

2015 Binational Great Lakes Basin Poll



**Prepared by the Great Lakes Water Quality Board
Public Engagement Work Group**

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Table of Contents

Executive Summary	1
Key findings.....	1
Background and overview	2
Study sample.....	3
Additional findings	3
Acknowledgements.....	4
Results.....	5
Section 1. Concerns and issues	5
Most important environmental issue facing Great Lakes	5
Threats to Great Lakes	6
Direction of environmental health	7
Why the Great Lakes should be protected	8
Section 2. Watershed Protection	9
Importance of protecting.....	9
Responsibility for protecting.....	10
Policies, regulation and cross border efforts.....	14
Section 3. Water Sources and Waste Water.....	16
Section 4. Water Activities	18
Use of Great Lakes – recreational purposes	18
Importance of Great Lakes – recreational purposes	19
Section 5 Information Sources.....	20
Interest in information.....	20
Information sources	21
Section 6. International Joint Commission	22
Awareness and perceived role	22
Advertising awareness	23
Importance of IJC	23
Section 7. Value Statements	26
Section 8: Demographics	28

Executive Summary

Key findings

- There is uncertainty as to whether the environmental health of the Great Lakes is getting better (18 percent), worse (26 percent) or staying the same (30 percent). Pollution is identified as the most significant problem facing the lakes (~50 percent), with a significant number indicating they do not know what is the biggest threat (31 percent).
- On why they should be protected, the Great Lakes are mostly seen as an important source of fresh water (26 percent) and a valued resource in general (19 percent). A large majority of residents agree that the lakes should be protected for the benefit of fish and wildlife (76 percent) as well as their economic significance in the region (76 percent) and their importance to human health (72 percent).
- Recreational use is rated a highly important reason to protect the Great Lakes (86 percent), with 42 percent stating they use the lakes for recreational purposes, most within the past six months.
- A strong majority (85 percent) feel it is important to protect the Great Lakes basin with most identifying that all sectors of society should be accountable (35 percent) but various levels of government in particular need to play a role (federal 25 percent and state/provincial 20 percent).
- An equally strong majority (78 percent) feel that they as individuals play an important role in protecting the lakes, and that they can take action by polluting less (24 percent) and conserving more (16 percent), as well as educating themselves more on relevant issues (12 percent) and engaging politically (10 percent). However, many are unsure what specifically they can do (30 percent).
- Few (7 percent) hold the belief that there are too many regulations in place to protect the Great Lakes, and while a sizeable number (46 percent) feel that there should be more put in place, many do not know if the current level of regulation is sufficient or not (31 percent). Within this context, not many residents are aware of collaborative or cross-border actions to protect the lakes (14 percent) or of any specific policies or actions in place (10 percent).
- The majority name groundwater as their source of local drinking water (34 percent), followed by local lakes (20 percent) and the Great Lakes (19 percent). There is greater uncertainty as to where their wastewater ends up, with many indicating they do not know (31 percent).

- Newspapers, both online and hard copy (26 percent), television (22 percent) and websites (22 percent) are the sources where residents currently get information about the Great Lakes, while the preferred sources include websites (25 percent), television (22 percent) and newspapers (20 percent).
- While awareness of the IJC is at 20 percent, a strong majority (74 percent) feel it is important that Canada and the United States cooperate on Great Lakes water issues and 65 percent feel it is important that the IJC is adequately funded to fulfill its work.
- Respondents living in the catchment area are clearly more attached to the Great Lake closest to them, as their concern over environmental health is most emphatic for the lake in the nearest proximity to their residence (74 percent) rather than the Great Lakes as a whole (53 percent).

Background and overview

- Oraclepoll Research Limited was commissioned by the International Joint Commission's (IJC) Great Lakes Water Quality Board (WQB) to conduct a telephone survey of residents living in the Great Lakes basin catchment area.
- The survey was intended to establish baseline data across an array of perceptions ranging from perceived threats to the Great Lakes and the importance of watershed and Great Lakes protection, to awareness of the IJC and cross-border water protection efforts.
- The survey was conducted using live interviewer computer-assisted telephone interviewing (CATI) and simple random number selection (RDD). Sample quotas were set for each of the states and provinces that comprise the Great Lakes basin catchment area and its approximate 33 million residents to ensure results were representative of the population across the basin.
- Initial calls were made between the hours of 6:00 p.m. and 9:00 p.m. Subsequent call-backs of no-answers and busy numbers were made up to five times until contact was made. In addition, telephone interview appointments were attempted with those respondents unable to complete the survey at the time of contact. If no contact was made at a number after the fifth attempt, the number was discarded and a new one was used.

Study sample

- A total of 3,950 interviews among residents 18 years of age and older were completed between November 16 and December 3, 2015 using person-to-person live telephone interviewing. All calls were made by Oraclepoll research staff at the Ontario based Oraclepoll research facility.
- Almost 70 percent of respondents were 18 – 54 years old, 47 percent graduated from a college or university, and almost half live in two-person homes. An equal percentage of respondents were male or female, and represent a virtually equal division of conservative, moderate or liberal political viewpoints (30, 31 and 26 percent, respectively).
- The margin of error for the total survey sample is +/- 1.6 percent. The margin of error for the each of the area breakouts is included in the table below.
- This table also includes the completed number (N) of interviews for the sample by catchment area or jurisdiction and their percent of the total completed sample.

SAMPLE BREAKDOWN BY AREA		
State or Province	Frequency (N)	Percent %
Ontario	1100 (+/-2.3%)	27.8%
Michigan	1100 (+/-2.3%)	27.8%
New York	450 (+/-4.6%)	11.4%
Ohio	350 (+/-5.2%)	8.9%
Illinois	350 (+/-5.2%)	8.9%
Wisconsin	280 (+/-5.9%)	7.1%
Indiana	120 (+/-8.9%)	3.0%
Pennsylvania	100 (+/-9.8%)	2.5%
Minnesota	100 (+/-9.8%)	2.5%
Total	3950 (+/-1.6%)	100%

- The randomized database used was inclusive of landlines as well as cell phone only residences. A total of 20 percent of all interviews were monitored and the management of Oraclepoll Research Limited supervised 100 percent for quality assurance.
- Open ended or verbatim results were coded by Oraclepoll into categories or themes.

Additional findings

- Detailed question-by-question results are located in the following sections of this report, as well as general demographics. A breakdown of the results by location (state/province) can be accessed at:

http://ijc.org/files/tiny_mce/uploaded/WQB/WQB_GreatLakesPollReport_CrosstabsReport_March2016.pdf

Acknowledgements

The Great Lakes Water Quality Board would like to acknowledge the excellent and extensive efforts of Oraclepoll Research Limited in the development of this report. The majority of this report has been taken directly from work completed by Oraclepoll on behalf of the Board's Public Engagement Work Group.

Cover Photo Credit: Ellen Perschbacher

Results

Section 1. Concerns and issues

The survey began with a lead in or introductory set of questions that related to perceptions of the Great Lakes.

Most important environmental issue facing Great Lakes

They were first asked in an open or unaided question to name what they felt was the most significant problem facing them as it related to their environmental health. One top of mind response was accepted and the following table highlights the top mentions provided that have been coded into general categories.

