

**Comments from Environmental Groups on
*Proposed U.S. Positions for Updates to the Agreement, February 4, 2011***

Thank you for the opportunity to comment on “potential” U.S. positions in the negotiations with Canada on the *Great Lakes Water Quality Agreement* in the document that you released to the Great Lakes U.S. Policy Committee.

We also were pleased to receive the update on the status of the negotiations and tentative timing. We look forward to being kept updated on a regular basis on the status of these negotiations.

Since the “tentative” U.S. positions in this document are presented at a very general level, it is impossible for us to know whether we agree or not with the proposals. Therefore, our comments here will be quite general in nature and will point towards issues that appear to be there and raise questions. For ease of reading, we have inserted our comments into your consultation document in bold and italics. By doing this, we felt that it would be easier for you to see what specifically in your proposals we are referring to.

You have already received detailed proposals for a revised GLWQA from ENGOs throughout the Great Lakes Basin on February 15 and July 9, 2010. The combined version of these submissions is available at www.glu.org/en/campaigns/healthy_waters/glwqa. We will not repeat those comments here, but we urge you to consider these proposals as you continue to develop the U.S. negotiating position.

We have a few overall comments on the U.S. position document:

1. The position document does not set goals and objectives. For the Agreement to be meaningful each part should include goals and objectives.
2. The positions are written in the passive voice. The Agreement needs to be written in the active voice clearly stating what actions will be taken and stating who is responsible for each action and giving timeframes for the actions. The Agreement should also include provisions for revising actions and timeframes to reflect increased scientific understanding and changing circumstances in the Great Lakes St. Lawrence River basin during the life of the Agreement.
3. The positions appear to be based overwhelmingly upon existing or planned programs that the U.S. government has. One of our main fears in this renegotiation of the GLWQA is that the governments will use their existing or planned programs as the basis for their commitments when there is no doubt that existing and planned government actions are not adequate to address the problems in the Great Lakes basin. If the Agreement is to contribute to the long-term health of the Great Lakes-St. Lawrence River basin and its inhabitants, the parties should commit to develop necessary programs regardless of whether they currently exist or are planned.
4. The proposals here for public involvement are minimal. We urge you to place provisions in the Agreement that greatly deepen public involvement in GLWQA activities and decision-making and implementation.

We are pleased with the consultation opportunities that you have provided thus far, but this will be insufficient unless the public has the opportunity to review a draft Agreement. It is only when we see specific wording for a new Agreement that we can know whether the proposed changes are adequate.

Therefore, in addition to the consultation that you have promised to conduct before the language of a new agreement is drafted, we urge you to carry out the following:

- Release a draft GLWQA to the public for comment before finalizing it; and
- Hold two public meetings for each of the Great Lakes to make input on the draft agreement – one on the Canadian and one on the U.S. side of lakes Superior, Huron, Erie, and Ontario, and one on the eastern side and one on the western side of Lake Michigan. In addition, a public meeting should be held in Montreal in both French and English.

We thank you for your consideration of our comments and recommendations and look forward to continuing to work with you on the renegotiation of the GLWQA.

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PROPOSED U.S. POSITIONS FOR UPDATES TO THE AGREEMENT

Note:

This document reflects proposed U.S. positions currently being considered by the U.S. federal government for use in negotiations with Canada to amend the Great Lakes Water Quality Agreement. The considerations described here have been informed by several recent steps of consultation with federal agencies, states, tribes, and environmental organizations.

The purpose of this document is to advance U.S. federal consultation with the Great Lakes U.S. Policy Committee (USPC) by providing an update of information since previous consultations. This document also provides USPC members an opportunity for additional input and a chance to indicate any concerns prior to negotiation of draft Agreement text with Canada.

February 4, 2011 version – draft for Domestic Consultation

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GOVERNANCE

The Great Lakes Water Quality Agreement as amended in 1987 (“the Agreement”) expresses the commitment of Canada and the United States to restore and maintain the chemical, physical and biological integrity of the Great Lakes basin ecosystem, and includes a number of objectives and guidelines to achieve these goals. Since 1987, many things have changed. Great Lakes programs and governance mechanisms have evolved. Advances in scientific understanding and a changing ecosystem have caused many of the previous objectives to become out-of-date. However, the Agreement continues to provide a meaningful context for coordinating binational efforts to restore the Great Lakes.

