



The Value and State of Fresh Water and Appropriate Responses to Freshwater Issues Survey

Final Report

Prepared for Environment and Climate Change Canada

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**The Value and State of Fresh Water and Appropriate Responses to Freshwater Issues Survey
Final report**

Prepared for Environment and Climate Change Canada by Environics Research

July 2021

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Executive summary

A. Background and objectives

The 2019 Mandate Letter to the Minister of Environment and Climate Change called on the Minister to:

With the support of the Minister of Agriculture and Agri-Food, create a new Canada Water Agency (CWA) to work together with the provinces, territories, Indigenous communities, local authorities, scientists and others to find the best ways to keep our water safe, clean and well managed.

Develop further protections and take active steps to clean up the Great Lakes, Lake Winnipeg, Lake Simcoe and other large lakes.

A supplementary mandate letter, issued on January 15, 2021, reaffirmed the CWA commitment. It directed the Minister of ECCC to “With the support of the Minister of Agriculture and Agri-Food, the Minister of Natural Resources and the Special Representative for the Prairies, continue work to create a new Canada Water Agency...”.

To deliver on these dual commitments, ECCC has sought external input through national and regional policy forums, online tools, and other forms of engagement. Most participants have had a solid knowledge base and a strong personal or professional interest in fresh water. Thus, they represent a relatively small segment of the Canadian public.

The purpose of this public opinion research study is to complement ECCC’s previous engagement on the freshwater commitments by assessing the *general population’s* views on:

- The value and state of fresh water
- The appropriate responses to freshwater issues.

The findings of this study provide ECCC with an up-to-date understanding of public sentiment. ECCC intends to use the information to:

- Inform the implementation of the mandate letter commitments (and potentially other Government of Canada policies and programs)
- Inform external outreach and communications strategies for the CWA and large lakes initiative.

B. Methodology

Environics Research conducted an online survey with 2,001 Canadians (aged 16 and older), from June 11 to June 19, 2021. The sample was stratified to ensure robust sample sizes across regions. Data was weighted approximately by region, age and gender to reflect the Canadian population according to the 2016 Census.

Survey respondents were recruited from registered members of an opt-in online panel. Since a sample drawn from an online panel is not a random probability sample, no formal estimates of sampling error can be calculated.

More information about the methodology for research is included in Appendix A of the full report.

C. Contract value

The contract value was \$39,922.09 (HST included).

D. Key findings

The survey results reveal that most Canadians consider fresh water to be among the most important natural resources in the country because of its value to the health of Canadians and to the environment.

Canadians believe the current quality of fresh water nationwide is in good shape, but are uncertain there is enough to meet long-term needs. They also hold mixed views about whether fresh water is being adequately protected, and anticipate that issues like water pollution and loss of wetlands will worsen over the next decade.

Most Canadians do not feel knowledgeable about fresh water, which is evident in their relatively elementary understanding of the threats facing fresh water in Canada – they tend to focus on “pollution” writ large and on industry, with limited mention of household (over)use. Similarly, many place responsibility on governments to regulate industry and prevent water pollution. The results suggest the need for greater awareness of individual Canadians’ role in and responsibility for fresh water protection in Canada.

Value of fresh water

- There is a broad consensus that fresh water is one of Canada's most important natural resources; nearly half (46%) rate it as the most important natural resource in Canada (well ahead of forests and oil & gas, each at 17%), and seven in ten (72%) rank it among their top three choices. The importance of fresh water is linked most closely to the health of Canadians (87%), wildlife, and ecosystems (85%); as well as to food production (85%), quality of life (83%) and Canada's beauty (80%), all of which rank ahead of its perceived value to economic prosperity, industry, recreation, culture and Indigenous reconciliation.

State of and threats to fresh water

- There is broad but modest concern about the **quality** of fresh water in Canada, with three in four (75%) saying they are at least somewhat concerned, but only three in ten who are very concerned. This reflects general optimism that water quality in Canada is currently excellent or good (86%, vs. 11% who say it is only fair or poor). Despite general positivity about the current state of fresh water quality in Canada, there are mixed views about its trajectory over the past ten years. Roughly three in ten believe fresh water quality has declined in the past decade, while roughly equal proportions think it has stayed the same (32%) or improved (28%).
- Canadians express uncertainty that the **supply** of fresh water is adequate for our long-term needs. Only one in five (22%) are very confident, 55% are only somewhat confident, and 18% are not confident.
- When asked to name the biggest threat to Canada's fresh water, half (50%) of the population points to pollution, followed by industry (21%) and climate change (10%). By comparison, relatively few mention household waste of water (6%) as a problem. Looking ahead ten years, a majority believes that the major issues affecting fresh water, like pollution and loss of wetlands, are bound to worsen over time.

Appropriate response to issues

- After considering the state of and potential threats to fresh water, there are mixed views about whether fresh water in Canada is adequately protected. Over half of Canadians (55%) rate current efforts as excellent or good, compared to almost four in ten (38%) who rate them only fair or poor (8% are unsure).
- Suggestions for how to better protect fresh water in Canada focus on the role of governments in monitoring and regulating, as well as creating disincentives, such as fines for polluters and fees for overuse.
- When presented with the possibility, four of five (80%) agree that protection of Canada's fresh water could be improved if there was more collaboration between different levels of government and different jurisdictions.