<i>Q1. When thinking about the environmental health of the Great Lakes, what in your opinion are the most significant problems facing them at this time?</i>	
Don't know	31%
Pollution (in general)	20%
Invasive species	16%
Industrial pollution	12%
Waste being dumped into the Lakes	6%
Water levels / fluctuations	5%
Oil spills / the oil pipeline	2%
Drainage / run off	2%
Algae / green algae	2%
Agricultural pollution / waste / run off	1%
Endangered species / fishing depleted in the Lakes	1%
Acid rain	1%
Fracking	1%

Pollution in general was the most named top of mind issue that 20 percent of respondents cited when it came to their perceived biggest problem facing the Great Lakes, next followed by invasive species that 16 percent named and specifically industrial pollution by 12 percent. Other mentions included waste or refuse being dumped in into the Great Lakes (six percent), concerns over fluctuating water levels (five percent), petroleum spills into the Lakes or leaks from pipelines (two percent), waste water runoff (two percent) and green algae blooms (two percent). A total of one percent also cited each of agricultural waste, endangered species including reduced fish stocks, acid rain and problems with fracking. Slightly more than three in ten, or 31 percent, did not know what the most significant problem was.

Threats to Great Lakes

In another open ended or unaided question allowing for multiple (up to three) answers, respondents were asked to name anything that they considered might threaten the waterways surrounding and flowing into the Great Lakes. The multiple answers from n=4505 mentions were coded into the categories provided in the table below.

<i>Q2. Can you name anything that you feel may pose a threat to the lakes and rivers that surround and feed into the Great Lakes?</i> (MULTIPLE RESPONSES ACCEPTED)	
COMBINED TOTAL RESPONSES CATEGORIES	Combined Total Percent
Don't know	24%
Invasive species (zebra mussels, Asian carp)	23%
Pollution (in general)	13%
Garbage / waste	9%
Industrial pollution / waste	7%
Population growth / urban sprawl	4%
Not enough conservation of water	2%
Pesticides	2%
Agricultural pollution / waste / run off	2%
Water levels / Fluctuation	2%
Chemical pollution	2%
Algae / green algae	2%
Fracking	1%
Runoffs (in general)	1%
Illegal fishing	1%
Traffic on the water	1%
Mercury levels	1%
People / human populations	1%
Oil pipeline	1%
Tourism	1%

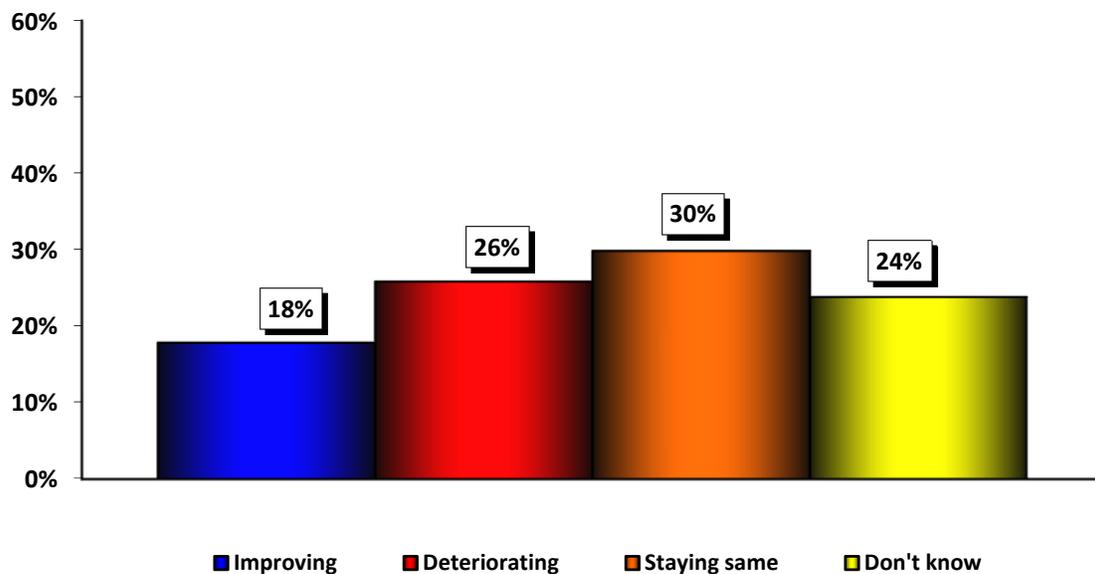
When it came to naming something that may pose a threat to the lakes and rivers surrounding and feeding into the Great Lakes, more respondents had an opinion and the number of do not know answers dropped to 25 percent from the 31 percent in Q1 on the previous page. The threat identified most was invasive species at 23 percent, while 13 percent stated pollution in general, nine percent garbage or waste, seven percent industrial pollution and four percent the growth of human populations and associated urban sprawl. Remaining responses were diffused among several categories and two percent mentioned each of a lack of water conservation measures, pesticides, agricultural pollution, chemical pollution and algae. Other answers ranged from

industrial issues including fracking and pipeline leaks, to human activities on the waters such as too much traffic and over fishing.

Direction of environmental health

In a direct ask question all respondents were asked their opinion about where they felt that the environmental health of the Great Lakes has been headed.

Q3. “In your opinion, is the environmental health of the Great Lakes improving, deteriorating or staying about the same?”



There was a split of opinion on the issue of the direction of Great Lake environmental health with no definitive result coming from the question, but slightly more respondents or 31 percent were of the opinion that it is staying about the same. More, or 26 percent, feel its health is headed in the wrong trajectory or deteriorating compared to only 18 percent that are of the belief that it is improving. One quarter, or 25 percent, were unsure or did not know. Females, younger respondents, those inclined to be more liberal and residents from Ontario, Minnesota and Michigan were significantly more likely to say things are deteriorating.¹

¹ Based on significance tests comparing the mean response across the various demographic groups.

Why the Great Lakes should be protected

In a final open ended or unaided question in this section that also allowed for up to three multiple responses, those surveyed were asked to state why the Great Lakes need to be protected.

<i>Q4. Can you tell me why you think that the Great Lakes need to be protected?</i> (MULTIPLE RESPONSES ACCEPTED)	
COMBINED TOTAL RESPONSES CATEGORIES	Combined Total Percent
Don't know	23%
Drinking / household water	20%
Valuable resource	19%
Sources for fresh water	6%
For the fish / fishing	6%
Our health	6%
For the wildlife	6%
For recreational purposes (swimming, boating)	4%
Good for the economy	3%
Important for the ecosystem / environment	3%
Important for the future	2%
It's the right thing to do / it's needed	<1%
Commercial activity	<1%
Shipping	<1%
Historic significance	<1%

The reasons why respondents want to see the Great Lakes protected revolve around the belief that that they are a source for drinking water and fresh water for households. They are also seen as being a valuable resource in their own right and also for various commercial, economic and recreational activities. The health aspects of the lakes were mentioned as it relates to humans, but also wildlife and the ecosystem as a whole. A still high 23 percent did not know or were unsure of the benefits of protecting the lakes.

