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## **Renegotiating the Great Lakes Water Quality Agreement: the Process for a Sustainable Outcome**

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**Abstract:** This is a defining moment for the Great Lakes St Lawrence region, with the opportunity to renovate the regime for ecosystem improvement, protection and sustainability. The binational Great Lakes Water Quality Agreement was first signed in 1972. The outcome of a 2007 review of the Agreement by government and citizens, resulted in a broad call for and revisions to the Agreement, so that it can once again serve as a visionary document driving binational cooperation to address long-standing, new and emerging Great Lakes environmental issues in the 21st century. A prescription for renegotiating the Agreement to generate a revitalized and sustainable future mandates that science inform contemporary public policy, third Party Mediation presses for and coordinates a deliberate negotiation, and inclusive discourse and public engagement be integral through the process.

**Keywords:** Treaty negotiation; Great Lakes; water resource management; public engagement; sustainability.

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### **1. Introduction**

Some argue that a collective vision for the future of the Laurentian Great Lakes is embodied in the Great Lakes Water Quality Agreement (GLWQA) signed on April 15, 1972, by Canadian Prime Minister Pierre Trudeau and U.S. President Richard Nixon. The Agreement represents a commitment on behalf of Canada and the United States to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem. Article X of the GLWQA Agreement requires the Parties to conduct a “comprehensive review of the operation and effectiveness

of this Agreement following every third biennial report of the [International Joint] Commission (IJC)” [1]. The IJC's 12th Biennial Report of 2004, resulted in a science, program and policy review which commenced May 2006 and concluded in October 2007. As of the Spring of 2009, the decision to revise the GLWQA based on the outcome of the review was not publically known. Indications are, however, that the two countries will likely revise the Agreement.

According to Krantzberg [2] this is a defining moment for the Great Lakes, with the opportunity to renovate the regime for Great Lakes St. Lawrence ecosystem improvement and protection. In 2008 we experienced a US presidential election where President Elect Obama advanced promises for restoration of the Great Lakes:

“The U.S. Democrats are proposing a \$5-billion trust fund to clean up and restore the Great Lakes if Barack Obama is elected president in November... The \$5 billion would pay for a plan that includes designating a Great Lakes co-ordinator to oversee the programs and stepping up the fight against invasive species.” (CBC News, Sept 16 2008)

On November 6, 2008, Rahm Emanuel accepted the position of White House Chief of Staff for Barack Obama. Emanuel is known for introducing in 2003 a far-reaching federal cleanup package under the Great Lakes Restoration Financing Act.

Further, emerging from the 2006 - 2007 review, was a near unanimous consensus that revisions to the GLWQA are not only timely, but arguably imperative. Reporting on the outcome of the Review, the Agreement Review Committee stated: “There was, however, a broad call from the Reviewers for renewal and revisions to the Agreement, so that it can once again serve as a visionary document driving binational cooperation to address long-standing, new and emerging Great Lakes environmental issues in the 21st century.” [3]

A significant gap missing in the 1987 GLWQA is the recognition of the requisites for a sustainable Great Lakes St. Lawrence River basin ecosystem. The socioeconomic nature of the region is nowhere acknowledged nor are there programs or policies in place that overtly enhance the economic vitality and social cohesion of the region. The opportunity presents itself to manifest these features into a renewed Agreement that truly integrates human societal needs into the ecosystem approach professed in the current version of the Agreement.

Should the governments determine that the Agreement be renegotiated; the very process of negotiation will significantly affect the outcome of programs, policies, and participation in Great Lakes revitalization and sustainability. Central to enabling a revised GLWQA to address contemporary threats to the integrity of the region is the rigorous attention to science that can best inform future policy and program direction. Harvey [4] points out that scholars have substantially addressed the role of science in the international environmental treaty-making process [5-7]. The Montreal Accord illustrates how science can be central and crucially important in providing policymakers the information to justify action. In setting the basis for an accord to address the depletion of the ozone layer, the international scientific community collaborated with diplomats at the Vienna Convention a few years prior to Montreal, and then at the negotiations in Montreal [8]. This enabled political and economic decision makers to appreciate the science, and to coordinate internationally to assess the need for an urgent and comprehensive international solution to ozone depletion.