Communicating about fresh water

- When asked to rank arguments in favour of protecting Canada's fresh water, leaving clean fresh water for future generations was ranked most compelling, with 64 percent selected this among their top three choices. Other strong arguments include safeguarding the health of Canadians (57% top three) and ensuring that wildlife and ecosystems have the fresh water they need (57% top three).
- Canadians do not feel particularly well informed about the state of fresh water in Canada: only two in ten (19%) say they are extremely or very informed. Overall, Canadians most often rely on television (40%) or the internet (35%) for information about fresh water. However, generational differences are evident, with younger Canadians more likely to turn to social media or the internet, and older Canadians more likely to find information through TV or government communications.

Differences by population segment

- The study results uncover differences in perceptions between generations of Canadians. Those 55 or older are more likely to say fresh water quality has declined in the past ten years (24%), and to predict that freshwater issues will further worsen over time (with the exception of water pollution, which all age groups equally anticipate will become more serious). Older Canadians 55 and up are also more likely than those under 35 to have concerns about freshwater protection in Canada.
- Among Canadians who live near fresh water, and those working in jobs that rely on fresh water; there is higher confidence that the current state of fresh water in Canada is good. However, there are also higher levels of concern about it worsening in the future.

E. Political neutrality statement and contact information

I hereby certify as a senior officer of Environics that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Communications Policy of the Government of Canada, and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leaders.

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About this report

This report begins with an executive summary outlining key findings and conclusions, followed by detailed analysis of the quantitative results. A detailed set of “banner tables” is provided under separate cover; this presents results for all survey questions by segments such as region, age and gender.

The results are expressed as percentages unless otherwise noted. Results may not add up to 100% due to rounding or multiple responses. Net results cited in the text may not exactly match individual results shown in the charts due to rounding. Findings in this report are based on the online panel sample of 2,001 Canadians. Unless otherwise noted, all demographic comparisons (age, gender, region, income, education, etc.) are based on this sample.

II. Detailed findings

1. Value of Fresh Water

Most Important Natural Resources in Canada

Nearly half of Canadians rate fresh water as Canada's most important natural resource. Seven in ten Canadians identify fresh water among the top three most important natural resources, and a similar proportion overall mention forests.

Most Canadians consider fresh water to be an important natural resource in Canada. More than seven in ten Canadians (72%) rank fresh water within the first, second or third spot compared to other natural resources, with nearly half (46%) ranking it as their first choice. While a similar proportion overall (68%) name forests in their top three choices, Canadians are nearly three times as likely to rank fresh water as their first choice (46% vs. 17% for forests).

Ranking of most important natural resource in Canada

Natural Resource	Ranked 1st	Ranked 2nd	Ranked 3rd	Ranked 1-3rd
Fresh water	46%	14%	12%	72%
Forests	17%	31%	20%	68%
Oil & gas	17%	13%	14%	45%
Agricultural land	10%	21%	21%	52%
Minerals and metals	4%	9%	14%	27%
Fisheries	4%	10%	15%	29%
Coal	1%	3%	3%	7%

Q5. In your view, which of the following are Canada's three most important natural resources?

Groups more likely to rank fresh water as Canada's most important natural resource include:

- Canadians aged 55 or older (51%).
- Residents of Ontario (50%).

Importance of Fresh Water to Canadian Life

Freshwater is rated as most important to the health of humans and the environment, to food production, and to quality of life and the country's natural beauty. Comparatively fewer respondents – although still a majority – link fresh water to economic prosperity and industry, recreation and culture and Indigenous reconciliation.

A majority of Canadians rate fresh water as extremely or very important to almost all of the aspects addressed in the survey, but the results suggest some prioritization. The aspects most closely linked to fresh water are people's health (87%), the environment (85% wildlife and ecosystems), agriculture and food production (85%), quality of life (83%) and Canada's natural beauty (80%).

A second tier, for which fresh water is rated less important, includes economic prosperity, recreation, identity and culture, Canadian industry, and reconciliation with Indigenous peoples. Note that Canadians do not distinguish between the importance of fresh water to their province’s economy or culture versus the economy or culture of Canada as a whole. Moreover, Canadians rate fresh water as more important to recreation (65%) and culture (63%) as a whole than to their own personal leisure (49%) or culture (53%).

Importance of values to Canada’s fresh water

Measure of importance	NET: Important	Extremely important	Very important	Somewhat important	Not very important	Not at all important	Not sure
The health of people living in Canada	87%	55%	31%	10%	1%	1%	1%
Wildlife and ecosystems	85%	51%	33%	13%	1%	0%	1%
Canadian agriculture and food production	85%	45%	40%	11%	2%	0%	1%
The overall quality of life in Canada	83%	47%	37%	14%	2%	0%	1%
The natural beauty of Canada	80%	42%	38%	16%	2%	0%	1%
Canada’s economic wealth and prosperity	72%	33%	40%	21%	4%	1%	2%
Province’s economic wealth and prosperity	71%	33%	38%	23%	4%	1%	2%
Recreation/enjoyment of the outdoors	65%	27%	38%	29%	4%	1%	1%
Canada’s identity and culture	63%	26%	37%	26%	7%	2%	2%
Province’s identity and culture	63%	27%	36%	27%	7%	2%	2%
Canadian industry	60%	23%	37%	30%	5%	2%	3%
Reconciliation with Indigenous peoples	58%	31%	27%	23%	9%	5%	5%
Your personal culture and identity	53%	21%	32%	28%	13%	4%	2%
Your personal leisure	49%	19%	30%	35%	12%	2%	2%

Q7. How would you rate the importance of Canada’s fresh water to each of the following:

In general, Canadians aged 35+ and women rate the importance of fresh water to people’s health, the environment, agriculture and food production, quality of life, and Canada’s natural beauty more highly.

However, younger Canadians (between 16-34 years old) and those with lower household incomes are most likely to rate fresh water as extremely or very important to reconciliation with Indigenous people and personal culture and identity.