Section 2. Watershed Protection

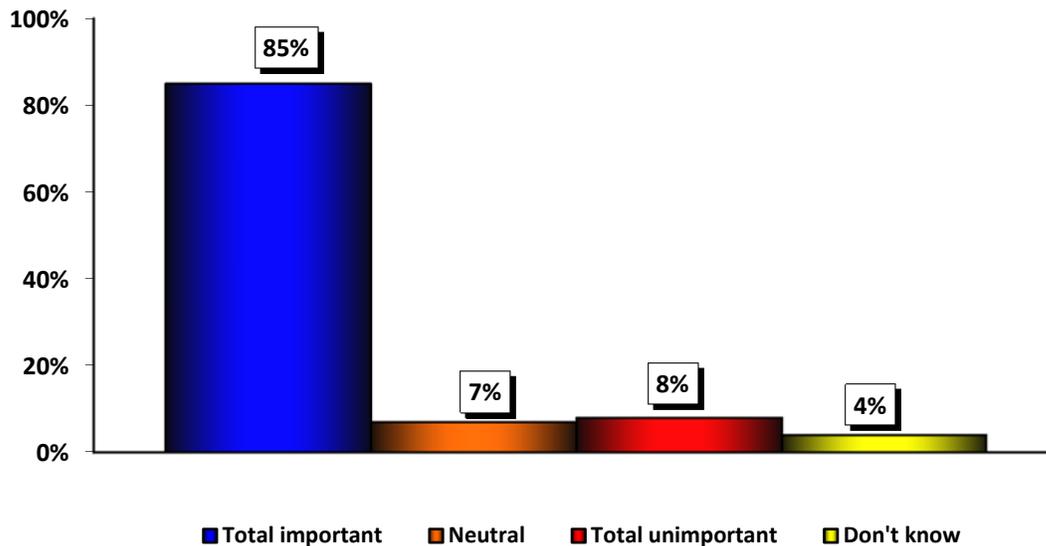
The next section related to issues around watershed protection and the roles that people and organizations can and should take to protect these areas. Respondents were first read the following short descriptive preamble before questioning commenced.

“The Great Lakes basin consists of the [Great Lakes](#) and the area of land and water that surrounds the Lakes and feeds into them from the States of [Illinois](#), [Indiana](#), [Michigan](#), [Minnesota](#), [New York](#), [Ohio](#), [Pennsylvania](#), and [Wisconsin](#) in the [United States](#), and the province of [Ontario](#) in [Canada](#).”

Importance of protecting

The first question asked was about the importance of protecting the Great Lakes basin.

Q1. How important is it that the Great Lakes basin be protected? Please respond using a scale from one not at all important to five very important.



Results in this graph combined the results of very important (5) and important (4) as well as not at all important (1) and not important (2). A very high level of importance (85 percent) was placed on protecting the Great Lakes Basin with 77 percent saying it is very important and eight percent an important issue. This compared to only 8 percent that felt it in unimportant (3.1 percent not important & 3.5 percent not at all important), while four percent had a neutral opinion (neither important nor unimportant) and four percent did not know or were unsure.

There were no differences in the level of importance placed on protection when looking at factors such as socio-demographics, political leanings, or location of residence (state/province).

However, those who previously stated the health of the Great Lakes is deteriorating were more likely to claim it is important or very important to protect the health of the lakes (95 percent) compared to those who previously stated the health of the lakes is staying the same (82 percent), improving (81 percent) or did not know (79 percent).²

Responsibility for protecting

Next two semi-open questions were asked to respondents. The first (Q2) was about *who they felt is currently responsible for protecting the health of the Great Lakes basin* and the second (Q3) *their perception as to who should be responsible for protecting their health*. Potential responses from a pre-established list were only read to respondents if they answered do not know to each question.³ One response was accepted from respondents for each question, individuals who initially indicated they did not know where given the option to change their answer using one of the categories on the pre-established list.

<i>Q2. Who in your opinion is currently responsible for protecting the health of the Great Lakes basin?</i>	
Everyone / all	42%
Federal governments	18%
State / Provincial governments	17%
Don't know	11%
Residents / individuals	4%
City / local government	2%
EPA	2%
All levels of government	2%
Industry	1%
Great Lakes Commission	<1%

In the first question about who they felt is currently responsible (Q2) for protecting the health of the Great Lakes a sense that this is a collective or collaborative effort as 42 percent said that everyone or all parties involved were responsible. Federal governments were named by 18 percent, state or provincial level governments by 17 percent, city or local governments only by

² Based on significance tests comparing the mean response across the various demographic groups.

³ This list included city/local government, state/provincial government, federal government, industry, residents/individuals, everyone/all.

two percent, the EPA by two percent, while two percent stated all levels of government. Residents or individuals were only mentioned by four percent, industry by one percent while 11 percent did not know.

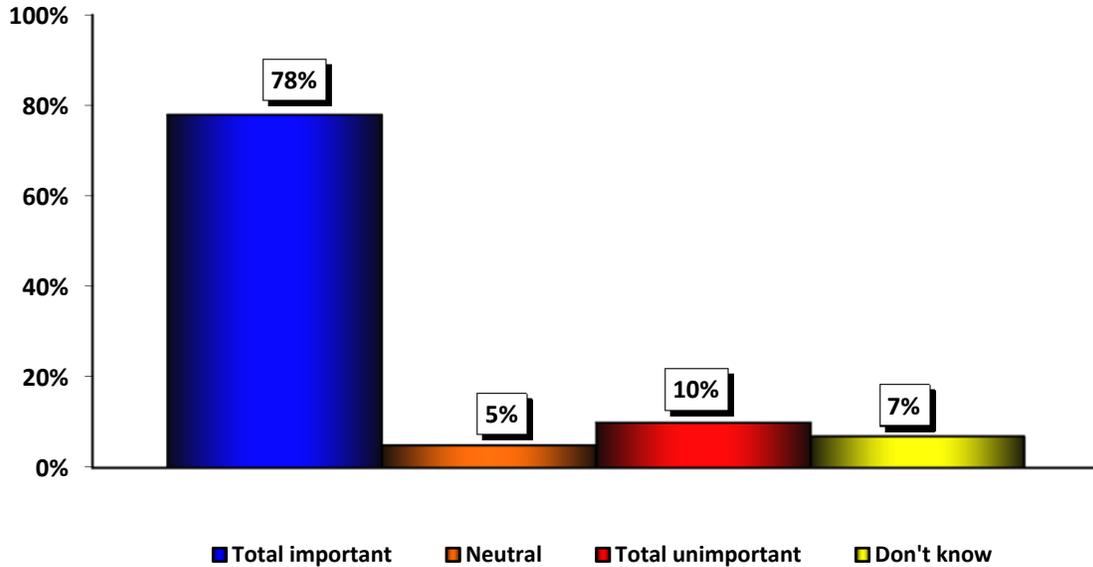
When it came to the topic of who should be responsible (Q3) for protecting the health of the Great Lakes, everyone or all was once again most named but by a lower 35 percent. There was a higher pull for senior tiers of government playing a role with 23 percent stating their federal government and 20 percent state or provincial levels of government. Only four percent mentioned local or municipal governments, two percent all levels and two percent the EPA. A total of six percent said residents or individuals, only one percent industry and the undecided dropped to only seven percent from the 11 percent in the previous question.