Further, a prerequisite to a successful international treaty is a well-informed public that could be mobilized to influence political will. Citizen engagement in the political spectrum can motivate the Parties to negotiate for the benefit of their constituents.

## **2. The Role of Science in Inter-State Agreement Negotiations; Application to the Great Lakes**

Environmental scientists play a key role in society's responses to environmental problems, and many of the studies they perform are intended ultimately to affect policy [9]. Policy makers can make use of science in treaty negotiations to understand and evaluate the nature, scope, scale, impacts and predictability ecosystem phenomena. Harvey [4] describes how the United Nations Convention on the Law of the Sea and the Montreal Protocol, employ scientific data and analysis to facilitate the ability of policy-makers to understand problems with fisheries, climate change, long-range transboundary air pollution, ozone and endangered species. The World Meteorological Organisation and the United Nations Environment Programme acknowledged the importance of science in assessing the problem of climate change when they established the International Panel on Climate Change and held it responsible to evaluate and determine consensus regarding the science behind human mediated climate change.

While policy analysts recognize that policy makers consider political, economic, and social contexts, science is widely recognized as a useful tool for identifying and understanding the problems posed by environmental degradation [6] and thereby informing sound public policy geared towards sustainable futures. For the Great Lakes, a consideration by the negotiating team of contemporary science matters will be paramount to the negotiation of shared priorities to address current pressures that if overcome, would place the Great Lakes on a vector towards improved resilience and sustainability.

Wilson [10] examines three established theories of the science-policy interface important to inform the Great Lakes regime. First, epistemic communities are networks that proceed towards a strong consensus among scientists with clear normative implications and policy relevance that the scientists can rally behind. Generally, though, the majority of environmental problems present themselves with high uncertainty is high so that consensus is difficult to obtain. This is clearly evident in the shared government and academic research on the recent changes to the structure and function of the Lakes Erie ecosystem. Lake Erie is in a stage of transition, reflecting human and environmental influences simultaneously acting on a poorly understood system. Scientists are trying to understand the underlying processes involved in these changes ([www.lemn.org](http://www.lemn.org), accessed 12/13/08). Once the scientific certainty improves, policy and program priorities can inform the renegotiation of the GLWQA.

The second well establish theory that Wilson [10] presents is Post-Normal Science (PNS), which operates in face of large uncertainty where the policy implications are critical. Within the high risk and high uncertainty context, it is scientific skills rather than scientific knowledge that becomes more important, as knowledge is largely absent. The third theory is Mode Two Science. Wilson explains that in this situation, "science is shifting from a search for truth to a more pragmatic aim of providing a provisional empirical understanding of the world that works in a practical sense."

In contributing to the science-policy dialogue to inform the negotiation of the GLWQA, scientists must interface with non-scientists to facilitate stakeholder capacity building and involvement as stewards of the natural assets that are the Great Lakes.

There is a complicated feedback relation between science findings and the policy formulation. While maintaining a sort of disinterested objectivity, negotiators of the GLWQA need to include environmental scientists who are cognizant that their research can have policy implication. This nurtures a social responsibility to convey science to lead to more sustainable Great Lakes futures [9]. Since good science is necessary for identifying policy directives, policy makers should seek out scientific research that is conducted professionally, with objectivity, integrity and credibility, and free from political influence and interference [11]. Further, Great Lakes think tanks and expert panels can be commissioned by the governments, to garner results that are not influenced by government positions. Such think tanks can collect evidence regarding specific questions or problems facing Great Lakes ecosystem integrity, make recommendations based on the impartial evidence they gather, and serve an important function for informing negotiations towards a more sustainable international agreement.

### **3. Citizen Participation and Civic Engagement**

The North American Agreement on Environmental Cooperation (NAAEC), the NAFTA environmental side agreement, serves as an important model of citizen participation. The NAAEC established the Commission on Environmental Cooperation (CEC), composed of a Council, a Secretariat and a Joint Public Advisory Committee. The Council is the governing body of government representatives. A trilateral Joint Public Advisory Committee (JPAC) participates in CEC deliberations, including direct interaction with the Council. As Turner [12] describes, the governments each appoint five members to the JPAC, who represent a wide array of stakeholders from industry, academia, and nongovernmental organizations. Each country also maintains governmental and/or non-governmental domestic advisory bodies. Turner [12] elaborates that the NAAEC also contains a public submission process in which citizens may submit claims to the Secretariat regarding the failure of a government to enforce its environmental laws and the Council may direct the development and release of a "factual record" concerning the claim in response.