2. State of Fresh Water

Concern About Quality of Fresh Water in Canada

Three in four Canadians are at least somewhat concerned about the quality of fresh water in Canada, but only a minority are very concerned, suggesting Canadians do not see an immediate threat to the state of our fresh water.

A three-quarters majority (75%) of Canadians are personally concerned about the quality of fresh water in Canada, with three in ten (30%) feeling very concerned and close to half (45%) somewhat concerned.

Concern about quality of Canada's fresh water

Level of Concern	NET: Concerned	Very concerned	Somewhat concerned	Not very concerned	Not at all concerned	Not sure
Canadians (general population, n = 2,001)	75%	30%	45%	19%	4%	2%

Q6. How concerned are you personally about the quality of fresh water in Canada?

Strong concern (i.e. *very concerned*) about the quality of fresh water in Canada is higher among:

- Residents of Ontario (34%).
- Women (33% vs. 27% men).
- Canadians who have an annual income of \$40k or less (37%).

Quality of Fresh Water in Canada

Canadians are largely positive about the quality of fresh water in Canada, with nearly nine in ten rating national freshwater and eight in ten rated their provincial freshwater as excellent or good.

A large majority of Canadians rate the quality of fresh water in Canada to be excellent or good; perceptions of water quality at the provincial level are only slightly weaker. While close to nine (86%) in ten Canadians consider the quality of fresh water in Canada to be excellent or good, eight in ten (80%) say the same about their own province.

Quality of fresh water

Quality of fresh water in Canada/Your province/territory	NET: Excellent/good	Excellent	Good	Only fair	Poor	Not sure
Canada as a whole	86%	32%	55%	10%	1%	2%
Your province/territory	80%	26%	54%	14%	2%	4%

Q8. Overall, how would you rate the quality of fresh water in Canada?

Q10. How would you rate the quality of fresh water in [PIPE IN PROVINCE / TERRITORY]?

Regional and demographic variation in perceptions of water quality are similar at both the national and provincial level. In general (but not in all cases), positive perceptions of water quality are higher among residents of Alberta, British Columbia, and Quebec; men; those with a university degree; and Canadians with a household income above \$100K.

Change in Quality of Canada’s Fresh Water Over Time

There are mixed views about the state of fresh water compared to ten years ago. Roughly equal proportions of Canadians say the quality of water has improved, stayed the same, or declined.

Perceptions are divided about whether the quality of fresh water in Canada has improved (28%), stayed the same (32%) or declined (31%) over the past 10 years. The survey responses suggest a fair degree of uncertainty, as more Canadians say quality has only slightly changed in either direction (i.e. improved a little or declined a little), as opposed to asserting a stronger position (i.e. improved a lot or declined a lot).

Change in quality of fresh water versus 10 years ago

Quality of fresh water over time	NET: Improved	Improved a lot	Improved a little	Stayed the same	Declined a little	Declined a lot	NET: Declined	Not sure
Canadians (general population, n = 2,001)	28%	8%	20%	32%	26%	5%	31%	9%

Q9. Compared with 10 years ago, would you say the quality of fresh water in Canada has...?

The perception that fresh water quality in Canada has improved (a little or a lot) skews to:

- Canadians aged 16 to 34 (39%) and men (30%).
- Residents of Quebec (30%).

The perception that quality of fresh water in Canada has declined skews to:

- Canadians aged 55 or older (39%).
- Residents of Manitoba / Saskatchewan (39%).

Confidence in Canada’s Fresh Water Supply

Canadians are generally optimistic that Canada has enough fresh water to meet its long-term needs, but only one in five are very confident. Canadians hold comparable views about water supply in their own province.

Relatively few Canadians (22%) are fully confident that Canada has enough fresh water to meet its long-term needs. Canadians are most likely to feel only somewhat confident (55%) in the adequacy of our fresh water supply, while almost one in five (18%) are not confident. Their level of confidence in fresh water supply in their own province or territory is almost identical.

Confidence in fresh water supply

Level of confidence	NET: Confident	Very confident	Somewhat confident	Not very confident	Not at all confident	Not sure
Canada as a whole	77%	22%	55%	15%	3%	6%
Your province/territory	76%	23%	53%	15%	3%	6%

Q11. How confident are you that Canada as a whole has enough fresh water to meet its long-term needs?

Q12. How confident are you that province/territory has enough fresh water to meet its long-term needs?

At the national level, men are the only demographic sub-group that is more likely to be *very confident* in Canada’s long-term water supply nationally (28% very confident). Men are equally confident about their provincial water supply (28% very confident). Those living in British Columbia, Alberta, and Quebec are more likely to say they are *very confident* in their province’s long-term water supplies compared to those in other provinces.

Biggest Threats to Canada’s Fresh Water

When asked about the top threats to Canada’s fresh water, Canadians identify pollution as the top threat, followed by industry and climate change.

When asked about the top threat to Canada’s fresh water (unprompted, without providing response categories), Canadians are most likely to say pollution (50%). Industry-related threats (including wasteful use by companies and agriculture) are mentioned second-most often (21%). Global warming or climate change were mentioned by close to one in ten (10%). Relatively few mention wasteful use by individuals/households(6%).

Threats to Canada’s fresh water

Perceived threats to Canada’s fresh water	Canadians (general population, n=2,001)
Pollution (Net)	50%
Industry (Net)	21%
Global warming / climate change	10%
Wasteful use by individual consumers	6%
Mass exports of water to the United States	4%
Wasteful use (general)	3%
Government (Net)	3%
Inadequate water infrastructure	2%
Other	10%
Nothing/no threat	2%
Not sure	7%

Q13. What do you think is the top threat to Canada’s fresh water?