The following ideas are being considered for a U.S. position on Governance in negotiations with Canada:

- The current scope of the Agreement - i.e., a water quality agreement that embodies an ecosystem approach – would remain the same.

We agree. However, for an ecosystem approach you need to include all geographic areas of the ecosystem. Therefore, the entire St. Lawrence River should be included in the Agreement. The nearshore area and those areas that feed into the nearshore also need to be included.

- A formal vision for the Agreement is suggested which includes passing on benefits to future generations.

This is so vague that we have no idea what the intention is. How does the proposed vision align with the existing vision in the GLWQA?

- A set of guiding principles, such as Adaptive Management and (Pollution) Prevention, have been identified to guide approaches and actions.

What are the definitions being used for these? There are very different definitions for terms like adaptive management and pollution prevention; therefore, we may or may not agree with this proposal, depending upon which definition is used. We urge you to commit to learning and acting on what we learn as a central component of adaptive management.

- The Agreement would clarify and harmonize the purposes and operations of several existing management forums, including the Binational Executive Committee, Lakewide Management Plans and Remedial Action Plans, to ensure effectiveness and improve accountability.

The current operation and composition of BEC, LaMPS, and RAPs require renovation. We would like to see how such forums are to be adjusted to address specific tasks, outputs, outcomes, public involvement and accountability

- Accountability would be further strengthened by an enhanced focus on protecting and restoring the nearshore areas of the waters of the Great Lakes, which would address the area most used by humans and prevent transboundary impacts. The Parties would commit to develop and implement an approach for the assessment and management of environmental conditions in the nearshore zones.

With an “enhanced focus” on the nearshore, is there something that will be getting less focus than it does in the current agreement?

What is the U.S. definition of nearshore? If it does not extend to the full watershed, it is important that any “enhanced focus on protecting and restoring the nearshore areas of the waters of the Great Lakes” also reference the importance of working upstream in the watershed, the source of many stresses to the nearshore areas.

- It is proposed that the executive-level meeting of federal, state/provincial, tribe/First Nation agencies (i.e., the existing membership of the Binational Executive Committee) would continue to

meet on a 6-month cycle. This committee would be the principal binational management forum to coordinate binational action, assessment and reporting; to advise on priorities for science and action; and to conduct public consultations in relation to binational priorities.

We await a clear description of the role of the BEC and BEC's relationship with other bodies, including the International Joint Commission and its boards.

- A meeting of all organizations involved with the design and delivery of Agreement programs, including municipalities, would be invited to participate in meetings on an 18-month cycle.
- The Parties would include a commitment to review the operation and effectiveness of the Agreement every three years. Every three years, there would be a "summit meeting", which would include a state of the lakes assessment, report on implementation progress, and broader public engagement.

The previous three points in the U.S. proposals about the BEC and the timing raise alarm bells for us. It implies that public involvement will occur only every three years. This is unacceptable. The governments should provide opportunities for public engagement in all the work of the BEC, and at all stages of the BEC's activities. The Agreement should also specify how the IJC roles interact with the BEC activities.

- The Agreement would acknowledge that Great Lakes States, the Province of Ontario, and Great Lakes Tribes/First Nations would be engaged in implementing actions to achieve the objectives of the Agreement.

The Province of Quebec should also be included in this list.

- The Parties would commit – in consultation with the State and Provincial Governments – to develop Lake Ecosystem Objectives based on best available science and public consultation.
- The commitment to consult with State and Provincial Governments regional and local governments, Tribes, First nations and Métis, stakeholders and the public would also be extended to developing and implementing Lakewide Management Plans (LaMPs).
- LaMPs would be updated to address all environmental stressors adversely impacting the achievement of water quality-related ecosystem objectives, not just critical pollutants, for the lakes.

The updating should also include upstream and source water degradation issues.

- Recognition would be included that prevention of groundwater contamination is vital for the protection of the waters of the Great Lakes, and a commitment to cooperate and coordinate Great Lakes groundwater science would also be articulated. The Parties would commit to coordinate, in cooperation with State and Provincial Governments, existing programs to assess, protect and manage the quality of groundwater and understand and manage groundwater related stresses affecting the waters of the Great Lakes.

We are pleased to see the emphasis on groundwater contamination. However, the commitment in the second sentence to "commit to coordinate ... existing programs" is unacceptable. Existing programs are not adequate. The parties should commit to develop necessary programs regardless of whether they currently exist.

