted discourse is troubling. There has been no analysis of what in the Agreement works, what does not work, and why. There has been no systematic collection of empirical evidence upon which to base any specific and defensible findings. The call for comments on a summary document that states what has been heard with no analysis is perplexing.

In preparing for the review, Review Working Groups were to be selected, composed of experts (government words, not mine) to enable each group to address a specific task in a timely manner. What is the process in reality? In an effort to be inclusive, an open invitation to participate was extended. Many of us presumed what would happen then, was that the governments would have a roster of names from which to undertake the identification of their experts. Well, maybe you did have the roster, but you did no screening or selection, in a show of commendable democracy. All who wanted to participate became working group members. This sounds like a remedy from the 1999 process that excluded anyone but government.

The calls engaged whoever dialed in, expert or not. What happened to the selection of experts? The original intent was to have public consultation along the way, not to have public dialogue every step of the way. Having been a member of the ARSC, I clearly remember this discussion. The governments were to pick experts on the relevant topics from the environmental groups, academia, industry, but they did not. We should convene smart people gather for a few days and do some difficult and focused and thoroughly rigorous work. Then have public meetings and hearings on the outcomes and take the comments into serious consideration.

We are just over one year into this review, and have, as I said, waited for 20 years to affect change. Consider seriously the track you are on, take your time, get it right, for the sake of our Great Lakes.

The current process for the review should be replaced, as originally intended, by groups constituted of a small number multi-stakeholder experts. This should be accompanied by a detailed consultation plan for the public to ensure accountability and transparency. As the experts are identified, we would have the time to look at the nature and the sequencing of the review of the GLWQA

### Theme 1 Comments:

In the hallways and meeting rooms of Great Lakes enthusiasts, people are debating divergent views on the scope and purpose of the GLWQA into the future. Should what is essence is a water chemistry Agreement, encompass more than it does given today's pressures and stressors on the Great Lakes. Yes, the GLWQA mentions an ecosystem approach, but for all intents and purposes, the language was meant to convey a multimedia approach to pollution. There are several points of view. A minority conviction held by active vocalist is that there must be no expansion of the purpose and scope of the GLWQA, but an intensified effort toward implementing actions to deal with trans-boarder injury stemming from chemical pollutant damage. There are groups who are equally fervent about expanding the Agreement to be more of either a Great Lakes Ecosystem Management Agreement, a Great Lakes Sustainability Agreement, and/or a blending of water quality with water quantity issues into one Agreement. It seems the majority at present nervously support an expanded GLWQA, but the dimension of such an expansion are undefined. Your report simply reflects this as a transcript of what self selected participants said. Your review does not analyze the merits of adjusting scope or the risks associated therein. I repeat my plea to actually review the agreement systematically, with data and information, as compared to this qualitative opinion based group debate that has no defensibility in terms of rigour. I hasten to add that I do respect the participants and the opinions shared, I argue that opinions and reviews are not the same thing.

In 2007 we ought to have the flexibility of doing what is right for the Lakes, and extend ourselves beyond a nearly century old treaty that was visionary at the time, but from which our science, technology and policies have evolved.

There has also been considerable interest in including in the GLWQA the St. Lawrence River from the Quebec-Ontario boundary, which also happens to be downstream of the international boundary at Cornwall, Ontario, and Massena, New York. This makes sense to me. The Great Lakes and the St. Lawrence River constitute one hydraulic unit. Just as Lake Michigan lies entirely in the U.S. but is part of a binational agreement due to its hydraulic union with Lake Huron, so should the St. Lawrence River be included in the scope of the Agreement, or if not, at least referenced.

Among the seeming obvious expansions of the scope and purpose of the GLWQA would be to extend the definition of hazardous polluting substances in Annexes 4, 5, 6, 8 and 9 to include biological pollution in the form of alien, potentially invasive species. Or what about amending Annex 13, that calls for the development of watershed management plans, to include their implementation.

An ecosystem-based management framework to protect water quality in its broadest sense would elevate actions at the land-water interface, the air-water interface, align watershed plans and implementation with RAPs and LaMPs, stop the introduction of invasive species, learn more about and adapt to climate change, respect ecosystem integrity, and deal with much more than chemical pollution.



### Theme 3 Comments:

Specific issues dealing with the structure of the GLWQA include that should be addressed include:

“Responsibility for near shore waters: These need to be more clearly defined as there appears to be discord between the BWT and the GLWQA.

“Economic Interests: Should economic concerns be made a part of the agreement? Would this help increase the level of commitment?

“Data Collection: There is a need for a central neutral data collection and collector (GLC, GLOS-RA, IJC are possible holders/maintainers of this database).

“Connection to GLFC: There are many similarities and overlaps between the GLFC and the IJC. There should be a requirement for the IJC to meet with the GLFC, the water level boards and the water quality boards to coordinate actions.

“Alignment: There is a view that the current Agreement made use of what institutional structures existed at the time, whereas such structures are not necessarily the most appropriate at present.

“Water Quality Board: The role and composition of the Water Quality Board needs to be reassessed.

“Political Clout: The idea of a Great Lakes Caucus has been suggested to raise political awareness.

### Theme 4 Comments:

The Great Lakes regime has a complex governance structure, with many questioning its cohesion, accountability, and leadership dimensions. Under current governance regime, the Great Lakes and St. Lawrence region is one where people, the environment and the economy are at increasing risk. The impediments to more integrated environmental regulation remain considerable in the Basin, and include the enduring single-medium orientation of federal programs and limitations of state, provincial, municipal or regional innovation. Nonetheless, regulatory integration need not be dismissed as a theoretical pleasantry that is political unattainable. The inability to stem the re-emergence of threats to the integrity of the ecosystem is symptomatic of the accountability complex for the Great Lakes basin ecosystem. A move toward greater integration in the Basin needs can be prompted in part by environmental policy professionals and political leaders who increasingly recognize the limitations of current approaches and who are willing to devise alternatives. The review does not advance much in this respect, thus far.

By exploring and evaluating governance developments that are necessary to generate a sustainable future and advance beyond policy to coordinated program implementation, it is time to illuminate the nature of accountable and responsive institutions, invigorate sound public policies, and launch appropriate models of well coordinated and managed binational programs and policies to enhance and protect the diversity and integrity of the Great Lakes Basin ecosystem.

The regime could be more adaptive if there were more attention paid to using the existing GLWQA provisions in Articles X and XIII. Flexibility is a beneficial aspect of governance and is a necessity for effectively meeting the challenges of new stressors. The Agreement has been able to somewhat cope with changing issues though it has not been adept at foreseeing and preventing them. True adaptive governance should provide flexibility (for example to resolve the inability to prevent AIS and deal with climate change).

There have been some attempts at adaptive governance under COA and the Great Lakes Regional Collaboration.

In research we have been undertaking, the BEC was considered by most, quite openly, to be a disappointment; that is, the institution is a disappointment, not the members necessarily, many of whom are tremendously committed to making the Lakes Great.

BEC was created in part to give the Parties what was then the IJC's role of coordinated reporting on the state of the lakes ecosystem. BEC has no authority or accountability. It serves essentially as a forum for exchange of information and minor policy deliberation. It is bilateral in that it has no ability to set binational agendas, and does not provide the shared analytical resource that is necessary. It is entrenched in administrative institutions.

The data being reported by BEC is in a multitude of forms, methods of data collection are not well harmonized, and information does not coalesce into a usable form for policy makers. SOLEC is judged as a valiant effort that is grossly under-funded, with equally unimpressive results. It is limited to reporting on state, and barely couples science with management.

Hence, a reform in binational institutions is direly needed, and should be integral to the review.

The majority opinion of those we interviewed for our research is that the IJC has become less neutral and generally less credible as an institution and that this has caused them to be less valuable and hence less used. There are a few schools of thought on why and how this has come to be:

1) Politicization of the IJC: The Reagan agenda changed previously accepted traditions of setting nationalism aside (notwithstanding the oath taken by Commissioners not to represent their countries); this has been exacerbated by the current policy of the Bush administration where bilateralism aligns with a general attitude of protectionism. Though it makes sense that there will be a similarity in political worldview between the Commissioner and the administration that appoints it, such appointments of persons who closely share the administration's agenda will result in Commissioner who are by nature, not disinterested in the needs of their respective state. In addition, given that the US and Canadian members of the IJC rely on federal funding they can be expected to report in ways that they deem to be politically safe. The practice of changing the Commissioners when changing political administrations reduces the institutional memory and capabilities of the Commission.

2) Advocacy by the IJC: The IJC began to take on an advocacy role for environmental matters (chlorine issue is the leading example) which some believe reduced scientific objectivity/moral authority of Commission. Some agree with an advocacy role though the general opinion is that this activity has been detrimental to their neutrality. Some stated that the “misplay” of the chlorine issue resulted in greater caution by the Parties in their appointments of Commissioners, which in turn reduced the influence held by Commissioners. The result has been less proactive Commissioners with more cautious reporting.

3) Increasingly complex issues: There seems to have been an evolution away from the IJC being a neutral issue-based body, due to increasingly controversial and complex scope of the issues. Earlier reports were easier to write and were better received as the context was simpler and had tended to have fewer political repercussions. The IJC does not have the human or financial resources to adequately review science, advise the Parties and assess progress as the pressures on the Great Lakes become more complex. Some describe the deep cuts to the Great Lakes Regional Office as central to this loss of capacity

4) The 1987 Protocol significantly limited the IJC’s ability to produce credible information due to the removal of many of its coordination functions and its limited ability to acquire the necessary data to review and report on the Parties’ progress in meeting the purpose of the Agreement. The weakening of the board structure (particularly the WQB), the dissolution of the library and severe reduction in staff that followed the 1987 protocol have all contributed to the decline in the relevance of the IJC.

As a consequence of one or of a combined number of the above situations, many interviewees believe there is a lack of sense of purpose, mission, and commitment by the IJC to advise on and assist in the implementation of the GLWQA. The opportunity to build the Commission back presents itself during this review, however, I see nothing in the review transcripts that lead to such analysis and call for ammendment.

Theme 5 Comments:

It is imperative that a mechanism be found to formally engage aboriginal peoples and municipal governments. It is important to contemplate how to more formally engage industry and ENGOs

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**Comment Number: 24**

**Name: Lohse-Hanson, Carri**

**Affiliation: Minnesota Pollution Control Agency**

General Comments:

In the future, save Binational.Net documents for public review in a PDF format that still allows reviewers to select text. The current format requires tedious retyping if a reviewer wants to suggest alternative text.

A simple outline of the GLWQA would be a helpful appendix for reviewers (i.e., a list of the articles and annexes and their names) and future discussions about reopening the Agreement.

### Theme 1 Comments:

Page 5:

- Just a caution on the “North Star” role of the Agreement. Minnesota is known as the North Star State with the state seal bearing the words “L'ETOILE DU NORD” (see <http://www.sos.state.mn.us/student/seal.html> ). This might make for some confusion about the nature of the Agreement, especially in Minnesota and in Canada, which sees the Great Lakes region as southern. Here’s a suggested rewording of Item 1: “The Agreement should serve as a clear, high-level vision for the protection and restoration...”
- There should be serious consideration of a change in the name of the Agreement. If the content changes from a focus on water quality to a broader environmental approach that includes water quality among other issues, the aspects of the broader approach that are only indirectly related to water quality are not well represented by the name. This will be confusing to the public and decision makers. A logical change would be Great Lakes Ecosystem Agreement.
- Also, broadening the scope of issues that would be covered by a water quality agreement could lead to a broadening of projects that would be funded by water quality funding. Funding for implementation of the existing Agreement focused on water quality has already been inadequate and broadening the scope of the Agreement has the potential to dilute future funding. The outcome would be to cut water quality projects even further.

Pages 12 and 13:

- I disagree with the findings of the RWG F (see footnote 18), which found that the Agreement has fallen short of the physical and biological integrity aspects. The group’s perspective on what constitutes physical and biological aspects of a water quality agreement vary greatly from the original intent of the water quality managers who developed the Agreement. Water quality programs during the 1970’s and 80’s considered biological integrity as dealing with issues such as pathogens and algae and physical integrity dealt with issues such as temperature and suspended solids. It would be more fair to say that the Agreement did not incorporate the current understanding of physical and biological integrity rather than saying the Agreement has fallen short or been less effective.

Page 14:

- The draft report may not be the place to discuss this, but I don’t understand what the compelling argument might be for including the St. Lawrence River in the Agreement. Why wouldn’t cooperation with the existing St. Lawrence programs and jurisdictions be sufficient?

Page 15:

- Same comments as Theme 1 summary on “North Star” and renaming the Agreement.

### Theme 2 Comments:

Page 5:

- For Item 7, I recommend saying that international sources should be “acknowledged” rather than

“emphasized.” By “emphasizing” international sources that the Parties have been unable to affect, we detract from our own efforts to minimize pollution, develop new technologies and find creative solutions that may be useful outside the Great Lakes Basin.

Pages 17 and 18:

- Same comment as Page 5, Theme 2 summary on “emphasizing” global sources of pollutants.

#### Theme 3 Comments:

Page 6:

- Per the paragraph on page 20 on emerging threats, “chemicals of concern not listed in the Agreement” should be specifically mentioned under this Theme summary.

#### Theme 4 Comments:

Page 6:

- I like the idea of Annex-by-Annex review so the Parties wouldn’t have to reopen the entire Agreement.

#### Theme 5 Comments:

Page 6:

- Recognizing the role of state, provinces tribes and local governments is welcome. This is happening to a degree already. For example, in the Lake Superior Binational Program, which is associated with the Lake Superior LaMP, states have held cochair positions with Canadian counterparts while at other times the cochair positions were held by federal agencies. This encouragement for states to participate at a significant level has made the program more robust.

#### Volume 2 Comments:

Page 29:

- The term “virtual elimination” is proposed to be part of the Definitions if the Agreement is reopened. My experience has been that this term is extremely difficult to define and can be divisive. The Glossary of the Great Lakes takes a whack at it: <http://www.seagrant.umn.edu/pubs/ggl/v.html#V1>

Page 30:

- When discussing measuring the overall progress of the Agreement, I think it is important to track trends in environmental indicators (the RWG A summary mentions continued fish consumption advisories) as well as trends in releases of chemicals from sources within our control. We also need to track trends in atmospheric deposition. While contamination levels in fish, wildlife, water, sediment and people are the ultimate indicators of progress, they are integrators of many sources and we have to look at those sources as well to understand our progress under the Agreement.

Page 36:

- The discussion about a 5 year rather than 2 year reporting cycle makes a lot of sense to me, but that is partly because the Lake Superior LaMP has a set of chemical reduction milestones that occur every 5 years. The next milestone occurs in 2010 and in 2011 we will be pulling together 2010 inventories. These chemical technical reports will have a 5 year schedule regardless of the reporting schedule for the LaMP as a whole.

Mr. Mark Elster  
Senior Program Analyst  
USEPA  
Great Lakes National Program Office  
77 W. Jackson Blvd. (G-17J)  
Chicago, IL 60604

July 13, 2007

Dear Mr. Elster,

On behalf of the National Wildlife Federation (NWF), I am submitting these comments on Agreement Review Committee (ARC) Draft Report to the Great Lakes Binational Executive Committee on the Great Lakes Water Quality Agreement (“Agreement”). I was involved in the Agreement review process, working with Review Working Group B (Toxics) and the Special Issues Working Group, as well as taking part in the Governance and Institutions workshop. In addition to these brief comments, NWF is endorsing comments submitted by Great Lakes United.

We feel the ARC draft report accurately summarizes, to our knowledge, the general emphasis of perspectives offered by participants in the various review working groups, and we offer the following brief comments on specific themes identified in the ARC draft report.

#### Theme 1: The Purpose and Scope of the Agreement

We believe the Agreement should continue to serve as the central overarching framework through which efforts to protect and restore water quality in the Great Lakes occur. Concerning the scope of the Agreement, we believe there does need to be a broader recognition of the multiple factors affecting water quality in the Lakes, and the multiple stresses on the system as a whole. This is consistent with the ideas proposed in the *Prescription for Great Lakes Ecosystem Protection and Restoration* report released in 2005, which notes that stresses such as aquatic invasive species, excessive nutrients and climate change can interact to push the system as a whole into an unhealthier state.<sup>1</sup> However, while we believe all significant stresses need to be addressed in the Great Lakes, we believe it is appropriate for the Agreement to be focused on water quality, and in that regard support an ecosystem approach to the chemical, physical, and biological integrity of the Great Lakes waters. Addressing all the environmental stresses within the Great Lakes Basin requires working within other fora (including potentially new Agreements on specific issues); ideally work within these fora would be coordinated as appropriate with activities in support of water quality protection.

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<sup>1</sup> Bails, J., Beeton, A., Bulkley, J., DePhilip, M., Gannon, J., Murray, M., Regier, H., and Scavia, D., *Prescription for Great Lakes Ecosystem Protection and Restoration*, December 2005.

*NWF Comments on Agreement Review Committee Draft Report to the Great Lakes Binational Executive Committee on the Great Lakes Water Quality Agreement, July 13, 2007.*

## Theme 2: Outdated Agreement Elements

The current Agreement clearly reflects an evolution in emphasis since the original Agreement was signed in 1972, and there are clearly components (from the smaller scale such as standards and deadlines to broader issues such as annexes) that need to be updated or reexamined. Ideally the Agreement would be written in a way that provisions do not easily become obsolete with new scientific and policy developments, and this could include streamlining annexes and other findings/recommendations noted in the ARC draft report. But it is also clear that the Agreement can contain certain principles (e.g., virtual elimination and the precautionary principle or a precautionary approach) that would have longstanding value and applicability, even as some of the stresses change. It is important that these types of core principles in the existing Agreement not be weakened in any revision.