Pollution is mentioned more or less often by some sub-groups:

- Residents of Ontario mention pollution more often than other regions (55%), while Albertans are less likely to mention pollution as a threat (35%).
- Women (56%) and younger Canadians between 16-34 (54%) are more likely to mention pollution.

Groups more likely to identify industry as the biggest threat:

- Canadians aged 55+ (23%).
- Residents of British Columbia (25%).
- Canadians with a post-graduate degree (26%).

Groups more likely to cite global warming/climate change as the biggest threat:

- Residents of Alberta (14%).

Seriousness of Issues Facing Canada’s Fresh Water

Looking ahead to the next ten years, majorities believe that each of the seven listed freshwater issues, particularly water pollution, will become more serious over time.

Canadians were asked about the future outlook for seven different freshwater issues; majorities (ranging from 53 to 71%) believe that each will become much or somewhat more serious over the next ten years. Most of the remainder foresee no change in the seriousness of these issues; very few (6% or fewer) believe these issues will actually become less serious.

Water pollution is ranked as most likely to worsen (71%) over the next ten years; this dovetails with results from the previous question, where pollution topped the list of perceived threats to fresh water. Notably, flooding is perceived as least likely to worsen (53%), despite the fact that climate change has been linked to increased flooding.

Seriousness of issues facing Canada’s fresh water

Taken action	NET: ‘More Serious’	Much more serious	Somewhat more serious	Same as today	Somewhat less serious	Much less serious	Not sure
Water pollution	71%	31%	40%	19%	4%	1%	5%
Loss of wetlands	66%	26%	40%	22%	3%	1%	8%
Issues related to water infrastructure	64%	22%	42%	25%	4%	1%	6%
Increased consumption of fresh water	62%	21%	41%	27%	3%	1%	7%

Changes in groundwater levels	61%	19%	42%	27%	3%	1%	8%
Droughts	60%	19%	40%	28%	4%	2%	7%
Flooding	53%	15%	38%	34%	4%	1%	7%

Q14. Over the next 10 years, do you think that the following will become more or less serious in Canada?

Belief that various freshwater issues will worsen over time is generally higher among those 55+, Ontario residents and women.

Residents of Quebec, and those living in Manitoba / Saskatchewan, are more likely to believe that droughts will become more serious over the next decade. Residents of Quebec and Atlantic Canada are more likely to expect flooding to worsen. These results likely reflect recent floods and/or droughts in these regions.

3. Appropriate response to freshwater issues

Protection of Canada’s Fresh Water

While more than half of Canadians say the protection of Canada’s fresh water is good or excellent, close to four in ten describe it as “only fair” or “poor”.

Canadians have mixed views about how well fresh water is currently protected in Canada. While a majority of Canadians (55%) hold positive perceptions of freshwater protection in Canada, very few rate it as excellent (9%). Almost four in ten rate freshwater protection as only fair (31%) or poor (7%).

Protection of Canada’s fresh water

Perception of Protection	NET: Excellent/ good	Excellent	Good	Only fair	Poor	Not sure
Canadians (general population, n = 2,001)	55%	9%	46%	31%	7%	8%

Q15. In Canada, fresh water protection involves various players and levels of government. Overall, how would you rate the protection of fresh water in Canada?

The following groups are more likely to rate current freshwater protections as only fair or poor:

- Older Canadians aged 55+ (41%)
- Residents of Manitoba / Saskatchewan (44%) and Ontario (39%).

How to Protect Canada’s Fresh Water

To better protect Canada’s fresh water, four in ten Canadians suggest further government oversight in the form of monitoring and regulations. The second-most suggested action is imposing water use limits or penalties for excessive water use, followed by reducing pollution.

When asked what more should be done to protect Canada’s fresh water (open-ended question, without providing response options), Canadians tend to favour top-down solutions. Four in ten Canadians (38%)

mention government regulation, including monitoring, protection, and regulation of industry. Two in ten Canadians (19%) suggest punitive measures, like water use limits, fees and increased penalties for rule-breakers, while a similar proportion (17%) suggest reducing pollution, including plastics and sewage.

How to protect Canada’s Fresh Water

Ways to protect Canada’s fresh water	Canadians (general population, n=2,001)
Government regulation (Net)	38%
Limits and penalties (Net)	19%
Reduce pollution / plastic / sewage in water	17%
Awareness/education	5%
Better water infrastructure/filtration system/more cleaning/recycling	5%
Stop selling our fresh water to bottling companies/foreign countries	4%
Protect our wetlands/ecosystem	3%
Stop building near fresh water	2%
Other	4%
Nothing /no suggestions	22%

Q16. In your view, what more should be done to protect Canada’s fresh water?

Government action was the most common suggestion across sub-groups, with similar proportions of Canadians mentioning it regardless of demographic.

Limits and penalties are suggested more often by Canadians aged 55+ (22%), and less often by residents of Saskatchewan / Manitoba (11%).

Reducing pollution in water is mentioned more often by Canadians aged 55+ (19%) and women (19% vs 15% men). It is suggested less often by those in British Columbia (10%) and Alberta (12%).

Responsibility for Water Management in Canada

Most Canadians agree that a lack of collaboration between governments is a barrier to the protection of Canada’s fresh water.

A strong majority of Canadians (80%) agree that water management, which is a shared responsibility of governments in Canada, is impacted by a lack of collaboration, ultimately hindering the protection of Canada’s fresh water. Six percent disagree, while fourteen percent are unsure.