- The Agreement would also include a commitment to notify and consult on any planned or existing facility or activity which has the potential to significantly adversely impact upon the waters of the Great Lakes.

We are very pleased to see this addition to the GLWQA. We look forward to a list in the new Agreement of examples of types of such activities, including transportation of hazardous cargoes on the Great Lakes, construction of nuclear power plants or major industrial facilities on the shores of

the Great Lakes, pipelines below the Great Lakes, natural gas and oil drilling operations under the lakes, wind farms in the Great Lakes, fish farms in the Great Lakes, mines in the Great Lakes watershed, etc. It should be clear that the list is examples only.

The commitment made in the U.S. proposal is “to notify and consult” with the other party to the Agreement, i.e., the other federal government, on planned or existing facilities. It should be made clear that the consultation should also be with the public in both Canada and the U.S. The IJC should also be consulted on any such proposals.

International Joint Commission

We are alarmed to find no reference to the critically important role of the International Joint Commission in these proposals from the U.S. We also see no mention of the roles of the IJC’s Science Advisory Board, Water Quality Board, and Council of Great Lakes Research Managers or of the role of the Great Lakes Regional Office in Windsor.

Sources of Degradation added to the GLWQA

We are pleased to see that the U.S. government is proposing to add threats to the well-being of the Great Lakes that were not in earlier versions of the Agreement. We think that mining activities should also be added to the types of threats to the Great Lakes that the Agreement commits the governments to address. Mine exploration and new mining proposals are booming around Lake Superior, Northern Lake Huron and Northern Lake Michigan due to the record surge in metals prices. This means that mining is threatening to become an ever more substantial threat to the Great Lakes.

TOXIC SUBSTANCES

The Agreement contains several Annexes, including *Annex 10 (Hazardous Polluting Substances)*, *Annex 12 (Persistent Toxic Substances)*, and *Annex 15 (Airborne Toxic Substances)*, that address the issue of toxic substances.

The following potential updates would ensure a new Agreement better reflects Toxic Substances management given the evolution of domestic and binational programs and knowledge over the past two decades.

We are concerned here with the priority placed on updating to reflect “evolution of domestic and binational programs” and the placement of improved knowledge of the problems after that. The emphasis here, and throughout the Agreement, should be on our advances in scientific understanding and a commitment by the two federal governments to create new programs, if necessary, to address the problems in the Great Lakes.

At the core of the updating of this annex should be a commitment by the governments to work together on the upstream end, in requiring and promoting aggressive green chemistry and related programs to reduce the generation and release of problematic existing and new chemicals.

- A new Agreement would consolidate the many Toxic Substances provisions in the existing Agreement into a single annex, which would describe guiding principles and shared approaches to toxic chemical management (such as the recognition of the potential for significant harm to human health and the environment, the concept of virtual elimination, the need for preventative measures, use of best-available science and public engagement).
- A binational process for determining priority substances for action would be created.

The Agreement should state that the public will be consulted on this matter.

- Chemicals management would continue to be addressed principally through existing domestic initiatives.
- Oversight would be provided by a “Binational Chemicals Committee.”

We need more description of this body and its role before we can decide whether to support its creation. Members of the public should be included on this committee.

- A new Agreement would remove the out-of-date specific objectives related to toxic substances in Annex 1. In their place, the agreement would recognize the existence of jurisdictional water quality objectives/guidelines that have been developed since 1987. Each jurisdiction’s criterion would stand on its own merit and inter-jurisdictional consultation on an exceedance would be supported by lakewide and basinwide management forums.

We do not agree that Annex 1 and its specific objectives should be eliminated. Replacing this with recognition of existing objectives and guidelines in each jurisdiction defeats the purpose of Annex 1. Annex 1 should set scientifically-based objectives necessary for the health of the Great Lakes basin and all those humans and wildlife who live there. Existing objectives and guidelines that a jurisdiction has may not be strong enough and may not include all the substances of concern. These objectives should be updated as scientific understanding deepens. The current Agreement has provisions for updating the objectives [Annex 1, Supplement, sec 2] without having to reopen the Agreement for formal renegotiation. Therefore, we urge the governments to commit in the new Agreement to use this provision to keep the objectives up-to-date. At the least, the governments

should commit to review these objectives every three years. So as to not delay the completion and signing of the Agreement, we urge the governments to commit in the new Agreement to update this annex within a year from the signing of the Agreement and to update it thereafter at least every three years. The governments should also commit in the Agreement to ongoing binational, coordinated work on the development of priority chemicals lists, which can help form the basis for deciding items that need new specific objectives.