<i>Q3. Who in your opinion should be responsible for protecting the health of the Great Lakes basin?</i>	
Everyone / all	35%
Federal governments	23%
State / Provincial governments	20%
Don't know	7%
Residents / individuals	6%
City / local government	4%
All levels of government	2%
EPA	2%
Industry	1%

Role of the individual

Next the questioning moved specifically to the role of the individual or household in protecting Great Lakes health. It began with a scaled question (1-5) in the perceived importance of the person in this process. Results in this graph combine the results of very important (5) and important (4) as well as not at all important (1) and not important (2).

Q4. How important is the role of the individual or individual household in protecting the health of the Great Lakes basin? Please respond using a scale from one not at all important to five very important.



A total of 78 percent are of the opinion that the role of the individual is very important (62 percent) or important (16 percent) contrasted with only ten percent that hold it is not important (six percent) or not at all important (four percent). A total of five percent had a neutral view of neither important nor unimportant and seven percent did not know. Similar to the question about whether the health of the lakes was increasing or decreasing, younger respondents, those inclined to be more liberal and residents from Ontario and Michigan were significantly more likely to believe that individual actions were important, as were those earning incomes in excess of \$100,000.⁴

In a follow up question (Q5) respondents were asked in an open ended unaided question allowing for multiple responses about *what they felt they or their household could do to protect the Great Lakes basin*. When combining the answers (n=4491) disposing of waste properly or recycling was the top mention from 19 percent of all responses, next followed by conserving more by 16 percent, being properly informed or educated by 12 percent, and taking political action by electing or lobbying governments that will make a difference by eight percent. Other themes brought up included polluting less (four percent), volunteering or donating money to related

⁴ Based on significance tests comparing the mean response across the various demographic groups.

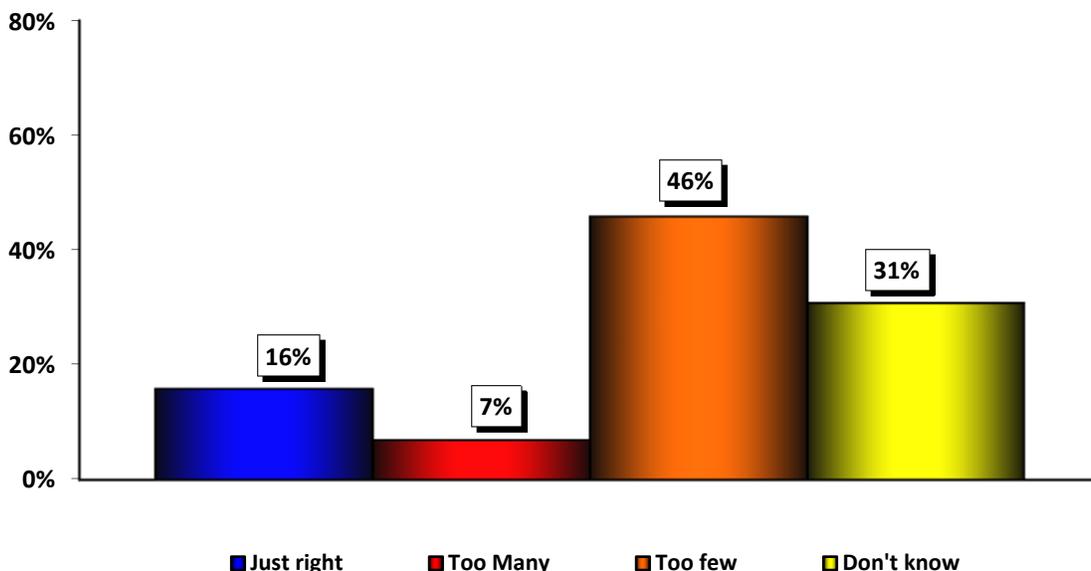
causes (two percent), limiting water runoff from their homes (one percent), helping to stop industrial waste (one percent) and following rules and laws related to water protection (one percent). A total of 30 percent did not know or were unaware as to what they could do and another four percent said they could do nothing or no more.

Another open ended question allowing for multiple responses (Q6) asked those interviewed to ***name the actions that they are willing to take in order to help protect the Great Lakes.*** The most named of the combined answers (n=4298) was conserving water consumption with 14 percent, next by the abstraction of doing anything or everything they can (10 percent), followed by disposing of waste properly (nine percent), taking political action by supporting or lobbying an issue friendly politician or Party (nine percent) and being informed or educated on the relevant topics (six percent). Self-ownership mentioned included volunteering time or money to causes related to protection (five percent), polluting less (four percent) and taking care of the environment (two percent). Blowing the whistle on polluters was named by one percent, not boating or fishing (or not allowing) on the lakes by one percent and living a healthier lifestyle by one percent. There were a higher number of those unsure of what to do as evidenced by the 35 percent that did not know or had no opinion, while a further three percent claimed that they could do nothing or nothing more.

Policies, regulation and cross border efforts

Respondents were then asked a set of indicators on awareness of policies, regulations and cross border efforts to protect the Great Lakes.

Q7. Thinking about the policies and regulations in place to protect the Great Lakes, do you feel there are too many, too few or just the right amount?

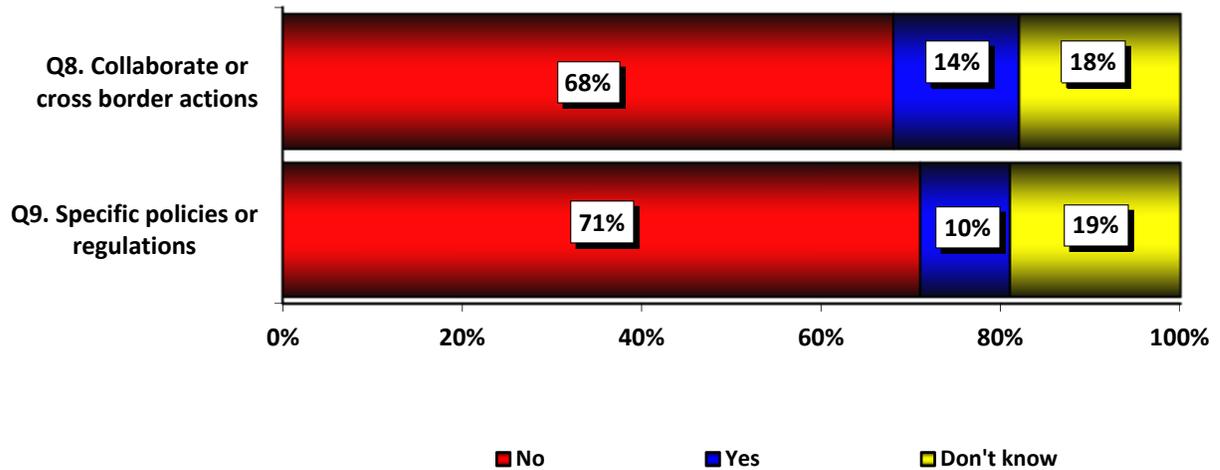


Only seven percent of those interviewed claim that there are too many polices and regulations in place to protect the Great Lakes, while 16 percent are of the belief that the amount is just right. Most or 46 percent hold the view that there are too few regulations but a significant 33 percent are unaware and responded do not know. Similar to prior questions about the health of the lakes and the importance of individual action, younger respondents, those inclined to be more liberal and residents from Ontario and Minnesota were significantly more likely to say there were too few regulations, as were larger households of five or more people.⁵

Those interviewed were expressly asked *if they were aware of any collaborative or cross border actions* between Canada and the United States that help to protect the Great Lakes *and if they were aware specifically of any policies or regulations to protect the Great Lakes.*

⁵ Based on significance tests comparing the mean response across the various demographic groups.