## Theme 3: Pressing Issues and Emerging Threats

We agree that there are a number of threats to the Great Lakes that are outside the focus of most stresses emphasized in the current Agreement, including aquatic invasive species and chemicals of emerging concern. Ideally, the Agreement should be broad enough to acknowledge the importance of these stresses (within the ecosystem approach definition noted above) and offer general principles for addressing them, while not being so broad that actual development and implementation of appropriate programs by the Parties not be practical. In addition, given the coordination and other problems with existing annexes, it is key that any revisions that would explicitly address additional threats to the Lakes be done in a way that results in a more integrated, less piece-meal, manner. In addition, it is clear that further work is needed in development of indicators for the Great Lakes ecosystem (both for existing and potentially emerging stresses), and the Agreement should make clear the responsibilities of the Parties to adequately fund monitoring programs for these indicators.

## Theme 4: Agreement Accountability and Implementation

We agree that governance structure is crucial to the success of the Agreement. An independent third body review of the Agreement (as suggested in the comments of Great Lakes United), could offer useful insights into progress under the Agreement over the past two decades, including an assessment of what has worked and not worked as well in the existing governance structure. There is a need for a clear management and implementation framework in the Agreement, as well as better coordination among the Parties and others involved in developing and implementing programs in support of the Agreement's goals. Development of work plans – with goals and timelines – by the Parties and others outside the Agreement could increase likelihood of timely implementation, without creating a situation where Agreement objectives and deadlines need to be regularly revised. But this approach would still require accountability mechanisms built into the Agreement. We agree that reporting could potentially be streamlined and better coordinated with reporting done outside Agreement-related



*NWF Comments on Agreement Review Committee Draft Report to the Great Lakes Binational Executive Committee on the Great Lakes Water Quality Agreement, July 13, 2007.*

programs; ideally, the Parties would have sufficient resources to both implement programs necessary to meet the Agreement goals as well as report on progress.

#### Theme 5: Including Other Orders of Government and the Public

We agree the Agreement should recognize the important roles played by Tribes and First Nations, states and provinces, and local governments in implementing Agreement programs. We also agree the Agreement should recognize the important role of the public in Agreement activities, ranging from involvement in program implementation to reviewing progress (both as individuals and through non-governmental organizations). We believe the public should have significant involvement in any revision to the Agreement, including with opportunities to participate as observers during formal revision meetings, and there should be increased opportunities for public engagement in activities of the International Joint Commission, including potentially through a citizens' advisory board.

In summary, we appreciate the opportunity to comment on the Agreement Review Committee's Draft Report to the Great Lakes Binational Executive Committee on the Great Lakes Water Quality Agreement, and are hopeful that this is the beginning of a process towards developing a Great Lakes Water Quality Agreement that maintains its foundational principles while also being more able to address new threats to the Lakes.

Sincerely,

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**MEMOIR ON THE REVIEW AND  
REVISION OF THE GREAT LAKE WATER QUALITY AGREEMENT (GLWQA)**

**PRESENTED TO THE  
GREAT LAKES ENVIRONMENT OFFICE  
ENVIRONMENT CANADA, ONTARIO REGION**

**BY  
Nature Québec / UQCN**

July 2007



## REVISION OF THE GREAT LAKES WATER QUALITY AGREEMENT (GLWQA)

Nature Quebec/UQCN's memoir on the review and revision of the GLWQA in light of the report from the Agreement Review Committee is focused largely on its vision of how the "future" Agreement should work in relation to the part of the Basin east of Cornwall Ontario, the "lower" St. Lawrence river.

This isn't to say that Nature Quebec doesn't care about the waters of the Great Lakes much to the contrary, being used to travel, work and live at times in the Great Lakes region, we very much recognize their crucial importance and their very high priority to the many "interested parties" and population upstream and thus the numerous and very pertinent comments that this review will trigger from them; leaving we feel the portion of the lower St. Lawrence to a much smaller scrutiny in the review process.

Nature Quebec's memoir also aims at fully supporting the International Joint Commission (IJC) as much as this credible "entity" meets modern expectations from the people and environmental emerging issues across the Basin, receives the adequate support and resources its unique role commands from both Federal governments and guarantees a fair and regular presence in all parts of the Basin and by this we mean also in Quebec at least downstream to Trois-Rivières and preferably to Quebec city.

In Quebec, the Great Lakes Water Agreement isn't known as well by the many ministries in government, departments in municipalities, various industry sectors and the general population as it is upstream in the Great Lakes. Nature Quebec feels this is largely due to the "interpretation" made of the 1907 Transboundary Water Treaty's definition of the location of the transboundary waters limit on the St. Lawrence river, which for all intended purposes ends at Cornwall, Ontario at the eastern end of the Great Lakes.

Nature Quebec wonders why in sharp contrast, lake Michigan which is located entirely outside of the transboundary waters as defined in the same Treaty, has been so quickly included in the GLWQA... We believe it is obvious that lake Michigan needs to be protected from pollution from neighbouring sources across the transboundary line. Looking at the St. Lawrence river, it is hard to figure out why what is good for lake Michigan isn't anymore when it comes to the river. After all, the St. Lawrence receives the vast majority of the waters from the Great Lakes, has the highest risk of being polluted from actions taken upstream and its geographical position doesn't end at Cornwall... In fact the "primary" zone of influence of the Great Lakes ends at Lac Saint-Pierre some 125 kilometers east of Montreal. In a scenario of significant shortages of the Great Lakes waters feeding the St. Lawrence river would have a direct impact downstream by potentially releasing toxic chemicals stabilized under a few centimetres of clean sediments under the current flow regime. Likewise, Quebec city in this scenario, might see the salt water line move upstream with the tides and contaminate neighbouring municipalities freshwater intakes located in the river.



Nature Quebec wishes this situation be corrected in this revision of the GLWQA which should evolve as a visionary modern approach, innovative and integrative. We feel otherwise it neglects the river in light of the climatic changes occurring and to come along with the potential cumulative impacts of actions taken upstream without considering fully what might be the consequences for the river, it's many uses and the population east of Cornwall. Nature Quebec believes strongly that with goodwill and creativity this situation can be corrected for the wellbeing of the entire St-Lawrence river, estuary and gulf.

At the last IJC Biennial in Chicago 6-8 June 2007, Mrs. Suzan Humphrey from Environment Canada said it best in her allocution: *Another component of the issue related to defining the geographic scope of the Agreement discussed among the Reviewers is whether or not the Agreement should include the entire St. Lawrence River. Currently the Agreement excludes the portion beyond the international boundary at Cornwall, Ontario; that is, the portion that is located solely in the Province of Québec. This exclusion reflects provisions of the 1909 Boundary Waters Treaty. However, despite the fact that a portion of the St. Lawrence River is not included in the geographic scope of the Agreement, the Parties are encouraged to promote and expand opportunities for greater collaboration with the Province of Québec, building, for instance on progress to conserve, protect and enhance the St. Lawrence River Ecosystem under the Canada-Québec Agreement on the St. Lawrence.].*

In a new revised Agreement, (we're guessing as in the past...) the respect "des champs de compétence" of each jurisdiction should prevail. As such, Quebec is by any means no different than any neighbouring state or province like Ontario. Each has it's way of making evolve (in this case) the water issues and at times, together, they must unite towards a "common way" to address "common issues" towards "common goals". In this case, a revised GLWQA should serve as a "common mechanic" to channel the interested parties' energies towards common goals. In Nature Quebec's view, this should not isolate Quebec from the other parties' work as each would contribute fairly and efficiently in their own way toward the goal.

In short, there is a legitimate political reality present everywhere within each jurisdiction even at the highest levels of governments. Realities that we live with and which are constantly evolving in order to protect cultures, various needs, quality of life etc. These "political realities" must not get confused on the ground with the inherent need arising for all interested parties to collaborate and join forces at every opportunity to protect, restore and promote the Great Lakes and St. Lawrence river and the many uses we benefit from them now and hope to maintain for future generations. This is especially required in light of the potential impacts of climatic changes across the region.

The actual GLWQA, in it's review process, could also benefit from the "Vision, mission and goals" document developed by the Great Lakes/St. Lawrence Future Roundtable under the leadership of Pollution Probe.



## 2B — NATURE QUEBEC'S RECOMMANDATIONS

- R-1: The revised Great Lakes Water Quality Agreement should innovate and take an ecosystemic approach that doesn't diminish in any way, the ever present need to keep targeting the physical, chemical and biological state of the water quality.
- R-2: The geographic scope of the revised GLWQA should in an innovative way cover the St. Lawrence Gulf, Estuary, River and the Great Lakes. This will help develop an umbrella vision of the problems facing the Great Lakes/St. Lawrence river and tributaries, it will also assist greatly in planning actions with alternatives to better adapt for example to climatic impacts on the entire system.
- R-3: In a revised GLWQA, Nature Quebec urges the IJC to be more present, in a regular manner in Quebec not only in the Montreal area, but also in Trois Rivières and Quebec city. People concerned with the state of the waters of the St-Lawrence river in Quebec have a lot of respect for the IJC and are hoping to be able to meet and collaborate more frequently than has been the case in the past.
- R-4: A revised GLWQA should be more specific on the role and responsibilities of each level of governments including cities, municipalities, municipality of counties, etc. The revised GLWQA could possibly get stronger support by being signed not only by the federal governments, but also by each jurisdiction and by First Nations.
- R-5: The "Watershed approach" that exists under various forms across the Basin including in Quebec, should receive recognition and have a priority role in the revised GLWQA. They represent where the problems are first spotted, where local people identify themselves to, where initial analysis and mitigation is put in place with various stakeholders and where the follow-up on actions taken actually takes place.
- R-6: Nature Quebec isn't quite familiar with the various related GLWQA Boards membership and functions, but where applicable, we would recommend the presence of at least one representative from Quebec on each pertinent Board and would ask that "double hat" representation from jurisdictions within the various boards be eliminated.
- R-7: Nature Quebec recommends a wider membership on each Boards to include NGOs and municipal representatives.
- R-8: The Governments should commit to full public involvement at every major steps leading to changes to the GLWQA.
- R-9: The notion of water quantity must be added to the notion of water quality in the revised GLWQA. This is especially important for the St. Lawrence river as for example, water fluctuations and impacts are very rapid in comparison to lake water level fluctuations .
- R-10: Nature Quebec recommends that the revised GLWQA makes good use of the tremendous expertise present within each watershed initiatives across the Basin. As such, networking the watershed committees/organisations together with other "interested parties" would help share experiences, learn from mistakes, save money or invest better where ideas are working well under known specific conditions etc. In other words, actions

across the Basin, ultimately in numerous instances would tend to complement each other and be more helpful to the entire system rather than act isolated and disconnected from neighbouring sectors.

- R-11: “Public Advisory Boards”: The IJC was innovative and champion at using a “Public Interest Advisory Group” composed of equally numbered representatives from various parts around this portion of the system, during the 5 years Lake Ontario/St. Lawrence river study. In Nature Quebec’s view, this example of transparent approach was a tremendous success in learning from each other’s region’s challenges and how each region individually had to deal with common issues. All learned to care for each other’s needs and concerns and also to adapt one’s expectations to reality. In short, it represents a perfect example of innovative and transparent way of collaborating with “interested parties” on a long term basis versus the all too often unproductive approach of “one evening public consultation” on sensitive issue where people only have time to ventilate frustration and anger and little constructive workable ideas come out of.
- R-12: The GLWQA should recognize and define the role of the Tribes, First Nations and Metis in Agreement activities. These aboriginal peoples have rights as sovereign independent governments. The unique role of the Tribes, First Nations and Metis in protecting and restoring the Great Lakes should be recognized in the GLWQA. Among other mechanisms, this should include their participation as IJC commissioners and membership on all IJC boards. The specific provisions related to the Tribes, First Nations and Metis should be worked out through extensive discussions with these peoples.
- R-13: Nature Quebec recommends that the public be somehow involved in the accountability of the measurable objectives and goals to be achieved under the revised GLWQA.
- R 14: Nature Quebec recommends that the revised GLWQA be formally sent to Quebec’s “Commissaire au développement durable” which operates under the “Vérificateur général du Québec”.

Nature Quebec appreciates the work behind the ARC report and the many ideas it contains and wishes some directions had been given to “us” from the numerous experts involved particularly as it relates to “governance and institutional issues”. In contrast, the IJC report “IJC advise to governments on review of the Great Lakes Water Quality Agreement” dated august 2006, does contain in our view many innovative ideas that we hope will be key in the renewal of the present Great Lakes Water Agreement.

In closing, we want to thank you for having given us the opportunity, appropriate time and timing to contribute to the effort to revise the GLWQA. We sincerely hope that the “Parties” will understand the genuine expectations from the public and interested parties across the Basin to grasp this window of opportunity in NOT “reinventing the wheel” but rather benefit from the vast experience and wisdom available and adapt a once visionary document to modern reality and likely future we prepare for the next generation in the Great Lakes and St-Lawrence region.





Fondé en 1981 comme organisme sans but lucratif, l'Union québécoise pour la conservation de la nature (UQCN) devient Nature Québec / UQCN en 2005.

Nature Québec / UQCN souscrit aux trois objectifs principaux de la Stratégie mondiale de conservation:

- maintenir les processus écologiques essentiels et les écosystèmes entretenant la vie;
- préserver la diversité génétique de toutes les espèces biologiques;
- favoriser le développement durable en veillant au respect des espèces et des écosystèmes.

Nature Québec / UQCN réfléchit sur l'utilisation de la nature dans l'aménagement du territoire agricole et forestier, dans la gestion du Saint-Laurent et dans la réalisation de projets de développement urbain, routier, industriel, et énergétique. Les experts des commissions Agriculture, Aires protégées, Biodiversité, Eau, Énergie et Foresterie, au coeur du fonctionnement de Nature Québec / UQCN, cherchent à établir les bases des conditions écologiques du développement durable.

Résolument engagé dans un processus qui vise à limiter l'empreinte écologique causée par les usages abusifs, Nature Québec / UQCN participe aux consultations publiques et prend position publiquement pour protéger l'intégrité biologique et la diversité des espèces sur le territoire québécois lorsque des projets de développement fragilisent les écosystèmes et les espèces biologiques.

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July 12, 2007

Mark Elster  
Senior Program Analyst  
USEPA, Great Lakes National Program Office  
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Chicago, IL 60604

**RE: Comments on the Draft Report of the "Review of the Great Lakes Water Quality Agreement"**

Dear Mr. Elster:

Thank you for the opportunity to participate in the review process of the Great Lakes Water Quality Agreement. The Nature Conservancy participated in the Special Issues Working Group as well as in the consultant-led process dedicated to Governance and Institutions.

The Nature Conservancy affirms the importance of the Great Lakes Water Quality Agreement and its role in restoring and maintaining the chemical, physical and biological integrity of the Great Lakes. Because the Agreement assigns no regulatory authority, its strength lies in its ability to provide a clear context for engagement for all who are committed to Great Lakes conservation. We agree with the call for re-establishing the Agreement's role as a "North Star" guiding those taking action to protect and restore the ecological integrity of the Great Lakes basin ecosystem.

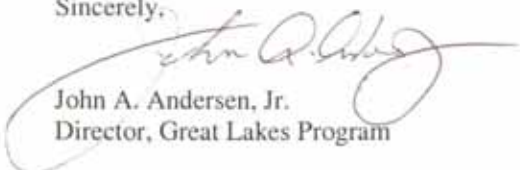
For the Agreement to remain relevant it must reflect current conservation science and practices. The Agreement must address pressing threats to Great Lakes water quality including aquatic invasive species, incompatible land use practices, altered flow regimes and climate change. The Agreement should also promote watershed planning and adaptive management as effective approaches to achieving the purpose of the Agreement.

The Agreement's governance sections should be clarified regarding how its articles and annexes relate to each other as well as to relevant external Great Lakes entities, programs and decision-making processes. This clarification should also address the critical roles of Great Lakes stakeholders including federal, state/provincial and local governments, Tribes and First Nations, non-governmental organizations and the public.

The Nature Conservancy is an international non-profit, science-based organization dedicated to the conservation of biodiversity. The goal of the Conservancy's work in the Great Lakes region is to preserve the range of natural systems, from groundwater-fed streams to interdunal wetlands, that support a tremendous variety of plants and animals, many of which occur nowhere else on Earth. Our work in the eight Great Lakes states and Canada is supported by more than 235,000 individual members.

We appreciate the opportunity to comment. If you have any questions, please feel free to contact me at 312-759-8017 x15 or [jandersen@tnc.org](mailto:jandersen@tnc.org), or Lois Morrison, Great Lakes Director of Conservation, at 312-759-8017 x14 or [lmorrison@tnc.org](mailto:lmorrison@tnc.org).