- Field programs would continue and be enhanced to provide early warning surveillance and address emerging chemicals of concern.

This Annex should contain commitments by the governments to the recommendations in a June 2009 report by the Canadian Environmental Law Association and Lowell Center for Sustainable Production, which was commissioned by the International Joint Commission to: (1) establish a Task Force on Chemicals of Emerging Concern; (2) Establish a Great Lakes rapid identification and screening process for chemicals of emerging concern; (3) Publish a Great Lakes List of Chemicals of Concern; and (4) Develop action plans for chemicals identified under the Great Lakes List of Chemicals of Concern to achieve the goals outlined under the GLWQA. See www.chemicalspolicy.org/downloads/IJC_FINAL92009.pdf

Radionuclides

The Agreement should specify that the same principles that apply to the use and management of other persistent toxic substances will also apply to long-lived radionuclides.

NUTRIENTS

The current Agreement contains several provisions to minimize eutrophication (excessive nutrients/algae) problems in the Great Lakes. Both narrative and quantitative targets are included for each of the Great Lakes, as well as the major Lake Huron embayments such as Saginaw Bay in the U.S. and the North Channel and Georgian Bay in Canada. In the last fifteen years, ecosystem changes such as the introduction of zebra and quagga mussels and land use changes have significantly altered nutrient inputs and nutrient cycling in all the Great Lakes except Lake Superior. The following updates to the Agreement would be responsive to the challenges the governments now face in managing nutrients and are currently under consideration for a U.S. position.

Increased 'industrial agriculture' or concentrated animal feeding operations where the liquid manure spread on fields is a nutrient source should be in the list of changes contributing to nutrient levels.

- In negotiating a new Agreement consideration would be given to developing, consolidating and updating provisions from Annex 3 - *Control of Phosphorus (including the 1983 Phosphorus Supplement)* and Annex 13 - *Pollution from Non-Point Sources* into a new annex on nutrient management.

While phosphorous has been the limiting nutrient in the Great Lakes, there is evidence that nitrogen is becoming an issue, especially when phosphorous levels are 'saturated.' A baseline for nitrogen also needs to be established. Nitrogen should be included as a nutrient of concern in this annex, and the annex should call for additional research to identify areas where it may be limiting.

- In recognition of the significant changes in the Great Lakes ecosystem, the new provisions would center on updating existing binational open water phosphorus concentration and loading objectives, and establishing new nearshore phosphorus loading objectives and concentrations, in each of the Great Lakes. Renewed commitments to undertaking the necessary actions to achieve these objectives and the establishment of associated ecosystem goals would also be included in the annex.

In addition to phosphorus concentrations in water and loading objectives, there should be phosphorous and nitrogen concentrations for sediments, including dredge materials and eroded materials.

The actions that will be undertaken to determine sources, their loadings contributions and actions to achieve the objectives should be specified.

- Research and surveillance are enhanced to improve our understanding of nutrient sources and their environmental impacts, including commitments to collect the necessary information to develop and support nutrient models as key tools in managing nutrients in the Great Lakes.
- Commitments to regularly review the adequacy of nutrient objectives and the effectiveness of management actions would also be new to the annex.

SHIP-SOURCE POLLUTION

At the time of the 1987 amendments, regulations for addressing pollution from the shipping sector by both Parties were Great Lakes-specific and the international regulatory process was still being developed. The evolution of ship-based pollution programs has been tracked through a biennial report submitted to the IJC by the Canadian and United States Coast Guards and other involved agencies. Nearly two decades after the signing of the 1987 amendments, the shipping sector is primarily regulated by a binationally compatible regulatory regime, which is typically consistent with International Treaties (Conventions). The U.S. and Canada recognize each other's inspection certifications; such reciprocity is unique for the Great Lakes trade. More stringent Great Lakes-specific regulatory requirements, in addition to the International requirements, are in place or are being considered. The following potential updates are factors for consideration in a U.S. position to capture the current programs and future efforts needed for the shipping and maritime activities.

- A new Agreement would consolidate the many annexes related to shipping into a single annex.
- This new annex would summarize the various binational regulatory requirements now relevant for the shipping sector, currently referenced in Annexes 4, 5 and 6.
- Elements of Annex 8 that continue to be relevant to ships, including "Oil Handling Facilities servicing Ships", would be covered in this new annex.
- This new annex would also capture the existing contingency planning programs for response to oil and hazardous substance discharges that have been established in the Great Lakes (Annex 9).