Responsibility for water management

Agree on lack of collaboration	Net: Agree	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not sure
Canadians (general population n = 2,001)	80%	29%	51%	5%	1%	14%

Q22. In Canada, responsibility for water management is shared between the federal, provincial, and municipal governments (and in some instances, by the territories and Indigenous governments under self-government agreements). Furthermore, some of Canada's waterways cross provincial, territorial, and international borders. To what extent do you agree that a lack of collaboration between governments hinders the protection of Canada's fresh water?

When it comes to protecting Canada's fresh water, the following groups are most likely to say they strongly agree that there is a lack of collaboration among those responsible:

- Canadians aged 55 or older (33%).
- Residents of Ontario (31%).

4. Communicating with Canadians about Fresh Water

Arguments for the Protection of Fresh Water in Canada

Canadians rate "leaving clean fresh water for future generations", "safeguarding health", and the "protection of wildlife and ecosystems" as the strongest arguments for protecting fresh water in Canada.

Survey respondents were given a list of potential reasons for protecting fresh water in Canada and asked to choose the three strongest. Leaving clean fresh water for future generations ranks as the most important argument for freshwater protection (64% placed it in their top three). Arguments about protecting fresh water to safeguard the health of Canadians (57%) and protect wildlife and ecosystems (56%) round out the top three.

The next strongest argument for protecting fresh water is ensuring Canada remains water rich (35%). The remaining arguments are each ranked highly by no more than one in five Canadians.

In an open-ended follow-up question, few Canadians offer arguments for protecting fresh water beyond the ones suggested.

Arguments for protecting fresh water in Canada

Arguments for protecting fresh water in Canada	Ranked 1st	Ranked 2nd	Ranked 3rd	Net: Ranked 1st-3rd
To leave clean fresh water for future generations	24%	21%	18%	64%
To safeguard the health of Canadians	26%	17%	15%	57%
To ensure that wildlife and ecosystems have the freshwater they need	16%	21%	19%	56%
To ensure that Canada remains water rich	10%	11%	13%	35%
To maintain Canada's natural beauty	5%	7%	8%	20%
To uphold the rights of Indigenous peoples	4%	6%	5%	15%
To support water-dependent industries and jobs	3%	4%	5%	12%
To protect water-related recreational and leisure activities	3%	3%	5%	10%
Because its integral to our national identity and culture	3%	2%	4%	9%
To serve as a role model for other nations	2%	2%	3%	8%
To improve Canada's international reputation	2%	2%	2%	7%
To meet Canada's obligations to the US on boundary/transboundary waterways	2%	2%	2%	6%

Q20. In your view, what are the top three strongest arguments for protecting fresh water in Canada?

The top three arguments are common across all regions and demographic sub-groups. Younger Canadians (16 to 24) are more likely to select other arguments, but not enough to displace any of the top three in the overall ranking.

Self-rated Knowledge of Fresh Water in Canada

Canadians do not feel particularly well informed about the state of fresh water in Canada.

Canadians rate themselves quite modestly when it comes to their knowledge of fresh water in Canada. Nearly four in ten feel somewhat informed (39%), a similar proportion (37%) feel not very or not at all informed; and only two in ten (19%) say they are very or extremely informed.

Self-rated knowledge of fresh water in Canada

Knowledge	Net: Informed	Extremely informed	Very informed	Somewhat informed	Not very informed	Not at all informed	Not sure
Canadians (general population, n = 2,001)	19%	5%	15%	39%	30%	7%	4%

Q17. How informed do you feel about the state of fresh water in Canada?

Feeling extremely or very informed about the state of fresh water in Canada is highest among:

- Canadians aged 16-34 (33%), men (24%) and those with post-graduate degrees (26%).

Feeling not very or not at all informed about the state of fresh water is highest among:

- Canadians aged 35 and older (40%) and women (44%).
- Residents of Quebec (43%) and Atlantic provinces (44%).

Source of Household Water

There is room for improvement in Canadians’ awareness of where their household water comes from, with just over half saying they know the original source.

A slim majority of Canadians (57%) claim to know the original source of their household water, leaving four in ten who either do not know (26%) or are unsure (16%).

Source of household water

Knowledge of source	Yes	No	Not sure
Canadians (general population, n = 2,001)	57%	26%	16%

Q18. Do you know the original source of your household water, for example a lake, a river, a well, etc.?

Awareness of their household water source is highest among:

- Canadians aged 55 or older (71%) and men (63%).
- Residents of Atlantic provinces (77%) and Manitoba / Saskatchewan (66%)

Fresh Water Information Sources

Canadians are most likely to rely on television or websites for information about fresh water, followed by government sources.

Of the list provided, television is the most important source of information on fresh water (selected by 40% of respondents). Canadians are almost as likely (35%) to rely on websites/internet for that information, followed by government communications (32%).

Fresh water information sources

Sources	Canadians (general population, n=2,001)
TV	40%
Websites/Internet	35%
Government communications	32%
Environmental/wildlife/nature groups	28%
Newspapers	25%
Social media	18%
Direct experience	17%
Friends/family/neighbours	14%
Education system	13%
Radio	13%
Magazines	6%
Other	1%
Not sure	15%

Q19. What source(s) do you rely on for information about Canadian fresh water?

Preferred information sources vary somewhat by age, with Canadians aged 55+ more likely to rely on television (53%) and government communications (38%). Younger Canadians aged 16-34 are more likely than other age groups to find information about fresh water through websites or the internet (42%) and social media (33%). Residents of the Atlantic provinces are more likely than others to get information from their friends, family, or neighbours (22%).