Sincerely,



John A. Andersen, Jr.  
Director, Great Lakes Program



**Comment Number: 28**

**Name: Kernahan, John**

**Affiliation: The Niagara Parks Commission**

General Comments:

Comment from The Niagara Parks Commission (NPC) regarding the Draft Agreement Review Report, Great Lakes Water Quality Agreement (GLWQA)

Since 1885, The Niagara Parks Commission (NPC), an agency and operational enterprise of the Ontario Government, has carried out its important mission of preserving and enhancing the natural beauty of the Falls and Niagara River Corridor for the enjoyment of visitors while maintaining self-sufficiency. This organization has had, and will continue to have an obligation by virtue of its legislated mandate within the Niagara Parks Act and Regulations of serving as the guardian and steward of these public lands. As a government agency, there is a public expectation that NPC practice high standards for all of its environmental obligations. NPC is therefore supportive of the review and updating of the Great Lakes Water Quality Agreement and the recommendations contained in the Draft Agreement Review Report. It fully supports international cooperation in restoring and protecting the Great Lakes ecosystem.

Over the past five years, NPC has been working closely with the Niagara Peninsula Conservation Authority (NPCA), the Great Lakes Sustainability Fund (GLSF), the Habitat Stewardship Program (HSP) and more than twenty partner organizations in protecting the natural heritage resources along the Niagara River Corridor. Our priorities have focused on improvement of air and water quality, protection of Species at Risk (SAR), enhancement of flora and fauna sustainability through riparian and wildlife habitat restoration, and removal of invasive alien species. It is to be noted that the Niagara Gorge contains one of the largest concentrations of SAR anywhere in Canada. All of these initiatives work toward the goal of delisting the Niagara Area of Concern (AOC) for the benefit of citizens and wildlife along the Niagara River Corridor.

A huge challenge facing NPC is the protection of its 56 km of shoreline along the Niagara River from erosion and upstream pollutants. In addition, NPC and other agencies mitigate surface water run-off and monitor water quality from the entire Niagara River watershed that passes through NPC's jurisdiction before entering the Niagara River.

NPC is tasked with providing a high quality tourist destination for upwards of 12 million visitors annually and to protect its areas of natural and cultural resources from environmental threats. This becomes increasingly difficult as the resident human population continues to grow, along with the agricultural, commercial and industrial initiatives that expand along with it. With limited budgets due to the unexpected decrease in tourism dollars in recent years NPC benefits from the programs and funding available through any binational agreements. NPC continues to welcome the opportunity to work in collaboration with other organizations to improve biodiversity in the Great Lakes ecosystem.

More information about NPC's environmental initiatives can be viewed at [www.niagaraparks.com](http://www.niagaraparks.com) and [www.niagaraparksnature.com](http://www.niagaraparksnature.com).

John Kernahan, P. Eng.  
General Manager

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**Comment Number: 29**

**Name: Chase, Edith**

**Affiliation: Ohio Coastal Resource Management Project**

July 9, 2007

TO: Binational Executive Committee,  
ATTN: Mark Elster, EPA GLNPO  
RE: Updating the Great Lakes Water Quality Agreement  
From: Edith Chase, President, Ohio Coastal Resource Management Project

The Ohio Coastal Resource Management Project (OCRMP), a nonprofit citizens organization, points out that the Great Lakes are the single largest source of surface freshwater in the world, so their health is of critical national and international significance. We commend the International Joint Commission (IJC) for their efforts on public consultation in updating the Great Lakes Water Quality Agreement. We call for formal public hearings on a complete draft of the revised Agreement.

OCRMP strongly urges the Federal Governments of the United States and Canada to reaffirm their commitment to achieving the purpose and objectives of the Agreement, as updated to reflect multiple sources of stress that may lead to widespread ecosystem breakdown. Impacts of such stressors may be aggravated by global climate change. Although some topics require more research, there is enough information available to take immediate action on high priority areas.

A group of Great Lakes scientists and other experts has collaborated on a new white paper, Prescription for Great Lakes Ecosystem Protection and Restoration (Avoiding the Tipping Point of Irreversible Changes) (2006). OCRMP supports the following list of Great Lakes management objectives recommended by the authors:

--Restore critical elements of the ecosystem's self-regulating mechanisms. To the extent possible, reestablish natural attributes of critical nearshore and tributary communities so they can once again perform their stabilizing function. Where full restoration of natural attributes is not possible, improve desirable aspects through enhancement of important functions.

--Remediate abusive practices that create sources of stress. Reduce or eliminate physical habitat alterations, pollution loadings, pathways for invasive species, and other stressors or their vectors into the Lakes.

--Protect the functioning portions of the ecosystem from impairment. Preserve those portions of the ecosystems that are now healthy, and those that can be restored or enhanced, through sustainable development practices within the Great Lakes basin.

--Measure ecosystem health through a set of agreed-upon integrative indicators that can serve to assess current conditions and monitor the progress of restoring the Lakes.[1]

OCRMP strongly recommends that the updated Great Lakes Water Quality Agreement focus on the whole great Lakes Basin, including tributaries, and Ecosystem Health, which includes humans. The principles of zero discharge and virtual elimination of persistent toxic substances must be retained in the Agreement. The principles of pollution prevention, precautionary approach, and reverse onus must be specifically added. Provisions are needed for a watershed approach and special ways to protect human health. A process must be developed to address emerging issues.

## ROLES

The roles and responsibilities of Federal, State, Provincial, Local governments, Tribes and First Nations must be specifically written into the Agreement. Since each carries a heavy burden for implementation, they must have a seat at the table where decisions are made. We urge the Commission to develop stable funding sources that would enable both countries to make progress on these critical problems, including research, data and information management and dissemination.

Public role: Public participation must be required in all parts of the Agreement and its implementation. Broader public understanding of these complicated issues would increase support for the actions needed to restore, preserve and protect our Great Lakes. We urge the Commission to provide new avenues for public input, including citizen petitions and public membership on all IJC boards.

## FOCUS ON WATER QUALITY

We agree with the IJC (1996) that the focus should remain on water quality, but take into account a broad array of stressors that impact on it, including atmospheric deposition. Article II of the Agreement states that the purpose of the Agreement is to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem. While the IJC's major focus has been on 1) the chemical integrity, we urge the Commission to take an open and objective look at the 2) physical and 3) biological integrity of the Lakes.

### 2) Physical Integrity:

How should we address water quantity / water quality interrelationships? As Dr. Mike Donahue said in 1999, what we now recognize as a single hydrologic system has historically been regarded as a collectivity of separate and distinct hydrologic systems. What we now regard as a finite and ecologically fragile resource has historically been regarded as an inexhaustible resource with a virtually limitless capacity to assimilate pollutants. What we now view as a collaborative, multi-jurisdictional management responsibility has historically been viewed as a loose amalgamation of individual fiefdoms where geo-political boundaries took precedence over hydrological ones.

In order to move forward on an “ecosystem approach” to resource management, Dr. Donahue points out three problems that must be addressed.

A) Consumptive use of Great Lakes water, whether it consists of an out-of-basin diversion, in-Basin use, or water export. This is being addressed now by the Great Lakes Charter Annex. Bills to establish a Great Lakes Compact are now being acted on by all Great Lakes States.

B) Lake level fluctuations, because the lakes are an intensively used resource. Reduced levels raise a plethora of issues associated with dredging needs, water supply and water treatment infrastructure, nearshore water quality, assimilative capacity, and wetlands and habitat. Global climate change may lead to significant lowering of lake levels, aggravating all of the above, including hydropower generation.

C) Land use/water resource interface: Urban and suburban sprawl and attendant environmental impacts. Millions of acres of farmland have been converted from farmland to alternate, more intensive uses, leading to problems such as the effect of impervious surfaces on groundwater recharge, access to ground and surface water supply, waste disposal requirements and impacts on sources of drinking water, conflicts with established uses, and the role of water supply and sewerage infrastructure in exacerbating sprawl. Land use decisions need to be based on water quantity/quality interrelationships at the local watershed level.

### 3) Biological integrity:

CRMP urges the Governments to specify in the Agreement that biological integrity includes both plants and animals, plus bacteria, pathogens and viruses. As the IJC has pointed out, a new aquatic alien invasive species finds its way into the Great Lakes system about every 6 ½ months. The impact of introduced species already in the system, from the sea lamprey to the zebra mussel, serve as harbingers of the economic and environmental costs to come if this crucial threat is not controlled. The latest headline-grabbing threat is Viral Hemorrhagic Septicemia virus (VHS), which has already caused widespread fish mortalities in Lakes St. Clair, Erie and Ontario. VHS has now spread into Lake Huron, probably in the discharge of infected waters. The virus does not affect humans.

## HUMAN HEALTH

OCRMP recommends that the Commission take the lead in identifying specific steps for the governments to take to protect human health, beginning with changing the “prove harm” system of regulation of chemicals. See attached comments on its deficiencies and the consequences thereof.

Our ability to detect parts per trillion of toxic chemicals has not yet been accompanied by actions to reduce exposure to humans, including the fetus. Health effects include damage to human central nervous system, reducing IQ, childhood cancers, lymphomas, breast and prostate cancers, Parkinson’s disease, diabetes, asthma and other environment related diseases. Endocrine disrupting chemicals act like drugs but are not regulated as drugs. Before new pharmaceuticals can be released, the Food & Drug Administration requires extensive testing to demonstrate safety and effectiveness. Even so, side effects discovered later show the need for post-market monitoring.

Hundreds of chemicals with similar effects are released with absolutely no safety testing or monitoring. Add flame retardants (PBDEs) to a list of PCBs, pesticides, dioxin and other industrial chemicals that contaminate breast milk and are currently accumulating in every fish, bird, reptile, mammal and human on earth. In addition, little work is done on additive or synergistic effects of mixtures similar to the ones we breathe, consume and live in every day. The Commission should begin with emphasis on fish consumption advisories and the Binational Toxics Strategy.

## WATERSHED APPROACH

More explicit requirements should be incorporated into the updated Agreement for the development and implementation of watershed management plans for all major watersheds within the larger Great Lakes Basin. Integrated watershed management plans must require clear identification of major ecological issues to be addressed in the watershed, the measures to be taken to address the problems, and a schedule of implementation actions, with benchmarks.

## EMERGING ISSUES

Legacy issues and new threats should be specifically addressed in the Agreement, including endocrine disruptors, flame retardants, nano materials, pharmaceuticals and personal care products. Emerging issues must be addressed by adding a process to investigate new threats to the Great Lakes. Stable funding would increase the capability of staff to assess potential problems and refer each to one of the IJC Advisory Boards for analysis. The Advisory Board could then prepare information and recommendations for Commission review, public consultation and action.

OCRMP recommends that priority be given to the following emerging issues:

--Climate change is here. The International Arctic Climate Impact Assessment confirms the previous scientific work that shows what we can expect in the Great Lakes region and around the planet. Dr. Gunter Weller, Executive Director of the Arctic Assessment, said the scientific debate over global warming is over, with scientists acknowledging that greenhouse gases, especially carbon dioxide from industry and vehicles, are contributing to the problem. Dr. Thomas Schindler emphasized the significance of climate change at the June 2005 IJC Biennial Meeting.

--Alien invasive species, including pathogens, viruses and protozoa:

There is an urgent need to 1) set biological standards for ballast water, and 2) pass comprehensive federal legislation to address all the pathways by which alien invasive species can enter the Great Lakes.

Zebra and quagga mussels have already caused over a billion dollars in economic damage and are changing the Great Lakes food web and ecosystem.

As the IJC's 12th Biennial Report states, "Any one of these new invaders could prove to be as ecologically and economically destructive, as those already in the system, if not more so."

--Land use changes, including urbanization and factory farms: These were first addressed by the IJC Pollution from Land Use Activities Reference Group (PLUARG) in the 1970s. Recent rapid increases in urbanization and impervious surfaces have direct consequences on water resources and the amount of flooding, erosion and water quality problems experienced downstream. Emphasis must be placed on stewardship and on assessing and disseminating

information on the cumulative effects of management actions in order to minimize the impacts of urbanization on the Great Lakes. Local decision makers need to understand the consequences of their decisions and have a toolkit of measures to address them. The Ohio Lake Erie Commission developed the Balanced Growth Initiative and has funded four pilot projects in the Lake Erie Basin to evaluate the use of Priority Conservation Areas and Priority Development Areas.

The release of untreated human sewage and animal wastes into Great Lakes Basin waterways must be halted, with standards, timetables and benchmarks, plus the resources to do the work. Combined sewer overflows and failing on-lot systems must be cleaned up, with benefits to public health and property owners along clean waterways. For residential property owners who cannot afford to upgrade their systems, special funds should be made available to assist them.

Northwest Ohio and areas of Indiana and Michigan have been swamped by large numbers of factory farms and increasing amounts of concentrated animal wastes that are spread on land. This can affect both surface and groundwater in the basin. Wastewater treatment meeting the requirements for treatment of human sewage must be required of these animal wastes, as well as control of air pollutants and insects from factory farms.

#### REMEDIAL ACTION PLANS:

RAPs have made only very slow progress toward delisting, only one on the U.S. side. Please develop stable funding sources so the RAPs don't have to spend half their time raising money to keep the doors open and the lights on.

#### MONITORING AND ASSESSMENT:

To strengthen science-based actions to improve Great Lakes Water quality, Great Lakes monitoring and assessment programs must be strengthened, with adequate funding. Systematic monitoring and surveillance includes biological monitoring, e.g. macroinvertebrates and fish communities. Physical indices include dams, channelization and habitat. Biological and physical indices plus chemical analyses are needed to measure ecosystem health.

#### CONCLUSION

Good water quality is essential for the Lakes and the socio-economic well being of the Basin's residents and their communities. The recommendations described above would benefit both the economy and the environment, with benefits to our children and grandchildren.

[1] See <http://www.restorethelakes.org/PrescriptionGreatLakes.pdf>

**Comment Number:** 30  
**Name:** Meyer, Kristy  
**Affiliation:** Ohio Environmental Council

July 5, 2007

Mark Elster  
Senior Program Analyst  
USEPA  
Great Lakes National Program Office



77 W. Jackson Blvd. (G-17J)  
Chicago, IL 60604

RE: Draft Review of the Great Lakes Water Quality Agreement

Dear Mr. Elster:

My name is Kristy Meyer and I am the Director of Clean Water Programs at the Ohio Environmental Council. The Ohio Environmental Council is a statewide, non-profit advocacy organization with over 3,000 individual members and more than 100 group members. We have been involved in the debate over water use and diversions from the Great Lakes since the late 1990's.

As you are aware, the Great Lakes hold 20% of the world's freshwater supply and 95% of our nation's freshwater supply. The Great Lakes are a precious resource to use and protect. Despite their vast size, the Great Lakes are a limited resource. Rainwater and snowmelt replenish only about one-percent of the lakes, rivers, and underground aquifers that make up the Great Lakes basin. The other 99% is a finite and non-renewable resource. Thus, careful management of the Great Lakes is imperative, especially here in Ohio.

Roughly 3 million Ohioans depend on Lake Erie as the source of their drinking water. The lake is a center of commerce and industry, supporting agriculture, shipping, heavy manufacturing, and electricity generation. It is vitally important to Ohio's environment and economy, providing homes, food, recreation, and economic sustainability. Protecting the lake and its interconnected system of streams and underground aquifers is critical to its future and to the livelihoods of all who depend on the Lake for their way of life.

The Great Lakes Water Quality Agreement (GLWQA) has made a very significant contribution over the past 35 years to improving environmental conditions in the Great Lakes. We believe, however, that the GLWQA needs to be revitalized because it is now less of a driver of Great Lakes programs than it previously was. Certain provisions are out of date and new understandings of some of the problems have arisen. In addition, the governments are paying less attention to the Agreement than they previously did.

However, we do not believe the existing Agreement should be abandoned and replaced by a completely new agreement. Many important provisions of the GLWQA have not yet been fully

implemented. In addition, the principles stated in the Agreement, such as ecosystem, virtual elimination and zero discharge, are as vital now as when they were first put into the Agreement. Therefore, if the governments decide to open up the Agreement, they should make a commitment not to weaken any of the provisions currently in it.

#### Emerging Issues and New Threats

We believe that the GLWQA should not become the only or even the prime agreement for addressing Great Lakes issues. We fear that an agreement that tried to address all issues would become an agreement that would be so dense and expansive that it would be impossible to implement and would wash out any focus, or be so general in nature as to be non-specific and, as a result, useless. In addition, there are other existing agreements, such as the Convention on Great Lakes Fisheries, and potential agreements that have valuable roles to play. We believe that, provided there is communication amongst those implementing these various agreements, it is best to keep each agreement separate and more focused.

Therefore, we recommend that the GLWQA retain its focus on water quality, but with a somewhat broader view of what impacts water quality.

The understanding by scientists and policy makers of the factors affecting water quality has increased since the Agreement was last revised. Therefore, we recommend that the GLWQA be revised to add new stressors or to reflect a better understanding of stressors already in the Agreement. The stressors that we believe should be added or given a greater emphasis include: invasive species, pollutants of recent concern (endocrine disruptors, flame retardants, pharmaceuticals, nanoparticles), air pollution from sources beyond the Great Lakes basin, radionuclides, groundwater pollution, fish farms, intensive agricultural operations, urban development, water levels, and climate change.

#### Watershed Approach

More explicit requirements should be incorporated into the updated GLWQA for the development and implementation of watershed management plans for all major tributary watersheds with the Great Lakes basin. It is through these tributaries that many of the stressors enter the Great Lakes and St. Lawrence River.

Integrated watershed management plans should require clear identification of major ecological issues to be addressed in the watershed, the measures to be taken to alleviate the issue, and a proposed schedule of any implementation actions.

#### Prevention

It is now well recognized that prevention is both more effective and less expensive than remediation in protecting human and ecosystem health. Prevention should be a key principle in any revised Agreement.



