Lake Champlain Basin Program

TECHNICAL REPORT NO. 103

Lake Champlain Basin Public Awareness and Action Survey Results and Recommendations

November 2022

Final Report

Prepared by:
Lori Fisher, Dr. Jane Kolodinsky, Michael Moser, and Dr. Kristine Stepenuck

For:
Lake Champlain Basin Program

This report was funded and prepared under the authority of the Lake Champlain Special Designation Act of 1990, P.L. 101-596 and subsequent reauthorization in 2002 as the Daniel Patrick Moynihan Lake Champlain Basin Program Act, H. R. 1070, through the Great Lakes Fishery Commission. Publication of this report does not signify that the contents necessarily reflect the views of the states of New York and Vermont, the Lake Champlain Basin Program, or the Great Lakes Fishery Commission.

The Lake Champlain Basin Program has funded more than 100 technical reports and research studies since 1991. For complete list of LCBP Reports please visit:
http://www.lcbp.org/media-center/publications-library/publication-database/

NEIWPCC Job Code: 0100-323-004
Project Code: L-2020-074

Lake Champlain Basin Public Awareness and Action Survey Results and Recommendations

Prepared for the Lake Champlain Basin Program by

Lori Fisher[1], Dr. Jane Kolodinsky[2], Michael Moser [2], and Dr. Kristine Stepenuck[3]

November 7, 2022

[1] Lake Champlain Committee
[2] Center for Rural Studies, University of Vermont (UVM)
[3] Lake Champlain Sea Grant and Rubenstein School of Environment and Natural Resources, UVM

Table of Contents

Executive Summary

Thousands of individuals across the Lake Champlain basin have participated in outreach programs, received educational materials, and/or otherwise been reached by LCBP or partners through outreach initiatives over the past 30 years. This report provides results of an assessment of public watershed and lake knowledge and stewardship activities of basin residents. It is one of the first broad based studies of its kind. A survey was developed to establish a baseline of public knowledge about water resources issues and the level of stewardship actions of the public within the basin in New York, Quebec, and Vermont. The survey instrument was developed with input from a diverse advisory committee composed of experts in water quality education & outreach, survey research and analysis, and community representatives. Residents in New York and Vermont were randomly selected and contacted about the survey via email. As Canadian regulations prohibited this type of contact, a request to participate in the online survey was mailed to a random selection of addresses in Lake Champlain basin communities in Quebec. A total of 1,675 substantially completed responses were collected ensuring a confidence level of 95% and a confidence interval (Margin of Error) of between +/- 3.7% and 5% for each geographic area and +/-2.4% overall. Approximately 42% of responses came from Vermont residents, 34% from Quebec residents and 23% from New York residents.

The majority of Lake Champlain basin residents recognized the importance of clean water for a healthy environment and sustainability, but they were nearly evenly divided on how clean the lake is. More people believe that local waterbodies were cleaner than believed Lake Champlain is clean. Basin residents most commonly believed that agriculture and runoff were the most serious challenges facing water quality, specifically identifying phosphorus, fertilizers, manure, and cyanobacteria as the most impactful pollutants. More basin residents who had heard about a watershed and could explain it to someone else strongly agreed that they knew things they could do to reduce water pollution where they live, how to find information about protecting water quality, and about local efforts to protect water quality.

These results suggest the benefits of watershed education to empower basin residents to understand impacts of land use practices on water quality, their role in minimizing such impacts and affording them opportunities to learn how to learn such information. Recommendations include identifying target practices that have most potential to protect or improve water quality and supporting community-based social marketing campaigns for specific audiences, developing TV and/or radio programs to educate basin residents about water quality, and using a variety of media types to reach different age groups, including podcasts, hands-on workshops and social media to reach younger audiences, and websites, informational fact sheets, and mailings to reach all adult audiences.

Key Findings

1. Clean water was important to Lake Champlain basin (Basin) residents who saw clean water as important to ensure a healthy environment/sustainability (50%), to supply drinking water (21%), and to support recreation and tourism (21%).
2. Basin residents were split on whether Lake Champlain was clean or not. About 45% thought it was clean and an equal percent felt it was not clean. Ten percent were unsure about its cleanliness. More Lake Champlain basin residents who only just learned about watersheds were unsure about how clean their local waterbodies were than those who could explain a watershed to someone else.

3. More people believed local waterbodies (besides Lake Champlain) were clean than believed Lake Champlain was clean.
4. There was a statistical association between the distance people lived from Lake Champlain and their knowledge of watersheds. More respondents who lived farthest from Lake Champlain (65%) had heard about a watershed and could explain it to someone else than those who lived closest to the lake (54%).
5. Agriculture and runoff were most often identified as the most serious challenges facing water bodies of the basin. Nearly 1 in 5 basin residents (18%) attributed water quality challenges to agriculture, while an additional 12% attributed water quality challenges to runoff. Specifically, basin residents believed that phosphorus, fertilizers, manure, and cyanobacteria were the most impactful pollutants on water quality in lakes, rivers and ponds in the basin.
6. Almost twice as many residents believed it was the responsibility of governments to act (59%) to address the most serious challenge impacting the health of streams, rivers, ponds, and lakes in local communities as compared to it being the responsibility of individuals (35%)
7. About 2 of 3 residents knew how to access information about protecting water quality and about half knew about community efforts to protect or improve water quality in their communities.
8. Fewer than 1 in 10 respondents had only just heard about watersheds for the first time during the survey. A small majority (57%) reported that they could explain what a watershed is to someone else.
9. While most respondents (53%) had learned about water quality from a mass media source (i.e., newspaper, TV, radio), about 1 in 5 had learned about water quality from a water or environmental organization. About twice as many people in Quebec (31%) had learned about water quality from a water or environmental organization than in New York (15%) or Vermont (16%). Similarly, while about 1 in 10 had learned about water quality from social media or by attending a municipal meeting, more people in Quebec than in Vermont or New York reported learning about water quality from those sources.
10. Respondents suggested a variety of solutions to address water quality concerns. They most commonly suggested ceasing actions that caused impacts (24%). Other top suggestions, each with about equivalent support to implement, were legislation/regulations/restrictions (16%), identifying/using best practices/technologies (15%), and providing education (14%).
11. Fewer people in NY (66%) and VT (68%) strongly agreed or agreed they knew what actions to take to reduce water pollution than people from QC (80%). Conversely, slightly more people in NY (71%) expressed confidence in their ability to find information about how to protect water quality than those from QC (68%) or VT (66%).
12. People in the basin understood that healthy waters equated to healthy communities and that they had a role to play in protecting water quality. However, Lake Champlain basin residents had less recognition of the potential impacts of developed land on water quality than of agricultural lands and wastewater treatment facilities.
13. Lake Champlain basin residents don't always have a connection to Lake Champlain. More people who lived closer to the Lake often or always thought about the water quality of Lake Champlain, while more people who lived farther from the Lake thought about water quality of a local water body often or always.
14. Among a suite of 15 actions individuals might have taken to date to reduce impacts to the health of waterways (Q24) or to reduce runoff (Q25), fewest basin residents had, on average, assisted in a waterway clean up (18%), replaced a paved or concrete driveway or walkway with other materials to allow water to flow into the ground (28%), participated in an invasive species removal project (34%) or gotten a soil test before applying fertilizer (46%). When asked their intentions to take stewardship actions in the future (Q28), 44% were somewhat or very likely to participate in an erosion control or invasive species removal project, and 52% were somewhat or

very likely to get a soil test before applying fertilizer to a lawn or garden. (The other least reported actions were not included in the question about future actions.)

15. About 80% of people were very likely to dispose of prescription medicines at a designated site in the future. Nearly as many (76%) indicated they intended to keep food waste out of sink garbage disposals in the future.
16. In general, more people in Quebec indicated likeliness to take a variety of types of actions to address water quality of streams, rivers, lakes or ponds in their communities (Q28). For 12 of 15 suggested actions, more Quebec respondents responded positively that they might implement such practices in the future than Vermont and New York residents. Where this relationship differed was that more dog owners in New York (81%) and Vermont (81%) were willing to pick up their dogs' waste than dog owners in Quebec (57%); slightly more Vermonters (19%) and New Yorkers (18%) were somewhat or very likely to donate money to a water quality organization, program or activity than Quebecers (17%); and slightly more Vermonters (34%) were somewhat or very likely to get a soil test before fertilizing than Quebecers (32%).
17. More basin residents who had heard about a watershed and could explain it to someone else strongly agreed that they knew things they could do to reduce water pollution where they live, how to find information about protecting water quality, and about local efforts to protect water quality.
18. More respondents who lived farther from Lake Champlain had modified their property specifically to reduce runoff (e.g., reduced/replaced lawn & impervious areas and planted/allowed vegetation).
19. People of all ages were interested to learn about ways to protect or improve water quality. In general, basin residents of all ages preferred to learn about protecting or improving water quality by reading a brochure or informational document (28%), watching a video on a web site (25%), reading information on a website (24%), or hearing information on a local TV or radio station (24%). However, more younger basin residents (18-34 and 35-54) than older basin residents (55+) preferred to learn about protecting or improving water quality by participating in educational field trips, listening to podcasts, looking at social media, or attending hands-on workshops. For other types of learning preferences, there was no statistical association between age and mode of learning.
20. There was no statistical association between distance people lived from Lake Champlain and how often they got a soil test before applying fertilizer to lawns or gardens.[4] Of people who fertilized, more than half never got a soil test before applying fertilizer to a lawn or garden.
21. The average stewardship action index level of Lake Champlain basin residents was 1.90 of a possible 6.0.

Recommendations

1. Nature viewing and recreating were key activities in which people in the basin engaged. As such, locations where such activities occur could serve as useful locations for LCBP or partners to provide outreach about watershed science.
2. LCBP should continue to provide information in a variety of ways and include traditional communication methods while including newer media, Mass media, websites, and mailings were the most preferred ways to learn; about 1 in 10 wanted to participate in a hands-on training.

[4] Only one quarter of respondents completed this question. Further research might explore if those who did not respond to this question fertilize at all.

3. LCBP might consider developing or partnering with local TV and radio news shows (e.g., *Across the Fence* or some other similar TV or radio show) to share water quality information. About one in five basin residents recalled learning about water quality from a local TV station or show and another 13% recalled learning about water quality from a radio station. Top stations included WCAX, WPTZ, and La semaine Verte. Top radio stations included VPR, NPR, NCPR, and the CBC.
4. LCBP should also consider forming partnerships with newspapers throughout the basin to share information about ongoing water quality projects, as newspaper reports were the most commonly cited method that basin residents (22%) had learned about water quality in their communities.
5. LCBP and its partners might consider minimizing effort/support for site visits (1.2%), webinars (4.9%), and tabling events (5.7%) due to small percent of basin residents who had previously learned about water quality in those ways or who demonstrated interest in receiving water quality information in those manners in the future.
6. LCBP might consider developing short informational documents from its State of the Lake report, as an average of 23% of people in the basin indicated they like to get information from brochures or informational documents (which as second only to reading information on a website), but relatively few (6.4%) learned about water quality from the State of the Lake report itself. This suggests that while people prefer to get information from websites, they may not be accessing the State of the Lake report website.
7. An opportunity exists for LCBP and its partners to highlight efforts in local communities that are intended to protect or improve water quality. Fewer than half of respondents agreed they knew about such local efforts. Local efforts to protect water quality might be shared via a partnership with local TV and newspapers, and/or shared via a video on a website or an informational brochure or document.
8. It may be valuable for LCBP and its partners to focus attention on pollutants that have significant impacts on water quality, but that basin residents seem to have less awareness of such as dirt road erosion, aquatic organism passage obstructions, and pharmaceutical disposal.
9. The percent of people who reported plans to engage in stewardship activities in the future was similar to the percent of people who had done those activities in the past. This suggests that motivating actions of a greater percent of the population to engage in those activities will require targeted outreach to specific audiences. As such, LCBP may wish to select a concentrated suite of critical practices that are predicted to have the biggest environmental benefits and implement or solicit development of community-based social marketing strategies to target key audiences to promote adoption of those practices.
10. A recommendation to LCBP is to reinvigorate its Lawn to Lake partners' "Don't P on the Lawn" public education campaign.
11. Specific sectors of the public that could benefit from targeted outreach include:
    a. Younger people (especially those 18-34 and 35-54) might be targeted to encourage water conservation at home, keeping food waste out of garbage disposals, disposing of toxic materials at hazardous waste drop off sites and prescriptions at designated sites, and limiting salt use on driveways.
    b. Further, younger people were less likely to know what a watershed is or to have awareness of efforts happening in local communities to protect or improve water quality. Lack of awareness of watersheds was associated with taking fewer stewardship actions. As such, younger audiences might be targeted for general watershed science and stewardship programs, and awareness of ongoing projects to protect and improve water quality. Such outreach might be targeted to youth sports facilities, day care centers, and pediatrician offices in an effort to reach parents with children in locations they might be

spending significant time. In addition. Or alternatively, as younger respondents indicated a preference to learn at hands-on educational events, through social media, and by listening to podcasts, these media might be collectively utilized to reach younger audiences. For instance, social media might be used to advertise a hands-on training opportunity taking place that includes childcare and/or that takes place during sports practice sessions at the same facility. Similarly, a podcast might be strategically released during times when a parent might be waiting in a vehicle for a child to exit school or practice.

c. Following a hands-on workshop, to build upon the finding that there was an association between the distance people lived from Lake Champlain and having talked with others about what they can do to protect water quality, with more people who live farther from the lake having spoken with others, a challenge might be made to encourage attendees to talk to others about what they learned.
d. Conversely, the oldest basin residents might be targeted for outreach focused on climate change and its potential impacts on water quality.
e. A variety of open-ended comments suggested that some residents sought additional access to reports about water quality that provided them with scientific information to allow them to make informed decisions based on their own research. As the State of the Lake report may be intended to do this, LCBP might consider greater marketing of the report, possibly by breaking its findings into smaller components and featuring those on local news sites (especially WCAX, WPTZ, and Across the Fence), newspapers (especially the Press Republication, Post Star, Vermont Digger, and Burlington Free Press), in fact sheets distributed by local environmental organizations (especially Organisme de Bassin Versant de La Baie Missisquoi (OBVBM), APELS, UVM, Lake Champlain Committee, VTDEC, Lake George Association, Trout Unlimited and VPIRG, in addition to LCBP itself), and through Front Porch Forum (in Vermont), and town meetings across the basin.
f. As more people who live farther from Lake Champlain keep food waste out of sink garbage disposals, an outreach campaign might target communities nearest the lake to promote composting and to share Vermont's food waste disposal laws (in Vermont).

12. To share results of this survey and address a request of numerous respondents and partners, a short report or series of fact sheets in both English and French should be prepared and widely distributed via popular mass media and environmental organizations identified through this survey.

Introduction

The Lake Champlain Basin Program (LCBP) was established in 1990 to work collaboratively with a variety of agencies and organizations in New York, Vermont, and Québec and to coordinate and fund efforts that aid water resources, fish and wildlife, cultural resources, and recreational activities of the Lake Champlain basin. To accomplish this, LCBP has developed, supported, and implemented numerous outreach programs and materials. Thousands of individuals across the Lake Champlain basin have participated in outreach programs, received educational materials, and/or otherwise been reached by LCBP or partners through outreach initiatives. However, progress towards building collective knowledge of members of the public has not been assessed and the LCBP seeks understanding of the level of stewardship activity among residents of the basin. This survey research-based project,

influenced by a similar effort with the Chesapeake basin, was developed to establish a baseline of public knowledge about water resources issues and the level of stewardship actions of the public within the basin in New York, Quebec, and Vermont. Results of the survey will not only provide a baseline about collective knowledge, but it can also inform future outreach of the LCBP and its partners. The survey instrument is anticipated to be repeated at regular intervals and results over time compared to assess changes in public knowledge or stewardship actions across time.

