

The Role of Public Participation in Environmental
Management within the Great Lakes Basin

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Introduction

The Great Lakes are situated on the border between Canada and the United States. The shoreline is shared by two Canadian provinces, Ontario and Quebec, and eight U.S. states, Michigan, Minnesota, Indiana, Illinois, New York, Ohio, Wisconsin and Pennsylvania¹. These lakes contain approximately 95% of the fresh surface water resources in North America and it is the largest fresh water system in the world². This makes the Great Lakes a unique area of environmental concern. The Canadian and United States governments have long since been cooperating in the field of environmental management and policy making in the region. As early as 1909, when the two countries signed the Boundary Waters Treaty Act³, there has been formal cooperation between them in the field of water resource management. Under the BWTA the International Joint Commission⁴ was created. The IJC (an advisory and monitoring body) is responsible for preventing and resolving disputes regarding trans-boundary waters between the two countries. In the 1970's concern over pollution levels in the Great Lakes arose due to the visibly low quality of water in the Lakes and in 1972, the two countries signed the Great Lakes Water Quality Agreement. The primary goal of this Agreement is to maintain a high standard of quality within the Great Lakes Basin but also to improve the quality of water in specific areas of concern. The Agreement was last amended in 1987, almost twenty years ago. A review is currently underway, due to be completed in the spring of 2006.

In June 2005, the IJC received a request from the Canadian and United States governments to conduct a public consultation in preparation for the upcoming review of the Great Lakes Water Quality Agreement. This consultation included fifteen public meetings, including the biennial meeting, in cities around the Great Lakes Basin. Public comments were also encouraged via a live web dialogue, email, telephone, fax, and standard mail. Residents from Ontario, Quebec, Minnesota, Ohio, Illinois, Michigan, New York and Wisconsin participated in the consultation process. Participants commented on issues they deemed of concern for residents in their area. Some of these issues included pollution, water quantity, threats to fish and wildlife, and the introduction of invasive species into the ecosystem.

Environmental Management

Environmental policy making in the Great Lakes is complicated by the jurisdictional concerns that are involved. The Great Lakes are an important part of both Canada and the United States. The interests of two Canadian provinces and eight American States as well as the interests of individual communities and land owners surrounding the lakes must be taken into account when considering any type of policy or regulation in the region. Stakeholders include governments (municipal, provincial, state, and federal), industry and business owners, agricultural producers, and private citizens. It is very unlikely that the interest of all stakeholders will be the same. Applying the stakeholder approach to environmental policy making would require policy makers to consider the interests of individuals, companies, communities, and governments involved in and affected by the environmental problem under consideration and any regulations made regarding that problem.

Micheal Howlett has examined issues of jurisdiction that arise when handling environmental management.⁵ These issues also arise throughout the text *Environmental Law and Policy*.⁶ These jurisdictional conflicts were the primary purpose for the BWTA and the creation of the IJC in 1909. An article written by George Hoberg in 2002⁷ provides a broad framework for understanding these jurisdictional conflicts. Due to the complicated nature of these conflicts, this article is an excellent background piece. Hoberg compares Canada's policy making process to that of the United States. He concludes that shared ecosystems require cooperation. He also expresses this conclusion in a previous article.⁸ A similar conclusion is also made by Castle Munton⁹, and by Lynton Caldwell¹⁰.

In Hoberg's earlier article he examines four policy areas and compares the records of Canada and the United States. These areas are air pollution, pesticides, water pollution and environmental impact statements. In his later article he furthers this comparison by examining how each country influences the other, both negatively and positively, in each policy area. In 1992 Hoberg concludes that both Canada and the United States have different areas of expertise, areas where one has a better track record and is in fact better at policy making and regulation. Ten years later, Hoberg examined the influence Canada has on American environmental policy and vice versa. His general conclusion is that each country influences the other in both negative and positive ways.

Similar to Hoberg, Munton compares the Canadian environmental record to that of the United States. Rather than looking at broad policy areas like Hoberg, Munton examines cooperative agreements between the two countries and compares each country's success at implementing those policies. Munton declares that since most of the pollution in the Great Lakes is generated by the United States and drifts into Canada, the United States should be largely responsible for the clean up of this pollution.¹¹ Hoberg's 2002 article agrees with this statement and in fact mentions this as the primary way the United States negatively influences Canadian environmental policy.¹² The United States pollutes both countries therefore necessitating that Canada make policies to curb that pollution. The data regarding levels of pollution generated by each country in the Great Lakes Basin is conflicting but the population on the American side of the Lakes is larger as is the level of industry and development.