Inclusivity of this nature is not currently the practice in the Great Lakes Regime. Formed in 1991, in response to the 1987 protocol to the GLWQA, the Binational Executive Committee (BEC) is comprised of senior-level representatives of Canadian and U.S. Federal, State, provincial agencies, Tribes and First Nations. Members are accountable for delivering environmental and natural resource programs and activities that respond to the commitments contained in the GLWQA. BEC is chaired by USEPA and EC and is to meet semiannually as called for under Article X of the GLWQA. Neither the BEC nor the IJC have a comparable Joint Public Advisory Committee (JPAC) or petition process for the Great Lakes region in contrast to the support provided under the CEC.

It is conceivable that in advance of renegotiation of the GLWQA, the governments each appoint equal members to a JPAC, representing industry, academia, and nongovernmental organizations. The inclusion of nongovernment experts in previous GLWQA negotiations sets the precedent for such a

JPAC. Learning from other regimes and transferring their experience to the Great Lakes provides a venue for elevating civic engagement in Great Lakes stewardship and sustainability.

A further example of civic engagement in treaty negotiation and implementation is the Columbia River Treaty (CRT) between Canada and the United States of America. The Columbia River Treaty was signed by Canada and the US in 1961 with the purpose of co-operative development of the Columbia River. Part of the public consultation that was carried out with Basin residents resulted in the creation of Columbia Basin Trust (CBT) [13]. In 1995, the Columbia Basin Trust was established with a unique mandate to support the efforts of the people of the Basin to create a legacy of social, economic, and environmental well-being in the region most directly affected by the creation of the Columbia River Treaty dams. The Columbia Basin Trust was endowed with \$295 million from the Province of B.C. [14]

One of the priorities for CRT is to inform residents of a renewal or renegotiation of the Treaty when that opportunity occurs (currently set for 2024). The Trust has designated a committee to oversee its programs and appointed an advisory panel of outside experts to assist in the development of its projects and priorities. The Columbia Basin Trust ensures that the views and values of the people of the Basin are a key component of any renewal or re-negotiation process for the CRT.

No such funding entity or citizen vehicle that assures public inclusivity currently exists for the Great Lakes region within or beyond the context of the GLWQA. The precedent, again, is set illustrating that Canada and the United States are open to such engagement infrastructure. The concept of the creation of a Great Lakes Trust is also consistent with the research of Krantzberg *et al.* [15]. The Parties involved in the renegotiation of the GLWQA could build on their experience from other regions of the shared boundary. Consultation among the Department of Foreign Affairs and International Trade (DFAIT), the U.S. Department of State (State Department), across the regions that span the binational boundary could be instructive in the design and process of ensuring public inclusivity.

#### **4. Large Scale Ecosystem Cooperation**

Given the profound changes that will need to be incorporated in a new version of the GLWQA, and given that international water treaties generally take decades to negotiate (the Indus treaty took 10 years of negotiations, the Ganges 30, and the Jordan 40) [16], it is time to launch a basin-wide dialogue to help craft the thinking towards this critical process. The CBT may be a model for serious consideration by the Parties to the Agreement.

Ecological repair of large complex ecosystems continues to be a major challenge. Manning *et al.* [17] find that restoration efforts to date tend to be ad hoc and site or situation specific. The Great Lakes St. Lawrence ecosystem supports rich biological diversity and significant fisheries but population growth and economic development in the Great Lakes Basin during the twentieth century have degraded the environmental quality of the region, threatening its economy and the quality of life of the people who live there. For over 20 years, Canada and the United States have been committed to restoring beneficial uses in Areas of Concern in the Great Lakes [18]. The clean up of the geographic Areas of Concern, represent relatively small-scale efforts that are vitally important to the return of beneficial uses to these locations [19].