This project had three primary objectives:

1) to assess public knowledge of lake issues and public engagement in watershed stewardship behaviors in the Lake Champlain basin;

2) to assess outcomes of education and outreach efforts of the Lake Champlain Basin Program (LCBP) and its partners; and

3) to identify specific sectors of the public that will benefit from future outreach efforts of the Lake Champlain Basin Program.

Methods

The survey instrument was developed with input from a diverse advisory committee composed of experts in water quality education & outreach, survey research and analysis, and community representatives. The iterative development process included internal instrument testing with informed contacts and a final field test with a small sample of random population members. A Canadian French version of the instrument was translated from the English and both versions were available to all participants.

The population for this study includes communities identified as lying within the Lake Champlain Basin Watershed in New York, Vermont, and Quebec. Randomly sampled email contacts for residents in New York and Vermont were purchased from a commercial provider (Exact Data). Canadian regulations prohibit this type of cold contact to populations via email outreach, and so the project worked with a Quebec firm to print and mail out a study information sheet with a QR code and survey website address.

Results

Overview

Following a description of the representativeness of the results, results are presented initially by univariate analysis, and then by cross tab analyses by knowledge, distance from Lake Champlain, and age of respondents. Univariate analyses include all questions asked in the survey in the order in which the questions were asked (Appendix A), while cross tabs present a subset of findings. For univariate analyses, responses are provided in percent of respondents unless otherwise noted. Results of cross-tabulations represent only a subset of survey questions. However, in general, cross-tabulation results are presented in order of the survey for that subset of questions. For each cross-tabulation, the Pearson Chi-square is reported along with the level of significance. A p value of <0.05 was considered to represent a statistically significant relationship. Below each cross-tabulation a statement interpreting the relationship between the two variables is included for ease of interpretation.

Representativeness

A total of 1,675 substantially completed responses were collected ensuring a confidence level of 95% and a confidence interval (Margin of Error) of between +/- 3.7% and 5% for each geographic area and +/-2.4% overall (Table 1). This means that if this study were conducted 100 times, 95 of those times, the results provided below would fall within +/- 2.4% of what is reported across the entire Lake Champlain basin. This is a threshold is higher than the +/- 5% error rate for social science research of this type. A second randomly selected list of New York residents had to be purchased due to initial limited response by New York residents.

Table 1. Summary of responses and confidence level of responses from Quebec, New York, and Vermont to the 2021 Lake Champlain basin public awareness survey to assess public knowledge of lake issues and engagement in watershed stewardship behaviors in the Lake Champlain basin.

Q3 Please select the State or Province in which you currently reside.

Lake Champlain Basin Community	Population	Number of Responses	Percent of responses	Confidence Level (%)	Confidence Interval/Margin of Error
New York	168,163	382	22.8	95%	+/- 5.0%
Quebec	34,197	582	34.7	95%	+/- 4.0%
Vermont	432,491	711	42.4	95%	+/- 3.7%
Total	634,851	1675	100.0	95%	+/- 2.4 %

Univariate results by Geography

Q7 Please tell us one reason having clean water in your community is important to you. (% of respondents)

Categorized Responses	All
Healthy Environment / Sustainability / Water is Life	50.0
Clean Drinking/Bathing Water	21.0
Recreation/Tourism	20.5
Other	3.9
Live at the Water	1.5
Future Generations	1.5
Quality of Life	1.2
Agriculture	0.4
Total	100.0

Q8 About how many days per year do you typically visit a river, stream, pond, or lake in your community or anywhere in the Lake Champlain basin for the following activities. (Mean number of days)

Category	All	New York	Quebec	Vermont
Fishing, hunting, or gathering food	50	59	48	48
Swimming	47	46	46	48
Motorized boating	38	44	39	35
Non-motorized boating	46	42	48	47
Recreating near waterways like walking, cycling, ice skating, camping, etc.	101	102	110	92
Accessing entertainment like dining, special events, shopping, or other activities near the water	60	67	60	57
Wildlife or nature viewing like bird watching, etc.	127	120	140	117
Some other activities include live, drive, work on or near water.				

Q9(2) How often do you think about the water quality of …a local water body that is not Lake Champlain (% of respondents)

Category	All	New York	Quebec	Vermont
Always	18.3	14.8	24.9	13.8
Often	42.8	40.1	46.8	40.3
Sometimes	27.2	33.1	21.2	30.1
Rarely	9.4	10.9	5.5	12.4
Never	1.7	0.7	1.3	2.6
Unsure	0.6	0.4	0.4	0.9
Total	100.0	100.0	100.0	100.0

Q9(3) How often do you think about the water quality of… Lake Champlain (% of respondents)

Category	All	New York	Quebec	Vermont
Always	15.9	14.2	17.7	15.1
Often	39.1	37.2	34.8	43.5
Sometimes	30.5	34.8	26.5	32.4
Rarely	10.4	12.1	13.3	7.1
Never	3.6	1.1	7.1	1.5
Unsure	0.5	0.7	0.6	0.3
Total	100.0	100.0	100.0	100.0

Q10 In general, how clean do you think that Lake Champlain is? (% of respondents)

Category	All	New York	Quebec	Vermont
Very clean	4.3	8.5	2.8	3.5
Somewhat clean	40.8	46.3	34.8	44.0
Somewhat unclean	34.3	28.6	35.3	35.9
Very unclean	10.6	10.6	8.4	12.6
Unsure	10.0	6.0	18.8	4.0
Total	100.0	100.0	100.0	100.0

Q11 In general, how clean do you think local water bodies in your community are? (% of respondents)

Category	All	New York	Quebec	Vermont
Very clean	8.6	13.3	6.3	8.5
Somewhat clean	54.6	59.7	51.6	55.3
Somewhat unclean	28.6	21.6	31.9	28.6
Very unclean	5.1	4.3	5.9	4.7
Unsure	3.1	1.1	4.4	2.9
Total	100.0	100.0	100.0	100.0

Q12 What do you feel is the most serious challenge impacting the health of streams, rivers, ponds, and lakes in your community? (Open Response - % of respondents)

Full text responses included in supplemental file *Full_responses.xlsx*.

Response Category	All
Agriculture/Farming	18.4
Runoff	12.4
Pollution, Contaminants	9.0
Sewage (septic systems, CSOs, urban wastewater, municipal wastewater)	8.8
Humans/Human Activity, Development	8.0
Nutrients, Fertilizers, Chlorophyll	7.6
Algae/Cyanobacteria	6.1
Pesticides, Chemicals, Herbicides	5.4
Trash, Garbage, Dumps	3.8
Invasive species	3.4
Other	3.0
Climate change, Global warming, Flooding, Drought	2.7
Urbanization, including waterfront development	2.7
Motorboats	2.2
Industrial/Industry pollution	1.3
Erosion, Sediment	1.3
Salt	1.1
Tourism	0.8
Deforestation, Riparian area loss	0.7
Bacteria	0.5
Acid rain	0.4
Construction sites	0.4
Total	100.0

Q13 What should be done to address the issue you just mentioned? (Open Response - % of respondents)

Full text responses are included in supplemental file *Full_responses.xlsx*.

Response Category	All
Fix/Stop doing negative impact things	23.5
Legislation, Restrictions, Regulations	15.8
Identify/Use best practices/technologies	15.1
Education	14.1
Monitoring, Research	6.9
Enforcement/Fines	6.5
Don't Know	5.3
Other	5.0
Inspection	2.6
Fund/Support Farmers/Households to make changes	2.2
Land Management	1.9
Ban Products	1.1
Total	100.0

Q14 Who should be responsible for taking action to address this issue? (Open Response - % of respondents)

Full text responses are included in supplemental file *Full_responses.xlsx*.

Response Category	All
Government Bodies	59.2
All of Us; Everyone; Citizens; More than one sector	34.9
Something Else	2.8
Farmers	1.8
NGO-Councils	0.7
Businesses	0.6
Total	100.0

Q15 What is one action you personally can take to improve or protect water quality in your community? (Open Response - % of respondents)

Full text responses are included in supplemental file *Full_responses.xlsx*.

Category	All
Don't Pollute/Litter, Clean Up	30.2
Dispose of/Limit Use of Chemicals	14.1
Advocacy, Education, Communication to others	10.8
Property/Land Changes (Rain diversion, buffers, vegetation)	9.0
Self- Awareness, Education, Respect, Mindfulness, Actions, Report Violations	8.5
Buy responsible products	5.2
Responsible water usage	4.2
Responsible Septic	3.6
No idea	3.5
Other	3.1
Clean Boats	2.7
Reduce/Stop motorized boating	2.3
Reduce (non-water) Consumption	1.7
Agricultural practices change	0.9
Total	100.0

Qs16 & 17 Please rate the following items on a scale of 0-10 with 0 having no impact to 10 having the greatest impact on the health of streams, rivers, ponds, and lakes in the Lake Champlain basin. (Mean % response)

Category	All	New York	Quebec	Vermont
Phosphorus from fertilizers, manure, dog waste, etc.	7.9	7.1	8.5	7.7
Cyanobacteria (blue-green algae)	7.7	7.3	8.2	7.5
Manure and fertilizer from farm fields washing into waterways	7.7	7.0	8.4	7.2
Pesticides	7.4	6.8	8.2	6.9
Wastewater treatment facilities overflowing into waterways	7.4	7.2	7.4	7.5
Increased temperature changes leading to cyanobacteria blooms (often called harmful algal blooms)	7.1	6.7	7.5	6.9
Non-native species like spiny water flea, zebra mussel, water chestnut, etc.	7.0	7.2	7.1	6.8
Development or construction that eliminates vegetation next to waterways	6.9	6.7	7.5	6.5
Habitat loss and degradation	6.8	6.7	7.1	6.6
Fertilizer application on lawns and gardens washing into waterways	6.8	6.4	7.3	6.5
Boats dumping black water tanks into waterways	6.8	7.0	7.1	6.5
Microplastics	6.8	6.6	7.1	6.6
Toxins like mercury, PCBs, PFOAs, etc.	6.8	7.0	7.0	6.6
Transport of invasive species on boats and equipment across waterways	6.8	6.8	7.2	6.4
Climate change	6.6	6.3	6.9	6.3
Private septic systems failing and allowing nutrients to enter waterways	6.6	6.7	7.0	6.1
Bacteria like *E. coli*	6.5	6.5	6.5	6.4
Stormwater runoff from urban areas entering waterways	6.4	6.2	6.2	6.8
Chloride from road salt	6.1	6.5	6.1	5.9
Sediment resulting from excessive soil erosion	6.0	5.7	6.5	5.7
Barriers that prevent fish or other aquatic life from moving freely like dams and culverts	5.7	5.8	6.0	5.4
Pharmaceuticals like prescription drugs	5.5	5.2	6.0	5.0
Increased frequency of intense storm events due to climate change	5.5	5.0	5.6	5.6
Dirt roads or driveways eroding into local waterways	5.0	4.8	5.3	4.8
Dog waste washing into waterways	4.8	4.6	4.6	5.1
Some other activity or condition (See Appendix B for full text responses)				

Q18 Phosphorus is a nutrient that can contribute to cyanobacteria—or blue-green algae—blooms when there is too much of it in a water body. Please rate the following sources of phosphorus on a scale of 0-10 with 0 having no impact to 10 having the greatest impact on the health of streams, rivers, ponds, and lakes in the Lake Champlain basin. (Mean % response)

Category	All	New York	Quebec	Vermont
Agricultural Land	7.7	7.0	8.4	7.1
Wastewater Treatment Facilities	6.5	6.4	6.4	6.6
Developed land	6.0	6.0	6.0	5.9
Wetlands	3.3	3.1	3.1	3.5
Forested Land	2.9	3.0	2.8	3.0
Some Other Source (See Appendix B for full text responses)				

Q19 For each of the following (eight) statements, please tell us your level of agreement.

I know things I can do to reduce water pollution where I live (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	27.0	21.7	37.0	19.1
Somewhat agree	47.7	54.4	43.2	49.0
Neither agree nor disagree	13.1	13.7	10.5	15.8
Somewhat disagree	5.8	4.0	3.9	8.8
Strongly disagree	2.6	1.3	2.1	3.7
Don't know	3.7	4.9	3.3	3.7
Total	100.0	100.0	100.0	100.0

I know how to find information about protecting water quality (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	24.3	28.2	22.6	24.6
Somewhat agree	42.6	42.7	44.6	40.5
Neither agree nor disagree	14.5	16.3	12.3	15.8
Somewhat disagree	11.0	6.6	12.7	11.5
Strongly disagree	3.4	1.3	4.1	3.7
Don't know	4.1	4.8	3.7	3.9
Total	100.0	100.0	100.0	100.0

I know about efforts in my community to protect or improve water quality (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	12.6	11.9	14.4	11.3
Somewhat agree	35.9	43.2	31.7	37.1
Neither agree nor disagree	20.5	19.8	20.0	21.5
Somewhat disagree	14.7	12.3	14.0	16.2
Strongly disagree	10.2	7.0	13.8	8.0
Don't know	6.0	5.7	6.0	5.9
Total	100.0	100.0	100.0	100.0

Planting native trees and shrubs along waterways helps protect water quality (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	58.6	48.9	69.5	51.4
Somewhat agree	27.8	35.1	21.4	31.1
Neither agree nor disagree	6.9	8.4	4.9	8.4
Somewhat disagree	0.7	0.0	0.6	1.2
Strongly disagree	1.1	1.3	0.8	1.4
Don't know	4.9	6.2	2.9	6.4
Total	100.0	100.0	100.0	100.0

Healthy waterways are a critical part of thriving communities (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	85.8	84.4	90.1	81.7
Somewhat agree	11.4	12.4	8.2	14.6
Neither agree nor disagree	1.2	1.3	0.6	1.8
Somewhat disagree	0.2	0.0	0.2	0.2
Strongly disagree	0.4	0.4	0.4	0.4
Don't know	1.0	1.3	0.6	1.2
Total	100.0	100.0	100.0	100.0

Planting native trees and shrubs along waterways improves flood resilience (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	65.2	59.7	70.7	62.0
Somewhat agree	21.9	26.5	18.0	24.0
Neither agree nor disagree	6.2	6.6	4.7	7.6
Somewhat disagree	1.1	0.4	1.2	1.2
Strongly disagree	1.0	0.9	1.0	1.0
Don't know	4.6	5.8	4.5	4.1
Total	100.0	100.0	100.0	100.0

I rely on Lake Champlain and its resources for my wellbeing (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	42.1	30.7	53.5	34.9
Somewhat agree	29.0	30.7	25.4	32.0
Neither agree nor disagree	18.2	26.2	12.2	21.1
Somewhat disagree	4.5	3.6	4.8	4.8
Strongly disagree	3.4	4.0	2.5	4.1
Don't know	2.8	4.9	1.6	3.1
Total	100.0	100.0	100.0	100.0

Climate change negatively impacts water quality (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	43.8	32.0	49.1	43.5
Somewhat agree	28.3	27.1	29.2	28.3
Neither agree nor disagree	15.0	21.3	13.5	13.5
Somewhat disagree	3.7	6.2	1.4	5.0
Strongly disagree	4.7	7.1	2.1	6.0
Don't know	4.6	6.2	4.7	3.5
Total	100.0	100.0	100.0	100.0

*For each of the following statements, please tell us your level of agreement. ("Strongly Agree" Comparisons; **average % for all respondents**)*

Statement	All	New York	Quebec	Vermont
Healthy waterways are a critical part of thriving communities	85.8	84.4	90.1	81.7
Planting native trees and shrubs along waterways improves flood resilience	65.2	59.7	70.7	62.0
Planting native trees and shrubs along waterways helps protect water quality	58.6	48.9	69.5	51.4
Climate change negatively impacts water quality	43.8	32.0	49.1	43.5
I rely on Lake Champlain and its resources for my wellbeing	42.1	30.7	53.5	34.9
I know things I can do to reduce water pollution where I live	27.0	21.7	37.0	19.1
I know how to find information about protecting water quality	24.3	28.2	22.6	24.6
I know about efforts in my community to protect or improve water quality	12.6	11.9	14.4	11.3

Q20 Now just a few questions about accessing water quality information.