Caldwell takes a similar approach to that of Munton because he chooses to examine the multiple levels of jurisdictional conflicts within the Great Lakes Basin by examining the Great Lakes Charter as well as the role of the IJC¹³. The Great Lakes Charter is an agreement between Quebec, Ontario, Ohio, New York, Michigan, Pennsylvania, Illinois, Indiana, Wisconsin, and Minnesota. This agreement affirms that the signatories recognize that the Great Lakes make up a single hydrologic system. The signatories agree to protect the quality and quantity of water within the Lakes, subject to jurisdiction. One of the major drawbacks to this agreement is that there are sections within the agreement that can be trumped by federal or state jurisdiction. One of the key aspects of the Great Lakes Charter is that the Great Lakes Basin ecosystem be treated as a unified whole, something not done by the federal governments. For example, the City of Chicago is diverting Great Lakes water to the Mississippi River and this diversion project is exempt from any of the agreements made between Canada and the United States. Suggestions made by the United States that water be diverted or sold is an example of

how the water level of all the lakes is not considered to influence the quality thereby not considering the effects such diversions would have on the lakes as a whole.

In terms of environmental problems governments are not the only stakeholders. Businesses have a major stake in the environmental policy making process. Policies such as the mandatory participation in clean up projects in Areas of Concern as implemented by the United States government can have a high cost for businesses involved. The firms that produce the pollution are large stakeholders because they could potentially be found criminally responsible for the pollution if that is what is mandated by the policies themselves. There may also be financial consequences for the firms. Douglas MacDonald examines the firm and how it influences or is influenced by pressures from environmentalists.¹⁴ Due to pressures applied by environmental groups to the government or to the consumer directly, the firm is left with only two choices to attempt to curb the negative sentiment expressed publicly by the environmental groups. The firm can comply with the demands of the environmentalists and the government by making all or some of the changes requested of them, or the firm can attempt to change the pressures thereby changing the negative sentiment. MacDonald makes it quite clear that businesses influence governments regarding environmental policy, often very successfully, because they have access to elite-lobbyists¹⁵. He also states that firms are moving towards voluntary action. They are making necessary changes before there is pressure to do so.¹⁶ By making these pre-emptive changes, the firms are seen as positive activists for environmental protection in some cases or they just slip under the radar in others.

This concept of cooperative and coalition based solutions to the environmental issues surrounding the Great Lakes is reiterated throughout the literature about environmental policy. Whether it is cooperation between levels of governments, between countries, between business and the governments, between governments and the IJC, or between individual citizens and the governments, the value of cooperation is a major theme in the environmental management literature.

Canadian environmental policy has changed and evolved over the years. Michael Howlett attempts to explain the shifts in policy instruments utilized by the Canadian governments.¹⁷ Howlett uses both common-law and public-law approaches to policy making regarding the environment as his unit(s) of analysis. He concentrates on the relationship between the federal and provincial governments saying that the changes in these relationships are like a pendulum. At first the federal government worked with the provincial government in areas of environmental policy. The federal government, believing environmental policy to be a fairly minor area, gave the responsibilities over to the provinces. Under the Constitution Act (1982), the provinces are given specific jurisdiction over resources, environmental concerns often involve resources. In the 1970's the federal government began to realize that environmental concerns encompassed more than just natural resources and they stepped back in to help the provinces. The federal government was first working with the provinces on environmental issues, they then left them on their own, realizing this to be a mistake, they have since swung back in to work with the provinces again.

Like Howlett, Kathryn Harrison examines the relationship between the Canadian federal government and the provinces.¹⁸ Both Howlett and Harrison argue that Canadian environmental policy has gone from cooperation between the federal and provincial governments to unilateral action then back to cooperation. In 1998, the federal

government signed the Canada-Wide Accord with the territories and the provinces (except Quebec). This Accord set national standards for environmental regulation and action. Harrison highlights the differences between the new generation of cooperation and the old one. She says that the new accords and agreements have more specific and firm deadlines, duties and mechanisms.¹⁹ These more concrete deadlines and duties suggest that Canada is leaning towards the mandatory participation approach utilised by the U.S, this is when the government forces the individuals, firms, or industries that caused the pollution to clean it up or be fined or criminally charged. This new generation of cooperation has included mechanisms to allow for public participation in the environmental policy making process and the setting of environmental standards. Public participation was not part of the cooperation or unilateral approaches previously favoured by Canadian policy makers, but it is becoming more popular. The Remedial Action Plans, instituted by both Canada and the U.S. in the Areas of Concern on the Great Lakes, are an excellent example of increased emphasis placed on public participation and consultation.

Howlett argues that this shift from cooperation to non-cooperation and back again is only part of the changes that have occurred in this area. He argues that the policies being implemented seem to be dealing with larger issues.²⁰ The solutions to environmental problems as developed by the government are no longer medium specific. The governments are dealing with the issues of environmental contamination as a whole rather than at the level of individual catalysts to the problem. This approach, also referred to as a multi-linear approach, is favoured by both Rabe and Caldwell.²¹

Cooperation between the federal and provincial governments influences policy making, however, equally important is the cooperation and influence the American government and American policies have on Canadian policies, especially in the field of environmental management. In Hoberg's 2002 article²², he examines the ways in which U.S. policy influences, and in some cases makes, Canadian environmental policy. Hoberg also suggests actions that can be taken by the Canadian government to lessen the American influence or, even better, influence U.S. environmental policy. He emphasises the importance of policy harmonization.