5. Connection to Fresh Water

While Canadians connected to fresh water (by living near it or working directly with it) perceive the current state of Canada's fresh water to be quite good, these Canadians are also more likely to worry that it will worsen in the future. The chart below shows key results broken out two ways:

- 1) Those who live near fresh water, compared to those who do not.

There are some noteworthy differences between Canadians who live near fresh water and those who do not. Canadians who live near fresh water are more likely to rate it as one of Canada's most important natural resources (75% top three, vs. 69% among those who do not live near fresh water). They are also more likely to say that Canada's water quality has improved in the past ten years (31%, compared to 25%) but that water issues (listed in Q14) will become more serious in the next decade. Perhaps for this reason, they have a higher degree of concern about freshwater quality than their counterparts (35% very concerned, compared to 25%).

- 2) Those who work in a job that relies on fresh water, compared to those who do not.

Interestingly, those who work in jobs that rely on fresh water are less likely (61%) to rate fresh water as a top three resource compared to those whose work does not depend on water (73%). The former tend to rate fossil fuels (i.e. coal, oil and gas) as more important, suggesting that they may work in the energy sector. The majority of this group (58%) also believes that freshwater quality has improved in the past 10 years. However, they are more likely to predict that issues affecting Canada's fresh water will worsen over the coming 10 years. Again, this translates to a higher level of concern for freshwater quality in Canada (48% compared to 28% among those who do not work with water). Finally, this cohort is more likely to give Canada's water protection a good or excellent rating (76%, compared to 53%); perhaps due to job-based awareness of specific laws and regulations.

Connection to fresh water

	Canadians (gen. pop., n=2,001)	Live near fresh water (n = 955)	Do not live near fresh water (n = 1,046)	Work with fresh water (n = 164)	Do not work with fresh water (n = 1,837)
Q5. Importance of fresh water (% top three)	72%	75%	69%	61%	73%
Q6. Concern about quality of fresh water in Canada (% very concerned)	30%	35%	25%	48%	28%
Q8. Rating of quality of fresh water in Canada (% Excellent)	32%	34%	29%	45%	31%
Q9. Comparison to quality of fresh water ten years ago (% Improved)	28%	31%	25%	58%	25%
Q11. Confidence that Canada has enough fresh water (% Very or somewhat confident)	77%	79%	74%	84%	76%
Q15. Level of protection rating (% Excellent/good)	55%	54%	55%	76%	53%

II. Appendix A: Methodology

EnviroNics Research conducted an online survey with 2,001 Canadians aged 16 and over. Survey respondents were selected from registered members of an opt-in online panel. Since a sample drawn from an online panel is not a random probability sample, no formal estimates of sampling error can be calculated.

Sample design, weighting and respondent profile

EnviroNics Research conducted this 10-minute online survey from June 11, 2021 to June 19, 2021. The sampling method was designed to attain interviews with at least 2,000 Canadians ages 16 and over.

Note that while the survey was open to respondents from all regions of Canada, the sample did not obtain any respondents from the territories.

Quotas for the general population were set by age, gender, and region. The final general population data were then weighted to ensure the sample is representative of the Canadian population, according to the most recent Census.

The survey obtained the following distribution for the general population:

Variable	% of population (2016 Census)	Target (quota)	% of sample	Actual Unweighted	Actual Weighted*
Jurisdiction					
Atlantic	6.8	200	9.5	193	138
Quebec	23.5	425	20.8	417	470
Ontario	38.4	725	36.2	725	768
Manitoba / Saskatchewan	6.5	150	7.6	154	130
Alberta	11.2	250	12.8	257	224
British Columbia	13.5	250	12.7	255	270
CANADA	100	2,000	100	2,001	2,001
Age					
16-29	21	425	21	406	420
30-44	24	485	24	465	480
45-59	26	525	26	544	520
60+	28	565	29	586	580
Gender¹					
Male	49	980	49	961	980
Female	51	1,020	51	1,029	1,011

*Results are weighted by region, gender and age to 2016 Census data.

¹Respondents who identified with a gender category other than male or female were weighted by age and region only.

Questionnaire design

Environment and Climate Change Canada provided Environics with desired topic areas and questions that addressed the research objectives. Environics then designed a questionnaire that incorporated these questions, advising on best practices in question design, particularly for online surveys. Upon approval of the English questionnaire, Environics arranged for the questionnaire to be translated into French by professional translators.

Environics’ data analysts programmed the questionnaires, then performed thorough testing to ensure accuracy in set-up and data collection. This validation ensured that the data entry process conformed to the surveys’ basic logic. The data collection system handles sampling invitations, quotas and questionnaire completion (skip patterns, branching, and valid ranges).

Prior to finalizing the survey for fieldwork, a pre-test (soft launch) was conducted in English and French. The pre-test assessed the questionnaires in terms of question wording and sequencing, respondent sensitivity to specific questions and to the survey overall, and survey length. Standard Government of Canada pre-testing questions were also asked. As no changes were required following the pre-test, the 67 responses (44 English, 23 French) have been included in the final data set.

The final survey questionnaire is included in Appendix B.

Fieldwork

The survey was conducted by Environics using a secure, fully featured web-based survey environment. The average interview length was 9.3 minutes.

All respondents were offered the opportunity to complete the surveys in their official language of choice. All research work was conducted in accordance with the Standards for the Conduct of Government of Canada Public Opinion Research – Online Surveys and recognized industry standards, as well as applicable federal legislation (*Personal Information Protection and Electronic Documents Act*, or PIPEDA).

Following data collection, the data from this survey were statistically weighted to ensure the sample is generally representative of the Canadian population according to the most recently available Census information.

Completion results

The completion results are presented in the following table.