Which option best describes your personal familiarity with what a watershed is? (% of respondents)

Category	All	New York	Quebec	Vermont
I have heard about watersheds, and I could explain what they are to someone else	57.6	51.4	66.3	51.7
I've heard of watersheds, but I could NOT explain what they are to someone else.	33.9	42.6	22.7	41.9
This is the first time I've heard of a watershed.	8.5	6.0	11.0	6.4
Total	100.0	100.0	100.0	100.0

Q21 Can you recall learning about water quality in your community or in the Lake Champlain Basin through any of the following sources? (average % for all respondents)

Source	All	New York	Quebec	Vermont
Newspaper reports	21.9	24.1	21.5	22.4
Outreach from a water or environmental organization	20.3	14.7	30.9	15.9
Local Television Station or Show	20.3	22.5	16.7	23.3
Municipal/Town/City meetings	13.6	8.9	21.6	10.4
Radio reports	12.6	10.5	13.2	14.2
Online social media	11.3	8.1	15.8	9.8
Online web sites	10.6	9.2	14.4	9.0
Events	7.2	6.0	11.0	5.3
Outreach or Training Webinars	6.5	6.5	7.6	5.9
LCBP State of the Lake report	6.4	5.2	8.1	6.2
Front Porch Forum or Other Community Listserve	5.8	4.7	-	11.5
Plan Directeur de L'eau	-	-	6.5	-
Some other place? (See Appendix B for full text responses)				

Q22 Please name up to five organizations you know that are working to clean up, protect or educate about water quality of the rivers, streams, ponds, lakes or other bodies of water in the Lake Champlain Basin.

See Appendix B for full text responses.

Q23 Please number the top three ways you would prefer to learn about protecting or improving water quality.

Read information on a web site (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	11.3	7.9	14.3	11.1
2	8.6	9.2	10.5	7.3
3	7.7	6.3	8.6	8.2
Total	27.5	23.3	33.3	26.6

Hear information on a local TV or radio station (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	8.2	8.1	5.8	10.7
2	7.6	8.4	7.4	7.7
3	6.5	8.6	5.8	6.2
Total	22.3	25.1	19.1	24.6

Receive information in the mail (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	6.5	7.1	8.4	4.9
2	5.5	5.8	6.9	4.6
3	6.6	4.7	9.1	5.6
Total	18.6	17.5	24.4	15.2

Watch a video on a web site (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	5.6	3.7	8.1	5.1
2	7.0	5.2	7.7	7.5
3	5.7	4.7	4.8	7.3
Total	18.3	13.6	20.6	19.8

See information on social media (like Facebook, Instagram, Twitter) (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	5.8	7.3	5.8	5.3
2	5.3	2.4	7.0	5.8
3	3.9	4.5	4.5	3.4
Total	15.0	14.1	17.4	14.5

Participate in an educational field trip (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	3.7	1.3	5.7	3.5
2	3.3	1.8	3.8	3.9
3	3.9	3.9	4.0	4.1
Total	10.9	7.1	13.4	11.5

Listen to a podcast (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	2.4	1.6	2.1	3.2
2	3.2	2.9	2.4	4.2
3	2.8	2.4	3.3	2.8
Total	8.3	6.8	7.7	10.3

Participate in a hands-on workshop (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	2.4	1.6	3.6	2.1
2	2.9	2.4	3.6	2.7
3	2.1	2.1	2.4	2.0
Total	7.4	6.0	9.6	6.8

Visit an educational table at a local event (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	1.2	0.8	1.5	1.1
2	1.7	0.8	2.2	1.8
3	2.8	2.6	3.1	3.0
Total	5.7	4.2	6.9	5.9

Attend a webinar (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	1.4	1.3	1.4	1.5
2	1.6	1.0	1.7	1.8
3	2.0	0.5	3.3	1.8
Total	4.9	2.9	6.4	5.2

Have someone visit your home (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	0.3	0.0	0.7	0.1
2	0.3	0.0	0.7	0.1
3	0.6	0.5	1.5	0.0
Total	1.2	0.5	2.9	0.3

I am not interested in learning about ways to protect or improve water quality (% of respondents)

Choice Rank	All	New York	Quebec	Vermont
1	0.5	0.5	0.7	0.4
2	0.2	0.3	0.2	0.1
3	0.2	0.3	0.5	0.1
Total	1.0	1.0	1.4	0.7

Some other way you would prefer to learn about protecting or improving water quality.

See Appendix B for full text responses.

Please number the top three ways you would prefer to learn about protecting or improving water quality. (Comparison; Total % of respondents)

Categories Selected as Choice 1, 2, or 3	All	New York	Quebec	Vermont
Read information on a web site	27.5	23.3	33.3	26.6
Read a brochure or informational document	23.1	19.6	34.5	17.0
Hear information on a local TV or radio station	22.3	25.1	19.1	24.6
Receive information in the mail	18.6	17.5	24.4	15.2
Watch a video on a web site	18.3	13.6	20.6	19.8
See information on social media (like Facebook, Instagram, Twitter)	15.0	14.1	17.4	14.5
Participate in an educational field trip	10.9	7.1	13.4	11.5
Attend an in-person presentation	9.2	7.3	11.9	8.4
Listen to a podcast	8.3	6.8	7.7	10.3
Participate in a hands-on workshop	7.4	6.0	9.6	6.8
Visit an educational table at a local event	5.7	4.2	6.9	5.9
Attend a webinar	4.9	2.9	6.4	5.2
Have someone visit your home	1.2	0.5	2.9	0.3
I am not interested in learning about ways to protect or improve water quality	1.0	1.0	1.4	0.7

Q24 The following (10) questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways?

Dispose of toxic materials at a hazardous waste drop-off center (n = 1075) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	75.6	66.1	79.9	74.6
Often	12.3	12.8	12.6	12.0
Sometimes	9.3	15.6	5.1	11.5
Never	2.7	5.6	2.4	1.9
Total	100.0	100.0	100.0	100.0

Keep food waste out of a sink garbage disposal (n = 1013) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	68.1	55.4	73.4	67.5
Often	17.7	17.5	19.1	16.2
Sometimes	8.6	16.9	5.2	8.9
Never	5.6	10.2	2.3	7.4
Total	100.0	100.0	100.0	100.0

Pick up dog waste (n=659) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	66.9	70.0	65.2	67.4
Often	15.2	12.3	14.2	17.8
Sometimes	9.8	10.8	10.9	7.6
Never	8.1	6.9	9.7	7.2
Total	100.0	100.0	100.0	100.0

"Clean, drain, dry" your watercraft to prevent the spread of invasive species (of those with watercraft) (n=477) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	66.7	60.6	66.5	69.9
Often	15.2	17.0	15.0	14.1
Sometimes	11.0	14.9	11.0	9.2
Never	7.2	7.4	7.5	6.8
Total	100.0	100.0	100.0	100.0

Dispose of medicines like prescriptions at a designated site or on a Drug Take Back Day (n = 975) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	65.8	58.9	70.4	63.1
Often	12.5	13.1	9.4	15.8
Sometimes	11.9	16.1	10.8	11.4
Never	9.9	11.9	9.4	9.7
Total	100.0	100.0	100.0	100.0

Limit use of salt on driveways or sidewalks during winter (n = 1020) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	55.4	45.7	62.4	52.2
Often	26.9	29.3	25.5	27.4
Sometimes	12.7	19.1	8.7	14.0
Never	5.0	5.9	3.4	6.5
Total	100.0	100.0	100.0	100.0

Raise your lawnmower blade so that it cuts no shorter than three inches (n = 974) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	53.5	48.4	57.9	50.8
Often	20.8	20.9	19.5	22.1
Sometimes	13.0	14.3	11.1	14.8
Never	12.7	16.5	11.5	12.3
Total	100.0	100.0	100.0	100.0

Practice general water conservation at your home (n = 1139) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	40.0	34.3	44.4	37.4
Often	39.3	36.2	38.6	41.5
Sometimes	17.3	23.7	14.3	17.9
Never	3.4	5.8	2.7	3.2
Total	100.0	100.0	100.0	100.0

Get a soil test before applying phosphorus fertilizer to lawns or gardens (n = 454) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	18.9	14.6	21.1	19.0
Often	12.1	9.7	11.1	14.5
Sometimes	15.0	18.4	8.8	19.0
Never	54.0	57.3	59.1	47.5
Total	100.0	100.0	100.0	100.0

Participate in an invasive species removal project (n = 870) (% of respondents)

Category	All	New York	Quebec	Vermont
Always	6.4	5.0	6.9	6.4
Often	8.3	3.6	9.3	9.0
Sometimes	19.5	19.3	20.7	18.5
Never	65.8	72.1	63.0	66.2
Total	100.0	100.0	100.0	100.0

How often do you do each of the following specifically to reduce impacts to the health of waterways? ("Never" Response Comparisons; % of respondents)

"Never" Responses	All	New York	Quebec	Vermont
Participate in an invasive species removal project	65.8	72.1	63.0	66.2
Get a soil test before applying phosphorus fertilizer to lawns or gardens	54.0	57.3	59.1	47.5
Raise your lawnmower blade so that it cuts no shorter than three inches	12.7	16.5	11.5	12.3
Dispose of medicines like prescriptions at a designated site or on a Drug Take Back Day	9.9	11.9	9.4	9.7
Pick up dog waste	8.1	6.9	9.7	7.2
"Clean, drain, dry" your watercraft to prevent the spread of invasive species	7.2	7.4	7.5	6.8
Keep food waste out of a sink garbage disposal	5.6	10.2	2.3	7.4
Limit use of salt on driveways or sidewalks during winter	5.0	5.9	3.4	6.5
Practice general water conservation at your home	3.4	5.8	2.7	3.2
Dispose of toxic materials at a hazardous waste drop-off center	2.7	5.6	2.4	1.9

Q25 In the past three years have you done any of the following specifically to reduce runoff? (% of respondents)

Category	All	New York	Quebec	Vermont
Planted or allowed vegetation to grow alongside a waterway	63.0	47.0	85.2	45.7
Reduced the size of your lawn or replaced it with native plantings	49.3	35.9	61.8	40.6
Installed a rain barrel or rain garden to catch or slow rainwater	42.4	27.8	55.4	33.0
Replaced a paved or concrete driveway or walkway with other materials so water can flow into the ground	28.1	11.4	47.8	16.3
Assisted in a waterway cleanup	17.8	14.7	20.6	16.6
Something else? (See Appendix B for full text responses)				

Q26 In the past three years have you ever done any of the following to help protect or improve water quality? (% of respondents)

Category	All	New York	Quebec	Vermont
Voted for initiatives, funding or candidates that support protection of water resources	64.2	63.9	55.3	73.4
Talked to others about what they can do to protect water quality	47.9	44.8	56.9	39.6
Assessed water quality in your community	23.6	20.2	30.1	18.1
Donated money to a water quality organization, program or activity	23.3	20.5	19.7	28.8
Attended a meeting about water quality	18.4	17.3	20.3	17.1
Participated in a water quality improvement project	13.5	12.7	15.8	11.4
Something else? (See Appendix B for full text responses)				

Q27 Please indicate your level of agreement to each of the following (six) statements.

Addressing water quality should be a priority for communities (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	70.5	60.8	82.2	61.8
Somewhat agree	25.0	34.3	16.6	30.2
Neither agree nor disagree	3.6	4.4	1.0	6.2
Somewhat disagree	0.4	0.0	0.2	0.7
Strongly disagree	0.4	0.5	0.0	0.9
Don't know	0.1	0.0	0.0	0.2
Total	100.0	100.0	100.0	100.0

Town budgets should help pay for stormwater runoff management (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	48.5	44.1	56.4	41.8
Somewhat agree	36.8	39.6	33.5	39.0
Neither agree nor disagree	8.6	8.4	7.0	10.4
Somewhat disagree	2.9	4.0	1.4	4.2
Strongly disagree	1.8	2.0	0.4	3.2
Don't know	1.4	2.0	1.2	1.4
Total	100.0	100.0	100.0	100.0

My personal actions affect the health of streams, rivers, ponds, and lakes (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	59.0	60.1	62.7	54.3
Somewhat agree	32.7	31.5	31.6	34.6
Neither agree nor disagree	5.6	6.4	3.9	7.2
Somewhat disagree	1.2	1.0	0.6	2.1
Strongly disagree	1.1	1.0	0.6	1.6
Don't know	0.4	0.0	0.6	0.2
Total	100.0	100.0	100.0	100.0

Property owners are not responsible water running off their property (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	3.3	3.4	2.1	4.6
Somewhat agree	8.1	10.3	6.0	9.5
Neither agree nor disagree	11.6	17.6	7.0	14.1
Somewhat disagree	22.8	21.6	18.9	27.7
Strongly disagree	51.5	42.6	63.2	42.5
Don't know	2.7	4.4	2.9	1.6
Total	100.0	100.0	100.0	100.0

More should be done to address water quality in the Lake Champlain basin (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	62.3	52.0	66.9	62.3
Somewhat agree	27.4	32.8	25.9	26.2
Neither agree nor disagree	6.1	10.8	2.7	7.9
Somewhat disagree	0.4	0.5	0.2	0.5
Strongly disagree	0.4	1.0	0.0	0.7
Don't know	3.4	2.9	4.3	2.5
Total	100.0	100.0	100.0	100.0

State/provincial and federal government should be responsible for local water quality (% of respondents)

Category	All	New York	Quebec	Vermont
Strongly agree	56.9	50.0	64.0	52.1
Somewhat agree	31.0	36.3	27.3	32.9
Neither agree nor disagree	7.1	6.4	6.4	8.1
Somewhat disagree	2.5	3.4	1.2	3.5
Strongly disagree	1.8	2.5	0.8	2.5
Don't know	0.7	1.5	0.2	0.9
Total	100.0	100.0	100.0	100.0

Q28 In the future, how likely would you be to do each of the following (15 actions) specifically to address water quality of streams, rivers, lakes, or ponds in your community?