Hoberg's contention is that both countries would benefit from having the same policies for a variety of reasons. First, harmonious environmental policies would mean that the policies are made up of the best parts of each country's policies, the most effective policies. That means that the policies for both countries would only get stronger. Second, if both countries have similar environmental policies, there is little to no risk of challenges being brought to the World Trade Organization or under the North American Free Trade Agreement. Competitors cannot argue that one side is providing their companies with unfair subsidies by simply not enforcing strong, often expensive, environmental standards while the other party is enforcing these policies.²³

Close trade ties as well as a high level of economic integration encourage cooperation between Canada and the U.S. in areas of environmental policy and practice.²⁴ One country can try to influence the policies of the other by pressuring the governments through interest groups and lobbyists. This action could be an effective way for Canada to influence U.S. policy because interest groups and lobbyists play a stronger role in American politics. This action can be risky for Canada however, because it can sometimes be viewed negatively by the American people as an attempt at foreign

manipulation of domestic politics.²⁵ That is in fact what is happening but it does not necessarily have to be viewed negatively, especially if the result is stronger environmental protection.

Shared jurisdiction is a reality in the field of environmental management due to the transitory nature of environmental pollutants and the environment in general. I believe that cooperation among levels of government as well as between governments will result in more comprehensive policies

As illustrated above there seems to be a consensus among the literature that environmental management in general, and in the Great Lakes region of North America specifically, is a complicated but necessary policy area. Governments from both sides of the border have to develop ways to effectively deal with environmental issues that arise, whether they be domestic or trans-boundary, without stepping on anyone's toes. The following is a synthesis of some of the literature that deals with possible solutions to the how to approach environmental policy making within the Great Lakes basin.

Rabe identifies the primary problem with the traditional approach to environmental management in the Great Lakes.²⁶ According to the author, that problem is that governments are implementing "medium-based pollution control strategies".²⁷ This approach is problematic because environmental concerns are not confined to specific mediums therefore solutions to these problems cannot be medium specific. For example, poor water quality in the Great Lakes is not simply the result of contaminants being dumped directly into the Lakes. It is also caused by air pollution, contaminated groundwater or run off, non-native species being brought into the Lakes, poor waste management, relaxed regulations on industrial waste and pollution, etc. There are a variety of sources of pollution and environmental degradation and to attempt to address each one individually would be an endless and frustrating task.

Rabe conducts a survey designed to assess public feelings towards integrated regulatory avenues. Based on the questions posed in his survey, Rabe concludes that generally, people agree that medium-based regulations are ineffective and integrated regulations may be more effective at address issues of cross medium contamination. Rabe also concludes that integration can be achieved through existing programs.

Mark Sproule-Jones' article²⁸ as well as an article by Beierle and Konisky,²⁹ examine the viability of public participation in the policy making and environmental management process. Both articles use Remedial Action Plans (RAPs) as their unit of analysis. The Sproule-Jones article attempts to measure the success of the RAPs generally while Beierle and Konisky examine the RAPs in an attempt to determine whether the level of trust stakeholders have for the lead agency, the effective incorporation of public values, and the lead agency's ability to resolve conflict between competing interests, effects the success of the RAPs or the ultimate goal of improving environmental quality in that Area of Concern. Both articles conclude that RAPs have met with mixed success rates. They are often successful at influencing government policy as well as program implementation, however, this policy making and implementation is sometimes simply the result of making changes to existing programs.³⁰

The conclusion that change can be achieved simply by adjusting existing programs indicates a clear need for cooperation in the field of environmental management since many of the existing programs involve cooperation at some level. The literature indicates the value of public input in environmental issues.

Methods

The analysis that follows is a preliminary examination of the level of public participation as received by the IJC between October and December 2006. As mentioned above, the IJC held fifteen public meetings in both Canadian and American cities around the Great Lakes Basin. The conclusions made in this paper are based upon the analysis of five of those meetings. A more in depth analysis would include comments made by email, telephone, fax, standard mail, and during the web dialogue. The five meetings used herein are those held in the Ontario cities of Thunder Bay, Sault Ste. Marie, Windsor, Midland, and Toronto. Only these five meetings were used in order to avoid some of the jurisdictional issues as discussed above that would arise when making policy for either two provinces (Ontario and Quebec) or two countries (Canada and the United States). The biennial meeting which was held in Kingston, Ontario was not included because it was a regular meeting and not the same type of public consultation as the other five meetings held in the province. The other reason for using only the Ontario meetings is that according to the IJC summary of the process, of the 1443³¹ people who participated directly in the consultation process, that is those who attended meetings or contributed via one of the other approved methods as mentioned above, nearly 49%³² of those were residents of Ontario, higher than any other province or state. There is no clear indication as to why more Ontarians participated in the IJC's consultation process but this higher level of participation does provide a larger data set.

The public comments made at those five meetings were coded into five general categories; Pollution, Quantity, Fish and Wildlife, Invasive Species, and Other (see Appendix 1 for totals). Comments regarding any type of pollution or contamination were coded as "Pollution". Although the public meetings were meant to gain public comment on issues regarding water quality, it became clear that the public is also concerned about water quantity and the effects of low water levels on the quality of water in the Great Lakes. It is for that reason that any comments regarding water levels and water quantity were coded as "Quantity". Any comments regarding the quantity, health, or habitat of fish and wildlife native to the Great Lakes Basin were coded as "Fish and Wildlife". In recent years there has been increased attention paid to the existence of non native invasive species within the Great Lakes and their effects on the water quality as well as on other species of the area. Any comments regarding these species were coded as "Invasive Species". Comments that were not directly related to the Great Lakes and any comments that did not fit into one of the other four categories were classified as "Other".