This annex in the GLWQA should commit to the development of sustainable shipping in the region, and ensure the protection of water quality on the precious freshwaters that the industry is privileged to ply.

The Shipping Annex of the GLWQA should recommit to improving monitoring and enforcement for the ship-board pollutants it currently addresses. It should also be expanded to require the two countries to better regulate the wide range of commercial shipping pollutants that have an impact on water quality such as air emissions, dry cargo sweeping, and invasive species introductions. The Annex should commit the two countries to decrease the need for dredging in the Great Lakes and should help the shipping industry adapt to climate change and lower water levels.

More details on the types of items that should be included in this annex on sustainable navigation are in the June 2009 document "A Better Seaway: Seven Principles to Guide Sustainable Shipping on the GreatLakes-St. Lawrence River": www.abetterseaway.com

SCIENCE

The current Agreement contains many provisions related to research, surveillance and monitoring. These programs provide the means to identify the current state of the lakes, water quality trends that need attention, and critical emerging issues. They also help to close information gaps, providing the knowledge base for informed program and policy decisions. The following potential updates would better reflect science programs and emerging information needs.

- A new Agreement would include several additions that highlight the importance of adaptive management and science coordination in Agreement programs.

We need to see the government's definition of adaptive management before we can say whether we agree with this proposal.

- While it is anticipated that much of the research and monitoring would be identified and addressed in other issue-specific annexes, the Science Annex would maintain an inventory of all science undertaken in support of the Agreement and address other science issues that are not included under other Annexes.

The purpose and scope of this annex need to be clearly identified, given that science presumably has a role to varying degrees in most aspects of the Agreement and will, therefore appear in other annexes as well. In the same manner, such an Annex should be considered in light of potential changes (dropping, consolidation, addition) to other annexes with strong science, research, and/or monitoring components.

The Annex should state who will be responsible for maintaining the inventory, and identifying a home for the inventory. The Annex should also commit the governments to provide adequate funds to maintain the inventory

- The Agreement would formally include the lake-specific research and monitoring effort currently called the "Cooperative Science and Monitoring Initiative" in the Agreement. This effort provides for an intensive year of study on each of the Great Lakes on a rotating 5-year cycle.
- The indicator-based "State of the Lakes Ecosystem Conference" effort would also be included to provide an update on the health of the Great Lakes ecosystem on a 3- year cycle.

We support having the Cooperative Science and Monitoring Initiative and the State of the Lakes Ecosystem Conference in the revised Agreement. However, the former is still in the development phase, and the latter effort does not adequately report on progress in meeting the purpose of the Agreement. SOLEC needs a considerable overhaul. Thus the Parties should also highlight the importance of improving coordinated science, monitoring, and indicator development and tracking efforts, and commit to providing adequate funding for these programs.

In developing this annex, the Parties should consider the major role that science can play in broader ecosystem restoration and protection. For example, two broad components include better understanding of the effects of human stresses on ecosystem structure and function (and implications of various management measures to decrease or remove the stresses), and increased understanding of approaches to reduce or eliminate the stresses themselves (e.g., reducing loads of problematic chemicals through research and development in green chemistry and engineering).

AQUATIC INVASIVE SPECIES

The current Agreement references invasive species in two places: Annex 6 and 17. Annex 6 includes the commitment to determine if fish or invertebrates found in ballast water discharges to the Great Lakes constitute a threat to the Great Lakes. This question was answered soon after the 1987 Agreement was signed when zebra mussels were established in Lake Erie in the late 1980s. This Invasive Species has drastically altered water quality, impacting the chemical, physical, and biological integrity of the Great Lakes and many others pose a similar threat. Annex 17 includes the commitment to determine the impact of invasive species on fish and wildlife populations and their habitats. The following possible updates to the Agreement are factors for consideration in developing a U.S. position to address invasive species.

- The Agreement would have a new Annex with commitments to protect the Great Lakes from invasive species.

We are pleased that the U.S. government is proposing an annex specific to aquatic invasive species. We are also pleased that it appears that the government has decided to include AIS as a result of ballast water in this annex instead of the ship-source pollution annex. We suggest that the ship-source pollution annex state that AIS specifically resulting from shipping are covered in the AIS annex.