Awareness



Awareness (“yes”) was low in both areas including collaborative or cross border actions or efforts at 14 percent and for specific policies or regulations to protect the Great Lakes at only ten percent. Responses of “do not know” and “no” were high (86 percent for awareness of collaborative actions and 90 percent for awareness of specific policies or regulations), but in the above graph they are separated as they represent distinct responses to a question. The answer of no represents an authoritative denial of knowledge, while the do not know implies the respondent had some reflection on the issue but was unsure.

The 10 percent (n=409) of those that stated they were aware of specific policies or actions were then asked a follow up question (Q10) which probed them to *name which one or ones they could recall*. Allowing for multiple responses (n=425) the most mentioned was the Clean Water Act by 17 percent, while 16 percent named legislation to remove foreign species, 10 percent warnings put in place about the hazards of dumping waste and 10 percent general comments about cooperation between Canada and the United States to protect the waters. Other general mentions included public education in general by eight percent, stopping or preventing farm run offs by seven percent, while five percent specifically stated the Great Lakes Commission, five percent the IJC, and four percent the Great Lakes Protection Act. A total of 18 percent could not recall anything or were unsure.

Section 3. Water Sources and Waste Water

Two questions were asked in this section both open ended that allowed for verbatim responses.

One unaided response was accepted for each question.

<i>Q1. Can you tell me where your drinking water comes from?</i>	
Groundwater wells / Springs	34%
Don't know	23%
Local lakes	20%
Lake Michigan	7%
Lake Ontario	5%
Lake Erie	4%
Lake Superior	2%
Local rivers	2%
Municipal water treatment plant	1%
Lake Huron	1%
Great Lakes (not specified)	1%

The first indicator questioned respondents on *where that they believed that their drinking water originated*. Ground water sources such as wells or springs were the most common responses from 34 percent of those surveyed followed by 20 percent that said local lakes and an additional two percent local rivers. When combining results, the Great Lakes or individual Great Lakes were named by a total of 19 percent of respondents. This included seven percent that named Lake Michigan, five percent Lake Ontario, four percent Lake Erie, two percent Lake Superior, one percent Lake Huron and less than one percent for the Great Lakes in general. A total of one percent cited municipal water systems including water treatment plants and 23 percent did not know or could not name the source of their drinking water.

Next they were asked to name *where that they felt waste water from their home usage goes to or ends up*. More were unsure as to where their waste water ends up as 31 percent answered do not know to this question. The most named top of mind answer to this question was a septic system by 17 percent, followed by a sewage plant by 13 percent, a waste water treatment facility by 11 percent, sewers by seven percent, into local lakes or rivers by seven percent, the ground or ground water sources by four percent and run off to fields or farm areas by two percent. A total of eight percent named a Great Lake including Michigan (three percent), Ontario (two percent), Erie (one percent), Huron (one percent) and Superior (one percent).

<i>Q2. Can you tell me where the waste water from your home usage goes?</i>	
Don't know	31%
Septic system	17%
Sewage plant	12%
Wastewater treatment facilities	11%
Sewers (unspecified)	8%
Into local lakes, rivers etc.	7%
Into the ground / ground water sources	4%
Lake Michigan	3%
Run off to farms / field beds	3%
Lake Ontario	2%
Lake Erie	2%
Lake Huron	1%
Lake Superior	1%
A reservoir	1%

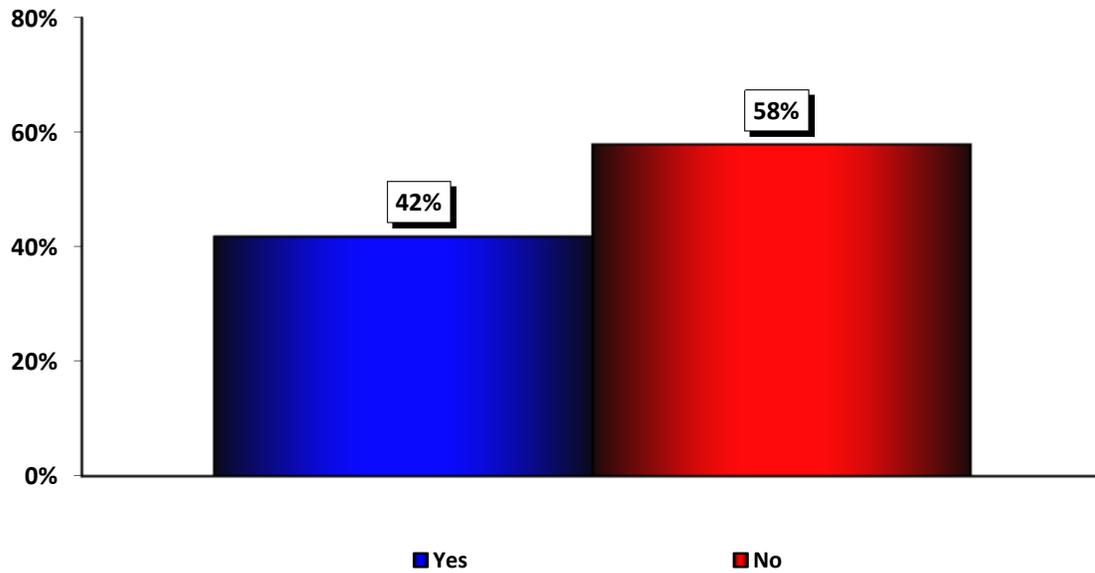
Section 4. Water Activities

The next section and series of questions dealt with usage of the Great Lakes for recreational purposes including the importance of them for these activities.

Use of Great Lakes – recreational purposes

Respondents were first asked if they or a member of their household use the Great Lakes for activities related to leisure or recreation.

Q1. Do you or any members of your household use the Great Lakes for leisure or recreational purposes?



A total of 42 percent stated that they or a member of their residence use the Great Lakes for recreational purposes with those aged 45-54 being most likely (49 percent) to use the lakes and older resident 65+ being least likely (32 percent).⁶

This 42 percent (n=1662) of the survey sample was then asked an unaided follow up question allowing for multiple answers, which probed them about *the types of activities that they engage in on the lakes*. When combining the total responses, 38 percent related to swimming, 28 percent boating, 19 percent fishing, ten percent canoeing, kayaking or wind surfing and four percent

⁶ Based on significance tests comparing the mean response across the various demographic groups.