However, absent lake-wide or basin wide vision and binational coordination, it is unlikely that this large functioning ecosystem will be achieved through the cumulative effects of small-scale projects. Manning *et al.* [17] point out numerous barriers that prevent large scale ecological restoration projects from being proposed, initiated, or carried through. One barrier is the “shifting baseline syndrome,” where the environment experienced by people at one point of time provides the baseline for their expectations regarding quality into the future. If environmental conditions continually degrading, there is an ongoing decline in expectations with each generation as the baseline is lowered. As a result, the expectations of scale and restoration endpoints can diminish over time. Further barriers to the repair of large ecosystems include the scale and complexity of renewal, the long-term and open-ended nature of revitalization, funding impediments, and preemptive constraint of vision [17]. Lack of enforceability compounds the dilemma.

So there are some critical principles requiring consideration for Great Lakes ecosystem revitalization and protection. Complex and lengthy negotiations among numerous government bureaucrats, scientists, politicians and basin stakeholders are requisite for a contemporary and responsive agreement that brings with it a strong likelihood for implementation. The nature of democratic dialogue enables a negotiation that nurtures political leadership based on analytically derived consensus. Such momentum provides a backbone to compile adequate resources for Great Lakes St. Lawrence renewal and protection.

Large-scale ecosystem restoration will not move forward without a comprehensive, science-based plan that includes cost estimates and stakeholder consensus [20]. Further, plans at this level of complexity take a great deal of time and resources. Therefore, purpose, planning, and process definitions are required of the Great Lakes St. Lawrence governments and its citizenry, inclusively defined. To generate the blueprint for the 21<sup>st</sup> century requires the analysis of complex science, public engagement beyond consultation, arduous negotiation, and a mandatory dedication of sufficient time to get it right.

## 5. Ripeness

The present frequency of destructive natural disasters worldwide, is generating heightened public concern for environmental issues, particularly climate change, given the real and potential impacts such stressors and pressures could have on their lives. Harvey [4] contends that this makes it a ripe and opportune time to move on the public’s attention and help citizens to push their governments to enact effective environmental policies.

Kingdon [21] contends that the policy window opens when three streams converge. Problem identification and recognition is the first stream, and may be triggered by indicators or specific events. Communities or stakeholders that generate and deliberate on alternatives and proposals is the second stream. The third, the political stream, incorporates modalities in public opinion, different interests as administrations change, and the receptivity of various interest groups. These streams may proceed independently stimulated by distinct priorities. Policy is determined by how government prioritizes public matters. For public policy to be effectively enacted Kingdon [21] describe the policy primeval soup: where factors align, including technical feasibility, value acceptance, and reasonable change for receptivity. A policy window then opens “because of change in the political stream or... because a

new problem captures the attention of governmental officials and those close to them,” In essence, a policy window opens in either the political stream or the problem stream leading to coupling efforts on the part of entrepreneurs and a place on the decision agenda.

In the Great Lakes regime, it appears we are at a ripe moment where the political stream and the problem stream are coupling. The 2006-2007 review of the Agreement raised a sense of urgency to revitalize the regime. The recently concluded negotiations on the Great Lakes Sustainable Water Resources Act [22] further heightened attention to the protection of the Great Lakes water resources. In a letter writing campaign, scores of organizations urged the President and the Prime Minister to include Great Lakes priorities in their February 2009 visit, and for the first time in over a decade, the media ceased the cause and wrote of the importance of the GLWQA (e.g. Chicago Tribune, February 12, 2009). Citizens, bureaucrats, and politicians are engaged.

Zartman [23] warns, though, that ripeness is necessary but not sufficient for the initiation of negotiations. It is not self-fulfilling. A ripe time must be grasped directly by the Parties. If not, the persuasion of a mediator may assist progress. Since not all ripe moments are seized and turned into negotiations, Zartman calls on the importance of interested third parties to press for the ripe moment to be seized, and in this case, to negotiate a renewed GLWQA.

Negotiation literature identifies two strategies for bargaining towards a common agreement: interest-based and cooperative bargaining compared to positional and competitive bargaining. Interest-based bargaining is rooted in the idea that the fundamental interests (or concerns) of the Parties are complementary. For the Great Lakes this would mean that both Parties want to revitalize the ecological, economical and social integrity of the Great Lakes St. Lawrence ecosystem. Interest-based bargaining goes by a host of names such as “consensus bargaining,” “problem-solving negotiations,” “win-win,” “mutual gains,” “collaborative bargaining,” “principled negotiations,” and others [23].