Dispose of medicine or prescription drugs at a designated site or on a Drug Take Back Day (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	79.6	74.9	82.4	78.3
Somewhat likely	13.2	19.1	10.2	14.1
Neither likely nor unlikely	4.1	3.3	3.5	5.1
Unlikely	1.5	1.1	2.4	0.8
Not at all likely	1.6	1.6	1.5	1.8
Total	100.0	100.0	100.0	100.0

Keep food waste out of sink/garbage disposal (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	76.9	60.2	84.7	75.2
Somewhat likely	13.3	21.7	9.6	13.8
Neither likely nor unlikely	4.7	8.4	3.7	4.4
Unlikely	3.0	7.2	1.4	3.1
Not at all likely	2.0	2.4	0.7	3.4
Total	100.0	100.0	100.0	100.0

Pick up your dog's waste (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	69.1	81.0	57.0	80.2
Somewhat likely	11.1	9.1	11.6	11.5
Neither likely nor unlikely	7.6	4.1	11.6	3.8
Unlikely	3.7	3.3	4.7	2.7
Not at all likely	8.4	2.5	15.2	1.9
Total	100.0	100.0	100.0	100.0

Reduce herbicide use for controlling weeds in your yard (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	68.1	50.3	75.6	67.2
Somewhat likely	19.5	32.9	14.4	19.4
Neither likely nor unlikely	7.6	9.6	6.9	7.6
Unlikely	2.8	5.4	1.0	3.8
Not at all likely	2.0	1.8	2.2	1.9
Total	100.0	100.0	100.0	100.0

Limit lawn or garden watering to prevent overflow into streets or gutters (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	64.9	54.1	70.1	64.1
Somewhat likely	19.7	27.1	15.9	20.9
Neither likely nor unlikely	9.7	14.1	8.7	8.6
Unlikely	2.8	2.9	1.8	3.9
Not at all likely	2.9	1.8	3.4	2.5
Total	100.0	100.0	100.0	100.0

Limit use of salt on driveways or sidewalks during winter (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	63.2	51.1	72.1	59.1
Somewhat likely	26.3	36.8	20.5	28.0
Neither likely nor unlikely	6.7	8.2	5.2	7.3
Unlikely	2.4	2.2	0.9	4.1
Not at all likely	1.5	1.6	1.4	1.6
Total	100.0	100.0	100.0	100.0

Raise your lawnmower blade so that it cuts no shorter than three inches (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	63.0	59.3	65.2	62.2
Somewhat likely	19.8	16.4	18.8	22.8
Neither likely nor unlikely	8.7	14.1	8.3	6.3
Unlikely	5.3	7.3	4.8	4.9
Not at all likely	3.1	2.8	2.8	3.7
Total	100.0	100.0	100.0	100.0

Reduce pesticide use in or around your home, like ant spray or poison for rodents (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	57.8	43.9	65.1	55.8
Somewhat likely	25.4	30.6	20.8	28.6
Neither likely nor unlikely	10.0	13.9	9.6	8.3
Unlikely	4.3	8.3	2.1	5.0
Not at all likely	2.5	3.3	2.5	2.2
Total	100.0	100.0	100.0	100.0

Install low flow faucet, shower head or toilet (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	53.1	49.4	56.2	51.3
Somewhat likely	23.2	25.6	21.7	23.9
Neither likely nor unlikely	12.4	10.6	14.4	10.7
Unlikely	7.1	7.2	5.4	9.1
Not at all likely	4.3	7.2	2.4	5.1
Total	100.0	100.0	100.0	100.0

Install a rain garden or rain barrel (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	39.0	31.6	49.3	29.9
Somewhat likely	25.5	24.1	22.8	29.4
Neither likely nor unlikely	16.6	22.4	12.5	19.0
Unlikely	11.9	14.4	10.5	12.5
Not at all likely	7.1	7.5	4.8	9.4
Total	100.0	100.0	100.0	100.0

Replace or reduce lawn with native plants (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	33.0	24.7	42.9	25.1
Somewhat likely	30.1	30.8	27.9	32.1
Neither likely nor unlikely	18.7	21.4	15.0	21.8
Unlikely	10.9	15.9	8.6	11.4
Not at all likely	7.3	7.1	5.6	9.6
Total	100.0	100.0	100.0	100.0

Get a soil test before putting fertilizer on your lawn or gardens (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	30.9	23.6	31.5	34.0
Somewhat likely	20.8	31.1	16.3	21.4
Neither likely nor unlikely	23.0	22.3	24.7	21.0
Unlikely	14.4	18.2	12.1	15.6
Not at all likely	11.0	4.7	15.5	8.0
Total	100.0	100.0	100.0	100.0

Talk to others about what they can do to protect water quality (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	28.2	19.7	37.8	21.9
Somewhat likely	34.1	37.9	31.8	34.7
Neither likely nor unlikely	23.4	25.8	21.3	24.5
Unlikely	8.8	11.1	5.4	11.6
Not at all likely	5.4	5.6	3.7	7.4
Total	100.0	100.0	100.0	100.0

Donate money to a water quality organization, program or activity (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	18.0	18.3	17.1	19.0
Somewhat likely	27.3	27.7	26.9	27.5
Neither likely nor unlikely	30.7	26.2	34.5	28.2
Unlikely	14.7	17.8	14.1	14.1
Not at all likely	9.3	9.9	7.5	11.2
Total	100.0	100.0	100.0	100.0

Participate in an erosion control or invasive species removal project (% of respondents)

Category	All	New York	Quebec	Vermont
Very likely	17.3	12.4	21.1	15.2
Somewhat likely	27.4	28.6	28.5	25.7
Neither likely nor unlikely	30.8	32.4	30.3	30.6
Unlikely	15.2	18.4	13.1	16.1
Not at all likely	9.4	8.1	7.0	12.5
Total	100.0	100.0	100.0	100.0

Demographics

Q2 Please select your age category (% of respondents)

Category	All	New York	Quebec	Vermont
18 to 24 years	1.2	1.3	1.9	0.7
25 to 34 years	5.9	2.9	9.5	4.6
35 to 44 years	10.7	9.7	10.5	11.7
45 to 54 years	15.9	15.7	14.4	17.2
55 to 64 years	27.0	27.7	29.6	24.6
65 to 74 years	28.9	33.0	24.7	29.8
75 years and over	10.4	9.7	9.5	11.4
Total	100.0	100.0	100.0	100.0

Q30 What is the highest level of education you've completed? (% of respondents)

Category	All	New York	Quebec	Vermont
Less than High School/Secondary School (no diploma, certificate, etc.)	0.5	0.0	0.6	0.5
High School/Secondary School graduate	9.4	10.9	10.0	8.2
Some College or University (no degree, certificate, etc.)	13.7	15.3	12.3	14.7
College, University, Technical degree, Certificate, etc.	45.5	40.1	47.8	45.2
Advanced degree, Graduate degree	30.8	33.7	29.3	31.5
Total	100.0	100.0	100.0	100.0

Q31 Please select the income category that most closely represents your total household income in 2019 (USD). (% of respondents)

No data were recorded for this question. Upon inspection of the Qualtrics (surveying software) file, the logic to display the question was miscoded. It required people to answer that they were from both New York *and* Vermont (rather than from New York *or* Vermont). Thus, no one taking the survey was shown this question, unfortunately.

Q32 Please select the income category that most closely represents your total household income in 2019 (CAD). (% of respondents)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than $25,000	25	1.4	5.4	5.
	$25,000-$50,000	85	4.9	18.5	23.
	$50,000-$75,000	84	4.9	18.3	42.
	$75,000-$100,000	98	5.7	21.3	63.
	More than $100,000	168	9.7	36.5	100.
	Total	460	26.7	100.0	
Missing	System	1265	73.3		
Total		1725	100.0		

Q33 Please tell us your gender. (% of respondents)

Category	All	New York	Quebec	Vermont
Female	48.1	47.8	42.5	54.3
Male	51.1	52.2	55.9	45.4
Some other gender identification	0.8	0.0	1.7	0.3
Total	100.0	100.0	100.0	100.0

Q34 Do you own or rent your current residence? (% of respondents)

Category	All	New York	Quebec	Vermont
Own	90.7	85.1	93.6	90.2
Rent	9.3	14.9	6.4	9.8
Total	100.0	100.0	100.0	100.0

Q35 Which of the following options best describes the area in which you live? (% of respondents)

Category	All	New York	Quebec	Vermont
Urban, city or downtown	11.5	19.0	1.7	18.7
Suburban, small towns and villages	39.8	49.0	32.0	44.4
Rural, open lands with sparse development	48.5	32.0	66.1	36.4
Not sure	0.3	0.0	0.2	0.5
Total	100.0	100.0	100.0	100.0

Q36 If there is something you'd like to learn more about related to watersheds or water quality, or if you have any additional comments, please feel free to add them here.

See Appendix B for full text responses.

Cross-Tabulations

For each cross-tabulation, Pearson Chi-square is reported along with the level of significance. A p value of <0.05 was considered to represent a statistically significant relationship. Below each cross-tabulation a statement interpreting the relationship between the two variables is included for ease of interpretation.

Relationships between age and water quality improvement/protection learning preferences of Lake Champlain basin residents

For all age-related cross-tabulations, responses for those ages 18-24 and 25-34 were combined due to limited responses in these categories as compared to other age categories.

Percent of respondents that selected particular outreach methods as their top three preferred ways to learn about protecting or improving water quality by age group.

	18-34	35-54	55-74	75+
Attend an in-person presentation	5.8%	8.5%	10.8%	6.9%
Attend a Webinar	5.8%	4.2%	5.8%	2.3%
Participate in hands on workshop	11.8%	8.9%	7.3%	2.9%
Read a brochure or informational document	27.7%	20.5%	23.6%	29.3%
Read information on a web site	24.4%	27.2%	29.6%	26.9%
Watch a video on a web site	24.6%	18.7%	17.5%	21.7%
Have someone visit your home	3.3%	1.6%	1.1%	0.0%
Hear information on a local TV or radio station	24.4%	23.6%	22.0%	24.6%
Visit an educational table at a local event	6.7%	4.4%	6.5%	5.1%
See information on social media (like Facebook, Instagram, Twitter)	28.6%	26.1%	10.6%	4.6%
Listen to a podcast	15.5%	10.9%	7.1%	5.7%
Participate in an educational field trip	14.3%	14.1%	10.3%	6.3%
Receive information in the mail	21.0%	19.3%	18.1%	21.7%
I am not interested in learning about ways to protect or improve water quality	1.7%	0.4%	1.3%	0.6%

		Age Recode			
Pearson Chi-Square = 5.544, 0.136		18-34	35-54	55-74	75+
Attend an in-person presentation	Top 3	5.8%	8.5%	10.8%	6.9%
	Not Top 3	94.2%	91.5%	89.2%	93.1%
Total = 1681		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality at an in-person presentation.

		Age Recode			
Pearson Chi-Square = 4.833, 0.184		18-34	35-54	55-74	75+
Attend a Webinar	Top 3	5.8%	4.2%	5.8%	2.3%
	Not Top 3	94.2%	95.8%	94.2%	97.7%
Total = 1686		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality at a webinar.

		Age Recode			
Pearson Chi-Square = 9.720, 0.021		18-34	35-54	55-74	75+
Participate in hands on workshop	Top 3	11.8%	8.9%	7.3%	2.9%
	Not Top 3	88.2%	91.1%	92.7%	97.1%
Total = 1686		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and preference to learn about protecting or improving water quality by participating in a hands-on workshop. More younger people prefer this mode of learning.

		Age Recode			
Pearson Chi-Square = 6.662, 0.083		18-34	35-54	55-74	75+
Read a brochure or informational document	Top 3	27.7%	20.5%	23.6%	29.3%
	Not Top 3	72.3%	79.5%	76.4%	70.7%
Total = 1681		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality by reading a brochure or informational document.

		Age Recode			
Pearson Chi-Square = 2.074, 0.557		18-34	35-54	55-74	75+
Read information on a web site	Top 3	24.4%	27.2%	29.6%	26.9%
	Not Top 3	75.6%	72.8%	70.4%	73.1%
Total = 1679		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality by reading information on a website.

		Age Recode			
Pearson Chi-Square = 4.562, 0.206		18-34	35-54	55-74	75+
Watch a video on a web site	Top 3	24.6%	18.7%	17.5%	21.7%
	Not Top 3	75.4%	81.3%	82.5%	78.3%
Total = 1678		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality by watching a video on a website.

		Age Recode			
Pearson Chi-Square = 7.065, 0.069		18-34	35-54	55-74	75+
Have someone visit your home	Top 3	3.3%	1.6%	1.1%	0.0%
	Not Top 3	96.7%	98.4%	98.9%	100.0%
Total = 1687		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality by having someone visit your home.

		Age Recode			
Pearson Chi-Square = .997, 0.801		18-34	35-54	55-74	75+
Hear information on a local TV or radio station	Top 3	24.4%	23.6%	22.0%	24.6%
	Not Top 3	75.6%	76.4%	78.0%	75.4%
Total = 1682		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality by hearing information on a local TV or radio station.

		Age Recode			
Pearson Chi-Square = 2.627, 0.452		18-34	35-54	55-74	75+
Visit an educational table at a local event	Top 3	6.7%	4.4%	6.5%	5.1%
	Not Top 3	93.3%	95.6%	93.5%	94.9%
Total = 1685		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality by visiting an educational table at a local event.

		Age Recode			
Pearson Chi-Square = 86.807, 0.000		18-34	35-54	55-74	75+
See information on social media (like Facebook, Instagram, Twitter)	Top 3	28.6%	26.1%	10.6%	4.6%
	Not Top 3	71.4%	73.9%	89.4%	95.4%
Total = 1681		100.0%	100.0%	100.0%	100.0%

There is a statistically association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality by seeing information on social media. More younger people prefer this mode of learning.

		Age Recode			
Pearson Chi-Square = 14.643, 0.002		18-34	35-54	55-74	75+
Listen to a podcast	Top 3	15.5%	10.9%	7.1%	5.7%
	Not Top 3	84.5%	89.1%	92.9%	94.3%
Total = 1681		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and preference to learn about protecting or improving water quality by listening to a podcast. More younger people prefer this mode of learning.

		Age Recode			
Pearson Chi-Square = 9.786, 0.020		18-34	35-54	55-74	75+
Participate in an educational field trip	Top 3	14.3%	14.1%	10.3%	6.3%
	Not Top 3	85.7%	85.9%	89.7%	93.7%
Total = 1683		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and preference to learn about protecting or improving water quality by participating in an educational field trip. More younger people prefer this mode of learning. Possibly related to families with children learning together.

		Age Recode			
Pearson Chi-Square = 1.670, 0.643		18-34	35-54	55-74	75+
Receive information in the mail	Top 3	21.0%	19.3%	18.1%	21.7%
	Not Top 3	79.0%	80.7%	81.9%	78.3%
Total = 1683		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality by receiving information in the mail.

		Age Recode			
Pearson Chi-Square = 2.952, 0.399		18-34	35-54	55-74	75+
I am not interested in learning about ways to protect or improve water quality	Top 3	1.7%	0.4%	1.3%	0.6%
	Not Top 3	98.3%	99.6%	98.7%	99.4%
Total = 1688		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and preference to learn about protecting or improving water quality in terms of having no interest in learning about this topic. All people in the Lake Champlain basin are interested in learning about ways to protect or improve water quality.

For each of the following statements, please tell us your level of agreement. - I know about efforts in my community to protect or improve water quality * Age Recode					
Pearson Chi-Square = 52.602, 0.000		Age Recode			
		18-34	35-54	55-74	75+
For each of the following statements, please tell us your level of agreement. - I know about efforts in my community to protect or improve water quality	Strongly agree	4.3%	12.5%	13.6%	14.0%
	Somewhat agree	27.2%	29.3%	38.2%	47.1%
	Neither agree nor disagree	16.3%	23.8%	20.8%	13.2%
	Somewhat disagree	23.9%	18.9%	12.3%	10.7%
	Strongly disagree	22.8%	10.1%	9.1%	7.4%
	Don't know	5.4%	5.5%	6.1%	7.4%
Total = 1234		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and knowledge of efforts in communities to protect or improve water quality. More older people know about efforts in communities to protect or improve water quality.