Contact disposition

Disposition		N
Total invitations	(c)	13,709
Total completes	(d)	2,010
Qualified break-offs	(e)	149
Disqualified	(f)	270

Not responded	(g)	10,698
Quota filled	(h)	582
Contact rate = (d+e+f+h)/c		21.96%
Participation rate = (d+f+h)/c		20.88%

Non-response bias analysis

The table below presents a profile of the final general population sample (unweighted), compared to the actual population of Canada (2016 Census information). The final sample underrepresents those with less education, which is a typical pattern for public opinion surveys in Canada (e.g., those with more education are more likely to respond to surveys).

Non-response bias analysis

Sample type	Sample*	Canada (2016 Census)
Gender (16+)		
Male	48%	49%
Female	51%	51%
Age		
16-29	20%	21%
30-44	23%	24%
45-59	27%	26%
60+	29%	28%
Education level ^α		
High school diploma or less	28%	35%
Trades/college/post sec no degree	35%	36%
University degree	36%	29%

* Data are unweighted and percentages are calculated based on those giving a response to each demographic question
^α Actual Census categories differ from those used in this survey and have been recalculated to correspond. Statistics Canada figures for education are for Canadians aged 25 to 64 years.
[†] Percentages are calculated based on those providing a response

III. Appendix B: Questionnaire

Environics Research Group
June 11, 2021

Environment and Climate Change Canada
Freshwater Issues Survey
Questionnaire – Draft
Canada Gen Pop, n = 2000, 10 minutes, online panel

LANDING PAGE

Welcome! Please select your preferred language for completing the survey / Bienvenue!
Veuillez sélectionner la langue de votre choix pour remplir le sondage.

01–English / Anglais
02–Français / French

- Welcome to the survey. Environics Research, an independent research company, is conducting this survey about current issues of interest to Canadians, on behalf of the Government of Canada. The survey will take about 10 minutes of your time.

Your participation is entirely voluntary and all of your answers will be kept completely anonymous. If you wish to verify the legitimacy of this research or to ask technical questions about this survey, please contact Environics at stephanie.coulter@environics.ca.

This study has been registered with the Canadian Research Insights Council’s Research Verification Service so that you may validate its authenticity. If you would like to enquire about the details of this research, you can visit CRIC’s website www.canadianresearchinsightscouncil.ca/rvs/home/?lang=en and enter reference project code.

Thank you in advance for your participation.

Screening

1. In what year were you born?

IF UNDER 16 THANK AND TERMINATE

2. In which of the following age categories do you belong?

Select one only

- 98 Under 16 [TERMINATE]
- 01 16 to 24
- 02 25 to 34
- 03 35 to 44
- 04 45 to 54
- 05 55 to 64
- 06 65 or older
- 99 Prefer not to answer [TERMINATE]

3. In which province or territory do you live?

Select one only

- 01-British Columbia
- 02-Alberta
- 03-Saskatchewan
- 04-Manitoba
- 05-Ontario
- 06-Quebec
- 07-New Brunswick
- 08-Nova Scotia
- 09-Prince Edward Island
- 10-Newfoundland and Labrador
- 11-Yukon
- 12-Northwest Territories
- 13-Nunavut

4. How do you identify your gender? (This may be different from the information noted on your birth certificate or other official documents)

Select one only

- 01-Female gender
- 02-Male gender
- 03-Gender diverse
- 99-Prefer not to answer

General Perceptions and Value of Fresh Water

5. In your view, which of the following are Canada's three most important natural resources?

[Randomize, select and rank top three]

Fresh water
Oil & gas
Agricultural Land
Forests
Minerals and metals
Fisheries
Coal
Other (Please specify)_____

For the purposes of this survey, please note that fresh water includes both surface water (lakes, rivers, streams etc.) and ground water (beneath the earth's surface). It excludes saltwater bodies, such as the oceans and Hudson Bay.

6. How concerned are you personally about the quality of fresh water in Canada?

- 01 Very concerned
- 02 Somewhat concerned
- 03 Not very concerned
- 04 Not at all concerned
- 99 Not sure

7. How would you rate the importance of Canada's fresh water to each of the following:

[Randomize except where noted - Carousel]

- a) Canada's economic wealth and prosperity
- b) [PROVINCE / TERRITORY]'s economic wealth and prosperity [ALWAYS SHOW B AFTER A]
- c) Canadian industry, for example manufacturing, mining, forestry, etc.
- d) Canadian agriculture and food production
- e) Canada's identity and culture
- f) [PROVINCE / TERRITORY]'s identity and culture [ALWAYS SHOW F AFTER E]
- g) Your personal culture and identity [ALWAYS SHOW G AFTER F]
- h) The health of people living in Canada
- i) The overall quality of life in Canada
- j) The natural beauty of Canada
- k) Wildlife and ecosystems
- l) Recreation / enjoyment of the outdoors
- m) Your personal leisure
- n) Reconciliation with Indigenous peoples

- 01 Extremely important
- 02 Very important
- 03 Somewhat important
- 04 Not very important
- 05 Not at all important
- 99 Not sure

8. Overall, how would you rate the quality of fresh water in Canada?

- 01 Excellent
- 02 Good
- 03 Only fair
- 04 Poor
- 99 Not sure

9. Compared with 10 years ago, would you say the quality of fresh water in Canada has...?

- 01 Improved a lot
- 02 Improved a little
- 03 Stayed the same
- 04 Declined a little
- 05 Declined a lot
- 99 Not sure

10. How would you rate the quality of fresh water in [PROVINCE / TERRITORY]?

- 01 Excellent
- 02 Good
- 03 Only fair
- 04 Poor
- 99 Not sure

11. How confident are you that Canada as a whole has enough fresh water to meet its long-term needs?

- 01 Very confident
- 02 Somewhat confident
- 03 Not very confident
- 04 Not at all confident
- 99 Not sure