Fisher and Ury [25] define three characteristics of interest-based negotiations relevant to the Great Lakes Regime:

1. Focus is placed on interests, not positions;
2. Options for mutual gain are invented;
3. Objective criteria are used to select the appropriate resolution to an issue.

The identification of interests is also at the center of formal interest-based processes. However, rather than starting from proposals and seeking justification, the interest-based process starts from the justification (the identification of interests) and leads to the joint development of proposals. Once alternative proposals are identified, the Parties, often using objective ranking criteria, select the alternative that ranks highest.

The Conflict Research Consortium at the University of Colorado [26] advises that the Parties, and indeed, any third party mediator should assess the ripeness for negotiating before beginning the process. Questions the two countries should explore are:

- 1) Are all the Parties interested in negotiating?
- 2) If not, why is one or more of the Parties reluctant?
- 3) Can anything be done to make negotiation more attractive to them?
- 4) Do the Parties all know their alternatives to a negotiated settlement?
- 5) Do they feel those alternatives are good?

- 6) Do the Parties have a legitimate leader or representative who could effectively negotiate for them?
- 7) Is a forum available for negotiations?
- 8) Is a credible mediator available to assist in the negotiations?
- 9) Do the Parties agree on the credibility of this mediator?

AFSCME [28] suggest that several factors are needed to determine if an interest-based process is appropriate. Adapting these factors to the Great Lakes St. Lawrence Regime, reveals that the Parties must honestly assess their relationship and the environment in which they operate and ask:

- Does each Party have the authority to negotiate or will the agreements be subject to further review by a higher order of government the executive branch? Legislative review of terminology is likely unavoidable.
- Do the Parties have the ability to clearly and effectively communicate? Good communication is essential to the effectiveness of an interest-based process.
- Is training and facilitation available? Knowledge of the process and third party assistance are necessary for success.
- Are both Parties willing participants in the process? Each party must be motivated to assume the changes and risks associated with interest-based bargaining.
- Does sufficient trust exist between the Parties? The process work best in a mature relationship where the Parties can rely on each others' word.
- Is there internal consensus within the Party to engage in the negotiations? If there is substantial opposition on either side, the process may be undermined. Similarly, if either party's decision makers are experiencing significant challenges to their leadership, the process is not likely to work well.

The Oregon Mediation Center [26] councils for integrative, collaborative or problem-solving approach to negotiation. Spector [29] examines the conditions that facilitate cooperation, often through the mechanism of negotiation. He refers to Druckman's findings that emphasized the importance of situational influences and levers, such as media attention, the number of negotiating parties, firm deadlines, and third party involvement, on facilitating flexibility in the negotiation process and yielding more successful outcomes.

## 6. Planning for Negotiations

Effective planning is crucial to meeting negotiation objectives. If Canada and the United States are to reach a satisfactory agreement whose provisions will be implemented, specific events that must take place before the Parties "come to the table". These events follow those of Maiese [30], adapted for the Great Lakes St. Lawrence regime

1. The Parties agree that they have a common problem that they share an interest in solving. This enables the development of a joint delineation of the priorities involved, and the programs, processes and policies needed to resolve them. The way in which Parties define the problem for the Great Lakes St. Lawrence region will fundamentally determine the rest of the planning process.
2. The Parties determine the depth and breadth of their goals, anticipate what they want to achieve spatially and temporally, and prepare for the negotiation process. They define the issues to be discussed and, in consultation with experts and citizens, develop a complete list of the issues at stake.

3. The Parties prepare a combined, comprehensive list of issues and priorities that determines the negotiation agenda.
4. The Parties agree on the location of the negotiations, the time and duration of the sessions, who will be involved in the negotiations, and techniques to pursue if negotiation fails.
5. Lewicki *et al.* [31] advise that the Parties must be aware of their goals and positions, determine which issues are most important, as well as whether the various issues are linked or separate, and be aware of the underlying interests and goals of the other side.
6. The Parties, representing their populations, need to consult with the public and various stakeholders throughout the process. Lewicki *et al.* [31] remind us that negotiators are operating on behalf of a constituency and should consult with their constituents as well as with the other side to ensure that the constituents' needs and priorities are included in the negotiations.
7. Negotiators must be able to present science information and respond to the other Party.
8. Professional negotiators should exchange information about initial proposals and priorities before negotiations begin to inform each Party's intelligence gathering.