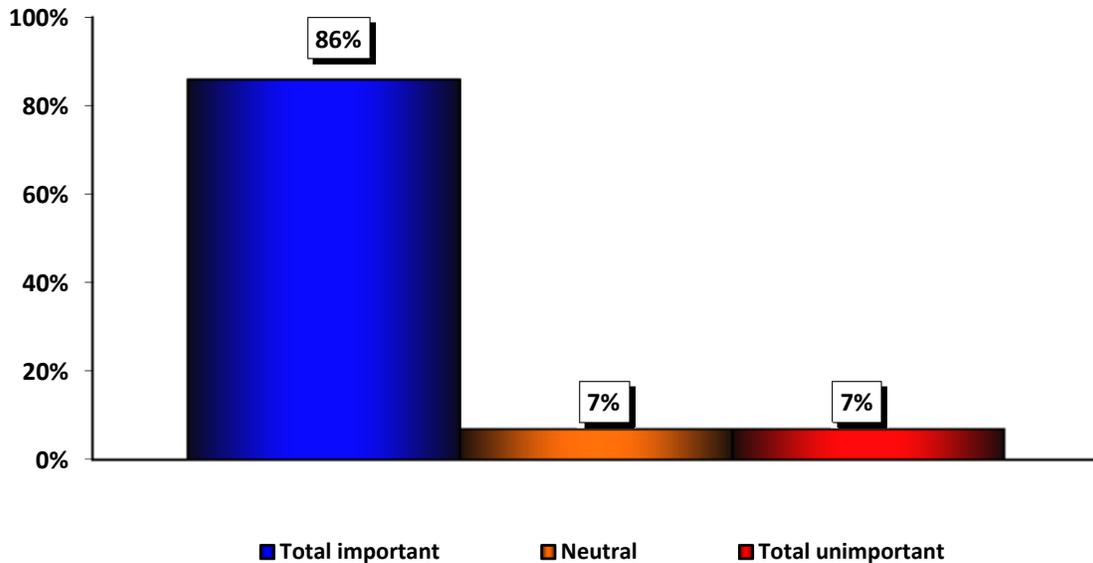
winter activities including skating, cross country skiing and snowshoeing. A total of one percent named leisure or scenic viewing and one percent could not remember or recall.

The 42 percent of Great Lakes users were then asked to state *when they or a household member last used or visited a Great Lake*. Most or 70 percent said within the last six months, five percent in the past 12 months, eight percent in the previous one to up to two years and 17 percent in a window of two years or longer. For the lake last visited, 35 percent named Michigan, 21 percent Ontario, 20 percent Erie, 14 percent Superior, seven percent Huron and four percent several or many.

Importance of Great Lakes – recreational purposes

In the final question in this section, the 42 percent of respondents who reported visiting the Great Lakes rated the importance to them of having the Lakes available for recreational uses.

Q4. How important is it to you that the Great Lakes are available for leisure or recreational purposes? Please respond using a scale from one not at all important to five very important.



A very high 86 percent said that it is very important (78 percent) or important (eight percent) to them to have the lakes available for recreational purposes, only seven percent claimed it was not at all important (three percent) or not important (four percent), while seven percent provided a neutral answer of neither important nor unimportant.

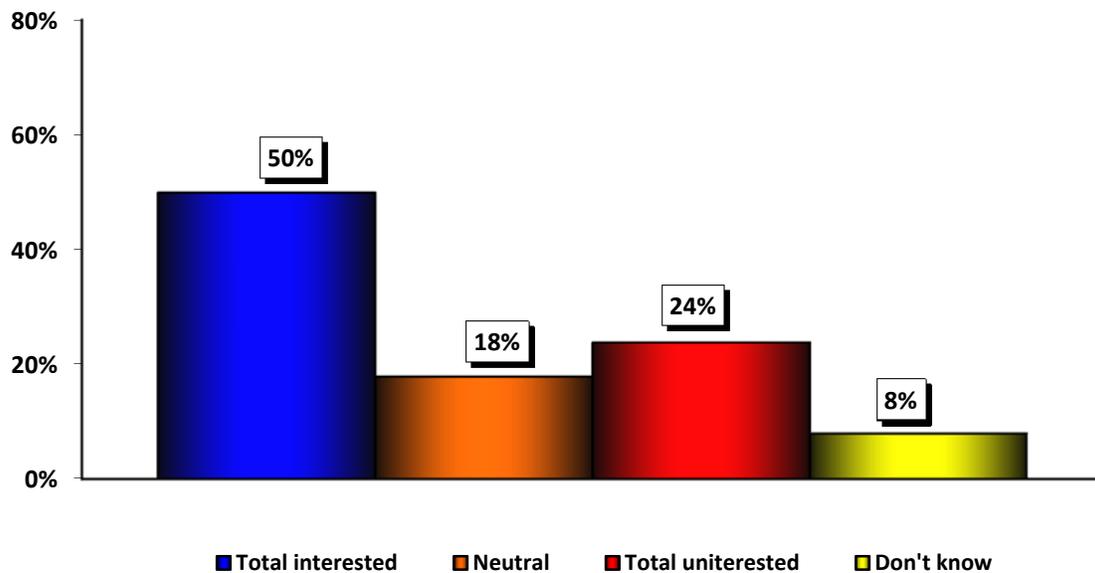
Section 5 Information Sources

Respondents were asked three questions in this section on information including interest in receiving information, how they currently get it and what they prefer sources are.

Interest in information

The following scaled question was asked to respondents about their interest in news and other information about issues affecting the Great Lakes. Results in this graph combine the results of very interested (5) and interested (4) as well as not at all interested (1) and not interested (2).

Q1. How interested are you in news and other information related to issues affecting the Great Lakes? Please use a scale from one being not at all interested to five very interested.



A total of 50 percent expressed interest in receiving information about the Great Lakes with 31 percent being very interested and 19 percent interested, while 18 percent were neutral on their interest providing a response of (3) neither interested nor uninterested. Total disinterest was 24 percent with 17 percent claiming that they are not at all interested and seven percent not interested while eight percent were unsure or did not know. Similar to several prior questions, those most likely to be very interested in information were liberals, younger individuals (i.e., 18-

34 year olds), households earning over \$100,000 and residents from Ontario (38 percent), followed by Minnesota (33 percent), Indiana (32 percent) and Michigan (31 percent).⁷

Information sources

All respondents were asked in an open ended question that allowed them to provide multiple answers about *where they currently get information not only about the Great Lakes but also related environmental issues* (Q2). When combining the n=6753 mentions provided, online or hard copy newspapers were named by 26 percent, television by 22 percent and other internet sources by 22 percent. Other notable answers included radio (ten percent), word of mouth or by talking to others (seven percent), social media (five percent) and magazines (one percent). A total of seven percent could not recall or remember a source.

In the final question of this section, another open probe that allow for up to three responses asked about *preferred sources to get information about the Great Lakes as well as related environmental issues* (Q3). There were n=5630 answers provided and the most cited combined mention was the internet by 25 percent, closely followed by television (22 percent) and newspapers (20 percent). A total of nine percent named social media, eight percent radio, four percent through a personal or word of mouth approach, one percent through environmental organizations and one percent via a mailing. There were nine percent that did not know. Older respondents 65+ most preferred newspapers (35 percent) while Millennials 18-34 had the highest response of social media (19 percent) and the internet (29 percent).⁸

⁷ Based on significance tests comparing the mean response across the various demographic groups.