In order to achieve a preventive approach, the precautionary approach and reverse onus should be added to the GLWQA. The precautionary approach is the “principle of taking a cautious, environmentally conservative approach to avoid and prevent pollution, according to threats of serious or irreversible damage, even with a lack of full scientific certainty.” Reverse onus is “a concept to require the producer, user or discharger of a substance to demonstrate that neither the substance nor its degradation products or byproducts are likely to pose a threat to the ecosystem.”

#### New Science Provisions

Successful protection and restoration of the Great Lakes and St. Lawrence River basin depends on the presence of adequate and consistently funded monitoring and scientific research. In the past the Great Lakes basin has been at the forefront of this type of monitoring and research. Unfortunately, funding cuts over the past fifteen years have had a devastating impact on this critical knowledge base. Therefore, revitalization of the GLWQA also must include a revitalization of Great Lakes monitoring and science.

A strong connection between monitoring, science and policy-makers is essential if these features are to be effective in protecting the basin's environment. It is for this reason that we have put in the recommendation regarding easy and timely access to monitoring and research results.

#### Public Participation

We commend the International Joint Commission (IJC) for the open manner in which the review of the GLWQA has undergone thus far. We strongly urge the continuation of this open process.

In their draft review report, the ARC recommends that the “public should be consulted in any revision of the Agreement.” The consultation processes thus far have not been based on government proposals for possible revisions. Thus, while very welcome, public involvement opportunities to date are far less important than the opportunity to comment on advice from Environment Canada and the U.S. Environmental Protection Agency to Foreign Affairs and International Trade Canada (DFAIT) and the U.S. Department of State, the opportunity to comment on preliminary positions of DFAIT and State Department and formal public hearings on a complete draft of proposed revisions to the Agreement, if it is revised, as well as formal status as observers at the negotiating table during negotiations. The decisions over the next couple of years will be the critical ones in determining whether to revise the Agreement and the content of any revised Agreement.

Therefore, we urge the governments to make specific commitments—now, before the first key government steps are taken—as to the opportunities that will be provided for input.

The four mechanisms provided in our recommendation are the minimum that we urge the governments to commit to. These mechanisms have precedents in the last revision of the GLWQA, in 1987.

A recurring theme in the ARC report of April 2007 is the need to include provisions in the GLWQA through which the governments commit to public involvement. We recommend that in addition to providing for this through a general commitment, the governments should commit to specific public involvement provisions. These should include mechanisms that allow the public to take the initiative

in prompting actions, such as citizen petitions that require reviews by the federal governments or the IJC.

The public also should be assured of more meaningful participation in IJC activities. Citizen experts in the appropriate fields should be included on the IJC's existing boards, that is, the Water Quality Board, the Science Advisory Board, and its Council of Great Lakes Research Managers. In addition, a new citizens advisory board should be set up for the IJC. This board should advise the IJC commissioners on the adequacy of government programs to achieve the goals of the GLWQA and make recommendations on how these programs could be improved.

In addition, the governments should commit through the Agreement to include the public in meaningful ways in their domestic programs on Great Lakes matters. This should include a commitment to set up public advisory committees for their GLWQA-related programs and/or to include representatives of the public on their steering committees for these programs.

The recommendations outlined in this letter would benefit the whole Great Lakes ecosystem, including its economy and environment, with benefits to our children and grandchildren. Together we can make the Great Lakes basin a better place in which to live, work and play.

Thank you for your serious consideration. If you require any further information please contact me at 614-487-7506 or at [Kristy@TheOEC.org](mailto:Kristy@TheOEC.org).

Kind regards,

Kristy Meyer  
Director of Clean Water Programs.

# ONTARIO FEDERATION OF ANGLERS AND HUNTERS

Ontario Conservation Centre  
P.O. Box 2800, 4601 Guthrie Drive  
Peterborough, Ontario K9J 8L5

Phone (705) 748-6324 Fax (705) 748-9577  
Website: [www.ofah.org](http://www.ofah.org)  
E-mail address: [ofah@ofah.org](mailto:ofah@ofah.org)

OFAH FILE: 525  
July 16, 2007

Agreement Review Committee  
c/o Sridhar Marisetti  
Great Lakes Environment Office  
Environment Canada, Ontario Region  
4905 Dufferin Street  
Toronto, Ontario  
M3H 5T4

Subject: Draft Report to the Great Lakes Binational Executive Committee

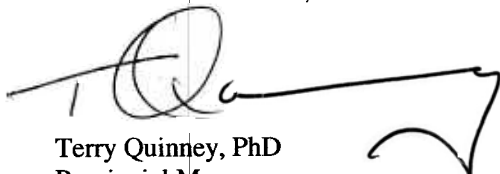
On behalf of our over 81,000 members and our 655 community-based member clubs, the Ontario Federation of Anglers and Hunters (O.F.A.H.) wishes to thank the Agreement Review Committee for their synthesis of findings, results, and recommendations from working groups associated with the review of the Great Lakes Water Quality Agreement (G.L.W.Q.A.).

The O.F.A.H. has a long record of participation in programs and projects that contribute to the restoration of each of the Great Lakes for which Ontario and the Government of Canada have responsibilities. Our interests are focused upon healthy fish and wildlife populations, and the habitats upon which they depend.

In general, we agree with the April 2007 recommendations from the Agreement Review Committee and the complementary recommendations of July 2007 from Great Lakes United.

We trust that as long-standing participants in Great Lakes restoration activities, you will continue to consult directly with us as the G.L.W.Q.A. review continues.

Yours in Conservation,



Terry Quinney, PhD  
Provincial Manager  
Fish and Wildlife Services

TQ/jb

cc: O.F.A.H. Board of Directors  
Mike Reader  
Greg Farrant  
O.F.A.H. Fish and Wildlife Staff



CONSERVATION PLEDGE

I give my pledge, as a Canadian, to save and faithfully defend from waste, the natural resources of my Country -- its soils and minerals, its air, water, forests, and wildlife.

Ministry  
of the  
Environment

135 St. Clair Avenue West  
Toronto ON M4V 1P5

Ministère  
de  
l'Environnement

135 avenue St. Clair ouest  
Toronto ON M4V 1P5



JUL 11 2007

**Great Lakes Binational Executive Committee (BEC) and  
Agreement Review Committee (ARC)**

**Sridhar Marisetti**  
Interagency Program Coordinator  
Great Lakes Environment Office  
Environment Canada, Ontario Region

**FROM:** John Licou, Assistant Deputy Minister, Ontario Ministry of the  
Environment  
Kevin Wilson, Assistant Deputy Minister, Ontario Ministry of  
Natural Resources  
Dr. Deb Stark, Assistant Deputy Minister, Ontario Ministry of  
Agriculture, Food and Rural Affairs

**SUBJECT:** Draft Agreement Review Report on the Canada-U.S.  
Great Lakes Water Quality Agreement

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The Great Lakes are crucial to the economic, social and environmental well being of Ontario. We are therefore writing with Ontario's recommendations and comments in response to the draft Agreement Review Report on the *Canada-U.S. Great Lakes Water Quality Agreement of 1978 (GLWQA)*.

The Great Lakes are under stress, as evidenced by the 2007 State of the Great Lakes Highlights report and by growing concern among scientists and the broader Great Lakes community. Protection and restoration of Great Lakes aquatic ecosystem health requires a strong binational framework of commitment and cooperation. Many pressing Great Lakes issues – such as climate change, new chemicals of concern and aquatic invasive species – know no borders and can only be fully addressed through binational cooperation.

Ontario's participation in the review of the GLWQA has led us to conclude that the agreement, which was last revised 20 years ago, is in need of updating and strengthening. The commitments under this agreement must evolve to keep pace with new understandings of the Basin Ecosystem, ongoing and new stressors, and best practices for agreement implementation.

Progress has been made, and the Great Lakes are clearly in better condition than they would have been without the GLWQA. However, the stated purpose of the agreement – "to restore and maintain the chemical, physical and



biological integrity of the waters of the Great Lakes Basin Ecosystem" – has not yet been met.

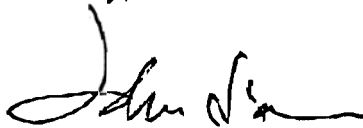
A renewed and enhanced agreement is needed, together with a renewed commitment to improved implementation. The GLWQA should be amended to address pressing issues and emerging concerns with specific objectives and commitments.

Accordingly, Ontario's working statement of priorities for renewal of the agreement is enclosed. For example, we would like to call to your attention the need to focus on the effectiveness of the GLWQA, including governance, institutions, accountability, and commitment to implementation.

The new 2007 Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem demonstrates Ontario's and Canada's commitment to taking specific, time-bound, resourced Great Lakes actions, and engaging partners across the Canadian side of the Great Lakes Basin. Ontario recognizes the interest of the broader Great Lakes community in the renewal and implementation of the GLWQA, and encourages the parties to the agreement to develop meaningful engagement mechanisms.

We trust that Ontario's priorities will be taken into consideration. We strongly recommend that the GLWQA be renewed by the parties, to create a strong, forward-looking framework backed by renewed commitments from the parties to protect, restore and sustain our shared Great Lakes.

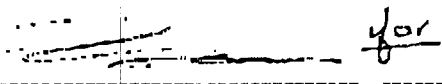
Sincerely,



John Licou, Assistant Deputy Minister  
Ontario Ministry of the Environment



Kevin Wilson, Assistant Deputy Minister  
Ontario Ministry of Natural Resources



Dr. Deb Stark, Assistant Deputy Minister  
Ontario Ministry of Agriculture, Food and Rural Affairs

CC: Leslie Marchant, Assistant Deputy Minister (A), Ontario Ministry of  
Intergovernmental Affairs

**CC: Gail Beggs, Deputy Minister, Ontario Ministry of the Environment**

**Charlie Lauer, Deputy Minister (A), Ontario Ministry of Natural Resources**

**Bruce Archibald, Deputy Minister, Ontario Ministry of Agriculture, Food and Rural Affairs**

**Brian Smithies, Cabinet Office, Ontario**

## ONTARIO'S WORKING STATEMENT OF PRIORITIES FOR RENEWAL OF THE CANADA-U.S. GREAT LAKES WATER QUALITY AGREEMENT

Great Lakes under stress		RECOGNIZING that the Great Lakes are presently exhibiting symptoms of extreme stress requiring bi-national attention, and that the number of people dependent on the well being of the Great Lakes Basin Ecosystem for their health, social and cultural well being and economic prosperity has never been greater;
Ontario's Great Lakes priorities	II	CONTINUING to pursue the vision of a healthy, prosperous and sustainable Great Lakes Basin Ecosystem for present and future generations, through the reduction of harmful pollutants, conservation of biodiversity, understanding and adaptation to the impacts of climate change, protection of Ontario's primary drinking water source, sustainable water use and conservation, and promotion of more environmentally sustainable lifestyles;
Importance of GLWQA	III	ACKNOWLEDGING the contribution of the GLWQA, its proven track record in motivating unprecedented action on pressing bi-national Great Lakes issues such as phosphorus loadings and persistent toxic substances, and the importance of a long-term bi-national agreement given the ongoing vigilance required to protect, restore and sustain this valuable ecosystem;
Contemporary interpretation of GLWQA	IV	INTERPRETING the purpose of the Agreement – "to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem" – as inclusive of the protection and sustainability of the aquatic ecosystem;
Updating and strengthening the GLWQA	V	CONCLUDING that the Agreement has not been updated in 20 years, and that an overarching finding of public and expert Agreement review is that the Agreement needs to be updated and strengthened to support the Parties in addressing the environmental challenges of today and of tomorrow;  ONTARIO THEREFORE RECOMMENDS THAT THE PARTIES UPDATE AND STRENGTHEN THE AGREEMENT AND FOCUS ATTENTION ON:
Pressing issues	VI	ADDRESSING pressing, contemporary and anticipated Great Lakes issues by:  a. updating the provisions related to the reduction of harmful pollutants b. strengthening provisions for the protection and restoration of biodiversity c. adding provisions for prevention and management of aquatic invasive species d. adding provisions for understanding and adapting to climate change e. strengthening provisions to support the sustainability of our cities, towns, villages and rural areas
Enhanced understanding	VII	IMPROVING bi-national understanding of the Great Lakes Basin Ecosystem through scientific research, monitoring, and sharing of knowledge and information.

Human health and well being	VIII	ENHANCING the profile of human health and well being by giving greater attention to Great Lakes ecological services and related beneficial uses – fishable, swimmable, drinkable – and preventing human health risks and social, cultural, and economic costs.
Watersheds	IX	INFLUENCING action at appropriate scales to protect the Great Lakes, including action in watersheds, given that what happens on the land and in the watersheds affects the Great Lakes Basin Ecosystem.
Complementary policy instruments	X	RECOGNIZING that the GLWQA is complementary to and complemented by other Great Lakes agreements, institutions and domestic actions, and that the Agreement should harmonize with other ongoing initiatives such as those for the protection of groundwater, the protection of water quantity, biodiversity conservation and fisheries management.
	XI	COMPLEMENTING Ontario's activities and commitments including the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem, Ontario's Biodiversity Strategy, the Strategic Plan for Management of Great Lakes Fisheries and the Great Lakes - St. Lawrence River Basin Sustainable Water Resources Agreement.
Governance and institutions	XII	IMPROVING bi-national governance, institutions and accountability mechanisms and acknowledging the key roles of implementers including not only the Parties but also the Province of Ontario, the Great Lakes States, Aboriginal communities, Great Lakes municipalities, conservation authorities, agricultural, industrial and business sectors, non-governmental organizations, academia, and other members of the Great Lakes community.
Great Lakes community engagement	XIII	MOTIVATING the support of implementing partners and the broader Great Lakes community through opportunities for meaningful involvement and sharing of knowledge and information to enhance awareness and education.
Resources for implementation	XIV	ENHANCING and sustaining resources for new and existing implementation mechanisms, including bi-national lake-wide management and Remedial Action Plans.



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PAGE 02/04



Dr. David McKeown  
Medical Officer of Health

Public Health  
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Toronto, Ontario M5B 1W2

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dmckeown@toronto.ca  
[www.toronto.ca/health](http://www.toronto.ca/health)  
Reply: Sudha Sabanadesan  
Tel.: 416-338-8143  
Fax: 416-392-7418  
ssabana@toronto.ca

July 11, 2007

Mr. Sridhar Marisetti  
Interagency Program Coordinator  
Great Lakes Environment Office  
Environment Canada, Ontario Region  
4905 Dufferin Street  
Toronto, Ontario M3H 5T4

Dear Mr. Marisetti:

Re: Review of the Canada-United States Great Lakes Water Quality Agreement

I am pleased to take this opportunity to state my support for the initiative to review the Great Lakes Water Quality Agreement (GLWQA), and also to submit my comments regarding the Agreement. The comments below are based on the draft binational report reviewing the Great Lakes Water Quality Agreement – *Review of the Canada-U.S. Great Lakes Water Quality Agreement (April 2007)*. The remarks made in this letter are categorized into five themes as found in the Review document and highlights and comments upon only of a few of the many recommendations by the Reviewers that are supported by Toronto Public Health.

Theme 1: The Purpose and Scope of the Agreement

The purpose of the Agreement to 'restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem' should remain as the guiding principle. In addition, it is essential to link the health outcomes of the peoples living in the Great Lakes region to the goals of the Agreement with an emphasis on precautionary measures in the Annexes to the Agreement. I also recommend that the comments of the Reviewers on the scope of the Agreement emphasize that it should create stronger linkages between the chemical, physical and biological integrity of the waters and the health of the Great Lakes Ecosystem is considered in any revisions or additions that might be made to the Agreement.

Theme 2: Outdated Agreement Elements

The Reviewers' finding that the Annexes have not kept pace with scientific understanding, new issues, and current tools available since the Agreement was last revised in 1987 is of concern. The objectives of the Agreement should take into account the current advances in understanding the linkage between human health and water quality. Advances in analytical chemistry, monitoring tools, and research conducted on human health outcomes as a result of toxic pollutants released (and

2

the presence of legacy contaminants) into the air and water, should be built-in to the objectives with flexibility to incorporate future advances in technology and our understanding of the toxicology of the pollutants in air and water.

It is important to acknowledge the significance of airborne pollutants not only from the U.S. and Canada but also international sources to water quality in the Great Lakes. Toronto Public Health has previously proposed to the government of Canada to adopt *new approaches* to ensure the commitments made under the Canada-United States Air Quality Agreement are met. I reiterate the Reviewers comments that international sources of pollutants to the Great Lakes basin be emphasized with efforts to work within international agreements to eliminate the release of toxic substances to the Great Lakes region.

### Theme 3: Pressing Issues and Emerging Threats

Toronto Public Health has previously called upon the government of Canada to make new commitments to virtually eliminate mercury emissions in Canada. Current approaches are not sufficient. The government of Canada and the province of Ontario should aggressively implement the Canada-wide standard for mercury, with the principal goal of eliminating coal-fired electricity generation in Ontario and the rest of Canada as soon as possible.

The continued issuance of fish consumption advisories, for example, through Ontario's Guide to Eating Sport Fish, indicates the extent of contamination from toxics such as mercury, PCBs, pesticides, dioxins and furans in the Great Lakes waters. A recently published report by the non-governmental organization, Environmental Defence, reviewing fish consumption advisories in 13 regions across the Great Lakes in 2007 – 2008 (retrieved at [www.environmentaldefence.ca/](http://www.environmentaldefence.ca/)), points out that consumption advisories have become more severe in areas of Lake Huron and Lake Ontario. Such advisories alone are insufficient for protecting public health. The focus of the Agreement should lie in eliminating toxic substances from entering the Great Lakes.