## 7. Participatory Elements for Success

Methods for effectively involving stakeholders in deliberations over science-based policy remain a challenge. Wilson [10] speaks to the importance of the public's own experience-based knowledge, and the need for transparency, involving a broad array of civic perspectives with different interests to gain saliency, legitimacy and credibility. Scholars have advocated the use of participatory techniques to further the involvement of scientists and other technical experts in collaborative environmental decision-making [32]. While the involvement of technical experts is one component of successful collaborative partnerships in the Great Lakes regime, it is not the sole participatory dilemma. The Parties will need to determine how and to what extent to involve the Great Lakes St. Lawrence citizenry in decision-making. The greater the engagement, the greater will be the ownership and commitment towards sustainable solutions.

Day *et al.* [33] find that a process driven solely by technical experts based on contemporary science fails to recognize, access and integrate the diverse values, wisdom, and perceptions of non-technical stakeholders. Scholars illuminate that the involvement of citizens provides a breadth of viewpoints, historical and traditional knowledge, and risk perceptions absent from an exclusive gathering of scientist and technical experts [34-37].

Scholars have convincingly demonstrated that nontechnical citizens can meaningfully engage in discussions about science and technology [38].

While researchers on public involvement concur on the utility of acquiring views and information provided beyond the scientific community, there is no clear agreement on the most pertinent role of citizens. Nor is it clear how to optimize the design a process of engagement that is most effective in assisting the Parties achieve a shared purpose that is responsive to their constituents input.

Public hearings and meetings are traditional means for the Parties to the GLWQA to solicit feedback on proposed regulatory or policy reform affecting citizens. As a public involvement tool, the value of hearings is limited as dialogue is restricted, often one way, and the platform presents itself as a place to air dissatisfaction leading to a confrontational environment. Trained Mediators should be

used, to augment meetings and hearings with interviews with both expert and non-expert Great Lakes stakeholders. Jolley [39] reminds us that non-expert respondents may lack the proper knowledge to respond to questions concerning natural resources policies or problems. Interviewed technical experts and non-technical experts may also have differing perceptions of the risks associated with various environmental problems and how to best address those problems. Once again dialogue, discourse, and debate are lacking, since interviews offer a very weak opportunity for reconciling differences. Table 1 reflects the dynamics of different public engagement instruments.

**Table 1.** Public involvement instruments and their associated characteristics. From [39].

<b>Public Involvement Tools</b>	<b>Degree of Citizen Commitment</b>	<b>Opportunity for Dialogue</b>	<b>Cost</b>
Individual Surveys	Low	None	Moderately Low (dependant on sample size and technique)
Public gatherings for Hearings/Meetings	Moderate	Low (generally uni-directional)	Low
Personalized Stakeholder Interviews	Moderate	Moderate	Moderately Low
Public Deliberation and Engagement	High	High	High

Citizen engagement is different from traditional consultation. True engagement means that, along with traditional decision-makers such as public servants, elected representatives, and influential stakeholders, citizens at large have continuing input into negotiations and greater opportunity to influence outcomes. While traditional consultations tend to provide a snapshot of public opinion, engagement is deliberative, interactive, and on-going. Mendelsohn and McLean [40] state that effective citizen engagement mechanisms permit citizens to be present not only in the beginning and end of the negotiation process, but also in the middle stage where choices and decisions are actually made.

The current the review of the GLWQA can be characterized by being at a stage where government officials listened to the public's view and concerns as provided to them October 2007 by the way of the Agreement Review Committee's reports [3]. These officials provided to feedback to the participants who contributed to the review findings report. With no information forthcoming on whether and how the Agreement will be renegotiation, there is a reasonable probability that Party officials will accept the commentary provided by citizens, but make decisions internally. Such a consultation process, then would be considered "venting", a process where citizens and stakeholders provide views with no feedback. Alternatively, the Parties could convene public meetings to explained or justify the decisions taken, a consultation technique referred to as "telling and selling" [40].