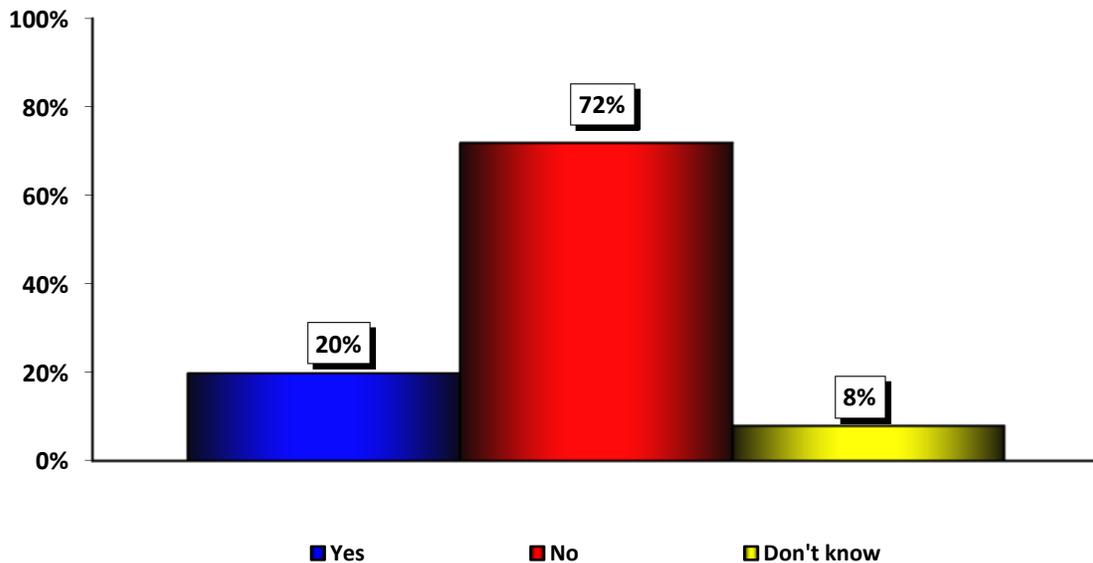
⁸ Based on significance tests comparing the mean response across the various demographic groups.

Section 6. International Joint Commission

Questioning moved on to the topic of the IJC, awareness of it, the importance of having it and its perceived role.

Awareness and perceived role

Q1. Have you heard of or are you aware of the International Joint Commission (IJC)?



Only 20 percent of respondents have heard of or were aware of the IJC. This 20 percent or n=785 were asked in a series of follow up questions starting with *what they perceive to be its role* (Q2). A total of 37 percent aware of the organization said that the IJC protects the Great Lakes, 23 percent that it helps both Canada and the United States to cooperate in lake protection, 12 percent that it assists in cleaning up the waters and four percent to ensure legislation in place for protection. Almost one quarter or 24 percent of those aware of the IJC could not recall a mention as it related to its role.

Advertising awareness

The 20 percent of respondents (n=785) that were aware of the IJC were then asked *if they had seen or heard any advertising about the organization* (Q3) of which only six percent (n=44) claimed that they had. When the n=44 were asked *what they had seen or heard* (Q4) most of them (59 percent, n=26) were not able to remember or were unsure, while other stated that they are trying to protect the lakes (16 percent, n=7), something general in the media (16 percent, n=7) and general information or an update (nine percent, n=4)

In another question allowing for multiple responses, the n=44 that had seen or heard advertising were asked *from what sources they got this information* (Q5). Television was the most named number of responses (from the n=92 provided) by 36 percent, followed by radio with 24 percent, the internet by 17 percent, newspapers both online and hard copy by 14 percent, word of mouth by five percent, social media by two percent and the IJC website by one percent.

Importance of IJC

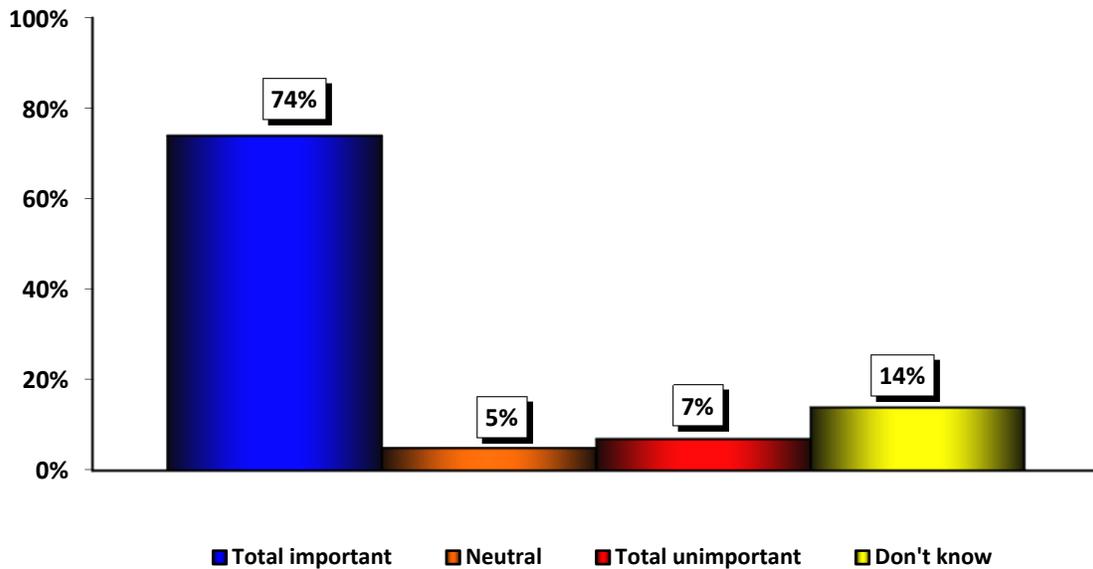
Three questions were then asked to respondents in this last part of this section. The first one (Q6) asked those 20 percent or n=785 aware of the IJC about *how important they felt it was that the US and Canada work together on dealing with Great Lakes issues*. A total of 77 percent said it was important (seven percent) or very important (70 percent), only 12 percent not important (five percent) or not at all important (five percent), eight percent had a neutral opinion (neither important nor unimportant) and three percent did not know.

The following preamble describing the role of the IJC was then read to all survey respondents after which they were asked three follow up questions.

“The International Joint Commission is an independent binational organization established by the United States and Canada. The purpose of the Commission is to help prevent and resolve disputes about the use and quality of boundary waters affecting both countries. It also works to monitor progress on the Great Lakes Water Quality Agreement to restore and protect the Lakes.”

The first indicator questioned all respondents on how important they considered it to be to have this organization.

Q7. In your opinion, how important is it to have an organization like the IJC? Please use a scale from one not at all important to five very important.