For each of the following statements, please tell us your level of agreement. - Planting native trees and shrubs along waterways helps protect water quality * Age Recode					
Pearson Chi-Square = 32.798, 0.005		Age Recode			
		18-34	35-54	55-74	75+
For each of the following statements, please tell us your level of agreement. - Planting native trees and shrubs along waterways helps protect water quality	Strongly agree	47.8%	54.3%	61.3%	62.6%
	Somewhat agree	28.3%	29.9%	28.0%	20.3%
	Neither agree nor disagree	12.0%	8.3%	5.5%	7.3%
	Somewhat disagree	1.1%	0.6%	0.9%	
	Strongly disagree	1.1%	0.9%	0.7%	4.1%
	Don't know	9.8%	5.9%	3.6%	5.7%
Total = 1231		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and agreeing that planting native trees and shrubs along waterways helps protect water quality. More older people agree with this than younger people.

For each of the following statements, please tell us your level of agreement. - Healthy waterways are a critical part of thriving communities * Age Recode					
Pearson Chi-Square = 40.316, 0.000		Age Recode			
		18-34	35-54	55-74	75+
For each of the following statements, please tell us your level of agreement. - Healthy waterways are a critical part of thriving communities	Strongly agree	87.9%	86.5%	86.3%	79.7%
	Somewhat agree	12.1%	12.6%	10.7%	12.2%
	Neither agree nor disagree		0.6%	1.6%	1.6%
	Somewhat disagree			0.3%	
	Strongly disagree			0.6%	0.8%
	Don't know		0.3%	0.6%	5.7%
Total = 1232		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and agreeing that healthy waterways are a critical part of thriving communities. More younger people agree with this.

For each of the following statements, please tell us your level of agreement. - Planting native trees and shrubs along waterways improves flood resilience * Age Recode					
Pearson Chi-Square = 20.531, 0.153		Age Recode			
		18-34	35-54	55-74	75+
For each of the following statements, please tell us your level of agreement. - Planting native trees and shrubs along waterways improves flood resilience	Strongly agree	52.2%	64.0%	67.7%	64.2%
	Somewhat agree	25.0%	21.5%	21.9%	20.8%
	Neither agree nor disagree	13.0%	6.8%	4.9%	6.7%
	Somewhat disagree	1.1%	1.5%	0.9%	0.8%
	Strongly disagree	1.1%	1.2%	1.0%	
	Don't know	7.6%	4.9%	3.6%	7.5%
Total = 1228		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and agreeing that planting native trees and shrubs improves flood resilience.

For each of the following statements, please tell us your level of agreement. - I rely on Lake Champlain and its resources for my wellbeing * Age Recode					
Pearson Chi-Square = 24.996, 0.050		Age Recode			
		18-34	35-54	55-74	75+
For each of the following statements, please tell us your level of agreement. - I rely on Lake Champlain and its resources for my wellbeing	Strongly agree	43.5%	43.3%	43.5%	29.8%
	Somewhat agree	29.3%	29.4%	29.3%	25.6%
	Neither agree nor disagree	16.3%	17.2%	17.8%	24.8%
	Somewhat disagree	3.3%	4.9%	4.0%	7.4%
	Strongly disagree	6.5%	2.8%	2.6%	7.4%
	Don't know	1.1%	2.5%	2.7%	5.0%
Total = 1231		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and agreement about relying upon Lake Champlain and its resources for personal wellbeing. More younger people agree with this.

For each of the following statements, please tell us your level of agreement. - Climate change negatively impacts water quality * Age Recode					
Pearson Chi-Square = 29.251, 0.015		Age Recode			
		18-34	35-54	55-74	75+
For each of the following statements, please tell us your level of agreement. - Climate change negatively impacts water quality	Strongly agree	47.8%	44.3%	45.0%	32.2%
	Somewhat agree	34.8%	28.0%	27.0%	32.2%
	Neither agree nor disagree	12.0%	18.5%	13.3%	17.4%
	Somewhat disagree	1.1%	2.8%	4.7%	2.5%
	Strongly disagree	1.1%	3.4%	5.4%	6.6%
	Don't know	3.3%	3.1%	4.7%	9.1%
Total = 1224		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and agreeing that climate change negatively affects water quality. More younger people agree that climate change negatively affects water quality.

Which option best describes your personal familiarity with what a watershed is? * Age Recode					
Pearson Chi-Square = 64.048, 0.000		Age Recode			
		18-34	35-54	55-74	75+
Now just a few questions about accessing water quality information. Which option best describes your personal familiarity with what a watershed is?	I have heard about watersheds and I could explain what they are to someone else	36.8%	48.2%	62.1%	71.3%
	I've heard of watersheds, but I could NOT explain what they are to someone else.	42.5%	37.4%	32.6%	26.2%
	This is the first time I've heard of a watershed.	20.7%	14.4%	5.3%	2.5%
Total = 1189		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and knowing what a watershed is. More older people could explain a watershed to someone else.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Pick up dog waste * Age Recode					
Pearson Chi-Square = 10.676, 0.299		Age Recode			
		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Pick up dog waste	Always	68.7%	63.3%	66.7%	80.4%
	Often	16.4%	18.6%	14.2%	7.8%
	Sometimes	4.5%	11.1%	10.9%	3.9%
	Never	10.4%	7.0%	8.3%	7.8%
Total = 656		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and picking up dog waste.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Dispose of prescriptions at a designated site or on a Drug Take Back Day * Age Recode					
Pearson Chi-Square = 22.652, 0.007		Age Recode			
		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Dispose of prescriptions at a designated site or on a Drug Take Back Day	Always	56.3%	57.3%	71.2%	64.2%
	Often	14.1%	15.3%	10.3%	16.0%
	Sometimes	12.7%	16.5%	10.1%	9.4%
	Never	16.9%	10.9%	8.4%	10.4%
Total = 970		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and disposing of prescriptions at a designated site or on a Drug Take Back Day. More older people dispose of prescriptions at designated locations. This may be due to older people having more prescriptions.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Dispose of toxic materials at a hazardous waste drop-off center * Age Recode					
		Age Recode			
Pearson Chi-Square = 28.960, 0.001		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Dispose of toxic materials at a hazardous waste drop-off center.	Always	57.5%	71.3%	80.0%	74.3%
	Often	20.5%	16.8%	9.4%	11.5%
	Sometimes	19.2%	9.0%	7.8%	12.4%
	Never	2.7%	2.9%	2.8%	1.8%
Total = 1070		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and disposing of toxic materials. More older people do this. This may be due to home ownership at older ages and lack of toxic materials to dispose at younger ages.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Raise lawnmower blades so they cut no shorter than three inches * Age Recode					
Pearson Chi-Square = 9.982, 0.352		Age Recode			
		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Raise lawnmower blades so they cut no shorter than three inches	Always	48.5%	49.4%	56.1%	53.1%
	Often	15.2%	22.7%	20.3%	22.4%
	Sometimes	19.7%	15.7%	11.4%	10.2%
	Never	16.7%	12.2%	12.2%	14.3%
Total = 970		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and raising lawnmower blades so they cut no shorter than three inches.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Limit use of salt on driveways or sidewalks during winter * Age Recode					
Pearson Chi-Square = 23.533, 0.005		Age Recode			
		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Limit use of salt on driveways or sidewalks during winter	Always	38.2%	50.9%	59.3%	58.8%
	Often	32.9%	28.4%	26.1%	22.5%
	Sometimes	25.0%	14.9%	9.8%	13.7%
	Never	3.9%	5.8%	4.8%	4.9%
Total = 1016		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and limiting use of salt on driveways or sidewalks during winter. More older people limit use of salt in winter than younger people.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Keep food waste out of sink garbage disposals * Age Recode					
		Age Recode			
Pearson Chi-Square = 28.644, 0.001		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Keep food waste out of sink garbage disposals.	Always	51.8%	63.5%	72.2%	71.6%
	Often	27.7%	18.5%	16.6%	13.7%
	Sometimes	13.3%	10.0%	6.3%	13.7%
	Never	7.2%	8.1%	4.9%	1.0%
Total = 1009		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and keeping food waste out of sink garbage disposals. More older people keep sink out of garbage disposals than younger people.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Get a soil test before applying phosphorus fertilizer * Age Recode					
			Age Recode		
Pearson Chi-Square = 10.506, 0.311		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Get a soil test before applying phosphorus fertilizer.	Always	23.3%	17.1%	20.8%	11.8%
	Often	20.0%	9.8%	11.2%	17.6%
	Sometimes	10.0%	13.8%	14.4%	23.5%
	Never	46.7%	59.3%	53.6%	47.1%
Total = 454		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and getting a soil test before applying phosphorus fertilizer.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Practice general water conservation at home * Age Recode					
Pearson Chi-Square = 25.761, 0.002		Age Recode			
		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Practice general water conservation at home	Always	39.1%	35.1%	40.9%	48.7%
	Often	32.2%	36.8%	41.5%	38.9%
	Sometimes	25.3%	24.2%	14.1%	10.6%
	Never	3.4%	4.0%	3.5%	1.8%
Total = 1133		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and practicing general water conservation at home. More older people conserve water than younger people.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Participate in an invasive species removal project * Age Recode					
Pearson Chi-Square = 13.807, 0.129		Age Recode			
		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Participate in an invasive species removal project	Always	5.6%	6.2%	5.9%	9.9%
	Often	2.8%	6.6%	9.6%	11.1%
	Sometimes	16.7%	17.0%	22.3%	13.6%
	Never	75.0%	70.1%	62.2%	65.4%
Total = 865		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and having participated in an invasive species removal project

The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Clean, Drain, Dry watercraft to prevent the spread of invasive species * Age Recode					
Pearson Chi-Square = 10.040, 0.347		Age Recode			
		18-34	35-54	55-74	75+
The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways? - Clean, Drain, Dry watercraft to prevent the spread of invasive species.	Always	50.0%	67.2%	67.9%	71.4%
	Often	25.0%	16.8%	13.4%	14.3%
	Sometimes	12.5%	7.3%	13.0%	7.1%
	Never	12.5%	8.8%	5.8%	7.1%
Total = 474		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and cleaning, draining and drying a watercraft.

In the past three years have you done any of the following specifically to reduce runoff? - Installed a rain barrel or rain garden to catch or slow rainwater * Age Recode					
Pearson Chi-Square = 3.736, 0.291		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you done any of the following specifically to reduce runoff? - Installed a rain barrel or rain garden to catch or slow rainwater	Yes	43.7%	45.8%	41.9%	34.4%
	No	56.3%	54.2%	58.1%	65.6%
Total = 982		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and having installed a rain barrel or rain garden to catch or slow rainwater.

In the past three years have you done any of the following specifically to reduce runoff? - Reduced the size of your lawn or replaced it with native plantings * Age Recode					
Pearson Chi-Square = 5.627, 0.131		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you done any of the following specifically to reduce runoff? - Reduced the size of your lawn or replaced it with native plantings	Yes	58.8%	51.8%	48.2%	41.5%
	No	41.2%	48.2%	51.8%	58.5%
Total = 954		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and having reduced the size of a lawn or having replaced it with native plantings.

In the past three years have you done any of the following specifically to reduce runoff? - Replaced a paved or concrete driveway or walkway with other materials so water can flow into the ground * Age Recode					
Pearson Chi-Square = 2.250, 0.522		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you done any of the following specifically to reduce runoff? - Replaced a paved or concrete driveway or walkway with other materials so water can flow into the ground	Yes	25.5%	31.5%	26.2%	31.7%
	No	74.5%	68.5%	73.8%	68.3%
Total = 661		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and having replaced a paved or concrete driveway or walkway with other materials so water can flow into the ground

In the past three years have you done any of the following specifically to reduce runoff? - Planted or allowed vegetation to grow alongside a waterway * Age Recode					
Pearson Chi-Square = 0.749, 0.862		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you done any of the following specifically to reduce runoff? - Planted or allowed vegetation to grow alongside a waterway	Yes	61.0%	64.1%	62.1%	66.7%
	No	39.0%	35.9%	37.9%	33.3%
Total = 754		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and having planted or allowed vegetation to grow alongside a waterway.

In the past three years have you done any of the following specifically to reduce runoff? - Assisted in a waterway cleanup * Age Recode					
Pearson Chi-Square = 2.612, 0.455		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you done any of the following specifically to reduce runoff? - Assisted in a waterway cleanup	Yes	16.7%	19.6%	16.3%	22.4%
	No	83.3%	80.4%	83.7%	77.6%
Total = 921		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and having assisted in a waterway cleanup.

In the past three years have you ever done any of the following to help protect or improve water quality? - Attended a meeting about water quality * Age Recode					
Pearson Chi-Square = 22.337, 0.000		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you ever done any of the following to help protect or improve water quality? - Attended a meeting about water quality	Yes	6.0%	13.0%	21.1%	27.4%
	No	94.0%	87.0%	78.9%	72.6%
Total = 1069		100.0%	100.0%	100.0%	100.0%

There is a statistically significant association between age and having attended a meeting about water quality.

In the past three years have you ever done any of the following to help protect or improve water quality? - Assessed water quality in your community * Age Recode					
Pearson Chi-Square = 0.203, 0.977		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you ever done any of the following to help protect or improve water quality? - Assessed water quality in your community	Yes	23.2%	24.2%	23.1%	24.8%
	No	76.8%	75.8%	76.9%	75.2%
Total = 1039		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and having assessed water quality in local communities.

In the past three years have you ever done any of the following to help protect or improve water quality? - Talked to others about what they can do to protect water quality * Age Recode					
Pearson Chi-Square = 1.388, 0.708		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you ever done any of the following to help protect or improve water quality? - Talked to others about what they can do to protect water quality	Yes	42.2%	47.2%	48.8%	48.6%
	No	57.8%	52.8%	51.2%	51.4%
Total = 1084		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and having talked to others about what they can do to protect water quality

In the past three years have you ever done any of the following to help protect or improve water quality? - Participated in a water quality improvement project * Age Recode					
Pearson Chi-Square = 2.659, 0.447		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you ever done any of the following to help protect or improve water quality? - Participated in a water quality improvement project	Yes	14.5%	14.8%	13.6%	8.6%
	No	85.5%	85.2%	86.4%	91.4%
Total = 1053		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and having participated in a water quality improvement project.

In the past three years have you ever done any of the following to help protect or improve water quality? - Donated money to a water quality organization, program or activity * Age Recode					
Pearson Chi-Square = 4.364, 0.225		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you ever done any of the following to help protect or improve water quality? - Donated money to a water quality organization, program or activity	Yes	15.7%	21.7%	24.4%	27.0%
	No	84.3%	78.3%	75.6%	73.0%
Total = 1078		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and donated money to a water quality organization, program or activity.

In the past three years have you ever done any of the following to help protect or improve water quality? - Voted for initiatives, funding or candidates that support protection of water resources * Age Recode					
Pearson Chi-Square = 0.732, 0.866		Age Recode			
		18-34	35-54	55-74	75+
In the past three years have you ever done any of the following to help protect or improve water quality? - Voted for initiatives, funding or candidates that support protection of water resources	Yes	59.7%	64.2%	64.7%	64.4%
	No	40.3%	35.8%	35.3%	35.6%
Total = 1010		100.0%	100.0%	100.0%	100.0%

There is no statistical association between age of Lake Champlain basin residents and voting for initiatives, funding or candidates that support protection of water resources.

Relationships between watershed knowledge and stewardship actions

As a means of assessing knowledge of Lake Champlain basin residents about lake and watershed issues, a single survey question was selected. This question directly asked respondents to indicate their level of understanding of a watershed – from being able to explain this term to others to having heard of it, but not being able to explain it, to only having heard the term in the survey for the first time. In cross-tabulations, responses to this question were compared to a variety of other questions related to location of residence, knowledge of water quality protection actions, and stewardship activities.