The Agreement should address not only the persistent toxic substances but also the non-persistent, yet continuously available substances, especially those with endocrine disrupting properties. For example, compounds that are endocrine disruptors found in pharmaceuticals and personal care products (PPCPs) that are discharged from wastewater treatment plants, agriculture, and aquaculture have been detected in the waters in Lake Ontario which is the source of drinking water for an estimated 75% of the residents of Ontario. These compounds have been documented to cause detrimental effects in fish populations and are also may potentially cause adverse health effects in humans at very low doses.

In addition to PPCPs, the following substances, also identified by the International Joint Commission (IJC) in its Priorities Report 2002-2005 as 'emerging' contaminants of concern in the Great Lakes require immediate attention in the Agreement: polybrominated diphenyl ethers (PBDEs), phthalates, bisphenol-A, estrogenic active compounds, and some currently used pesticides. The adverse human

health effects from these 'emerging' toxic substances and the legacy chemicals should be considered additive in nature when setting human health-based reduction targets and timelines in the Agreement. The Agreement should include measures to proactively reduce discharges into the Great Lakes through both voluntary initiatives and mandatory programs and regulations. The recommendation made by the Reviewers to include a streamlined process for identifying and addressing emerging threats that may impact the Great Lakes in the future, on a timelier basis is most appropriate.



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PAGE 04/04

3

Working with the understanding that climate change will have an impact on the quality and quantity of water in the Great Lakes, the Agreement should explicitly identify climate change as an emerging factor to be considered when setting targets and timelines based on restoring and maintaining the chemical, biological and physical integrity of the Great Lakes. Further, identifying energy policy and transportation plans as issues directly linked to the impacts of climate change in the Great Lakes Basin should be made a priority in the activities and programs designed to reduce airborne pollutants. The Agreement should specify that policies be developed based on energy Great Lakes. Further, identifying energy policy and transportation plans as issues directly linked to the impacts of climate change in the Great Lakes Basin should be made a priority in the activities and programs designed to reduce airborne pollutants. The Agreement should specify that policies be developed based on energy conservation, reliance on renewable sources of energy, and transportation plans that preferentially favour public transport.

#### Theme 4: Agreement Accountability and Implementation

The success of the Agreement can be best evaluated by monitoring whether the purpose and goals in the Agreement are being achieved. It is thus imperative, as recommended by the Reviewers, that specific results and timelines are included in the Annexes to achieve the purpose and goals of the Agreement, and to include responsible entities to implement the programs to achieve these goals.

#### Theme 5: Including Other Orders of Government and the Public

The provision of accessible information for decision making by the Agreement is a key step toward involving the public and local and provincial levels of governments. The role of municipalities and local governance structures in implementing programs based on the goals of the Agreement is significant to its success in many areas. For example, with respect to pressing and emerging issues related to urbanization, local levels of governments are instrumental in identifying relevant issues and finding workable solutions best suited for the locality. As pointed out by the Reviewers, implementation of Remedial Action Plans (RAPs) from the Agreement exemplify the successes that result from involving all levels of governments and the public.

I trust that you find these comments useful for the review process being undertaken by the Great Lakes Binational Executive Committee. If you have any questions or need clarification, please contact Sudha Sabanadesan of my staff, at 416-338-8143 or [ssabana@toronto.ca](mailto:ssabana@toronto.ca).

Sincerely,



Dr. David McKeown  
Medical Officer of Health

**Comment Number: 34**

**Name: Crooks, Timothy**

**Affiliation: Rescue Lake Simcoe Charitable Foundation**

General Comments:

I am in full support of a comprehensive review of the Great Lakes Water Quality Agreement. I agree with the positions and recommendations made by the Great Lakes Aquatic Habitat Network and Fund.

Theme 1 Comments:

Lake Simcoe is within the Great Lakes Watershed. It would be good to include Lake Simcoe in the agreement.

Theme 3 Comments:

Emerging threats come from the increased urbanization of the Great Lakes Watershed.



July 13, 2007

**Sridhar Marisetti**

Interagency Program Coordinator  
Great Lakes Environment Office  
Environment Canada, Ontario Region  
4905 Dufferin Street  
Toronto, ON M3H 5T4

**RE: Great Lakes Water Quality Agreement – Review 2007**

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Dear Mr. Marisetti:

The Shipping Federation of Canada (the Federation), incorporated by an Act of Parliament in 1903, is the representative of the owners, operators and agents of ocean ships trading at Canadian ports, particularly in the Atlantic, St. Lawrence and Great Lakes regions. The ships represented by Federation members transport virtually all of the trade moving between overseas ports and eastern Canada.

The Federation is committed to the development and promotion of an environmentally responsible and sustainable marine transportation system – a commitment that informs every facet of our activities, from advocacy to operations to education. As an industry leader on marine environmental issues, the Federation's role is three-fold:

1. To serve as a frontline information resource on environmental regulations, policies and practices applicable to ships trading in Canadian waters;
2. To promote the importance of international conventions and standards as the optimal means of responding to environmental challenges;

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*THE SHIPPING FEDERATION OF CANADA*  
300 St. Sacrement, suite 326  
Montreal QC H2Y 1X4  
Tel : (514) 849-2325 / Fax : (514) 849-8774  
[www.shipfed.ca](http://www.shipfed.ca)

3. To provide operational know-how and expertise in the development of environmental technologies and management systems.

We are pleased to have the opportunity to submit comments to the Great Lakes Binational Executive Committee on the Review of the Canada-U.S. Great Lakes Water Quality Agreement. We believe that the Agreement is an essential tool to restore and maintain the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem, and that the collaboration and participation of all relevant parties and stakeholders is the only means of achieving tangible results in this respect. We have analyzed Volumes I and II of the Draft Review Report for Public Comment, with particular attention to the report from the Review Working Group G (Volume II), and offer the following comments from a commercial navigation perspective:

Overall, we support the key findings, results and recommendations as presented in pages 5-6 of the Volume I – Great Lakes Water Quality Agreement Review Draft Report. Theme 2: Outdated Agreement Elements, includes recommendations that “The Agreement Annexes should be streamlined, integrated and reduced in number so that they work more effectively with each other and the Articles.” In relation to this, we would like to support the Review Working Group G’s recommendation to renegotiate a single Annex for ship source pollution within the Great Lakes. The regulatory environment in both Canada and the U.S. has undergone major changes since the ratification of the Agreement, as a result of which pollution threats from ships have been greatly reduced. The implementation of mechanisms such as the *Regulations for the Prevention of Pollution from Ships and for Dangerous Chemicals*, which became effective on May 3, 2007 will permit Canada’s long-overdue accession to Annexes IV, V and V of *MARPOL 73/78* as well as its accession to the *Anti-Fouling Convention*. Given the changes in the regulatory environment that have occurred on both sides of the border, we would therefore support a revision of Annexes 4, 5, 6, 8, and 9 with an overall view of merging them into a single Annex.

Morover, we would like to support the recommendations included under Theme 4: Agreement Accountability and Implementation, especially in regards to the regular Annex-by-Annex review and reporting on progress. In order to develop and implement strategies to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem, we would strongly recommend the development of a standard reporting framework, along with a schedule for the revision of the Agreement Annexes.

The overall goal of the Agreement, which is to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes, still remains relevant in 2007. We believe that the Agreement’s Articles and Annexes should be implemented in a manner that prevents and minimizes conflicts among water users, while enhancing the economic viability and competitiveness of the region.

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THE SHIPPING FEDERATION OF CANADA  
300 St. Sacrement, suite 326  
Montreal QC H2Y 1X4  
Tel : (514) 849-2325 / Fax : (514) 849-8774  
[www.shipfed.ca](http://www.shipfed.ca)

We thank you for the opportunity to provide our views on the revision of the Great Lakes Water Quality Agreement, and would be pleased to provide any additional clarification or information you may require.

Respectfully submitted,

Caroline Gravel  
Director, Environmental Affairs  
Shipping Federation of Canada  
300 St. Sacrement, suite 326  
Montréal, Québec  
H2Y 1X4

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*THE SHIPPING FEDERATION OF CANADA*  
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Clean Corporate Citizen

July 12, 2007

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Dear Messrs. Marisetti and Elster:

The Smurfit-Stone Container Corporation (SSCC) is pleased to file these comments regarding the draft report; **Review of the Canada – U.S. Great Lakes Water quality Agreement**, dated April, 2007. Smurfit-Stone Container is a manufacturer of paperboard at our pulp and paper mill in Ontonagon, Michigan located on Lake Superior. We also are a producer of corrugated boxes in various corrugated container plants; some are located in all of the Great Lakes States. Assurance of access to water supplies within the Great Lakes Basin is essential to industry overall and to SSCC. We at the Ontonagon Mill and those at our various container plants in the region support ensured equitable access to and long-term availability of our water resource.

SSCC has tracked and participated in the Great Lakes Water Quality Agreement Review process through the Council of Great Lakes Industries (CGLI). We have provided input, reviewed outputs, and examined the report prepared for the Great Lakes Executive Committee (BEC). The draft report of review activities presents well organized summaries of major points made by the very large number of review participants holding varying viewpoints and perspectives. The report should be useful to the Agreement Parties as they work towards decisions on what changes should be made in the Agreement.

However, some key points appear to be missing from the discussion and some should be more prominently highlighted. These include:

- As mentioned during review discussions, the Agreement should be up-dated to provide for the use of risk assessment and risk management principles by the Parties as they seek to achieve Agreement objectives.





- Agreement review discussions included observations on the need for prioritization of Great Lakes ecosystem assessment, restoration, and protection needs. The report should better highlight these views.
- Discussions identified a need for flexibility in both specific objectives and the objectives themselves. The report does not appear to include the points regarding flexible objective provisions.
- The use of the Agreement to advance a sustainable development agenda for the Region was suggested by review participants. This point is not evident in the report.
- Participants stated several times during the discussions that the Parties should have the flexibility to report on progress towards meeting Agreement objectives via processes already in place or those put in place to satisfy other legislative directives. It should not be necessary to initiate a process or activity just to address an Agreement objective if a program initiated by other means can satisfy that reporting or assessment need. This point should be included in the report.
- Finally, the Agreement cannot exceed or replace the authorities established by the constitutional structures of the two Parties. Points relating to these limitations were a part of many review discussions. The report needs make more specific mention of these.

Thank you for the opportunity to provide these comments. SSCC appreciates having been a part of the review process. We hope that activities which go forward as the Parties determine if and what Agreement revisions might be made will provide similar participation opportunities.

Sincerely,

Chris Broome  
General Manager

**Comment Number:** 37  
**Name:** Clatworthy, Jim  
**Affiliation:** St. Clair River BPAAC

General Comments:

Did a pool of lawyers and a dozen monkeys write this? It's hardly any better than the 1978 Report and certainly doesn't improve upon the desired ACTIONS! The time is over for "Reviews", Study,

Theme 3 Comments:

AIS and the discharge of ballast water by Ocean going vessels "has become THE principle issue of concern and the subject of the bulk of the biennial report and the majority studies since approx 1996. It is briefly mentioned in Annex 6 1 (b) as a problem worth studying." ????? WHY?????

ALMOST 30YRS AND NOTHING MORE THAN NOBOB DECLARATIONS. A TOTAL UNMITIGATED DISASTER!!!! How long has the U.S. Coast Guard been working on a better system than asking ships if they have No Ballast On Board? This issue needs immediate attention and placed at the TOP of the Pressing Issues section. It also needs to be turned over to Canadian and U.S. research Universities to come up with an immediate solution that at least begins the process of controlling ballast water discharges. The International Association of Great Lakes Researches held a conference in May of 2006 at the Univ. of Windsor where this issue was addressed and a quick search in Google can produce interim solutions to the problems like the Opti Mar system and others. A simple garbage disposer wired into the ballast water discharge pump would eliminate AIS species and macroplankton from the ballast water. The U.S. and Canadian Coast Guard could seal the pumps to insure that the eliminators were installed correctly. Ocean going vessels will need them as well when they visit foreign ports so the shipping companies need not complain about the cost to enter the Great Lakes.

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**Comment Number:** 38  
**Name:** Di Gironimo, Lou  
**Affiliation:** Toronto Water Infrastructure Management, Toronto Water

Dear Mr. Marisetti

RE: Review of the Canada-United States Great Lakes Water Quality Agreement

Staff at Toronto Water, on behalf of the City of Toronto have reviewed the draft report on the *Review of the Canada-US. Great Lakes Water Quality Agreement* and identified key areas of concern and interest. In preparing the City's comments we have also consulted with the Great Lakes and St. Lawrence Cities Initiative. We have restricted our comments to issues directly affecting the City of Toronto and municipalities located on the Great Lakes. Toronto's Medical Officer of Health will be responding separately.

The Review Report is organized around 5 key Themes, and our comments are organized accordingly.

Theme 1 –The Purpose and Scope of the Agreement

The general purpose of the Agreement is sound and relevant. We agree with the Review Committee's recommendation that, "The Agreement should serve as a North Star for the protection and restoration of the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem, providing a clear, high-level vision that will function as a guide for concerted action".

Over the last 20 years the geographic scope of the agreement has shifted significantly—from originally focusing exclusively on open water, then addressing the near shore water quality issues and now moving towards taking into consideration entire watersheds and source water protection strategies. From a City of Toronto perspective we would like to re-iterate, that our area of primary concern is still the near shore area, as our water intakes and discharges relate to this zone. We would support the recommendation of the Review Committee that 'The Agreement's focus should remain on water quality, but take account of a broader array of stressors that impact on it'.

#### Theme 2 -Outdated Agreement Elements

The suggestions made with respect to outdated agreement elements are logical and we have no issue with them and agree with proposed improvements.

With respect to a broader review of the Agreement, we suggest that, as part of the review, the governments should commission a neutral, professional and detailed assessment of progress and performance under the Agreement such as the one carried out by the National Research Council of the United States and the Royal Society of Canada, prior to the negotiation of the 1987 amendments. As extensive amendments are being proposed to the current Agreement, we would support a similar, independent study being conducted.

#### Theme 3 -Pressing Issues and Emerging Themes

Consideration should be given to developing new annexes to address new and emerging issues. From a City of Toronto perspective the topics of urbanization and climate change have particular relevance.

The impact of urbanization on the Great Lakes is an area where municipalities have direct experience. In our case, the City of Toronto has already undertaken a comprehensive process to develop a plan related to urban runoff. In 2003, City Council adopted a Wet Weather Flow Management Master Plan, which directly addresses reducing pollutants from runoff in a highly urbanized area. This could be used as a model for other Great Lakes municipalities. Pollution prevention, water conservation and source water protection should be key principles in the revised Agreement. In order to achieve a preventive approach, the concepts of 'precautionary approach' and 'reverse onus' should be added to the GLWQA.

#### Theme 4 -Agreement Accountability and Implementation

Commitments in the GL WQA should be written in language that leads to implementation. The Agreement should refer to targets and timetables for achieving targets.

The Canadian federal government through the Great Lakes Water Quality Agreement should play a leadership role with respect to the Areas of Concern along the Great Lakes and show leadership with respect to Remedial Action Plans by providing funding for implementation.

Theme 5 -Including other Orders of Governments and the Public

The Great Lakes Water Quality Agreements should recognize the critical role and essential participation of the municipal level of government.

Municipalities are not specifically named in the agreement and should be. Municipalities should be recognized as key players and an appropriate formal consultation process should be established, either through a specific Annex or Committee. For example, the Great Lakes and St. Lawrence Cities Initiative could be formally included in the consultation process, given their position that 'municipal governments are on the front lines of Great Lakes water management'.

Finally, successful protection and restoration of the Great Lakes depends on the presence of adequate and consistently funded monitoring and scientific research. The Agreement should recognize the importance of accessible information and promote information sharing between those carrying out the monitoring and those responsible for carrying out remedial works.

As the review of the Great Lakes Water Quality Agreement continues, we look forward to being engaged in ongoing discussions.

Sincerely,  
Lou Di Gironimo  
General Manager  
Toronto Water  
City of Toronto

Cc: Michael D'Andrea, Director, Water Infrastructure Management, Toronto Water  
Anna Pace, Senior Corporate & Management Consultant, Intergovernmental Relations

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July 10, 2007

Mark Elster, Senior Program Analyst  
US EPA-Great Lakes National Program Office  
77 W. Jackson Blvd (G-17J)  
Chicago, IL 60604

**RE: Review of Great Lakes Water Quality Agreement**

Dear Sir:

Please be advised that the following resolution was passed by the General Government Committee at its meeting held July 5, 2007 and endorsed by Ajax Town Council at its regular meeting held July 9, 2007:

Main Motion As Amended by Committee

1. **That Council urge the Governments of Canada and the United States to complete the revisions to the Great Lakes Water Quality Agreement in 2008 based on a strong accountability framework, and support the Agreement with sustained, long-term capital and program funding.**
  
2. **That the Agreement be revised to take a precautionary approach to protecting Great Lakes waters from the environmental effects of growth and development in the Province of Ontario, the only Province affecting the Great Lakes, by imposing strict Federal requirements, including greater focus on:**
  - i) **addressing threats to drinking water quality posed by sewage treatment plants by requiring more rigorous assessment processes, higher (more protective) environmental standards, and use of the best possible treatment technologies for both municipal sewage treatment plants (including tertiary treatment) and water supply plants;**
  - ii) **preventing any further increases in the inter-basin transfer of wastewaters as a key step in protecting water quality;**
  - iii) **ensuring the list of emerging contaminants is constantly updated and high environmental standards are imposed to curtail their release; and**
  - iv) **assessing and mitigating the cumulative impacts of human activity on water quality and the aquatic environment to protect water quality and biodiversity.**

(cont'd)

3. **That this report be forwarded to the Right Honourable Herb Gray, Canadian Chair of the International Joint Commission, Environment Canada, the United States Environmental Protection Agency and the Executive Director of the Great Lakes, St. Lawrence Cities Initiative, the Federal and Provincial Ministers of the Environment, local MPs and MPPs, the Region of Durham and local municipalities.**

Further to Council direction, please find enclosed a copy of the staff report. May I ask that you **confirm receipt of this report** and that you **add the name of Barb Hodgins**, Policy Planner, Town of Ajax (same address noted below) to your contact list for updates regarding the progress toward a Final Report and timetable for completing revisions to the Agreement and effecting its implementation. Your assistance and cooperation in this matter are most appreciated. Thank you for your attention.

