

Navigating the results of 2021 Great Lakes Regional Polls

International Joint Commission Great Lakes Water Quality Board

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As outlined in the Great Lakes Water Quality Agreement, the Great Lakes Water Quality Board (WQB) serves the International Joint Commission (IJC) in an advisory capacity. The WQB includes an Engagement Work Group, established to fulfill the WQB's growing need to strengthen and expand its public engagement efforts to reach non-traditional audiences through a wide range of communication techniques and strategies.

The Engagement Work Group recognizes that it is important to 'meet people where they are' and attune the WQB's communication products to people's varying attitudes and understanding of Great Lakes issues. Therefore, every three years the work group conducts opinion polls to gauge public perceptions, beliefs, attitudes and understanding of Great Lakes environmental issues, and can inform decision makers to undertake actions to protect and restore the Lakes.

The WQB offers the following information and guidance about its 2021 Great Lakes Regional Polling efforts, highlighting the important differences and similarities between the random phone poll report findings and the anecdotal online poll findings.

Background

The work group started in 2015 with a random phone poll of 3,950 Canadian and US residents with landlines located in the Great Lakes basin.¹ In 2018 the work group repeated and expanded upon the random phone poll, querying 4,250 respondents, adding questions and setting a representative sampling quota to gather a minimum number of responses from individuals self-identifying as Indigenous.² In 2021, the work group again repeated and refined the random phone poll, gathering 4,550 responses, ensuring key questions remained the same from 2015 and 2018, adding new questions, increasing the number of Indigenous participants, and including a targeted number of responses from residents of Great Lakes islands.³ New in 2021, the work group also deployed an online version of the phone poll, gathering 4,674 responses to questions repeated from the phone poll, modified questions from the phone poll, and new questions.⁴ The

¹ International Joint Commission Great Lakes Water Quality Board, 2015, "2015 Binational Great Lakes Basin Poll," accessed at: ijc.org/en/wqb/2015-binational-great-lakes-basin-poll, September 14, 2021, 31 pages.

² International Joint Commission Great Lakes Water Quality Board, 2018, "Second Binational Great Lakes Basin Poll," accessed at: ijc.org/en/wqb/second-binational-great-lakes-basin-poll, September 14, 2021, 67 pages.

³ International Joint Commission Great Lakes Water Quality Board, 2021, "2021 Great Lakes Regional Poll Telephone Poll Final Report," accessed at: ijc.org/sites/default/files/WQB_GreatLakesRegionalPoll_TelephonePollReport_2021.pdf, November 2021, 54 pages.

⁴ International Joint Commission Great Lakes Water Quality Board, 2021, "2021 Great Lakes Regional Poll Online Poll Final Report," accessed at: ijc.org/sites/default/files/WQB_GreatLakesRegionalPoll_OnlinePollReport_2021.pdf, November 2021, 36 pages.

online poll used a purposive sample approach to try to increase participation from under-represented publics identified in the phone poll results.

The phone poll randomly selected respondents with landline and cell phone area codes within (or overlapping) the Great Lakes basin area. The phone poll established a quota to reflect the populations of the eight states and province of Ontario. The phone poll is valuable because the findings of the phone poll are generalizable to the broader population of Great Lakes residents (within a ± 1.5 percent margin of error). Many poll questions repeated from the 2015 and 2018 establish this 2021 phone poll as the third point in a one-of-a-kind longitudinal data set capturing the public's attitudes and opinions on Great Lakes environmental issues. The phone poll is also uniquely valuable because it generated a sufficient sample size of Indigenous individuals through oversampling that enables statistically valid comparisons (and in some cases, statistically significant differences) in findings among and between the general population and Indigenous populations.