Which option best describes your personal familiarity with what a watershed is? Please select the State or Province in which you currently reside. Crosstabulation				
Pearson Chi-Square = 50.842, .001		New York	Quebec	Vermont
Now just a few questions about accessing water quality information. Which option best describes your personal familiarity with what a watershed is?	I have heard about watersheds and I could explain what they are to someone else	51.4%	66.3%	51.7%
	I've heard of watersheds, but I could NOT explain what they are to someone else.	42.6%	22.7%	41.9%
	This is the first time I've heard of a watershed.	6.0%	11.0%	6.4%
Total (N=1184)		100.0%	100.0%	100.0%

There is a statistical association between state or province of residence and knowledge of a watershed. More people from Quebec had heard of watersheds and could explain them to someone else than people from New York or Vermont.

How often do you think about the water quality of - A local water body (that is not Lake Champlain)? Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 21.266, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
How often do you think about the water quality of… - A local water body (that is not Lake Champlain)	Always	21.5%	16.6%	17.3%
	Often	45.1%	41.0%	39.8%
	Sometimes	25.6%	27.6%	25.5%
	Rarely	6.9%	11.1%	11.2%
	Never	0.6%	3.0%	3.1%
	Unsure	0.3%	0.8%	3.1%
Total (N= 1167)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and how often people think about water quality in a local waterbody that is not Lake Champlain. More respondents who had heard of watersheds and could explain them to someone else thought about water quality of a local waterbody often or always as compared to those who had only just heard about watersheds or who had heard about them but could not explain them to others.

How often do you think about the water quality of - Lake Champlain? * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 11.264, .259		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
How often do you think about the water quality of… - Lake Champlain	Always	16.8%	12.7%	22.1%
	Often	39.9%	40.8%	33.7%
	Sometimes	28.5%	33.7%	25.3%
	Rarely	10.5%	9.9%	13.7%
	Never	3.9%	2.8%	4.2%
	Unsure	0.4%	0.3%	1.1%
Total (N= 1159)		100.0%	100.0%	100.0%

There is no statistical association between knowledge of watersheds and how often people in the Lake Champlain basin think about water quality in Lake Champlain.

In general, how clean do you think that Lake Champlain is? * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 8.237, .411		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
In general, how clean do you think that Lake Champlain is?	Very clean	4.7%	3.8%	3.0%
	Somewhat clean	42.1%	39.1%	39.0%
	Somewhat unclean	33.8%	34.8%	34.0%
	Very unclean	8.2%	12.8%	12.0%
	Unsure	11.1%	9.5%	12.0%
Total (N= 1173)		100.0%	100.0%	100.0%

There is no statistical association between knowledge of watersheds and how clean people in the Lake Champlain basin think water quality is.

In general, how clean do you think that the local water bodies in your community are? * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 42.214, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
In general, how clean do you think that the local water bodies in your community are?	Very clean	11.0%	5.3%	6.3%
	Somewhat clean	56.0%	54.9%	39.6%
	Somewhat unclean	26.1%	30.7%	35.4%
	Very unclean	4.9%	5.8%	7.3%
	Unsure	2.1%	3.3%	11.5%
Total (N= 1172)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and how clean people think local waterbodies in their communities are. More respondents who had heard about a watershed and could explain it to someone else thought that their local bodies of water were “very” clean, and more respondents for whom this was the first-time hearing about a watershed were unsure about the cleanliness of their local water bodies.

I know things I can do to reduce water pollution where I live * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 70.441, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- I know things I can do to reduce water pollution where I live	Strongly agree	34.6%	16.7%	20.0%
	Somewhat agree	46.6%	49.8%	45.0%
	Neither agree nor disagree	9.8%	16.7%	15.0%
	Somewhat disagree	3.7%	9.7%	8.0%
	Strongly disagree	2.9%	2.0%	4.0%
	Don't know	2.3%	5.2%	8.0%
Total (N= 1184)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and knowing what an individual can do to reduce water pollution locally. More people who had heard about a watershed and could explain it to someone else strongly agreed that they knew things they could do to reduce water pollution where they live.

I know how to find information about protecting water quality * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 109.490, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- I know how to find information about protecting water quality	Strongly agree	31.5%	15.5%	13.0%
	Somewhat agree	46.5%	37.9%	32.0%
	Neither agree nor disagree	10.0%	19.5%	23.0%
	Somewhat disagree	7.1%	17.5%	15.0%
	Strongly disagree	2.8%	4.0%	6.0%
	Don't know	2.2%	5.7%	11.0%
Total (N= 1181)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and knowing how to find information about protecting water quality. More people who had heard about a watershed and could explain it to someone else strongly agreed that they knew how to find information about protecting water quality.

I know about efforts in my community to protect or improve water quality * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 51.753, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- I know about efforts in my community to protect or improve water quality	Strongly agree	17.2%	7.2%	7.0%
	Somewhat agree	38.8%	33.6%	23.0%
	Neither agree nor disagree	18.1%	22.1%	28.0%
	Somewhat disagree	13.1%	16.7%	19.0%
	Strongly disagree	8.7%	11.9%	14.0%
	Don't know	4.1%	8.5%	9.0%
Total (N= 1182)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and knowing about efforts in local Lake Champlain basin communities happening to protect or improve water quality. More people who had heard about a watershed and could explain it to someone else strongly agreed that they knew about efforts in their community to protect or improve water quality.

Planting native trees and shrubs along waterways helps protect water quality * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 98.531, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Planting native trees and shrubs along waterways helps protect water quality	Strongly agree	69.9%	45.5%	41.0%
	Somewhat agree	22.5%	36.0%	29.0%
	Neither agree nor disagree	4.0%	8.5%	16.0%
	Somewhat disagree	0.3%	1.0%	2.0%
	Strongly disagree	1.0%	1.0%	2.0%
	Don't know	2.4%	8.0%	10.0%
Total (N= 1180)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and knowing that planting native trees and shrubs along waterways helps to protect water quality. More people who had heard about a watershed and could explain it to someone else strongly agreed that they knew that planting native trees and shrubs along waterways helps protect water quality.

Healthy waterways are a critical part of thriving communities * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 10.496, .398		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Healthy waterways are a critical part of thriving communities	Strongly agree	87.8%	83.5%	82.8%
	Somewhat agree	10.0%	12.5%	15.2%
	Neither agree nor disagree	0.9%	1.8%	1.0%
	Somewhat disagree	0.3%	0.0%	0.0%
	Strongly disagree	0.4%	0.5%	0.0%
	Don't know	0.6%	1.8%	1.0%
Total (N= 1181)		100.0%	100.0%	100.0%

There is no statistical association between knowledge of watersheds and knowing that healthy watersheds are a critical part of thriving communities.

Planting native trees and shrubs along waterways improves flood resilience * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 73.659, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Planting native trees and shrubs along waterways improves flood resilience	Strongly agree	74.0%	56.4%	43.4%
	Somewhat agree	17.7%	27.7%	26.3%
	Neither agree nor disagree	4.3%	7.2%	15.2%
	Somewhat disagree	0.6%	1.7%	2.0%
	Strongly disagree	0.7%	1.0%	1.0%
	Don't know	2.7%	6.0%	12.1%
Total (N= 1178)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and knowing that planting native trees and shrubs along waterways improves flood resilience. More people who had heard about a watershed and could explain it to someone else strongly agreed that they knew that planting native trees and shrubs along waterways improves flood resilience.

I rely on Lake Champlain and its resources for my wellbeing * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 25.688, .004		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- I rely on Lake Champlain and its resources for my wellbeing	Strongly agree	46.2%	33.7%	46.5%
	Somewhat agree	28.1%	31.8%	22.2%
	Neither agree nor disagree	15.8%	23.1%	17.2%
	Somewhat disagree	4.4%	4.7%	5.1%
	Strongly disagree	3.4%	3.5%	3.0%
	Don't know	2.1%	3.2%	6.1%
Total (N= 1181)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and reliance on Lake Champlain and its resources for wellbeing.

Climate change negatively impacts water quality * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 24.803, .006		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Climate change negatively impacts water quality	Strongly agree	46.4%	41.4%	36.4%
	Somewhat agree	28.4%	27.8%	31.3%
	Neither agree nor disagree	12.1%	17.8%	19.2%
	Somewhat disagree	3.1%	5.3%	1.0%
	Strongly disagree	5.3%	4.0%	2.0%
	Don't know	4.6%	3.8%	10.1%
Total (N= 1174)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and knowing that climate change negatively impacts water quality. More people who had heard about a watershed and could explain it to someone else strongly agree that climate change negatively impacts water quality, and more people who had only just heard about watersheds didn't know whether climate change negatively impacts water quality.

Addressing water quality should be a priority for communities * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 11.961, .288		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Addressing water quality should be a priority for communities	Strongly agree	72.9%	67.4%	64.5%
	Somewhat agree	23.7%	26.9%	29.0%
	Neither agree nor disagree	2.4%	4.6%	6.5%
	Somewhat disagree	0.5%	0.3%	0.0%
	Strongly disagree	0.5%	0.5%	0.0%
	Don't know		0.3%	0.0%
Total (N= 1089)		100.0%	100.0%	100.0%

There is no statistical association between knowledge of watersheds and knowing that addressing water quality should be a priority for communities. No matter people's knowledge, it was commonly understood that addressing water quality should be a priority for communities.

Town budgets should help pay for stormwater runoff management * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 12.346, .263		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Town budgets should help pay for stormwater runoff management	Strongly agree	51.6%	44.4%	46.2%
	Somewhat agree	34.2%	39.8%	41.9%
	Neither agree nor disagree	8.0%	9.0%	7.5%
	Somewhat disagree	2.7%	4.1%	
	Strongly disagree	2.2%	1.1%	2.2%
	Don't know	1.3%	1.6%	2.2%
Total (N= 1086)		100.0%	100.0%	100.0%

There is no statistical association between knowledge of watersheds and agreement that town budgets should help pay for stormwater runoff management. Regardless of knowledge of watersheds, the majority of people in the Lake Champlain basin agreed or strongly agreed that town budgets should help pay for stormwater runoff management.

My personal actions affect the health of streams, rivers, ponds, and lakes * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 21.604, .017		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- My personal actions affect the health of streams, rivers, ponds, and lakes	Strongly agree	63.1%	54.5%	48.4%
	Somewhat agree	30.8%	34.1%	39.8%
	Neither agree nor disagree	4.0%	8.2%	7.5%
	Somewhat disagree	1.0%	1.6%	1.1%
	Strongly disagree	0.6%	1.6%	2.2%
	Don't know	0.5%	0.0%	1.1%
Total (N= 1086)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and knowing that personal actions affect the health of streams, rivers, ponds, and lakes. More people who had heard about a watershed and could explain it to someone else strongly agreed that personal actions affect the health of water bodies.

Property owners are not responsible for water running off their property * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 38.856, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Property owners are not responsible for water running off their property	Strongly agree	3.4%	3.0%	5.4%
	Somewhat agree	6.1%	8.7%	15.2%
	Neither agree nor disagree	8.6%	15.5%	15.2%
	Somewhat disagree	21.1%	26.1%	23.9%
	Strongly disagree	58.5%	43.5%	37.0%
	Don't know	2.4%	3.3%	3.3%
Total (N= 1086)		100.0%	100.0%	100.0%

There is a statistical association between watershed knowledge and agreeing that property owners are responsible for water running off their properties. More people who had heard about a watershed and could explain it to someone else strongly *disagreed* that property owners are *not* responsible for water running off their properties.

More should be done to address water quality in the Lake Champlain Basin * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 9.789, .459		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- More should be done to address water quality in the Lake Champlain basin	Strongly agree	63.5%	61.9%	55.4%
	Somewhat agree	27.0%	25.6%	35.9%
	Neither agree nor disagree	5.4%	8.2%	4.3%
	Somewhat disagree	0.5%	0.3%	0.0%
	Strongly disagree	0.6%	0.3%	0.0%
	Don't know	2.9%	3.8%	4.3%
Total (N= 1084)		100.0%	100.0%	100.0%

There is no statistical association between knowledge of watersheds and agreement that more should be done to address water quality in the Lake Champlain basin. Regardless of knowledge of watersheds, the majority of people in the Lake Champlain basin agreed or strongly agreed that more should be done to address Lake Champlain basin water quality.

State/provincial and federal government should be responsible for local water quality * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 13.589, .193		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- State/provincial and federal government should be responsible for local water quality	Strongly agree	54.5%	58.4%	69.6%
	Somewhat agree	32.0%	30.4%	23.9%
	Neither agree nor disagree	7.7%	6.0%	5.4%
	Somewhat disagree	2.9%	2.7%	0.0%
	Strongly disagree	2.4%	1.4%	0.0%
	Don't know	0.5%	1.1%	1.1%
Total (N= 1082)		100.0%	100.0%	100.0%

There is no statistical association between knowledge of watersheds and agreement state/provincial and federal government should be responsible for local water quality. Regardless of knowledge of watersheds, the majority of people in the Lake Champlain basin agreed or strongly agreed that state/provincial or federal government should be responsible for local water quality.

Attended a meeting about water quality * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 54.162, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Attended a meeting about water quality	Yes	26.0%	8.5%	6.0%
	No	74.0%	91.5%	94.0%
Total (N= 1031)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and having attended a meeting about water quality. More people in the Lake Champlain basin who have heard about a watershed and could explain it to someone else have attended a meeting about water quality.

Assessed water quality in your community * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 13.796, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Assessed water quality in your community	Yes	27.9%	17.1%	23.5%
	No	72.1%	82.9%	76.5%
Total (N= 1000)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and having assessed water quality in a local community. More people in the Lake Champlain basin who have heard about a watershed and could explain it to someone else have assessed water quality in their community.

Talked to others about what they can do to protect water quality * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 30.480, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Talked to others about what they can do to protect water quality	Yes	54.8%	36.6%	42.9%
	No	45.2%	63.4%	57.1%
Total (N= 1045)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and having talked to others about what they can do to protect water quality. More people in the Lake Champlain basin who have heard about a watershed and could explain it to someone else have talked to others about what they can do to protect water quality.

Participated in a water quality improvement project * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 39.670, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Participated in a water quality improvement project	Yes	19.3%	5.2%	7.1%
	No	80.7%	94.8%	92.9%
Total (N= 1015)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and participated in a water quality improvement project. More people in the Lake Champlain basin who have heard about a watershed and could explain it to someone else have participated in a water quality improvement project.

Donated money to a water quality organization, program or activity * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 20.139, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Donated money to a water quality organization, program or activity	Yes	27.7%	20.5%	7.1%
	No	72.3%	79.5%	92.9%
Total (N= 1039)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and having donated money to a water quality organization, program, or activity. More people in the Lake Champlain basin who have heard about a watershed and could explain it to someone else have donated money to a water quality organization, program, or activity.

Voted for initiatives, funding or candidates that support protection of water resources * Which option best describes your personal familiarity with what a watershed is? Crosstabulation				
Pearson Chi-Square = 27.963, .001		I have heard about watersheds, and I could explain what they are to someone else	I've heard of watersheds, but I could NOT explain what they are to someone else.	This is the first time I've heard of a watershed.
- Voted for initiatives, funding or candidates that support protection of water resources	Yes	71.1%	57.8%	46.8%
	No	28.9%	42.2%	53.2%
Total (N= 975)		100.0%	100.0%	100.0%

There is a statistical association between knowledge of watersheds and voted for initiatives, funding or candidates that support protection of water resources. More people in the Lake Champlain basin who only just heard about a watershed had voted for initiatives, funding or candidates that support protection of water resources.