Sincerely,

Martha A. Pettit  
Manager of Legislative Services/Deputy Clerk  
Town of Ajax  
65 Harwood Avenue South  
Ajax, ON L1S 2H9  
905-619-2529, ext. 342  
[martha.pettit@townofajax.com](mailto:martha.pettit@townofajax.com)

Copy: The Right Honourable Herb Gray, Chair, Canadian Section, International Joint Commission  
Sridhar Marisetti, Interagency Program Coordinator, Great Lakes Environment Office  
David Ullrich, Executive Director, Great Lakes & St. Lawrence Cities Initiative  
B. Hodgins, Policy Planner, Town of Ajax

## **TOWN OF AJAX REPORT**



**Report To:** General Government Committee

**Submitted By:** Paul Allore, M.C.I.P., R.P.P.  
Director of Planning & Development Services

**Prepared By:** Barbara Hodgins, M.C.I.P., R.P.P.  
Senior Policy Planner

**Subject:** **Review of the Great Lakes Water Quality Agreement-Update Report**

**Ward(s):** All

**Date of Meeting:** July 5, 2007

**Reference:** Strategic Plan: Environmental Awareness

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### **Recommendations:**

1. **That Council urge the Governments of Canada and the United States to complete the revisions to the Great Lakes Water Quality Agreement in 2008 based on a strong accountability framework, and support the Agreement with sustained, long-term capital and program funding.**
2. **That the Agreement be revised to take a precautionary approach to protecting Great Lakes waters, including greater focus on:**
  - i) **addressing threats to drinking water quality posed by sewage treatment plants and establishing more rigorous assessment processes, imposing higher (more protective) environmental standards, and promoting the best possible treatment technologies for both municipal sewage treatment plants and water supply plants;**
  - ii) **preventing any further increases in the inter-basin transfer of wastewaters as a key step in protecting water quality;**
  - iii) **ensuring the list of emerging contaminants is constantly updated and high environmental standards are imposed to curtail their release; and**
  - iv) **assessing and mitigating the cumulative impacts of human activity on water quality and the aquatic environment to protect water quality and biodiversity.**
3. **That this report be forwarded to the Right Honourable Herb Gray, Canadian Chair of the International Joint Commission, Environment Canada, the United States Environmental Protection Agency and the Executive Director of the Great Lakes and St. Lawrence Cities Initiative.**

Subject: Review of the Great Lakes Water Quality Agreement-Update Report

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## **Background:**

The purpose of this report is to provide comments to the Governments of Canada and the United States, through Environment Canada and the United States Environmental Protection Agency (US EPA), for consideration in the completion of their review of the binational Great Lakes Water Quality Agreement, during the 60-day comment period concluding July 14, 2007.

## Brief History

The original rights and obligations of the Federal Governments regarding the Great Lakes were established under the Boundary Waters Treaty in 1909. The Treaty also established the International Joint Commission (IJC) and enabled the Federal Governments to refer matters to the IJC for further study and recommendations.

In 1972, the Great Lakes Water Quality Agreement (Agreement) was signed by Canada and the United States to reaffirm the commitments of the 1909 Treaty, for the purpose of restoring and maintaining the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem.

Though reviews of this Agreement are required every six years, it has not been reviewed for 20 years. The current review was launched in response to recommendations in the IJC's 12<sup>th</sup> Biennial Report of September 2004.

## Public Consultation

In June 2005, the Federal Governments directed the IJC to consult with the public and municipalities on how the Agreement was being implemented and how it could be "modernized". A binational Agreement Review Committee, co-chaired by Environment Canada and the US EPA, is empowered to oversee this review.

Consultation took place in Canada and the United States in the fall of 2005, with approximately 4,100 persons attending 15 Regional public meetings. Over 80% of the attendees were from the United States. Approximately 100 people attended a Regional public meeting held in Toronto in November 2005.

The IJC subsequently produced a "Synthesis of Public Comment" document<sup>1</sup> which included an outline of the main concerns (see Attachment 1). Water quality emerged as the primary issue. The IJC document indicates that the public are expecting the first result of an improved Agreement and well implemented action plan to be noticeable improvement to the Great Lakes' water quality.

## Technical Review

The existing Agreement was reviewed by a series of Review Working Groups comprised of Federal, Provincial, State and non-government issue experts and non-experts. Importantly, the Review process also included an examination of issues not specifically addressed in the current Agreement, conducted through a "Special Issues" Working Group.

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<sup>1</sup> See [Synthesis of Public Comment on the Forthcoming Review by the Federal Governments of Canada and the United States of The Great Lakes Water Quality Agreement: A Report to the Governments of the United States and Canada](http://www.ijc.org/glconsultations), International Joint Commission, January 2006 at [www.ijc.org/glconsultations](http://www.ijc.org/glconsultations)



Subject: Review of the Great Lakes Water Quality Agreement-Update Report

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On May 14, 2007, staff received an invitation from Environment Canada to comment on two documents made available for public input for a 60-day review period ending July 14, 2007:

- 1) Volume I - GLWQA Review Draft Report dated April 2007; and
- 2) Volume II - Review Working Group Reports dated December 2006.

The above-noted reports can be accessed at [www.agreementreview.net](http://www.agreementreview.net) before midnight on July 14, 2007. The Synthesis of Key Findings, Results and Recommendations from Volume I are contained in Attachment 2.

At the end of the comment period, the Agreement Review Committee will consider the comments received as they finalize the draft Agreement Review Report for submission to the Binational Executive Committee in the fall of 2007. The Final Report will then be provided to the Federal Governments, who will determine the next steps in the Agreement Review.

#### IJC's Perspective and Recommendations

In December 2006, the IJC issued its "13<sup>th</sup> Biennial Report on Great Lakes Water Quality", noting the future of the Lakes is uncertain, and recommending bold binational commitments and accelerated actions to restore and protect the Lakes. The report warned that as only one percent of the Great Lakes' water flows out of the system each year, water remains in the Lakes for years. This means that pollution can also remain in the Lakes' waters for many years<sup>2</sup>.

With the benefit of its experience and the above-noted Review documents, the IJC provided a clear assessment of the steps needed to successfully implement a "modernized" Agreement, and observations about the existing Agreement (see Attachment 3).

The IJC is advocating an unambiguous "Accountability Framework" to improve implementation of the updated Agreement. This would require all partners to the Agreement to specify and take responsibility for their performance and regularly report on their progress toward achieving commitments.

An independent review of those progress reports, which should publicly recognize both achievements and shortcomings, is also recommended.

The IJC's Accountability Framework would involve the following steps:

#### Step 1: Develop a Rigorous Plan Agreed to by All Partners

- though the need for a rigorous plan was recognized in 1987 through an adopted protocol that required the parties to meet twice a year to coordinate work plans and evaluate progress, these meetings have not yet been held or acted upon; and
- develop a coordinated work plan that assigns specific responsibilities to particular departments and agencies in Federal, Provincial and State Governments, including municipal governments, and specifies the time frames in which these

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<sup>2</sup> A Guide to the Great Lakes Water Quality Agreement: Background for the 2006 Governmental Review, International Joint Commission, p. iv.

Subject: Review of the Great Lakes Water Quality Agreement-Update Report

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responsibilities would be performed, with appropriate measures to evaluate performance.

#### Step 2: Monitor and Assess

- accurate, comprehensive monitoring information is required to evaluate progress toward Agreement objectives and as the basis for reliable and useful reporting to inform and prioritize actions (e.g. integration of data management systems);
- use a binational entity to be fully charged with responsibility to gather information to be used to assess progress, including a more focused number of “indicators” of water quality, in the context of clear goals and milestones, so that monitoring can be adequately funded; and
- standardize methods of data collection in Canada and the United States to address long-standing roadblocks to progress.

#### Step 3: Report

- greatly improve progress reports on “indicators” that assess progress toward nine desired outcomes: fishability; swimmability; drinkability; healthy human populations; economic viability; biological community integrity and diversity; virtual elimination of inputs of persistent toxic substances; excess phosphorus; and physical integrity<sup>3</sup>.
- provide objective reporting of information useful to decision-making, and a credible, independent review procedure.

#### Step 4: Use Reports to Review and Adjust Plans

- to strengthen accountability, conduct an independent review to provide feedback on program performance, highlight achievements and suggest corrective actions;
- encourage direct public engagement in all review activities to empower citizens to monitor and, in informed ways, comment on the Governments’ performance.

Based on its case for accelerated progress to protect the Great Lakes, the IJC is recommending that a draft Accountability Framework, crucial to successful implementation of the Agreement, be released to the public for review in June 2008, regardless of whether the Federal Governments have completed the Agreement Review at that time.

In turn, the IJC will strike a Task Force to assist in consultation with the Federal Governments on the Accountability Framework, and convening a “Great Lakes Accountability Summit” in 2008.

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<sup>3</sup>

See [Indicators to Evaluate Progress under the Great Lakes Water Quality Agreement](http://www.ijc.org/php/publications/html/ietf.html), International Joint Commission, 1996 at [www.ijc.org/php/publications/html/ietf.html](http://www.ijc.org/php/publications/html/ietf.html)

Subject: Review of the Great Lakes Water Quality Agreement-Update Report

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## **Discussion:**

The following discussion is focused on certain key issues to Ajax.

### Support for the IJC's Recommendations

Firstly, it is recommended that the recommendations of the IJC, as set out in this report, be supported, as they present basic, reasonable solutions. They would establish a clear role for municipalities to assist in the implementation of the Agreement, presumably supported by the necessary funding.

### Obvious Decline in Water Quality

Along the north shore of Lake Ontario at Ajax, there has been a noticeable decline in water quality in the past decades. There is also concern that this degradation may be significantly affecting local aquatic habitat and possibly jeopardizing the quality of raw water being drawn into the municipal water supply plant.

Our beach is losing its "swimmability" Since the mid-1990's, there have been steady increases in the frequency of beach postings by the Region's Health Department. In 2005 and again in 2006, the Town's westerly beach was posted for the entire summer season due to bacterial levels in excess of Provincial standards. From the outset of the 2007 summer season, this beach is again posted, and is expected to remain so for the remainder of the summer (early June to late August). The Town is expending resources continuing again this year to explore the reasons for these unacceptable conditions.

Our publicly-owned waterfront is losing its "physical environmental integrity" and "economic viability" as it is increasingly coated with decaying algae (Cladophora) during summer months. This creates slick, unsafe walking and undesirable wading conditions and generates strong odours. This is detracting from full recreational use of Ajax's waterfront park and the recently completed Waterfront Trail, and undermining Ajax's long-term investment in this community asset.

It is recommended that a comprehensive study of Lake Ontario conditions in the vicinity of Ajax be conducted to determine the sources of existing water quality problems and recommend effective solutions.

### Less Obvious Changes

The Duffin Creek Water Pollution Control plant is situated immediately to the west of the Town of Ajax. It is one of the largest in Canada, providing primary and secondary treatment for wastewater. This plant will service existing and future development primarily in York Region over the next 30 years and beyond. It releases treated effluent within one kilometre of the shore in shallow waters through a diffuser/outfall feature for dilution.

The Province recently approved a doubling of the plant's current capacity, based on the premise that Lake Ontario will continue to function as the receiving body without causing adverse environmental impacts. No tertiary treatment has been integrated into the expanded plant.

Escalating volumes of effluent from the plant remain a concern to the Town, as a separate environmental assessment process is required to address the limitations posed by the existing capacity of the outfall/diffuser facility. The Town also continues to be concerned about the many

Subject: Review of the Great Lakes Water Quality Agreement-Update Report

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other substances contained in the treated wastewater from residential, commercial and industrial sources.

Secondly, it is recommended that Federal Governments take a more precautionary approach to protecting Great Lakes waters in the “modernization” of the Agreement by focusing on addressing the well-documented threats to drinking water quality posted by sewage treatment plants by utilizing available and emerging research findings to establish more rigorous federal environmental assessment processes, higher (more protective) environmental standards, and the best possible treatment technologies for both municipal sewage treatment plants, including tertiary treatment, and water supply plants.

The man-made sewershed being served by this sewage treatment plant is very extensive, having been expanding incrementally for decades, and now diverts wastewater from development within the Lake Huron Basin through the Oak Ridges Moraine via the Big Pipe - for discharge and dilution in the Lake Ontario Basin. The Town of Ajax is located near the Big Pipe’s outfall.

From a Great Lakes perspective, this should be an issue, as exporting wastewater might protect one Basin at the expense of another. Individual Regions and municipalities should not be transferring their wastewater impacts on to other jurisdictions, but should arrive at their own solutions based on motivation to minimize local impacts.

Therefore, it is recommended that the Agreement be revised to prevent any further increases in the inter-basin transfer of wastewaters into the Lake Ontario Basin, particularly in the absence of much higher treatment technologies at the nearby sewage treatment plant and water supply plant, as a key step in protecting water quality.

#### Threats and Cumulative Environmental Effects

In 2001, Environment Canada published a scientific assessment<sup>4</sup> identifying a large number of threats and emerging issues to sources of drinking water and aquatic habitat, including municipal wastewater effluent, endocrine disrupting substances, algal toxins, nutrients, waterborne pathogens, pesticides, persistent organic pollutants and mercury, and urban runoff.

The report indicated that, since the early 1990s, sewage treatment has been needed to prevent adverse environmental impacts where municipal sewage treatment plant effluents are discharged. With continued urbanization, public expectations are increasing the demand for municipalities to provide greater levels of treatment for wastes, on the basis that improved receiving water quality will benefit human and environmental health. In order to protect the interests and health of Ajax residents, the Town is also seeking greater levels of treatment and believes revisions to the Agreement could lead to action on this matter locally sooner rather than later.

According to Environment Canada, new issues related to the negative effects of municipal wastes continue to become apparent as environmental science advances, and tools and technologies develop. New technologies are becoming available but can be more expensive than traditional ones. New chemicals and combinations thereof need to be assessed by Environment Canada and the US EPA as they emerge, and high environmental standards need to be set in the near term and

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<sup>4</sup> Threats to Sources of Drinking Water and Aquatic Ecosystem Health in Canada, National Water Research Institute, Burlington, Ontario, NWRI Scientific Report Series No. 1, 2001.

Subject: Review of the Great Lakes Water Quality Agreement-Update Report

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stringently enforced, particularly with respect to municipal sewage treatment and water supply plants.

The Environment Canada report also indicates that the toxicity of municipal effluents depends on many factors, including the size and characteristics of the sewershed. The report indicates that the acute toxicity of such effluent is due to un-ionized ammonia or, where chlorination is used, to total residual chlorine, and that despite considerable investment in treatment systems, acute and chronic toxicity remain a concern in many sites receiving municipal effluents.

The Town also has serious concerns about the cumulative environmental effects of these features on water quality and ecological conditions in the vicinity of Ajax. These concerns are compounded by the lack of sufficiently cohesive scientific background data about existing Lake Ontario water quality, local coastal conditions and currents, correlated with weather conditions, despite years of monitoring by senior governments.

In our opinion, the chemical, physical and biological integrity of the ecosystem in Lake Ontario in the vicinity has been substantially degraded in recent decades, particularly in the vicinity of Ajax. This degradation is contrary to the objectives of the Agreement.

#### Need for Modernized Agreement

Staff's research into the scientific and technical information available on water quality revealed that, in Canada and the United States, many governments and agencies are involved in various aspects of Great Lakes water quality. Monitoring and reporting requirements vary between jurisdictions, as do environmental standards. There is great need for consistent, top-down direction from senior governments to ensure that the data, analyses and findings are assimilated and objectively assessed in order to gain a well-informed perspective on Great Lakes water quality.

It is important that a comprehensive study be conducted of Ajax's stretch of the north shore, in the context of Lake Ontario conditions in the short-term. As well, the cumulative impacts of local features in the vicinity of the Ajax shoreline, and their proportionate contributions to declining local water quality, need to be evaluated so that sources of declining water quality can be identified and effectively addressed. The availability of sufficient, consistent funding will be critical in order to implement capital improvements to existing infrastructure on a sustainable basis to gradually improve water quality. If this remains a local funding matter, little progress will be made.

#### Remove Uncertainty and Address Concerns

The draft Agreement Review Report indicates that there is uncertainty as to whether the Federal Governments will actually act to revise the Agreement despite the time and resources expended in arriving at the Review's findings, based on genuine public concerns, and its recommendations. There should be no doubt. The freshwater resources of our shared Great Lakes are finite and irreplaceable.