Despite the random sampling used in the past three polls, the Engagement Work Group recognized that the random phone poll appears to oversample some demographic and geographic cohorts and under-sample others. For example, in the 2021 random phone poll:

- Geography: while quotas were for state populations, only 7 percent of respondents live in the Lake Superior watershed and 6 percent live in the Lake Huron watershed
- Age: only 1 percent of respondents were students, the minimum age to participate was 18, and 30 percent of respondents were age 18-34
- Race, culture and ethnicity: 61 percent of poll respondents identified as white, compared to 10 percent identified as Black/African American/African Canadian and 3 percent identified as Hispanic/Latinx. The Indigenous and Métis sampling quota (500 respondents) constituted 11 percent of respondents. 7 percent refused to answer this question.
- Duration of residence: 87 percent of respondents lived in the Great Lakes basin 10 years or longer

Therefore, new in 2021, the work group conducted a subsequent online poll with the principal purpose of soliciting responses from several under-represented geographic and demographic target groups, including residents of the Lake Superior watershed, youth and newcomers, and expand oversampling to increase responses from Great Lakes island residents and Indigenous peoples.⁵ The online poll was a modified version of the 2021 phone poll repeating most questions, modifying others and adding new questions. Whereas the online poll was a random sample of phone numbers, the online poll was a purposive sample to try to reach the under-represented publics identified above. It is important to note that the findings of the 2021 online poll are not statistically generalizable to the broader Great Lakes population because, for the purpose of targeting respondents as described above, the poll responses were not randomly collected. The polling contractor Oraclepoll was asked to disseminate the online survey link through social media and other outlets to reach multiple target audiences and the survey was also

⁵ Allison Voglesong Zejnati, 2021, "Third Great Lakes Poll Underway, Board Seeking Diverse Voices," International Joint Commission Great Lakes Connection newsletter, accessed at: [ijc.org/en/third-great-lakes-poll-underway-board-seeking-diverse-voices](https://www.ijc.org/en/third-great-lakes-poll-underway-board-seeking-diverse-voices), September 13, 2021.

distributed by IJC staff and WQB members and posted the IJC website so anyone could complete the online poll.

Because of the meaningful differences in the poll methods and generalizability of the results, the WQB chose to publish the report on the 2021 phone poll findings separate from the report on the 2021 online poll. **The WQB offers the following considerations to readers navigating the WQB's two 2021 poll findings reports:**

1. The 2021 online poll only partially succeeded in oversampling the target groups that were not sufficiently covered by the 2021 phone poll.

The online poll provides better representation of views from residents in the Lake Superior watershed (17 percent) and the Lake Huron watershed (28 percent).⁶

Attracting youth participants continues to be a challenge, and respondents skewed older than in the phone poll overall. Youth between 15 and 18 constituted 1 percent of respondents, but student respondents were again low at 2 percent of respondents, only 15 percent were between ages 19 and 34. Half of the online poll respondents were over the age of 55, substantially more than the phone poll (28 percent).

The online poll partially succeeded at increasing the racial, cultural and ethnic diversity of respondents, and Indigenous respondents (the First Nations, Tribes and Metis) are well-represented in the online poll. While 47 percent identified as white, 25 percent identified as Indigenous. However, 18 percent refused to answer the question, and other backgrounds were less representative than in the phone poll (i.e., 2 percent identified as Black/African American/African Canadian and none identified as Hispanic/Latinx).

The online poll also failed to oversample “newcomers,” with residents of less than five years constituting only 2 percent of the sample; of the 94 percent of respondents residing 11 years or more, 87 percent claimed to live in the region longer than 20 years.

2. In both the phone and online poll, few respondents said their lake is ‘improving’. Online poll respondents were more positive about the status of their lake as ‘good’ but more negative about the trend of their lake as ‘deteriorating,’ whereas phone poll respondents were more evenly split with a third or respondents saying the status of their lake is ‘good’ or ‘poor’ and ‘deteriorating’ or ‘unchanging.’

The governments of Canada and the United States report on the status and trends of the lakes’ environmental health and water quality in their triennial State of the Great Lakes

⁶ The phone poll established a respondents’ location based on responses to their ZIP/Postal code, but the online poll did not ask respondents for a ZIP/Postal code. While the online poll captured IP addresses, the contractor did not provide results of respondents’ geography in their report. However, in the phone poll, actual ZIP/Postal code location distribution was within 1 point of respondents’ answer to the question “With which Great Lake (or other water body) do you have the greatest connection?” Therefore, responses to this question in the online poll is a suitable estimate of respondents’ geographic location.

reports.⁷ To provide public opinion data that corresponds to these government questions, the WQB repeated its previous question on the trends of lakes' environmental health and water quality and added question a question on the lakes' current status.