How often do you think about the water quality of… - Lake Champlain * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 187.935, .001		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
How often do you think about the water quality of… - Lake Champlain	Always	24.8%	14.5%	11.2%	9.9%
	Often	47.6%	48.5%	35.2%	23.3%
	Sometimes	21.8%	29.4%	37.6%	37.0%
	Rarely	4.8%	6.7%	12.4%	18.7%
	Never	0.6%	0.3%	2.7%	10.8%
	Unsure	0.3%	0.6%	0.9%	0.3%
Total (N= 1326)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between distance people live from Lake Champlain and how often they think about the water quality of Lake Champlain. More respondents who live closer to the Lake think about Lake Champlain water quality always or often than those who live farther from the Lake.

How often do you think about the water quality of… - A local water body (that is not Lake Champlain) * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 66.437, .001		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
How often do you think about the water quality of… - A local water body (that is not Lake Champlain)	Always	12.1%	15.5%	21.4%	23.1%
	Often	36.6%	41.2%	47.0%	46.7%
	Sometimes	30.8%	29.3%	24.4%	24.5%
	Rarely	17.5%	11.6%	5.7%	3.7%
	Never	1.8%	1.8%	1.5%	1.4%
	Unsure	1.2%	0.6%	0.0%	0.6%
Total (N= 1338)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between distance people live from Lake Champlain and how often they think about the water quality of a local water body. More respondents that live farther from Lake Champlain think about their local water quality always or often than respondents who live closer to the lake.

In general, how clean do you think that Lake Champlain is? * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 119.212, .001		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
In general, how clean do you think that Lake Champlain is?	Very clean	4.0%	5.8%	4.5%	2.3%
	Somewhat clean	41.6%	42.1%	41.1%	38.9%
	Somewhat unclean	34.0%	36.0%	35.0%	31.1%
	Very unclean	17.6%	11.3%	10.3%	4.6%
	Unsure	2.7%	4.9%	9.1%	23.1%
Total (N= 1338)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between distance people live from Lake Champlain and how clean they think Lake Champlain is. More people who live farther from Lake Champlain are unsure of the cleanliness of the lake.

In general, how clean do you think that the local water bodies in your community are? * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 72.123, .001		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
In general, how clean do you think that the local waterbodies in your community are?	Very clean	4.0%	7.4%	12.0%	11.9%
	Somewhat clean	47.9%	50.8%	58.3%	63.0%
	Somewhat unclean	34.0%	34.1%	24.0%	19.5%
	Very unclean	10.1%	5.0%	4.2%	2.0%
	Unsure	4.0%	2.8%	1.5%	3.7%
Total (N= 1336)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between distance people live from Lake Champlain and how clean they think local waterbodies are. More respondents who live farther from the lake think about how clean the water is in waterbodies in their community than those who live closest to Lake Champlain.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Pick up dog waste * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 18.746, .027		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Pick up dog waste	Always	75.6%	65.2%	63.9%	59.6%
	Often	11.5%	17.7%	20.8%	14.1%
	Sometimes	5.1%	9.1%	9.0%	15.4%
	Never	7.7%	7.9%	6.3%	10.9%
Total (N= 620)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between distance people live from Lake Champlain and how often they pick up after their dogs. More respondents who live closer to Lake Champlain always pick up their dog waste than those who live farther from Lake Champlain.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - - Dispose of prescription drugs at a designated site or on a Drug Take Back Day * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 10.003, .350		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Dispose of prescription drugs at a designated site or on a Drug Take Back Day	Always	65.0%	65.4%	61.0%	70.1%
	Often	14.5%	13.5%	14.0%	9.2%
	Sometimes	10.5%	12.5%	11.9%	13.1%
	Never	10.0%	8.7%	13.1%	7.6%
Total (N= 915)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between distance people live from Lake Champlain and how often they dispose of prescriptions at a designated site or on a Drug Take Back Day.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - - Dispose of toxic materials at a hazardous waste drop-off center * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 1.955, .992		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Dispose of toxic materials at a hazardous waste drop-off center	Always	75.2%	75.8%	74.7%	76.3%
	Often	12.0%	13.1%	11.7%	12.4%
	Sometimes	9.9%	8.5%	10.5%	9.5%
	Never	2.9%	2.5%	3.1%	1.8%
Total (N= 1018)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between distance people live from Lake Champlain and how often they dispose of toxic materials at a hazardous waste drop-off site.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Raise lawnmower blades so they cut no shorter than three inches * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 6.400, .699		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Raise lawnmower blades so they cut no shorter than three inches	Always	55.9%	55.1%	50.6%	51.0%
	Often	20.2%	16.7%	23.6%	22.0%
	Sometimes	11.7%	14.8%	14.8%	12.5%
	Never	12.2%	13.4%	11.0%	14.5%
Total (N= 921)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between distance people live from Lake Champlain and how often they raise lawnmower blades to 3”.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Limit use of salt on driveways or sidewalks during winter * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 14.181, .116		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Limit use of salt on driveways or sidewalks during winter	Always	52.5%	51.8%	55.6%	61.7%
	Often	26.7%	28.8%	31.5%	20.7%
	Sometimes	15.4%	14.2%	10.1%	12.4%
	Never	5.4%	5.3%	2.8%	5.3%
Total (N= 961)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between distance people live from Lake Champlain and how often they limit use of salt on driveways or sidewalks during winter.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Keep food waste out of sink garbage disposal * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 18.431, .030		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Keep food waste out of sink garbage disposal	Always	60.4%	68.0%	72.1%	73.9%
	Often	18.3%	18.0%	16.6%	14.9%
	Sometimes	13.6%	9.0%	5.2%	7.1%
	Never	7.7%	5.0%	6.1%	4.1%
Total (N= 954)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between the distance people live from Lake Champlain and how often they keep food waste out of the sink garbage disposal. More people who live farther from Lake Champlain always keep food waste out of the sink than those who live closer.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Get a soil test before applying phosphorus fertilizer to lawns or gardens * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 8.404, .494		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Get a soil test before applying phosphorus fertilizer to lawns or gardens	Always	18.1%	17.5%	19.1%	18.3%
	Often	9.5%	9.7%	16.4%	13.5%
	Sometimes	21.0%	17.5%	14.5%	9.6%
	Never	51.4%	55.3%	50.0%	58.7%
Total (N= 422)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between distance people live from Lake Champlain and how often they get a soil test before applying phosphorus fertilizer to lawns or gardens. Of people who fertilize, more than half never get a soil test before applying a phosphorus fertilizer to a lawn or garden.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Practice general water conservation at home * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 9.438, .398		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Practice general water conservation at home	Always	42.6%	33.7%	39.6%	44.1%
	Often	35.9%	42.5%	41.0%	36.2%
	Sometimes	19.1%	19.4%	16.5%	16.2%
	Never	2.3%	4.4%	2.9%	3.4%
Total (N= 1070)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between distance people live from Lake Champlain and their use of general water conservation practices at home.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Participate in an invasive species removal project * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 14.023, .121		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Participate in an invasive species removal project	Always	7.7%	6.4%	3.9%	6.8%
	Often	6.2%	8.6%	6.9%	11.4%
	Sometimes	15.4%	17.1%	22.5%	22.9%
	Never	70.8%	67.9%	66.7%	58.9%
Total (N= 822)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their participation in invasive species removal projects.

How often do you do each of the following specifically to reduce impacts to the health of waterways? - Clean, Drain, Dry watercraft to prevent the spread of invasive species * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 6.856, .652		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Clean, Drain, Dry watercraft to prevent the spread of invasive species	Always	63.7%	69.4%	64.9%	70.9%
	Often	15.9%	16.7%	17.5%	9.1%
	Sometimes	13.3%	6.5%	10.5%	12.7%
	Never	7.1%	7.4%	7.0%	7.3%
Total (N= 445)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their actions to clean, drain and dry watercraft to prevent the spread of invasive species. The majority of people always follow these practices.

In the past three years have you done any of the following specifically to reduce runoff? - Installed a rain barrel or rain garden to catch or slow rainwater * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 5.345, .148		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Installed a rain barrel or rain garden to catch or slow rainwater	Yes	35.8%	46.4%	42.6%	43.8%
	No	64.2%	53.6%	57.4%	56.3%
Total (N= 932)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and whether they have installed a rain barrel or rain garden to catch or slow rainwater.

In the past three years have you done any of the following specifically to reduce runoff? - Reduced the size of your lawn or replaced it with native plantings * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 9.102, .028		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Reduced the size of your lawn or replaced it with native plantings	Yes	41.9%	48.3%	49.8%	55.9%
	No	58.1%	51.7%	50.2%	44.1%
Total (N= 904)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between the distance people live from Lake Champlain and reducing the size of their lawn or replacing it with native plantings. More people who live farther from Lake Champlain have reduced the size of their lawn or replaced it with native plantings in the past three years than those who live closer to the lake.

In the past three years have you done any of the following specifically to reduce runoff? - Replaced a paved or concrete driveway or walkway with other materials so water can flow into the ground * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 26.935, .001		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Replaced a paved or concrete driveway or walkway with other materials so water can flow into the ground	Yes	19.9%	18.5%	30.3%	41.5%
	No	80.1%	81.5%	69.7%	58.5%
Total (N= 623)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between distance people live from Lake Champlain and whether they have replaced a paved or concrete driveway or walkway with other materials so water can flow into the ground. More respondents who live farther from Lake Champlain (41.5%) have replaced a paved or concrete driveway or walkway with other materials so water can flow into the ground in the past three years than those who live closer to the lake (19.9%).

In the past three years have you done any of the following specifically to reduce runoff? - Planted or allowed vegetation to grow alongside a waterway * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 19.254, .001		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Planted or allowed vegetation to grow alongside a waterway	Yes	55.3%	53.8%	68.5%	71.8%
	No	44.7%	46.3%	31.5%	28.2%
Total (N= 716)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between the distance people live from Lake Champlain and whether they planted or allowed vegetation to grow alongside a waterway.

In the past three years have you done any of the following specifically to reduce runoff? - Assisted in a waterway cleanup * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 2.798, .424		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Assisted in a waterway cleanup	Yes	18.5%	15.3%	21.3%	16.9%
	No	81.5%	84.7%	78.7%	83.1%
Total (N= 876)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and whether they have assisted in a waterway clean up. Overall, less than one in five people have done this in the past three years.

In the past three years have you ever done any of the following to help protect or improve water quality? - Attended a meeting about water quality * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 6.785, .079		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Attended a meeting about water quality	Yes	16.0%	14.1%	21.9%	20.6%
	No	84.0%	85.9%	78.1%	79.4%
Total (N= 1014)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their attendance at a meeting about water quality in the past three years.

In the past three years have you ever done any of the following to help protect or improve water quality? - Assessed water quality in your community * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 7.212, .065		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Assessed water quality in your community	Yes	21.6%	18.7%	26.7%	27.6%
	No	78.4%	81.3%	73.3%	72.4%
Total (N= 985)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and whether they have assessed water quality in their community. On average, about one in four or one in five has assessed water quality in their community.

In the past three years have you ever done any of the following to help protect or improve water quality? - Talked to others about what they can do to protect water quality * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 13.863, .003		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Talked to others about what they can do to protect water quality	Yes	42.4%	41.0%	55.0%	51.1%
	No	57.6%	59.0%	45.0%	48.9%
Total (N= 1026)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between the distance people live from Lake Champlain and whether they have talked to others about what they can do to protect water quality. In the past three years, more respondents who live farther from Lake Champlain have talked to others about what they can do to protect water quality than those who live closer to the lake.

In the past three years have you ever done any of the following to help protect or improve water quality? - Participated in a water quality improvement project * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 7.285, .063		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Participated in a water quality improvement project	Yes	13.1%	9.5%	17.9%	14.0%
	No	86.9%	90.5%	82.1%	86.0%
Total (N= 998)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their participation in a water quality improvement project in the past three years.

In the past three years have you ever done any of the following to help protect or improve water quality? - Donated money to a water quality organization, program or activity * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 4.150, .246		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Donated money to a water quality organization, program or activity	Yes	24.2%	20.5%	27.9%	22.4%
	No	75.8%	79.5%	72.1%	77.6%
Total (N= 1022)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and whether they have donated money to a water quality organization, program, or activity.

In the past three years have you ever done any of the following to help protect or improve water quality? - Voted for initiatives, funding or candidates that support protection of water resources * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 3.195, .362		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86- 46.97 miles)
- Voted for initiatives, funding or candidates that support protection of water resources	Yes	68.2%	62.4%	67.4%	62.2%
	No	31.8%	37.6%	32.6%	37.8%
Total (N= 958)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and whether they voted for initiatives, funding or candidates that support protection of water resources in the past three years.

Please indicate your level of agreement to each of the following statements. - Addressing water quality should be a priority for communities * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 23.599, .072		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- Addressing water quality should be a priority for communities	Strongly agree	74.6%	63.8%	68.6%	72.8%
	Somewhat agree	20.3%	29.7%	28.2%	23.1%
	Neither agree nor disagree	3.9%	4.9%	2.9%	3.4%
	Somewhat disagree	0.0%	1.2%	0.0%	0.3%
	Strongly disagree	1.2%	0.4%	0.0%	0.3%
	Don't know	0.0%	0.0%	0.4%	0.0%
Total (N= 1073)		100.0%	100.0%	100.0%	100.0%

There is no statistical association people live from Lake Champlain and whether they agree water quality should be a priority for communities.

Please indicate your level of agreement to each of the following statements. - Town budgets should help pay for stormwater runoff management * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 27.793, .023		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- Town budgets should help pay for stormwater runoff management	Strongly agree	55.5%	40.4%	48.7%	50.3%
	Somewhat agree	33.9%	38.8%	35.4%	38.4%
	Neither agree nor disagree	7.1%	11.4%	9.0%	5.8%
	Somewhat disagree	0.8%	3.3%	4.0%	3.7%
	Strongly disagree	1.6%	3.7%	1.8%	0.7%
	Don't know	1.2%	2.4%	1.1%	1.0%
Total (N= 1070)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between the distance people live from Lake Champlain and their agreement as to whether town budgets should help pay for stormwater runoff management. More people who live closer to Lake Champlain strongly agree that town budgets should help pay for stormwater runoff management.

Please indicate your level of agreement to each of the following statements. - My personal actions affect the health of streams, rivers, ponds, and lakes * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 13.348, .575		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- My personal actions affect the health of streams, rivers, ponds, and lakes	Strongly agree	63.9%	55.1%	55.8%	61.2%
	Somewhat agree	26.7%	36.7%	34.4%	32.3%
	Neither agree nor disagree	6.3%	5.7%	6.5%	4.1%
	Somewhat disagree	2.0%	0.8%	1.4%	1.0%
	Strongly disagree	0.8%	1.6%	1.4%	0.7%
	Don't know	0.4%		0.4%	0.7%
Total (N= 1070)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their agreement about their personal actions having an effect upon the health of streams, rivers, ponds, and lakes.

Please indicate your level of agreement to each of the following statements. - Property owners are not responsible water running off their property * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 17.991, .263		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- Property owners are not responsible water running off their property	Strongly agree	3.9%	4.5%	3.3%	2.4%
	Somewhat agree	7.0%	8.5%	10.1%	6.2%
	Neither agree nor disagree	14.5%	13.8%	11.2%	8.9%
	Somewhat disagree	23.8%	24.0%	23.2%	21.6%
	Strongly disagree	48.0%	47.2%	48.9%	59.6%
	Don't know	2.7%	2.0%	3.3%	1.4%
Total (N= 1070)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their agreement about property owner responsibility for water running off their properties.