Comments were then coded as negative, positive, or ambivalent. Many comments were negative in nature (see Appendix 2). If the comment was critical of government action or actions taken by the industrial sector, if the comment was regarding the poor quality of water, fish, or wildlife, if the comment was directly related to negative impacts experienced first hand by residents, or if it was generally pessimistic, it was coded as "negative". Any comments that praised the government, the IJC, industry or private actions that improved the conditions within the Great Lakes Basin, and any comments regarding improvements of water quality or the health of fish and wildlife, was coded as "positive". Any comment that was not clearly negative or positive was coded as "ambivalent". Comments that were phrased as recommendations to either government or the IJC were also coded as "ambivalent".

Introductory comments made by host city officials, i.e. the mayor, were not included in this analysis. Also, any comments made by representatives from the IJC were not included. Comments made by IJC representatives were excluded because the goal of these meetings was for the IJC to gather public comment in order to pass that along to the Canadian and American governments. The reason the introductory comments made by city officials were excluded was because there was no consistency between the content of these comments. The representative from Windsor simply welcomed the IJC and thanked them for considering the opinions of the people in the area while the mayor of Sault Ste. Marie talked about unrelated issues such as his trips to Russia.

Results

Each of the five meetings included in this analysis had their own clear tone. The meetings varied in numerous ways. For example, speakers at the meeting in Windsor were largely average citizens, whereas speakers at the Toronto meeting generally represented an association or organization, and were often specialists in the field or a related field and some had prepared presentations including slides.

The meeting in Thunder Bay lasted 63 minutes. Thunder Bay is located in Northern Ontario on Lake Superior. Six people chose to speak with one gentleman speaking twice. The mayor of the City of Thunder Bay gave introductory remarks and welcomed the IJC to the city. The meeting was facilitated by Allen Olson, IJC Commissioner, U.S. Section, and Jack Blaney, IJC Commissioner, Canadian Section. The general tone of this meeting was casual. Speakers seemed to be able to comment on any issue raised by other participants. The facilitators commented on remarks made by other speakers as well as answered various questions.

Although there were only six speakers, nineteen comments were recorded. Of these nineteen comments, none of them were positive, seven were ambivalent, and twelve were negative. The bulk of the comments, nine out of nineteen, were about pollution or contamination at 47.7%. Approximately 10.5% of the comments made were about water quantity which would indicate that citizens of the area are witnessing a drop in water levels. There was only one comment (5.3%) regarding fish and wildlife. All other comments were coded as "Other". The "Other" comments represent 36.8% of the comments.³³ There were no comments regarding invasive species which is not surprising because Thunder Bay is located at the North end of the largest and deepest of the Great Lakes. It may be that no invasive species have travelled that far, or that they are simply not visible in such a large body of water.

The meeting in Sault Ste. Marie was the shortest of the five meetings at 55 minutes. Sault Ste. Marie is located on the St. Mary's River connecting Lake Superior to Lake Huron. Eight people spoke, mostly average citizens. Introductory and welcoming remarks were made by the mayor of the City of Sault Ste. Marie. This meeting was also facilitated by Jack Blaney and Allen Olson. The general tone of this meeting was also fairly casual. The facilitators made fewer comments than they did at the Thunder Bay meeting. There were a total of sixteen comments made. Of these sixteen comments, ten were negative and five were ambivalent. There was one positive comment, a gentleman remarked "[t]here has been virtually no fluctuation at all on Lake Huron this year, and

this has been an extremely dry year.”³⁴ It was refreshing to hear that some things are not in decline.

Only 12.5% of the comments were about pollution which could indicate either that the area is fairly clean or that people have become accustomed to the pollution. Despite the one positive comment made regarding water levels, 37.5% of the comments made were concerned quantity. One quarter of the comments were coded as “Other” and the remaining 25% were regarding invasive species.³⁵ This last 25% is not surprising because the residents of Sault Ste. Marie are not unfamiliar with invasive species, specifically the sea lamprey. There is a sea lamprey control centre located in Sault Ste. Marie and it is not uncommon for a fisher to catch a fish with the markings of a sea lamprey attack. No comments were made regarding fish and wildlife.

The Windsor meeting held on November 2, 2005 lasted 60 minutes. Windsor is located on the Detroit River, in the most southerly region of Canada. Nine people chose to express their views, although the meeting was largely dominated by the comments of one speaker. The mayor was unable to attend so introductory comments were made by his Special Advisor. This meeting was facilitated by Herb Gray, IJC Co-Chair, Canadian Section, and Dennis Schornack, IJC Co-Chair, U.S. Section. Mr. Gray and Mr. Schornack were very effective at allowing people to make comments but not make too many comments themselves. As chair Gray said, “really we’re supposed to be here to receive your comments and not to get involved in the discussions ourselves because this is not the purpose of these meetings around the Lakes.”³⁶

The general tone of this meeting was fairly casual. There were a total of forty-two comments recorded. Of those forty-two comments, twelve were made by one woman much of which was irrelevant which increased the number of comments coded as “Other”, therefore slightly skewing the final results.