Some 42 percent of online poll respondents rated the status of 'their lake' as good, whereas 29 percent of phone poll respondents rated the status of 'their lake' as good. A third of respondents from both the 2021 phone poll (33 percent) and online poll (28 percent) believe the status of 'their lake' is poor.

In the 2015 and 2018 phone polls, respondents were asked their opinion on the trend of the environmental health and water quality for the Great Lakes (overall), but the question in the 2021 phone poll asked respondents their opinion on the trend of 'their lake' they identified in Question 2. The phone poll combined rating shows an even split: 30 percent believe 'their lake' is deteriorating and 33 percent believe 'their lake' is staying about the same. Notably, respondents in the online poll were more negative about 'their lake:' 46 percent believe 'their lake' is deteriorating and 21 percent believe 'their lake' is not changing. Both polls are similar in that fewer responses reflecting the belief that 'their lake' is improving (18 percent in the phone poll and 16 percent in the online poll).

3. Both the online poll and the phone poll support the finding that nine in ten people believe it is important to protect the health and water quality of the Great Lakes basin.

Across all the three phone polls, and in the new online poll, an overwhelming majority of people expressed the belief that it is important to protect the Great Lakes: 85 percent of the 2015 phone poll respondents; 88 percent of the 2018 phone poll respondents, 90 percent of the 2021 phone poll respondents, and 95 percent of the 2021 online poll respondents.

4. Consistent between both polls, top public issues of concern are pollution and invasive species. Online poll respondents are more concerned about climate change, while phone poll respondents are more concerned about algal blooms.

Pollution is a top concern; 39 percent of online poll respondents and 41 percent of phone poll respondents identified pollution (when combining various characterizations of pollution (including pollution generally, industrial pollution, municipal runoff, agricultural runoff, waste dumping, petroleum spills and plastics). Invasive species (including both aquatic and terrestrial species) were also the top concern for 12 percent of online poll respondents and 18 percent of phone poll respondents.

Far fewer phone poll respondents identified climate change as the top concern (3 percent) than the online poll respondents (9 percent). Slightly more phone poll respondents identified algal blooms as the top concern (8 percent) than the online poll respondents (6 percent).

⁷ Recent "State of the Great Lakes" reports are accessible at the website for the Canada-United States Collaboration for Great Lakes Water Quality: binational.net/category/docs/a10-docs/.

5. Differences between how the questions were presented and worded can help explain why far more online poll respondents reported engaging with the Great Lakes recreationally, culturally or otherwise than phone poll respondents.

The phone survey first asks a screening question: “Do you or any members of your household use the Great Lakes for leisure or recreational purposes,” and 46 percent responded ‘yes’. Only those “yes” respondents were asked subsequent questions about the type of activities they engage in. The work group changed the question wording and structure for the online poll, removing the screening question and instead asking “In what ways do you engage recreationally, culturally or otherwise with the Great Lakes?” Framed this way, 99 percent of respondents identified at least one activity. The top activity in the online poll was hiking or walking (85 percent), far greater than the 3 percent of phone poll respondents.⁸ However, swimming and beach visits were a top activity, reported by 75 percent of online poll respondents and 30 percent of phone poll respondents.⁹

Conclusion

Ultimately, individuals navigating the similarities and differences among the WQB 2021 phone poll and 2021 online poll should always keep in mind that the online poll is based on a self-selected, purposive, non-random sample of Great Lakes residents. Similarities between the two polls’ findings should inspire readers’ confidence in the veracity of polls, while differences highlight areas where further analysis and inquiry are warranted. The WQB expects to undertake additional analysis of these results in 2022. The datasets are available by request, and the WQB encourages academics and other organizations to explore the results of the 2021 online and phone polls to advance our collective understanding of public opinions and attitudes about the Great Lakes.

⁸ Three percent of the 46 percent of total phone poll respondents that answered “yes” to the screening question, but about 1 percent of total phone poll respondents.

⁹ Thirty percent of the 46 percent of total phone poll respondents that answered “yes” to the screening question, but about 14 percent of total phone poll respondents.