Successful collaboration, however, helps participants recognize that they must work together when participants concentrate on shared goals, common problems, a sense of crisis, or a strong sense of place [43]. This applies clearly to the Great Lakes region, where citizens and stakeholders hold a strong identification with a geographic location. Almost all primers on negotiation argue the need to focus on interests not positions [43].

Mendelsohn and McLean's [40] concept of engagement would well suite the Great Lakes St. Lawrence Region. They describe citizen engagement as an open-ended yet structured public dialogue that contributes to specific decisions in a transparent, publicly accountable manner. To further these goals, they recommend a jointly appointed council responsible for enforcing, monitoring, and reporting on progress related to the citizen engagement provisions.

For the Great Lakes regime one could envision an Agreement renegotiation process that is lead by the two federal governments, advised by a multi-stakeholder panel consisting of a broad cross section of interests spanning industry, environment, academia, business, citizens and the list continues. Such a panel would help share the shared vision, deliberate on priorities, principles, and governance, and hold the parties accountable to their input. The jointly appointed council would ensure the parties maintained their commitment to shared decision making. This negotiation oversight council would conceivably be responsible to both orders of government, perhaps directly to a Ministerial (or Administrator) Council, and would make recommendations on what other kinds of engagement activities to use in particular circumstances. Such an approach would be well suited to the Great Lakes St. Lawrence region. The collaborative decision making would also generate shared responsibility for implementation of the programs and support for the policies in a renewed and renovated Agreement.

## **8. The Great Lakes Water Quality Agreement: the Future at Stake**

At the cusp of the 1999 aborted review of the GLWQA, Donahue [41] wrote:

“The Great Lakes Water Quality Agreement is a road map to our destination: a restored and enhanced basin ecosystem that meets the general objectives as presented in Article III.(GLWQA supra) It has been twelve years since we have examined that road map and, while the destination remains the same, we are certainly not where we were in 1987. We can not move forward unless we are first able to look back, assess progress, evaluate performance and apply lessons learned to the balance of our journey.”

It is now 22 years since the Parties renewed that road map, and as in the case of Donahue [41] the regime continues to witness a confusing plethora of Great Lakes institutions, with a pronounced paucity of integration and coordination. Funding levels, policy priorities, and societal preferences have changed. New institutions have emerged, others have evolved, and still others have ceased to exist. Existing institutions are becoming irrelevant [15].

In their report “Promises to Keep: Challenges to Meet” [42], a coalition of Great Lakes environmental nongovernmental organizations recommends several overarching principles that should guide the future spirit and overall thrust of the Agreement, urging that a future Agreement: 1) be more preventative in its ecosystem approach (i.e., embrace the precautionary principle), 2) more urgently compel ecological recovery, and 3) provide for more accountability for implementation. To reclaim the

Agreement's effectiveness, they state, the Parties must support public transparency in the processes and institutions that fostered public involvement in the past.

Finally, the issue is not whether transboundary groups should be involved in shared protection and restoration of the Great Lakes St. Lawrence. Rather, argue Wondolleck and Lewis [43] the question is how their involvement can be managed so that results are informed and accountable to the broader public trust. Such processes must be accountable by making them complementary to traditional decision making, respecting the rights of public comment and influence, and incorporating independent science and appropriate performance measures [43].

Kingdon [21] concurs that in the end, public policy must be realistic and compatible with socially held values; in this context, current public policy on Great Lakes St. Lawrence programs and priorities must more precisely reflect what the Great Lake St. Lawrence regime has said during its review of the Agreement, that being to reflect contemporary threats and opportunities for binational innovation.

From the scholarly literature to practical experience in the Great Lakes St. Lawrence regime, a prescription for a revitalized future for the GLWQA mandates:

- Science information to inform contemporary public policy
- Third Party Mediation that reinforces ripeness of negotiation
- Negotiation planning that generates a logical sequence of actions and deliberations
- Inclusive discourse and public engagement throughout the process to enrich the information base and enable implementation
- Establishment of a jointly appointed authority responsible for enforcing, monitoring, and reporting on progress related to the citizen engagement that is responsible to both orders of government, at a Ministerial (Administrator) level.

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