There were twenty-nine negative comments made, six positive comments, and seven ambivalent comments. Approximately 33.3% of the comments were regarding pollution which is not surprising considering Windsor is an industrial city with high pollution rates. Comments regarding water quantity made up 9.5% of the total, while, 19% of the comments were regarding fish or wildlife, and many of those were positive in nature. For example one gentleman said “[f]ish habitats are...stable in the area...And they’re relatively clean fish.”³⁷ There were some comments regarding invasive species, at 11.9%. Finally, 26.1% of the comments were coded as “Other”.³⁸, including the irrelevant comments made by the one dominant speaker.

On November 8, 2005 a meeting was held by the IJC in Midland, located in the Georgian Bay area on Lake Huron. This meeting lasted 110 minutes and nineteen people made comments. These speakers mostly represented community groups such as the Georgian Bay Association, the Georgian Highlands Ratepayers Association, The Severn Sound Public Advisory Committee, and Blue Mountain Watershed Trust Foundation to name a few. Introductory remarks were made by the mayor of the City of Midland. This meeting was facilitated by Herb Gray with the assistance of Stephen Keat. Judging by the transcript, the meeting appeared to run very smoothly. Mr. Gray made very few comments himself which allowed more time for public participation. This meeting was a little more formal than the previous three; however, the general tone was still casual and amicable. Some of the participants had slide presentations prepared.

Sixty-eight comments were recorded. Of those, forty-seven were negative in nature, seven were positive, and fourteen were ambivalent. Of the ambivalent comments, many of these were recommendations for the government or the IJC. A large portion of the comments were regarding pollution and contamination at 39.7%. There were ten comments regarding water quantity putting it at 14.7% of the total. Many of these comments were concerns expressed regarding any possible diversion projects that may affect the water levels in the future. About 20% of the comments were regarding fish or wildlife. There were only three comments regarding invasive species putting it at only 4.4% of the total. A total of 22.1% of the comments were coded as “Other”.³⁹

The meeting held in Toronto was the longest of the five at 135 minutes. Toronto is the largest city in Ontario as well as the provincial capital. It is located in Southern Ontario on the shores of Lake Ontario. Nineteen people chose to speak at this meeting. Introductory comments were made by the mayor of the City of Toronto. The meeting was facilitated by Herb Gray and Dennis Schornack. Again, Mr. Gray and Mr. Schornack did an excellent job of facilitating the meeting by allowing people their time to speak without interruptions. It should be noted here that the same speaker who spoke at the Midland meeting on behalf of the Georgian Bay Association spoke at this meeting, again on behalf of the Georgian Bay Association. It should also be noted that her comments were different at each meeting although still in the same vein. This meeting was much more formal than the others, possibly due to the size of the city of Toronto.

The bulk of the comments made at this meeting were coded as “Other” at just over 60% compared to the average of 38.3%. These comments were also largely ambivalent at 33.5% compared to the average of 27.2%. The reason for this is that speakers had some very constructive comments and recommendations regarding future actions of their government or the IJC. The concluding remarks from a representative from the Georgian Bay Association are an example of such a recommendation. She concluded with “a request to the IJC to include open-net aquaculture as an emerging issue...in its 2006 review of the Great Lakes Water Quality Agreement.”⁴⁰

Approximately 27.6% of the comments were regarding pollution. Only 2.3% of the comments dealt with water quantity, 5.7% of the comments were about fish or wildlife, and 3.4% dealt with invasive species.⁴¹ It is possible that because the City of Toronto is such a highly populated Urban area that many citizens do not participate in recreational activities that involve the Great Lakes in any way. It is for that reason that comments were largely recommendations made in order to better the environment for everyone rather than comments based on personal experience.

Participants at all five meetings appeared to represent the interests of a wide range of stakeholders. One significant interest that was represented at four of the five meetings was Ontario First Nations. Aboriginal representatives had a similar message for the IJC at all four meetings. The First Nations representatives expressed concern over the government’s lack of respect for the opinions of the Aboriginal Peoples. This was expressed through comments similar to the one expressed at the Windsor meeting where one speaker said, “let me first say that I don’t view this as adequate or proper consultation”.⁴² At the time the IJC meetings were held, the government had not yet consulted the First Nations with regards to the Great Lakes Water Quality Agreement. The government had told the IJC that their plan was to consult the First Nations on a

government to government basis though the process had simply not begun, nor had it been publicized.