Therefore, it is imperative that the Federal Governments take decisive, expedited action to modernize this critical binational Agreement by focusing its objectives, expanding and continuously updating the list of emerging threats and chemicals of concern to be addressed, examining cumulative impacts, very clearly identifying roles and responsibilities, setting firm timelines, and requiring regular monitoring and reporting to measure the progress made toward the Agreement's

Subject: Review of the Great Lakes Water Quality Agreement-Update Report

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objectives - to municipalities and the public - in an open, accountable manner as recommended by the IJC.

#### Strong Accountability Framework

It is reasonable to expect that expeditious adoption of an Accountability Framework by Canada and the United States, as recommended by the IJC for as early as 2008, would be a major step in the right direction. However, such action must be combined with Federal commitments to sufficient, long-term financing in order to achieve the Agreement's objectives.

#### Ajax's Actions

The Town of Ajax adopted a Corporate Strategic Plan for 2007 to 2010 that places high priority on environmental awareness, which reflects the intent of Council, staff and Ajax residents.

Ajax is taking many actions locally on its own, and in conjunction with others, to study Lake Ontario water quality and surface water inputs from our urbanized area with a view to pinpointing contaminant sources and implementing cost effective controls to curtail releases to the Lake. Ajax has also reduced the use of pesticides on municipally-owned lands to reduce nutrient inputs and will be implementing a pollution prevention program for small and medium-sized businesses this year.

In May 2007, Ajax Council recommended to Environment Canada and the Ontario Ministry of the Environment that the renewal of the related Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem for the 2007 to 2010 period and its successors focus on:

- i) providing stable, long-term financing to municipalities to facilitate timely and effective implementation of higher environmental standards and the best possible treatment technologies in water supply plants and sewage treatment plants;
- ii) educating the public about the environmental impacts of their actions and the importance of protecting our shared water resources through pollution prevention programs; and
- iii) preventing further inter-basin transfers of water in order to sustain the integrity of the Great Lakes watersheds.

In early June 2007, Council also supported the Great Lakes and St. Lawrence Cities Initiative's "Water Conservation Framework" and directed staff to prepare a Water Conservation Program in 2008 to work toward a 15% reduction in total water usage by facilities owned and operated by the Town by 2015.

The Town is most willing to do its part to protect and enhance Lake Ontario water quality, supported by adequate funding from senior governments and the actions of the other parties to this Agreement.

#### **Financial Implications:**

None.

#### **Communication Issues:**

None.

Subject: Review of the Great Lakes Water Quality Agreement-Update Report

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**Conclusions:**

With the 100<sup>th</sup> anniversary of the original Boundary Waters Treaty approaching, it is time for the Federal Governments to act to better protect and improve the quality of Great Lakes waters in the future - by deciding to update the Agreement now, based on the findings of the Draft Review Report and the comments and recommendations of this staff report, and by moving forward with aggressive implementation.

From a local perspective, the Agreement needs to be re-balanced to rest on all three of its pillars - chemical, physical and biological integrity - to be most effective. It needs to be implemented in a sustainable, consistent manner, with the support of reliable long-term funding, to begin to achieve measurable results much sooner rather than later.

Expedited modernization of the Great Lakes Water Quality Agreement and its effective implementation are critically important to the protection of our precious, shared Great Lakes waters from the escalating threats posed by continued population growth and development.

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Barbara Hodgins - Senior Policy Planner

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Gary Muller - Manager of Planning

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Paul Allore - Director of Planning & Development Services

## Attachment 1

### Brief Summary of Main Themes from Public Comments

Strong support for all levels of government to reinvigorate their efforts to implement the GLWQA

Demand good quality water as it is essential to ensure a healthy future for the Lakes and the socio-economic well-being of the Great Lakes Basin's residents and their communities

Reinvigorate the GLWQA by including actions to address:

- the many concerns about releases of municipal sewage and animal wastes;
- the issues of water quantity and climate change;
- aquatic invasive species;
- a variety of land use and watershed management issues, especially the protection of wetlands;
- the need for progress on delisting and restoring beneficial uses in Areas of Concern, as well as the need to reinvigorate Remedial Action Plans;
- inclusion of the St. Lawrence River (downstream of the international boundary at Cornwall, Ontario and Massena, New York);
- increased public education programs to build support for Great Lakes restoration; and
- a stronger role for the IJC to hold Governments accountable for achieving their commitments, to educate the public about the GLWQA and to facilitate public input during the review of the GLWQA.



## Attachment 2

### Synthesis of Key Findings, Results and Recommendations from the Draft Report to the Great Lakes Binational Executive Committee on the Review of the Great Lakes Water Quality Agreement (April 2007)

#### Theme 1: The Purpose and Scope of the Agreement

1. The Agreement should serve as the “North Star” for the protection and restoration of the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem, providing a clear, high-level vision that will function as a guide for concerted action.
2. The purpose of the Agreement - to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem - remains sound and relevant and should be fully translated into the Articles and Annexes of the Agreement.
3. The ecological and geographic scope of the Agreement should be clarified to reflect the critical link between chemical, physical and biological integrity and the health of the Great Lakes Basin Ecosystem.
4. In clarifying the ecological and geographic scope of the Agreement, groundwater, to the extent that it affects the purpose of the Agreement, should be further considered.
5. Consideration should be given to promoting and expanding opportunities for greater collaboration with other governments whose territory is not covered by the Agreement, building, for instance on the progress to conserve, protect and enhance the St. Lawrence River Ecosystem under the Canada-Quebec Agreement on the St. Lawrence.

#### Theme 2: Outdated Agreement Elements

1. The Agreement Articles should be written in such a way to retain their effectiveness long into the future.
2. The Agreement Annexes should evolve to effect the purpose of the Agreement and reflect current conditions and challenges.
3. The Agreement Annexes should be streamlined, integrated and reduced in number so that they work more effectively with each other and the Articles.
4. The Agreement Annexes should be cross-referenced and their interrelationships clearly identified within each Annex so that implementation can be more effective.
5. The Agreement should include a process for identifying and implementing new binational approaches for addressing issues.
6. The Agreement should highlight, emphasize and facilitate watershed planning as an effective approach to achieving the purpose of the Agreement.
7. The significance of international sources of pollutants to the Great Lakes Basin Ecosystem should be emphasized in the Agreement.

### **Theme 3: Pressing Issues and Emerging Threats**

1. Consideration should be given to developing new Annexes to address pressing issues, or incorporating them specifically into the Agreement, as appropriate. The Agreement should include a streamlined process to address pressing issues that currently exist including the impacts of urbanization, climate change, and aquatic invasive species.
2. The Agreement should include a streamlined process for identifying and addressing emerging threats that may impact the Great Lakes in the future, on a more timely basis.

### **Theme 4: Agreement Accountability and Implementation**

1. The Agreement's governance structure is critical to its success and should be carefully considered and addressed as the Parties move forward.
2. The Parties should consider how the Agreement interacts with outside entities, and international or intergovernmental agreements.
3. The Annexes should include specific results and timelines to achieve the purpose and goals in the Agreement; and the Parties should clearly designate responsible entities.
4. The Agreement should include provisions for regular Annex-by-Annex review and reporting on progress, noting that there are some existing reporting mechanisms: a standard, streamlined reporting framework should apply across the Annexes; the Agreement Annexes should be reviewed individually and updated according to a schedule to be determined.

### **Theme 5: Including Other Orders of Government and the Public**

1. The Agreement should recognize the critical role and essential participation of other orders of government, including (1) Tribes and First Nations, (2) states and province, (3) local governments and authorities. These entities should be included in the revision and implementation of the Agreement.
2. The Agreement should recognize the critical role and essential participation of the public in the successful implementation of the Agreement by the Parties and other order of government. The public should be consulted in any revision of the Agreement.
3. The Agreement should recognize the importance of accessible information for decision making to foster greater involvement of other orders of government, non-government organizations and the public.

### Attachment 3

#### **Observations about the Current Great Lakes Water Quality Agreement Identified in the International Joint Commission's 13<sup>th</sup> Biennial Report (December 2006)**

1. The objectives are indefinite, outdated and often go unmet within specific timelines.
2. It has few limits and thresholds or schedules for action and is based on reporting requirements rather than performance requirements.
3. It generally refers to the federal Governments, working with provincial and state governments, as "parties" but does not assign specific roles to particular departments or agencies, nor does it specify roles for municipal governments or commit the parties to making best efforts to achieve objectives.
4. It does not effectively confront ongoing, persistent inputs of toxic substances from contaminated sediment, air and other sources, continuing polluting runoff from farmlands and urban surfaces, and inadequate capability to collect and treat sewage to improve water quality.
5. It does not address significant persistent challenges, and new ones are emerging that need to be addressed (e.g. beach closures are on the rise, all Lakes have advisories limiting fish consumption and very few Areas of Concern targeted for remediation have been delisted).
6. Efforts to improve the Lakes are being complicated by increasing numbers of alien invasive species and emerging issues, such as new chemicals and personal care products, urban sprawl, shoreline development, global transport of airborne pollution, and climate change.
7. Insufficient funding remains a core issue, due to significant gaps between funds required and those appropriated to clean up contaminated sediment and improve wastewater treatment systems.
8. Lack of meaningful, more substantive reports providing information useful to decision-makers and a credible, independent review procedure to assess progress toward achieving stated objectives.

**Comment Number: 40**

**Name: Hansen, Jim**

**Affiliation: The Wallaceburg Advisory Team for a Cleaner Habitat (WATCH)**

Wallaceburg Advisory Team for a Cleaner Habitat  
1809 Dufferin Avenue  
Wallaceburg ON N8A 2X6

July 11, 2007

Sridhar Marisetti  
Interagency Program Coordinator  
Great Lakes Environment Office  
Environment Canada, Ontario Region  
4905 Dufferin Street  
Toronto, Ontario M3H 5T4

Dear Sridhar Marisetti:

The Wallaceburg Advisory Team for a Cleaner Habitat (WATCH) wished to submit comments to the Great Lakes Bi-national Executive Committee (BEC) regarding the draft review of the Great Lakes Water Quality Agreement (GLWQA).

WATCH is a not-for-profit Environmental Non Government Organization (ENGO) located in Wallaceburg, Ontario. Our community's primary source of drinking water is the Chenal Ecarte, a channel of the St. Clair River.

Our ENGO desires an annex to the GLWQA that standardizes an enhanced bi-national real-time river quality monitoring (RTRQM) in the St. Clair – Detroit River corridor.

We appreciate this opportunity to submit our public comments to the Agreement Review Committee (ARC) on this important matter

Yours very truly,

Jim Hasson  
Director, research and policy  
WATCH  
(519) 627-1623

## **1.0 St. Clair River Area of Concern (AOC)**

In an effort to clean up the most polluted areas in the Great Lakes, the United States and Canada, in Annex 2 of the Great Lakes Water Quality Agreement, committed to cooperate with State and Provincial Governments to ensure that Remedial Action Plans (RAPs) were developed and implemented for all designated Areas of Concern (AOC) in the Great Lakes basin.

The St. Clair River Bi-national Public Advisor Council (BPAC) was formed in 1988 and elimination of spills to the river from "Chemical Valley" downstream of Sarnia, Ontario, and ensuring proper notification when spills occur was identified as a priority.

## **2.0 A recent history of St. Clair River spills**

**2.1** On August 14, 2003 two unreported spills of Vinyl Chloride Monomer (VCM), a class "A" carcinogen began that went unreported to authorities for six days.

On August 20, 2003, the Medical Officer of Health for Chatham-Kent issued a drinking water advisory for consumers of the Wallaceburg municipal water supply advised water advisory recommending that water not be used for drinking, food preparation, dishwashing, brushing of teeth and washing of fruits and vegetables.

**2.2** On February 1, 2004, less than six months later, 150,000 litres of ketones spilled into the St. Clair River. Once again closure of water intakes at Wallaceburg and Walpole Island was initiated, as well as at multiple U.S. water intake plants located along the St. Clair River.

**2.3** Many more industrial spills were reported over the next three years

## **3.0 Ontario Ministry of the Environment responds**

Following the second major St. Clair River spill that resulted in closures of Canadian, U.S. and First Nations water intakes, then Ontario Environment Minister Leona Dombrowsky made three significant moves.

**3.1** Thirty-two provincial officers from the environmental SWAT (Soil, Water and Air Team) were dispatched to Chemical Valley for a year long detailed inspection of 35 industrial facilities. 34 Provincial Officer Orders were issued to resolved 260 incidents of non-compliance.

**3.2** An Industrial Pollution Action Team (IPAT) was formed. On August 9, 2004 they released their report containing 35 recommendations including real-time monitoring of the St. Clair River.

**3.3** The Environmental Enforcement Statute Law Amendment Act (EESLAA) received Royal Assent on June 13, 2005. The Ontario Water Resource Act (OWRA) and

Environmental Protection Act (EPA) were strengthened and provisions made for Environmental Penalties (EPs) as well as spill prevention and contingency plans.

#### **4.0 Actions taken in U.S.**

In response to major spills, primarily from Canadian industrial sources, the U.S. undertook implementing a real-time river quality monitoring program along the St. Clair – Detroit River corridor.

The network should be operational this summer and includes spill detection monitoring equipment at water intakes including multi-parameter probes, total organic carbon analyzers, fluorimeters, mass spectrometers as well as communication and data management systems.

#### **5.0 International Joint Commission (IJC)**

5.1 On September 13, 2004 the International Joint Commission (IJC) released its 12<sup>th</sup> Biennial report on Great Lakes Water Quality. The IJC expressed serious concern St. Clair River spills.

5.2 On October 10, 2006 the IJC release Report on spills in the Great Lakes Basin with a special focus on the St. Clair – Detroit River corridor. The IJC made six recommendations including better monitoring, accurate detections and speedy notification as requirements to reduce harmful him and ecosystem impacts.

#### **6.0 Current monitoring with GLWQA**

The existing GLWQA includes provision for surveillance and monitoring actives for reason including:

- (a) Compliance. To assess the degree to which jurisdictional control requirements are being met.
- (b) Achievement of general and specific objectives.
- (c) Evaluation of water quality trends.
- (d) Identification of emerging problems.
- (e) Annex 2 programs (RAPs)

#### **7.0 WATCH recommendations**

WATCH recommends enhancing the GLWQA with an annex that standardizes an enhanced bi-national real-time river quality monitoring (RTRQM) in the St. Clair – Detroit River corridor. Further, to develop bi-national synergies in retrieving and disseminating data.

WATCH recommends adding vinyl chloride monomer (VCM) to “Appendix 2 – Potential hazardous polluting substances” and recommended inclusion of this Class “A” carcinogen on RTRQM substance list



July 13, 2007

Sridhar Marisetti  
Interagency Program Coordinator  
Great Lakes Environment Office  
Environment Canada, Ontario Region  
4905 Dufferin Street  
Toronto, Ontario M3H 5T4

Mark Elster  
Senior Program Analyst  
USEPA  
Great Lakes National Program Office  
77 W. Jackson Blvd. (G-17J)  
Chicago, IL 60604

Dear Messrs. Marisetti and Elster:

The following comments are submitted on behalf of the members of the Wisconsin Paper Council regarding the Agreement Review Committee draft report to the Great Lakes Binational Executive Committee entitled Review of the Canada – U.S. Great Lakes Water Quality Agreement, April 2007. The Paper Council is the trade association for the pulp and paper industry in Wisconsin. Wisconsin is the leading papermaking state in the nation. Several of our members are located in the Great Lakes basin and are directly impacted by the provisions of the Water Quality Agreement.

The Wisconsin Paper Council supports the comments submitted by the Council of Great Lakes Industries (CGLI). We would like to emphasize the following points made by CGLI in their comments:

- The report should mention that the pursuit of the “ecosystem approach” should be advanced through a risk-based analysis.
- Missing from the summary document is mention of the discussions about the need for balancing resources outlined in the Agreement with resources required by out-of-basin regions also under the care of each of the parties. The fact that resources are finite and need to be prioritized should be included.



*Sridhar Marisetti, Great Lakes Environment Office  
Mark Elster, Great Lakes National Program Office  
July 13, 2007  
Page 2*

- The report should mention the suggestions made to broaden the Agreement scope to advance the principles of sustainable development within the Region.
- The report should include language noting that the Agreement does not acknowledge that programs put in place by the Parties to address Agreement objectives can provide legitimate means for reporting and consultation.
- The limitations on just what the Agreement can do to drive and police Party actions within the Basin needs to be a part of report discussions.

Please contact me with any questions regarding these comments.

Sincerely,



Edward J. Wilusz  
Vice President, Government Relations

rg

**Comment Number:** 42  
**Name:** Drag, Nate  
**Affiliation:** N/A

**GLWQA Review**  
**Comment #40**  
**Nate Drag**

Dear Mr. Elster,

The opportunity for citizens to comment on the draft summary document by the Canadian and U.S. Governments on the review they conducted during 2006 on the Great Lakes Water Quality Agreement is a crucial step in the process towards a new and reinvigorated Agreement. While the GLWQA has been successful on certain levels, there is much room for improvement. The following letter is a brief list of my comments on the upcoming revision/renegotiation of the Agreement. Several of my thoughts and recommendations will echo those of various Great Lakes Basin organizations such as Great Lakes United, the Great Lakes and St Lawrence Cities Initiative, and the International Joint Commission while other recommendations will be more unique.