The precautionary principle and zero discharge should be the basis for policy development in this annex. This Annex should set a goal of zero new invasions and challenge the two countries to meet this goal, just as the GLWQA has done historically with toxic pollution.

For intentional introductions via the importation pathway, the potential future invader is often a known species destined for a market. Under this scenario, policies that emphasize risk assessment and a risk-based management approach on individual species should be pursued.

- Programs would be included that deal with organisms in trade, canals and waterways, and spread by recreation and resource users.

Commercial shipping should be added to this list.

This annex should set specific goals and timelines to prevent the introduction and spread of Aquatic Invasive Species in the Great Lakes basin via each of the major pathways.

- Proactive risk assessments of species would help identify and prioritize prevention activities such as enhanced early detection and rapid response capabilities.
- Research on invasive species, including quantifying impacts to inform management options would be covered under this new Annex.
- A new subcommittee would also be established to help coordinate the implementation of these programs.

This subcommittee should include non-government members as well as representatives of government agencies.

HABITATS AND SPECIES

The current Agreement recognizes the restoration of habitats and species as an endpoint for water quality management. Over the past two decades, there has been a greater appreciation of the interactions between water quality and the broader physical and biological components of Great Lakes ecosystem. The following potential updates are under consideration for a U.S. position for an Agreement that would better reflect broader consideration of water quality programs.

- A new Agreement would have a new Annex on habitat and species, which would commit the governments to developing plans to address stressors to native species and their habitat, increasing scientific understanding to improve conservation and management, and taking collaborative actions to restore degraded habitats.
- Ecosystem considerations in the Lakewide Management Plans (Annex 2) would be strengthened.
- The importance of wetland preservation would be highlighted for the synergistic benefits for habitats, species and climate change.

The description of this annex misses the critical point for the GLWQA. Healthy habitat and biodiversity provide essential ecological functions that create clean water, through filtration, slowing surface runoff, plant transpiration, and also through capturing and storing water within soils, plants, etc., supporting life cycles and the hydrological cycle at the same time. Habitat protection (especially for headwaters, natural riparian areas and wetlands) and restoration of healthy habitat should be seen as a critical clean water protection strategy for the Agreement, not just an endpoint.

The Annex should be both proactive and precautionary.

CLIMATE CHANGE IMPACTS

The effects of climate change represent a considerable threat that may already be impacting, and would continue to impact the physical, chemical, and biological integrity of the waters of the Great Lakes. The two governments are pursuing agreements on greenhouse gas emissions through other international efforts. However, Canada and the United States are expecting to work together to quantify and understand impacts in the Great Lakes and incorporate climate change considerations into Agreement activities. The following updates are factors for consideration in developing a U.S. position on Climate Change Impacts.

- An amended Agreement would have a new Annex on Climate Change Impacts.

We commend the U.S. for proposing an Annex on climate change, an important issue for the Great Lakes region that can impact water quality in countless ways.

- The Agreement would also integrate Climate Change considerations in other relevant Agreement programs and measures.

We strongly support this measure. Climate change is mentioned in the Habitats and Species section, but is not explicit in the other positions. To reinforce the above stated measure of climate change integration, it is important to mention climate change impacts or considerations in the outlines of all positions.

- The new Annex would include commitments to develop and improve modeling capabilities and analytical tools to better predict and understand changes in climate and their associated impacts in the Great Lakes.

We support efforts to improve modeling and monitoring so as to stay current on ways that climate change may and does affect water quality. What is not explicit in this proposal, however, is a plan outlining steps for protecting water quality based on these climate impact projections and monitoring results. We would like to see the new annex develop a climate change adaptation plan addressing some potential actions to lessen impacts of climate change on water quality.

- It would also include provisions for the enhanced monitoring of climate and ecosystem variables to validate model predictions.

- Implementation of the new Annex would be overseen by a new subcommittee under the Agreement.

This committee should have ENGO members as well as government and other stakeholder membership.

We would also like to see commitments in the Annex to crisis measures and response. The Annex should commit the governments to consider the range of uncertainty when predicting climate change impacts, especially in the shorter term. As the climate changes, there is a potential for

seasonal extremes such as flooding or extreme heat that could compromise Great Lakes water quality. We would like to see a mechanism in the annex for response, such as a board or decision-making action plan, put in place to deal with these climate change-related urgencies. We would like to see a commitment to develop and implement climate change adaptation strategies.

The Annex should also reference the Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement that the Great Lakes States and Provinces signed.