Another similarity between the comments made by Aboriginal representatives was that Aboriginal Canadians have a unique relationship with and knowledge of the environment and that this unique perspective could be very beneficial to the policy making process. The representative at the Thunder Bay meeting commented “we have traditional knowledge that we carry within ourselves about the environment.”⁴³ Along with this unique knowledge comes a special respect and entitlement as stated by the representative at the Toronto meeting; “Indigenous people have inherent rights to traditional territories, including the whole circle of life, from the trees to the water to the fish to the animals.”⁴⁴ This concept relates to a very significant comment made by the representative at the Windsor meeting. He said “we still rely on hunting, fishing, and trapping through traditional economies as our major income.”⁴⁵

This is significant because it highlights a different perspective when considering water quality, one that was possibly previously un-thought of. It is easy to consider the effects of water quality on the recreational fisher, even easier if you are one. It is easy to consider the effects of poor water quality on the commercial fisher. It is even easy to point fingers at the commercial fisher for the declining fish population or the recreational fisher for the increased garbage in the Lakes. It is a whole different story when considering the Aboriginal communities that rely on the sale of fish for their livelihood, especially when those fish are not being caught as the result of large scale fishing operations but rather traditional methods of fishing and netting.

An Aboriginal representative at the Toronto meeting made an excellent point about the value of clean water to children and family tradition which is something that was not mentioned by any of the other participants. She said “[t]hings that perhaps my dad wants to teach me he can’t teach me anymore because our water is dirty.”⁴⁶ This applies to Aboriginal and non-Aboriginal peoples alike.

Conclusion/Recommendation

Generally the five IJC public consultations examined above produced helpful comments. Comments made by average citizens, although not always backed up by scientific proof, were based on first hand experience and were therefore reliable and significant. For example a woman from Windsor who lives on the shores of the Detroit River said “[w]e have fewer zebra mussels this year.”⁴⁷ A gentleman from Midland said that “recreational fishing has deteriorated badly. The fish that I have caught over the last three years are starving.”⁴⁸ This type of first hand comment provides the policy makers with information they are not able to get any other way, after all, they are not necessarily the ones living on the shores of the Great Lakes, nor are they necessarily the ones eating the fish and drinking the water.

Based upon the participants and their comments there is support for a stakeholder approach to environmental management. A comment made at the Toronto meeting indicates that stakeholder approach has been and continues to be effective in their region. “The RAP [Remedial Action Plan] is working well for us because of our consistent stakeholder approach”⁴⁹ Upon analysing these meetings, I would recommend that the Ontario government establish multiple advisory boards representing various stakeholders.

This system would the government to bypass the IJC if they so choose. These boards would consist of groups that have a stake in water quality and quantity within the Great Lakes Basin. There would be a total of five boards. One board would consist of average citizens that live in the Great Lakes region and have an interest in the quality and quantity of water within the lakes. The second advisory board would consist of members of non-governmental organizations interested in the environment, including academics and specialists in the field of environmental management and related fields. The third board would consist of representatives from the industrial sector. This would include companies that are located on the Lakes and companies that use the water as part of their operation or as a means of shipping. The fourth board would consist of members from the agricultural sector. This includes produce, livestock, and dairy farmers. The fifth board would represent the interests of Aboriginal Ontarians representing First Nations around the Great Lakes. All of the five above mentioned groups have a unique perspective to bring to this issue as was clearly demonstrated above in the analysis of the five IJC public consultations.

These five advisory boards should consist of fifteen to twenty members each. The members of each committee should represent all areas of the Great Lakes region whenever possible. Membership will be strictly volunteer, though travel grants will be provided by the government for members that have to travel to the location of the meeting. The board members would be selected by the Ministry of the Environment and/or Natural Resources among qualified interested parties. Meetings will be held once or twice a year or at the government's request and the government will set out an agenda of issues it wishes to receive comments on.

This policy option does not carry a large cost to the government since the board members are volunteers. The only cost is in the travel grants however, the meeting will not be frequent so the grants will only have to be issued once or twice a year. The recommendations made by the advisory boards will have to be examined and analysed by one or some civil servant(s) who will then pass those results along to the policy makers. This analysis will carry some administrative costs for the government.

One problem with this policy proposal is that it would be a complicated undertaking. One large advisory committee, with representatives of all stakeholders would be slightly more cost effective and possibly less complicated however the recommendations will be less concise. By having all stakeholders agree on a set of recommendations, individual recommendations that are of concern to only one or some of the stakeholders would never be heard by the government. Just because there are fewer people who feel that something is of concern does not make it less important. Having only one committee may result in the voices of average people being ignored in favour of the louder voices of industry or academics.

The clear differences between the meetings that involved comments by average citizens versus the meeting in Toronto that involved comments by academics and specialists proves that there is value in both. Average people are able to make valuable comments based on first hand knowledge and academics and specialist are able to make comments based on science and research. The opinions of agriculture and industry are also valuable because they are based on business practices and profit margins. As previously mentioned, First Nations are able to share opinions that are based upon values and tradition. The views and feelings of all stakeholders are valuable to the government

when considering policies that affect all of these different groups. The possibility that having five advisory boards may be complicated is outweighed by the value of the comments that will be produced by each board.