Initially, I believe one of the most important changes in a updated, efficient agreement is including all of the levels of government that are effected by the implementation of the Agreement. While the nature of international relations rests in the realm of federal governments, the consequences of these agreements effect every governing body below them. In the case of the GLWQA, as with many other international agreements, the federal governments have made commitments that the state, provincial, and local governments will have to enforce. Additionally, the vagueness of responsibility of implementation and funding of programs in the GLWQA magnifies this problem. The negotiation of a new agreement should place the representatives from states, provinces, and localities at the table with their respective federal representatives to provide approval of the negotiations. What good does an annex describing the process of drafting and implementing a Remedial Action Plans for an area like the Buffalo River do if the groups (New York State Department of Environmental Conservation, local elected officials, etc.) are not there to pass on their experience and knowledge of local level feasibility?

Furthermore, including individuals beyond the government level is also important to a new agreement. Individual citizens and nongovernmental environmental organizations play a vital role in the Great Lakes Environmental Community. On the Buffalo River, for example, the Buffalo Niagara Riverkeeper has been placed in charge of implementing the RAP. Volunteers of such organizations can also be vital in collecting and reporting data. Private monitoring of the effects of combined sewer systems and sewage discharge could fill the void left by poorly funded government agencies.

Another issue that needs to be addressed from a governmental and citizen level is the role of First Nations, Metis, and Tribes in the United States and Canada. As separate and sovereign nations, Great Lakes United has recommended that the should have "participation as IJC Commissioners and membership on all IJC Boards" (GLU, 7/11/07). The inclusion of the Tribes, First Nations,

and Metis on this level would help bring more balance and a broader perspective to the increasingly political and bilateral activities of the Great Lakes environmental community.

It is this increasingly level of political favors and nationalistic actions that also warrant some attention in a new agreement. Since the 1980's appointments of International Joint Commissioners have become dependent solely on the current administration in charge of a country. While the individuals appointed are no doubt qualified, the dismissal of an entire commission at one time leaves a void of institutional memory that can cause set backs in progress. At the same time, I am not advocating life time appointments. However, a rolling appointment schedule, allowing only one commission replaced every two years for example, may better serve the goals of the GLWQA. Also due to the Bush Administrations attempts to fire Commissioner Dennis Shornack this week, perhaps Senate approval will be necessary for appointments. I realize that this issue is not addressed in the GLWQA and the Boundary Waters Treaty of 1909 should not be opened up for amendment. This should be addressed in federal legislation.

There are, however, issues that can be addressed in a new GLWQA. Aquatic invasive species, climate change, cage aqua culture, off shore wind power facilities, and non persistent but continually available chemicals are examples of new issues that need to be tied into the Annex sections of the Agreement. With these additions, however, need to come specific directions on the responsible entities and funding sources. That stipulation should apply to current annexes as well.

Finally, as of the 1978, the GLWQA has aimed for a more holistic, ecosystem wide approach. At the same time, there has been (or should be) a continually shift to the precautionary principle and reverse onus. On that level, I think a possible addition to the GLWQA could be the protection and conservation of vital ecosystems that preserve water quality. Through the use of such mechanisms as conservation easements that state environmental agencies would hold in trust, crucial areas could be preserved before they are threatened or become Areas of Concerns. The Nature Conservancy has identified hundreds of such sites in the Great Lakes Basin. These 'Areas of Preservation' would complete the full spectrum of an ecosystem approach to ensuring the restoration and maintenance of the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem.

Thank you for the opportunity to express my comments and concerns on the Great Lakes Water Quality Agreement. While I am in no way an expert on every issue of the Great Lakes and the policies that manage them, I appreciate your concern in my opinion.

Sincerely,

Nate Drag  
129 College St, Apt 3  
Buffalo, New York 14201

**Comment Number:** 43  
**Name:** Elphick, Len  
**Affiliation:** N/A

General Comments:

Please do a better job of protecting the associated watersheds. The agreement should be equitable and demand the same high standards from both countries. Also, because the Great Lakes are a nonrenewable water resource they should be protected from commercial harvesting for bottled water (a scourge on the Earth as it is). We have a chance to use good science and a public desire for environmental improvement to protect an international treasure, thank you for your efforts.

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**Comment Number:** 44  
**Name:** Gilbertson, Michael  
**Affiliation:** N/A

General Comments:

I have read the document in detail and the drafters are to be complimented for the faithfulness in recording the discourse of the various workgroups. There does, however, seem to be an evident bias in preparing the executive summary which does not reflect the content of these various reports on which it is supposedly based. The examples I want to elaborate concern the discourse in the workgroups on the purpose of the Great Lakes Water Quality Agreement and the ambiguity of the meaning of the "ecosystem approach". On page 12, the debate is correctly described as "intense." A second concern is the relative absence of discourse on water quality in relation to human health.

Theme 1 Comments:

Ambiguity of the ecosystem approach and the purpose of the Great Lakes Water Quality Agreement

The words "ecosystem approach" appear 19 times in the document and therefore, in the minds of those charged with drafting the report, must have been an important organizing principle for the interpretation of the purpose of the Great Lakes Water Quality Agreement. Several of the workgroups, however, made special mention of the ambiguity of the concept. For example, on page 35, the second paragraph under the section of the Working Group C on RAPs and LaMPs asks "whether it is the intent that the Agreement/Annex 2 take an ecosystem approach or simply a water quality approach." It is evident here that the Work Group perceived the ecosystem approach as quite separate and distinct from the water quality approach: it evidently did not mean an ecosystem approach to water quality. It then asks "whether the Remedial Action Plans and Lakewide Management Plans are to be prepared and implemented in relation to Critical Pollutants using an ecosystem approach to the multi-media sources, pathways and distribution of this narrow group of contaminants, or are they for general ecosystem management and stewardship within the Great Lakes Basin."

Similarly, on page 44, the Work Group F on Research and Monitoring detailed the "significant discussions on the implications of expanding the focus and / or interpretation of the Agreement from water quality, with an ecosystem perspective, to a broader concept such as "ecosystem

integrity.”” The Work Group noted that it was important that the members of the Agreement Review Committee need to know these details about the differing interpretations because “broadening would distract attention and resources away from the Agreement’s core focus on water quality, weakening its effectiveness.”

The Special Issues Work Group, on page 50, advocated that the Agreement should address all ecosystem stressors within the Great Lakes basin while stating that “the term “ecosystem approach” is in need of clarity and guidance.” Similarly, the Report of the Workshop on Governance and Institutions noted (page 57) that “the design of the governance and institutional frameworks will be influenced by the agreed upon scope and purpose of the Agreement” indicating the lack of consensus on what the Agreement is about. There are several other instances, but these should suffice to demonstrate the ambiguity of the term “ecosystem approach” and of the purpose of the Great Lakes Water Quality Agreement.

Within the context of the purpose of the Agreement, it seems that there is a further ambiguity that arises as a result of the first ambiguity. Is the physical, chemical and biological integrity a cause or an effect? In other words, did the physical, chemical and biological integrity cause the loss of ecosystem integrity, or did the impairment of water quality cause the loss of physical, chemical and biological integrity. The choice between these alternatives determines all aspects of the Agreement including, for example, programs, priorities, funding, indicators, RAPs and LaMPs, and the composition of and relations with constituencies.

I then turn to page 3 to see what is written in the Executive Summary to reflect the ambiguity of the ecosystem approach. I think it is important to make sure that there is no appearance of bias in the Executive Summary in reporting what is contained in the report. There is no hint in the second and third paragraphs that there is any ambiguity or lack of consensus in the interpretation of the purpose of the Great Lakes Water Quality Agreement. The two paragraphs would seem to have a distinct bias advocating for the transformation of the purpose of the Agreement into a broad instrument for addressing, on a bilateral basis, a seemingly open-ended ecosystemic agenda. Hundreds of people patiently attended the meetings and participated on the conference calls and made their points of view respectfully through the designated processes. I feel that they are poorly served by this biased handling of the Executive Summary. This brings me to my second point concerning the absence of any representation by the human health authorities in either country.

### ***Human Health***

The legal basis for the Great Lakes Water Quality Agreement derives from Article IV of the Boundary Waters Treaty which states that the Parties agree not to pollute their side of the boundary waters to the injury of health and property on the other side. This phrase is contained in the preamble to the Agreement as the continuing basis for the concerns. In 1964, the Parties sent a reference to the International Joint Commission and asked whether there was injury to health and property from transboundary water pollution. The response from the IJC boards in 1969 was that there was injury and this advice was transmitted in 1970 in the report from the IJC to the Parties and was used as the basis for the negotiation of the 1972 Great Lakes Water Quality Agreement. The question, “Is there injury to health and property from transboundary water pollution” remains the central organizing principle for the Great Lakes Water Quality Agreement. There is, however, no hint of this in the ARC draft report.

For some inexplicable reason, the health authorities from both countries chose to remain silent

during the review process and their responsibilities under the Agreement are mute in the ARC report. During the past decade, the International Joint Commission has avoided, where possible, mentioning the evidence of injury to health. For example, in 1997 the Parties hosted the Great Lakes/ St Lawrence Conference on Human Health Effects at which the results of a decade of federal research funding of human health on Great Lakes communities was reported. The papers from the conference were published in 1999 in the journal, *Environmental Research*, but the IJC, in preparing its biennial report chose to omit all the new evidence. As then U.S. Co-Chairman Baldini told the irate staff member from the Agency for Toxic Substances and Disease Registry, "I guess it ended up on the cutting room floor."

In 2003, the IJC hosted a conference on An Ecosystem Approach to the Health Effects of Mercury in the Great Lakes. The papers from that conference were also published in *Environmental Research*, in 2004. One of the papers was authored by me and claimed that there were outbreaks of congenital Minamata disease in several Canadian Areas of Concern on the Canadian side of the Great Lakes. This has been omitted from two of the IJC Biennial reports published since then. I mentioned the evidence of congenital Minamata disease in three of the on-line conference calls, but there was no response or follow-up from other participants. In risk communication terms, it seems that there is a widespread pattern of attenuation of the risk message. It seems that this risk message attenuation extended to the review process and to the preparation of the ARC report.

There is an extensive literature on the effects of pollutants on human health in the Great Lakes basin. The epidemiological evidence demonstrates that large numbers of people are exposed, particularly from the consumption of contaminated fish from the Great Lakes. Infants of mothers who ate Great Lakes fish prior to or during pregnancy were smaller at birth, had smaller head circumference and in subsequent testing had measurable deficits in cognitive and behavioural development. There is evidence of effects on reproduction among people who consume Great Lakes fish. Even though the human health evidence was not part of the discourse in the review process, it would seem important that it should somehow be included in the report before the ARC document is forwarded to the Great Lakes Binational Executive Committee.

### ***Discussion and Conclusions***

It would seem that there are certain criteria that need to be established for the inclusion of an issue within the purview of the Great Lakes Water Quality Agreement and these derive from Article IV of the Boundary Waters Treaty. These criteria include:- that the issue must relate to water pollution; that it must have the potential for crossing the boundary; and that it must have the potential for causing injury to health and property on the other side. This is a minimalist interpretation of the Great Lakes Water Quality Agreement. With the continuing epidemiological evidence of effects on human health and the reluctance of both Parties to implement the 1978 Great Lakes Water Quality Agreement as amended by Protocol in 1987, I feel that the same recommendation should be put forward as in 1992 and 1999: The Parties should not fundamentally change the Agreement but should implement the existing one. To overcome the intrinsic ambiguity of the ecosystem approach and of the present statement of purpose, the following new wording is proposed for Article II of the Great Lakes Water Quality Agreement:-Pursuant to Article IV of the Boundary Waters Treaty, the purpose of the Parties in signing the Great Lakes Water Quality Agreement is to prevent injury to health and property from pollution of the boundary waters by restoring and maintaining the chemical, physical and biological integrity of the Great Lakes basin.

It would seem that there is a groundswell of opinion that there is a need for a bilateral institutional

mechanism for addressing the conservation of biological resources in the Great Lakes basin. There are several existing bilateral institutional mechanisms already existing, such as the Great Lakes Fishery Commission and the North American Waterfowl Management Plan. If there is an overwhelming need to improve the management and conservation of biological resources in the Great Lakes basin, the Parties might explore the possibilities of negotiating an omnibus agreement on ecosystem management, while maintaining the Great Lakes Water Quality Agreement with its present focus on injury to health and property from transboundary water pollution.

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**Comment Number:** 45

**Name:** Morris, Nathan

**Affiliation:** N/A

hi my name is nathan morris i am from ruby and often fish the st.clair river.  
i am e mailing you today to ask your group can help me get a large amount of pollution from domtar paper stopped. i have contacted the epa the dnr and the times herald but none of these groups have helped . the only group that i have been able to find that will help is the water keeper alliance, and i really need your groups help at a times the pollution is so bad that you can drag in pounds of it on fishing line, and that is only a few thousandths of an inch thick so you can imagine how bad it really is, also i have heard stories from local divers that areas just south can be completely buried in up too three or four inches of paper waste on days that they are discharging heavily. i really need your help.  
thanks.

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**Comment Number:** 46

**Name:** Visser, Mel

**Affiliation:** N/A

Theme 5:

### *A Global View of PCBs and "banned" Pesticides*

Regarding Great Lakes contamination with PCBs and “banned” pesticides such as toxaphene, chlordane, DDT and others, considerable scientific knowledge has been generated by the international community studying the Arctic Ocean. These persistent organic pollutants, POPs, have been found to transport through the air, spread around the globe, and move towards the poles according to their volatility. Alpha-hexachlorocyclohexane, an isomer of Lindane, is the most volatile POP and was found at 40X the concentration in the Arctic Ocean as in oceans near its use points. PCBs were found to spread across mid latitudes, from the Chesapeake to San Francisco Bays, and decrease towards the Arctic. Toxaphene and chlordane move towards colder waters.

By viewing history through the eyes of current knowledge, one realizes that the early transport of POPs was through the air ... not watersheds. The Great Lakes were vulnerable to U.S. uses outside their watershed and became highly contaminated.

In the early 1960s, the Green Revolution took place, transferring our agricultural technology to India and Pakistan to save hundreds of millions of people from certain starvation. Its success led to developing countries adopting high yield agriculture and POPs use rate eclipsed a hundred thousand tons per year.

By the time we banned POPs, 1970s and 80s, POPs levels in the Arctic were affecting wildlife and Inuit populations were ingesting more than 15X a tolerable daily intake of POPs from the portion of their diet obtained from the sea. International uses, now entering their fifth decade, have kept the Arctic supplied with POPs. POPs concentrations remain stable as global input matches global degradation and deposition in sinks. (See ATSDR Profiles for the environmental fate of individual POPs)

When we banned POPs, their concentration in air above the Great Lakes diminished and POPs vented from the waters like gas from an uncapped warm soda. Lake Michigan lost 70 % of its PCBs in a hurry and has now lost nearly 90%, but according to the EPA needs to lose another 90% or more. Its removal rate is slow while in Lake Superior, PCB levels have gone to 50% of their peak and have been stable for years. Lake Superior's toxaphene level has increased 50% from 1982, when it was banned, to 1992 and is now stagnant. During this time period, Lake Michigan's toxaphene decreased.

### ***Why?***

In looking at these data with today's knowledge, this behavior is not surprising. Continuing global usage is sending contaminated air around the hemisphere. This air will drop its contaminants into waters that are less contaminated than the air and remove contaminants from water that is more contaminated than air. Lakes Superior and Michigan were more contaminated with PCB than the global use would support, so they supplied the global air with PCBs. Lake Superior is now in global equilibrium with PCBs and Lake Michigan is approaching it.

Lake Michigan had adsorbed more than its share of toxaphene during ten years of heavy U.S. use, but Lake Superior, further north, colder and much larger, was not yet satisfied. When the ban reduced toxaphene's air concentration, Lake Michigan gave up its excess, but Lake Superior took more in from the air to come into global equilibrium.

### ***What does this mean for the Water Quality Agreement?***

Lake Superior: The efforts at declaring Lake Superior a "Zero Discharge" area are an exercise in futility. Lake Superior's POPs levels, as the POPs levels in the Arctic, are now controlled by global inputs and actions within the basin are incapable of changing them. The visibility of toxaphene in Lake Superior has been lessened by removal of it from State and Provincial "Fish Consumption Guidelines." This is unwarranted. If it is hidden, it will not be addressed and health will suffer. Lake Superior trout have 10X the hazardous waste limit of toxaphene!

Lower Lakes: Reaming and cleaning the Lakes of all their sediments, clean sweeps, Zero Discharge and Virtual Elimination will have little effect on POPs levels. Global uses will not allow Lake Michigan's PCB levels to go as low as Lake Superior's. Your estimates of 10-30 years of virtual elimination to remove harmful levels of POPs are unrealistic. The Stockholm Agreement of 2001 is



a voluntary agreement. There has been no progress in eliminating agricultural use of POPs pesticides or industrial use of PCBs in 6 years and there is none on the horizon.

Changes Needed:

- Telling the truth about toxaphene in Lake Superior.
- Face the fact that we've done all that can be done within the basin. (We can do more, but there will be no benefit to water quality.)
- Aggressively pursue a global ban of POPs through diplomatic carrot and stick efforts.
- Examine the benefit of Zero Discharge and Virtual Elimination efforts. (With the major impact of POPs coming from outside the basin, priorities need to be examined.).

Health researchers are implicating low levels of POPs in diseases such as asthma, diabetes and cancer. Every breath we take contains hundreds of millions of foreign sourced POPs molecules. It is time to do the hard work of negotiating a true global ban of PCBs and POPs pesticides in agriculture.

Thank you for the opportunity to provide input to the future of our Lakes.