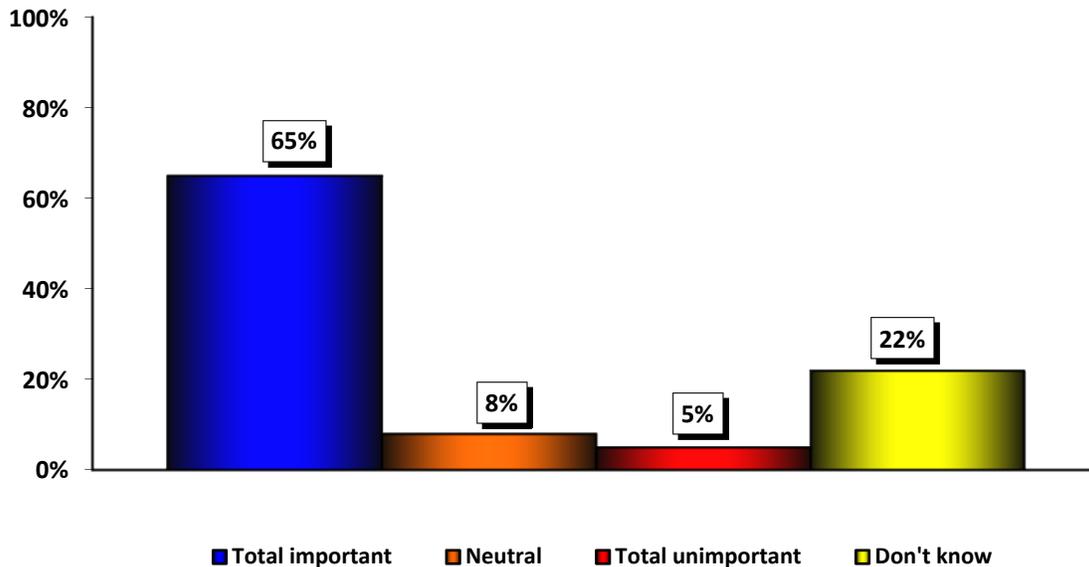


Among all respondents 74 percent said it is important (12 percent) or very important (62 percent) to have the IJC, only seven percent not important (three percent) or not at all important (four percent), five percent neither important nor unimportant (neutral) and 14 percent did not know. There were no differences in the level of importance placed on having an organization like the IJC when looking at factors such as socio-demographics, political leanings, or location of residence (state/province).⁹

⁹ Based on significance tests comparing the mean response across the various demographic groups.

The final importance question in this section dealt with the significance of adequately funding the IJC.

Q8. How important is it that the IJC be adequately funded in order to fulfill its objective?



On the issue of IJC funding, importance is still in majority territory but it has decreased from the previous question (Q7) on overall importance (- nine percent) and the undecideds have grown (+ eight percent). There are 65 percent that feel it is important that the IJC is adequately funded with half (50 percent) saying very important and 15 percent important, only four percent unimportant (two percent not at all important & three percent not important), eight percent neither important nor unimportant (neutral) and a high 22 percent did not know.

In the final question (Q9) on the IJC an open ended probe was asked to all respondents about *what they considered to be the most important role of the IJC or where the organization should direct its priorities*. A high 45 percent answered do not know to this question revealing a lack of clarity or awareness on where the organization needs to focus its energies. Among those with an opinion, the category most named was protecting the quality of water (34 percent), while other mentions ranged from education (four percent), the protection from invasive species (four percent), reducing industrial pollution (four percent), helping to encourage US and Canadian cooperation on water issues (three percent), punishing polluters (two percent) and enforcing regulations (two percent).

Section 7. Value Statements

In the final section of the survey respondents were asked to rate their level of agreement on a scale from one strongly disagree to five strongly agree with eight value statements related to the Great Lakes. Results in this table combine the total agree results of strongly agree (5) and agree (4) as well as the total disagree results of strongly disagree (1) disagree (2).

“I am now going to read a short list of statements and after each one please rate your level of agreement with each one using a scale from one strongly disagree to five strongly agree.”

AGREEMENT VALUE STATEMENTS	Percent Total Agree	Percent Neutral	Percent Total Disagree	Percent Don't know
Q1. Actions should be taken now to ensure the health of the Great Lakes for future generations	73%	11%	3%	14%
Q2. It is important to protect the Great Lakes for the personal benefits that I receive	60%	18%	6%	16%
Q3. The Great Lakes should be protected for the benefit of people living in the Great Lakes basin	68%	12%	8%	12%
Q4. The Great Lakes should be protected for the benefit of fish and wildlife who depend on the lakes	76%	4%	5%	15%
Q5. The economy of the region will suffer if the Great Lakes are not healthy	76%	7%	2%	15%
Q6. The health of residents in the region will suffer without healthy Great Lakes	72%	12%	3%	13%
Q7. I am concerned about the health of the Great Lakes as a whole	53%	25%	9%	13%
Q8. I am most concerned about the health of the lake that is closest to me	74%	13%	3%	10%

Wildlife and economic concerns are most important to residents in the Great Lakes area. The strongest level of agreement (76 percent) related to the need to protect the Great Lakes for the

benefits of fish and wildlife and that if not protected or healthy the region's economy will suffer (76 percent). There were no differences in agreement with the value statements when looking at factors such as socio-demographics, political leanings, or location of residence (state/province).¹⁰

The third highest level of agreement for a statement related to being concerned about the health of the lake closest to them (74 percent). This agreement statement is juxtaposed to the one with the lowest agreement score at 53 percent on being concerned about the Great Lakes as a whole.

There is a sense as a function of total agreement among more than seven in ten (73 percent) that action should be taken now to ensure the health of the Great Lakes for future generations and that the health of residents will suffer if the Lakes are not healthy (72 percent).

Personal benefits are less important as a lower 68 percent agreed that the Great Lakes should be protected for the benefit of people living in the area and only 60 percent agreed that they should be protected for their own personal benefit.

In short, residents seem most concerned about the lake in their immediate vicinity and they want healthy lakes for the greater environmental good and for larger economic benefits. Health and generational (future) issues also seem to outweigh any personal benefits that would result from a healthy lake system.

¹⁰ Based on significance tests comparing the mean response across the various demographic groups.

Section 8: Demographics

The final few questions collected demographic information. The details of this information will remain strictly confidential and is used for statistical purposes only.

D1. Which of the following age groups are you in?

Age Group	Frequency	Percent
18-34	1209	30.6
35-44	799	20.2
45-54	748	18.9
55-64	510	12.9
65 or older	684	17.3
Total	3950	100.0

D2. What is the highest level of education that you have completed?

Level of Education	Frequency	Percent
Some high school or less	245	6.2
Graduate high school	495	12.5
Some post-secondary (college, university)	948	24.0
Graduated university/college	1877	47.5
Refused	385	9.7
Total	3950	100.0

D3. What is your combined family income?

Combined Family Income	Frequency	Percent
Less than \$50,000	883	22.4
\$50,000 to \$74,999	667	16.9
\$75,000 to \$99,999	356	9.0
\$100,000 or more	817	20.7
Refused	1227	31.1
Total	3950	100.0

D4. How many people live at this household?

Number of People	Frequency	Percent
One	810	20.5
Two	1926	48.8
Three	328	8.3
Four	286	7.2
Five or more	183	4.6
Refused	418	10.6
Total	3950	100.0

D5. Finally, do you consider yourself to be politically conservative, liberal or moderate?

Political Group	Frequency	Percent
Conservative	1195	30.3
Liberal	1024	25.9
Moderate	1214	30.7
Refused	517	13.1
Total	3950	100.0

D6. What is your gender?

Gender	Frequency	Percent
Male	1952	49.4
Female	1998	50.6
Total	3950	100.0