¹ Becker, Nir and Easter, K. William. "Conflict and Cooperation in Managing International Water Resources such as the Great Lakes." *Land Economics* (May 1999) 72 (2): 233-45

² Becker and Easter. "Conflict and Cooperation..." (1999)

³ Hereafter referred to as the BWTA

⁴ Hereafter referred to as the IJC

⁵ Howlett, Michael. "Instruments and Implementation Styles: The Evolution of Instrument Choice in Canadian Environmental Policy" Canadian Environmental Policy: Context and Cases 2nd Edition. Ed. Debora L. VanNijnatten and Robert Boardman. Don Mills: Oxford University Press (2002): 25-45

⁶ Eds. Hughes, Elaine, Lucas, Alastair R., Tilleman, William A. Environmental Law and Policy Third Edition Toronto: Edmond Montgomery Publications Limited (2003)

⁷ Hoberg, George. "Canadian-American Environmental Relations: A Strategic Framework." Canadian Environmental Policy: Context and Cases 2nd Edition. Ed. Debora L. VanNijnatten and Robert Boardman. Don Mills: Oxford University Press (2002): 171-189.

⁸ Hoberg, George. "Comparing Canadian Performance in Environmental Policy" Canadian Environmental Policy: Ecosystems, Politics, and Process. Ed. Robert Boardman. Don Mills: Oxford University Press (1992): 246-62.

⁹ Munton, Don and Castle, Geoffrey. "The Continental Dimension: Canada and the United States" Canadian Environmental Policy: Ecosystems, Politics, and Process Ed. Robert Boardman. Don Mills: Oxford University Press (1992): 203-23

¹⁰ Caldwell, Lynton K. "Disharmony in the Great Lakes Basin: Institutional Jurisdictions Frustrate the Ecosystem Approach." Alternatives Journal 20.3 (1994): 26-31

¹¹ Munton, 203-23.

¹² Hoberg, "Canadian-American", 171-189

¹³ Caldwell, 26-31

¹⁴ MacDonald, Douglas. "The Business Response to Environmentalism" Canadian Environmental Policy: Context and Cases 2nd Edition. Ed. Debora L. VanNijnatten and Robert Boardman. Don Mills: Oxford University Press (2002): 66-86

¹⁵ MacDonald, 81

¹⁶ MacDonald, 83

¹⁷ Howlett, 25-45

¹⁸ Harrison, Kathryn. "Federal-Provincial Relations and the Environment: Unilateralism, Collaboration, and Rationalization" Canadian Environmental Policy: Context and Cases 2nd Edition. Ed. Debora L. VanNijnatten and Robert Boardman. Don Mills: Oxford University Press (2002): 123-44

¹⁹ Harrison, 140

²⁰ Howlett, 25-45

²¹ Caldwell, 29

²² Hoberg, "Canadian-American" 171-189

²³ Hoberg, "Canadian-American" 172

²⁴ Hoberg, "Canadian-American" 173

²⁵ Hoberg, "Canadian-American" 186

²⁶ Rabe, Barry G. "An Empirical Examination of Innovations in Integrated Environmental Management: The Case of the Great Lakes Basin" Public Administration Review. 56.4 (July/August 1996): 372-81

²⁷ Rabe, 372

²⁸ Sproule-Jones, Mark. "Institutional Experiments in the Restoration of the North American Great Lakes Environment" Canadian Journal of Political Science 35.4 (December 2002): 835-857

²⁹ Beierle, Thomas C. and Konisky, David M. "Values, Conflict, and Trust in Participatory Environmental Planning" Journal of Policy Analysis and Management. 19.4 (2000): 587-602