12. How confident are you that [PROVINCE / TERRITORY] has enough fresh water to meet its long-term needs?

- 01 Very confident
- 02 Somewhat confident
- 03 Not very confident
- 04 Not at all confident
- 99 Not sure

13. What do you think is the top threat to Canada's fresh water?

[Open Text Box Field]

14. Over the next 10 years, do you think that the following will become more or less serious in Canada?

- a) Flooding
- b) Droughts
- c) Water pollution
- d) Issues related to water infrastructure (water pipes, sewage systems, water treatment plants etc.)
- e) Changes in groundwater levels
- f) Increased consumption of fresh water
- g) Loss of wetlands

- 01 Much more serious
- 02 Somewhat more serious
- 03 Same as today
- 04 Somewhat less serious
- 05 Much less serious
- 99 Not sure

15. In Canada, fresh water protection involves various players and levels of government. Overall, how would you rate the protection of fresh water in Canada?

- 01 Excellent
- 02 Good
- 03 Only fair
- 04 Poor
- 99 Not sure

16. In your view, what more should be done to protect Canada's fresh water?

[Open Text Box Field]

Communicating With Canadians About Freshwater

17. How informed do you feel about the state of fresh water in Canada?

- 01 Extremely informed
- 02 Very informed
- 03 Somewhat informed
- 04 Not very informed
- 05 Not at all informed
- 99 Not sure

18. Do you know the original source of your household water, for example a lake, a river, a well, etc.?

- 01 Yes
- 02 No
- 99 Not sure

19. What source(s) do you rely on for information about Canadian fresh water?

[Randomize, Multiple response]

- 01 - Social media
- 02 - TV
- 03 - Radio
- 04 - Newspapers
- 05 - Magazines
- 06 - Websites/ Internet
- 07 - Direct experience (e.g. observed appearance)
- 08 - From friends/family/neighbours
- 09 - From environmental/wildlife/nature groups
- 10 – From the education system
- 11 – Government communications
- 98 - Other (SPECIFY _____)
- 99 – Not sure

20. In your view, what are the top three strongest arguments for protecting fresh water in Canada?

Rank top three

- 01 – To leave clean freshwater for future generations
- 02 – To ensure that wildlife and ecosystems have the freshwater they need
- 03 – To safeguard the health of Canadians

- 04 – To maintain Canada’s natural beauty
- 05 – To support water-dependent industries and jobs
- 06 – To protect water-related recreational and leisure activities
- 07 – To uphold the rights of Indigenous peoples
- 08 – To improve Canada’s international reputation
- 09 – To meet Canada’s obligations to the United States on boundary/transboundary waterways
- 10 – To ensure that Canada remains water rich
- 11 – To serve as a role model for other nations
- 12 – Because it is integral to our national identity and culture

21. Do you have an argument for protecting fresh water that wasn’t included in the list?

[Open Text Box Field]

22. In Canada, responsibility for water management is shared between the federal, provincial, and municipal governments (and in some instances, by the territories and Indigenous governments under self-government agreements). Furthermore, some of Canada’s waterways cross provincial, territorial, and international borders. To what extent do you agree that a lack of collaboration between governments hinders the protection of Canada’s fresh water?

- 01 Strongly agree
- 02 Somewhat agree
- 03 Somewhat disagree
- 04 Strongly disagree
- 99 Not sure

Demographics

The following are a few questions about you and your household, for statistical purposes only. Please be assured all of your answers will remain completely confidential.

23. Do you live on or near a freshwater body that you see every day or almost every day?

- 01 Yes
- 02 No
- 99 Not sure

24. Do you work in an industry that is connected to or dependent on fresh water to operate? Examples might include agriculture, water-based tourism, hydroelectric generation, and major industries that use water.

- 01 Yes
- 02 No
- 99 Not sure

25. What is the size of your community?

- 01–Very small (population below 20,000)
- 02–Small (population between 20,000 and 49,999)
- 03–Medium (population between 50,000 and 199,999)
- 04–Large (population between 200,000 and 499,999)
- 04–Very large (population of 500,000 or above)
- 99–Not sure / Prefer not to answer

26. What is the highest level of formal education you have completed?

Select one only

- 01–Up to high school
- 02–Some high school
- 03–High school diploma or equivalent
- 04–Registered Apprenticeship or other trades certificate or diploma
- 05–College, CEGEP or other non-university certificate or diploma
- 06–University certificate or diploma below bachelor’s level
- 07–Bachelor’s degree
- 08–Post graduate degree above bachelor’s level
- 99–Prefer not to answer

27. Which of the following categories best describes your total household income (i.e. the total income of all persons in your household combined, before taxes)?

Select one only

- 01–Under \$20,000
- 02–\$20,000 to just under \$40,000
- 03–\$40,000 to just under \$60,000
- 04–\$60,000 to just under \$80,000
- 05–\$80,000 to just under \$100,000
- 06–\$100,000 to just under \$150,000
- 07–\$150,000 and above
- 99–Prefer not to answer

28. Do you self-identify as... ?

Select one only

- 01 First Nations
- 02 Inuk / Inuit
- 03 Metis
- 04 A non-Indigenous person
- 99 Prefer not to answer

29. What language do you speak most often at home?

- 01 English
- 02 French
- 03 Other
- 99 Prefer not to answer

This completes the survey. On behalf of Environment and Climate Change Canada, thank you for your valuable input. In the coming months, the results of this survey will be available on the Library and Archives Canada website.