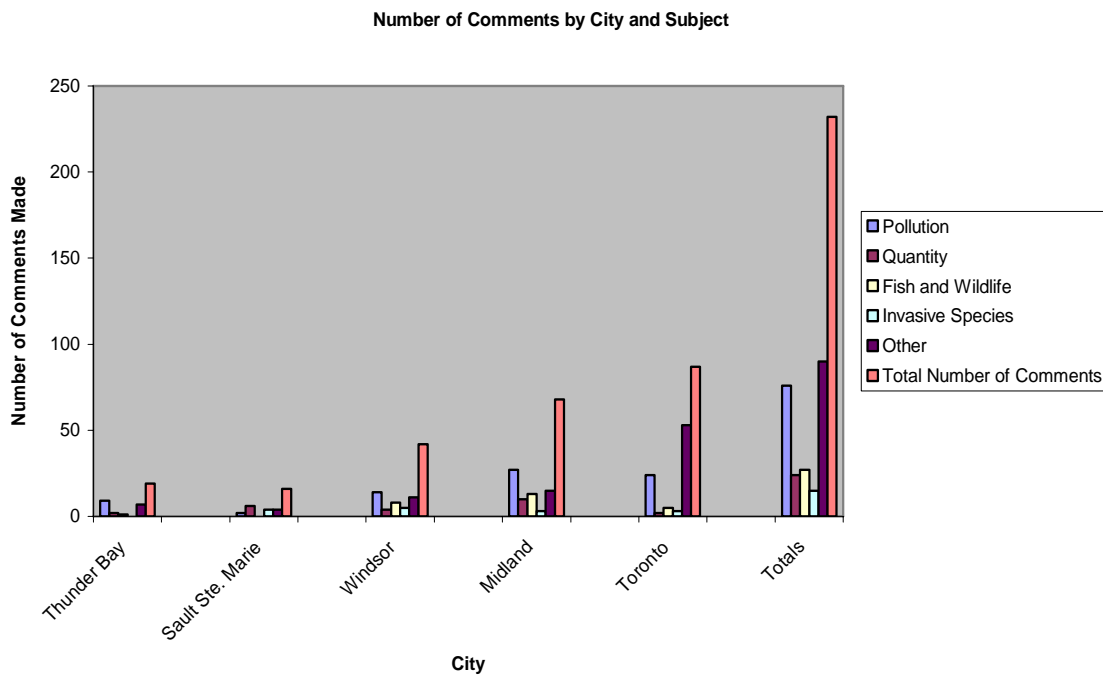
³⁰ Sproule-Jones, 835-857

³¹ International Joint Commission "Synthesis of Public Comment" January 2006 3

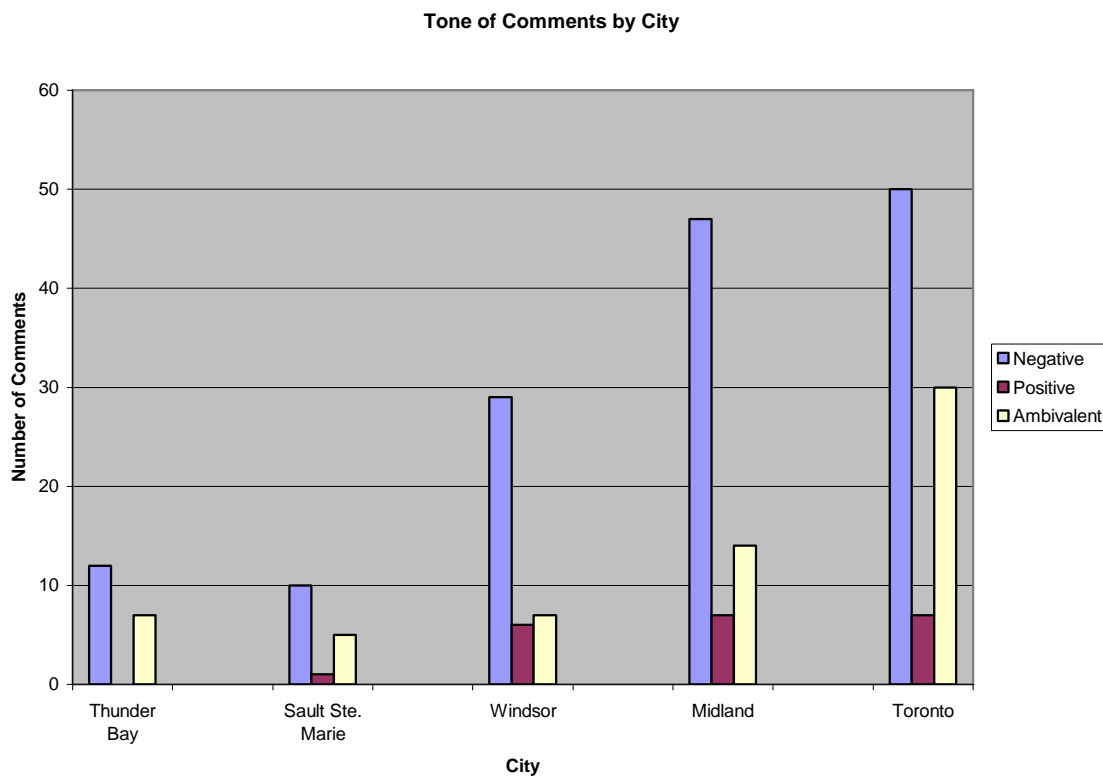
³² International Joint Commission "Synthesis of Public Comment" January 2006 3

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- ⁴⁴ International Joint Commission. “Transcript of the public meeting held by the International Joint Commission on the Great Lakes Water Quality Agreement Review at Toronto, Ontario, on November 9, 2005” 16
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Appendix 1

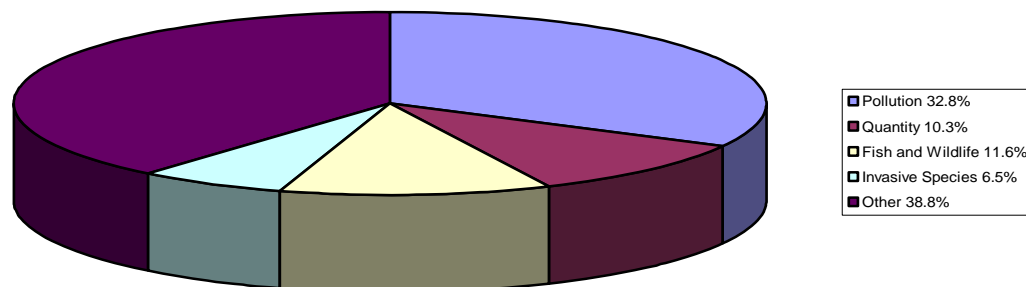


Appendix 2



Appendix 3

Percentage of Total Comments by Subject



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