Please indicate your level of agreement to each of the following statements. - More should be done to address water quality in the Lake Champlain Basin * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 59.746, .001		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- More should be done to address water quality in the Lake Champlain Basin	Strongly agree	73.9%	58.9%	60.5%	54.9%
	Somewhat agree	21.7%	28.9%	27.9%	31.7%
	Neither agree nor disagree	2.4%	8.5%	9.4%	4.4%
	Somewhat disagree	0.0%	0.8%	0.0%	0.7%
	Strongly disagree	1.2%	0.4%	0.0%	0.3%
	Don't know	0.8%	2.4%	2.2%	7.8%
Total (N= 1068)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between the distance people live from Lake Champlain and their agreement about whether more should be done to address water quality in the Lake Champlain basin. More respondents who live closest to Lake Champlain strongly agree that more should be done to address water quality in the Lake Champlain Basin than those who live farther from the lake.

Please indicate your level of agreement to each of the following statements. - State/provincial and federal government should be responsible for local water quality * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 11.580, .711		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
. - State/provincial and federal government should be responsible for local water quality	Strongly agree	62.4%	51.8%	56.2%	54.8%
	Somewhat agree	28.6%	33.1%	31.0%	32.9%
	Neither agree nor disagree	6.3%	7.8%	7.7%	6.5%
	Somewhat disagree	1.2%	4.5%	2.6%	2.4%
	Strongly disagree	1.2%	2.0%	1.8%	2.4%
	Don't know	0.4%	0.8%	0.7%	1.0%
Total (N= 1066)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their opinion about whether state/provincial and federal government should be responsible for local water quality.

For each of the following statements, please tell us your level of agreement. - I know things I can do to reduce water pollution where I live * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 16.435, .354		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- I know things I can do to reduce water pollution where I live	Strongly agree	26.3%	23.0%	28.2%	29.0%
	Somewhat agree	49.6%	45.3%	47.0%	49.2%
	Neither agree nor disagree	13.1%	17.6%	13.1%	10.0%
	Somewhat disagree	4.4%	7.9%	5.7%	5.6%
	Strongly disagree	4.0%	2.2%	2.0%	2.5%
	Don't know	2.6%	4.0%	4.0%	3.7%
Total (N= 1171)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their knowledge of what they can do to reduce water pollution where they live.

For each of the following statements, please tell us your level of agreement. - I know how to find information about protecting water quality * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 13.914, .532		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- I know how to find information about protecting water quality	Strongly agree	26.0%	26.7%	26.2%	21.2%
	Somewhat agree	38.5%	37.9%	43.3%	47.0%
	Neither agree nor disagree	17.6%	13.7%	15.1%	13.4%
	Somewhat disagree	11.4%	11.9%	9.1%	12.1%
	Strongly disagree	3.7%	4.7%	3.0%	2.8%
	Don't know	2.9%	5.1%	3.4%	3.4%
Total (N= 1169)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their knowledge of how to find information about protecting water quality.

For each of the following statements, please tell us your level of agreement. - I know about efforts in my community to protect or improve water quality * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 11.160, .741		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- I know about efforts in my community to protect or improve water quality	Strongly agree	14.2%	11.5%	14.0%	11.0%
	Somewhat agree	33.1%	32.7%	39.8%	38.7%
	Neither agree nor disagree	20.4%	23.4%	19.7%	19.8%
	Somewhat disagree	15.3%	15.8%	12.0%	14.8%
	Strongly disagree	11.3%	11.9%	8.4%	9.4%
	Don't know	5.8%	4.7%	6.0%	6.3%
Total (N= 1170)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their knowledge of efforts in their community to protect or improve water quality.

For each of the following statements, please tell us your level of agreement. - Planting native trees and shrubs along waterways helps protect water quality * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 24.065, .064		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- Planting native trees and shrubs along waterways helps protect water quality	Strongly agree	53.1%	53.6%	60.5%	63.2%
	Somewhat agree	27.1%	30.8%	28.8%	26.7%
	Neither agree nor disagree	11.0%	8.3%	6.0%	3.1%
	Somewhat disagree	1.1%	0.4%	0.3%	0.9%
	Strongly disagree	1.5%	1.4%	0.7%	1.3%
	Don't know	6.2%	5.4%	3.7%	4.7%
Total (N= 1166)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their knowledge that planting native trees and shrubs along waterways helps to protect water quality.

For each of the following statements, please tell us your level of agreement. - Healthy waterways are a critical part of thriving communities * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 18.299, .247		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- Healthy waterways are a critical part of thriving communities	Strongly agree	89.0%	79.4%	86.2%	87.2%
	Somewhat agree	8.1%	17.3%	11.1%	10.3%
	Neither agree nor disagree	1.5%	1.8%	1.0%	0.9%
	Somewhat disagree	0.4%	0.0%	0.3%	0.0%
	Strongly disagree	0.7%	0.4%	0.3%	0.3%
	Don't know	0.4%	1.1%	1.0%	1.2%
Total (N= 1167)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their knowledge that healthy waterways are a critical part of thriving communities. Most people in the Lake Champlain basin strongly agree that this is true.

For each of the following statements, please tell us your level of agreement. - Planting native trees and shrubs along waterways improves flood resilience * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 13.514, .563		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- Planting native trees and shrubs along waterways improves flood resilience	Strongly agree	66.5%	60.0%	67.4%	67.6%
	Somewhat agree	20.6%	24.4%	21.1%	21.1%
	Neither agree nor disagree	7.0%	8.4%	4.4%	5.3%
	Somewhat disagree	1.1%	1.1%	1.0%	0.9%
	Strongly disagree	1.8%	0.4%	1.3%	0.6%
	Don't know	2.9%	5.8%	4.7%	4.4%
Total (N= 1163)		100.0%	100.0%	100.0%	100.0%

There is no statistical association between the distance people live from Lake Champlain and their understanding that planting native trees and shrubs improves flood resilience.

For each of the following statements, please tell us your level of agreement. - I rely on Lake Champlain and its resources for my wellbeing * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 52.912, .001		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
- I rely on Lake Champlain and its resources for my wellbeing	Strongly agree	54.6%	43.7%	30.9%	35.2%
	Somewhat agree	25.3%	31.4%	32.9%	28.0%
	Neither agree nor disagree	13.9%	17.3%	21.1%	22.3%
	Somewhat disagree	2.9%	3.2%	5.0%	6.9%
	Strongly disagree	1.8%	2.2%	6.0%	4.1%
	Don't know	1.5%	2.2%	4.0%	3.5%
Total (N= 1166)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between the distance people live from Lake Champlain and their reliance upon Lake Champlain and its resources for their wellbeing. More respondents who live closest to Lake Champlain strongly agreed that they rely on Lake Champlain for their wellbeing than those who live farther from the lake.

Which option best describes your personal familiarity with what a watershed is? * DistanceToLakeQuartiles Crosstabulation					
Pearson Chi sq = 15.462, .017		0-25 percentile (0-2.26 miles)	25-50 percentile (2.26-8.84 miles)	50-75 percentile (8.84-20.86 miles)	75-100 percentile (20.86-46.97 miles)
Which option best describes your personal familiarity with what a watershed is?	I have heard about watersheds and I could explain what they are to someone else	54.0%	53.2%	61.6%	64.8%
	I've heard of watersheds, but I could NOT explain what they are to someone else.	37.7%	36.6%	33.2%	27.0%
	This is the first time I've heard of a watershed.	8.3%	10.2%	5.1%	8.1%
Total (N= 1129)		100.0%	100.0%	100.0%	100.0%

There is a statistical association between the distance people live from Lake Champlain and their knowledge of watersheds. More respondents who live farthest from Lake Champlain (65%) have heard about a watershed and could explain it to someone else than those who live closest to the lake (54%).

Action Index

We developed an action index based on a series of six questions to which all respondents had the ability to answer yes or no (see Appendix C for a full description of the development of this index). The six questions used to develop the action index were:

In the past three years have you ever done any of the following to help protect or improve water quality?

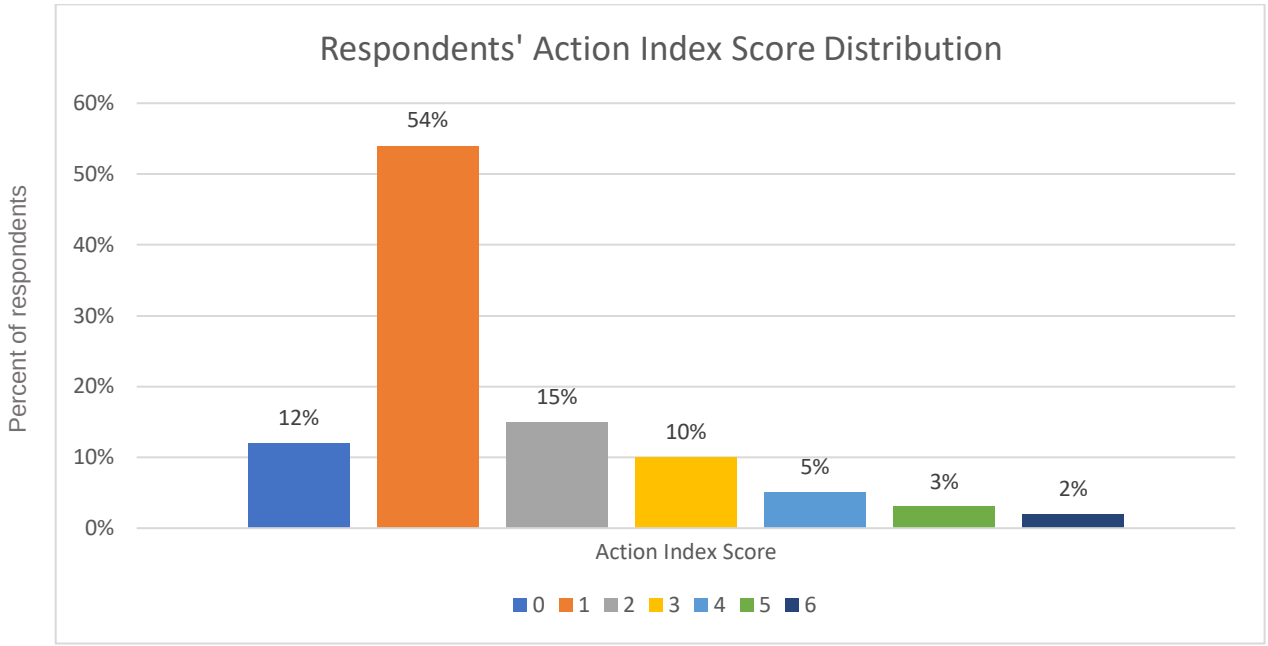
1. *Attended a meeting about water quality*
2. *Assessed water quality in your community*
3. *Talked to others about what they can do to protect water quality*
4. *Participated in a water quality improvement project*
5. *Donated money to a water quality organization, program or activity*
6. *Voted for initiatives, funding or candidates that support protection of water resources*

"Yes" responses were coded as 1 and "no" responses as 0. If a respondent skipped a question, their missing response was assigned the most common response for that question (see table).

Abbreviated question	Mode (% of respondents)
Attended a meeting about water quality	0 (82%)
Assessed water quality	0 (76%)
Talked to others	0 (52%)

Participated in a water quality improvement project	0 (87%)
Donated money	0 (77%)
Voted for initiatives/funding for candidates	1 (64%)

The six responses were summed for each respondent to produce action index scores that ranged from 0 to 6. The percent of respondents that scored each possible value in the action index were:



Most respondents had action index scores of 2 or less. The average score was 1.90 (n = 1725). This suggests that, for the types of actions assessed, a relatively small percent of the Lake Champlain basin residents have taken action to protect or improve water quality. As the questions used to define the Action Index inquired about actions taken in the past 3 years, it is possible that the COVID-19 pandemic may have influenced people's actions in that time period.

Strengths, Challenges, Lessons Learned, and Recommended Survey Modifications

Strengths of the Survey

The survey collected information about lake and watershed knowledge and stewardship activities of a random selection of Lake Champlain basin community members. Such information has never been collected nor compiled. Thus, results have the potential to be valuable drivers of outreach activities and priorities of LCBP and its partners in the coming months and years. Such outreach can be targeted to audiences based on specific demographics such as age and distance respondents reside from Lake Champlain. The survey was designed to be repeatable at regular intervals to assess knowledge and stewardship activities over time.

Challenges with the Survey

Three challenges resulted in changes to the final report, eliminating components that were initially expected to be included. Each of these is listed in bold font and is followed by a description explaining its exclusion. LCBP's Project Officer was consulted and approved all major project changes.

- **Maps designed to help LCBP and others visualize and interpret the results** – While the survey team developed maps to visualize results, the maps displayed data that did not meet 95% confidence by a significant margin. As a result, the maps were not included in this report. Specifically, maps displayed results by municipality. However, as just a single survey response was received from numerous communities in the basin, applying one response to an entire community weighted individuals' responses so greatly that significant bias resulted. If municipal level results are desired, further distribution of the survey to randomly selected audiences from desired municipalities could be carried out.
- **A comparison of awareness and stewardship activities by income level** – When compiling results, an error was observed in the survey coding that resulted in the question about income level not being presented to survey respondents. This should be corrected for future survey distribution.
- **A comparison between the general public and those engaged in LCBP programs will be included as a means of assessing program effectiveness and reach** – Due to LCBP's long history, the extensive support LCBP has provided partner organizations since its inception, the complication for survey participants to differentiate between an LCBP-sponsored event and one provided by a partner organization, and a need to keep the number of questions in the survey to a succinct number to promote greatest response rate, the survey team did not include a question about participation in LCBP programs, and thus such a comparison was unable to be made. LCBP and its partners might consider implementing evaluations following programs that include a subset of the public awareness survey. Once sufficient number of responses (e.g., 400) have been collected, analysis could be done to compare results of program participants to the general audience that completed the basin-wide survey.

Lessons Learned and Recommendations for the Future

In addition to those lessons noted in the challenges described above, lessons were learned at each stage of the project period.

- Initially, to authentically collect and incorporate knowledge of diverse stakeholders in the basin, the survey's development took significantly longer than anticipated. Additional meetings with project advisors were scheduled to thoughtfully collect input and follow up meetings and communications were held within the project team and in conjunction with LCBP to plan next steps to best incorporate input. While this resulted in some delays to the completion of survey distribution, response and analysis, we believe the survey was developed, distributed, and communicated in a manner that reflected compromise in language that minimized biasing responses and content that maximized participant understanding of intended uses for results. In future survey periods, an extended planning period is warranted.
- During the survey's distribution, as Canadian law prohibited email distribution of the survey, a number of individuals from Quebec experienced challenges in accessing the survey as a result of typographical errors when entering the URL from the Canadian Post letter they received. In the future, UVM's "go.uvm.edu" link shortener or another similar tool that allows for a personalized link should be used.
- To collect sufficient responses from New York participants to reach 95% confidence in results, a second list with thousands of residents had to be contacted. This was informative in that the audience in New York was clearly more difficult to reach via email and says something about the motivations of people to participate in surveys and possibly about attitudes towards

environmental topics of that population. In the future, the survey team might consider using a mixed method approach such as mailing a postcard, texting, and/or calling people in advance of the survey's distribution to alert them to it, or both mailing and emailing the survey to households to reach them in multiple ways. In addition, the survey team might consider an alternative method to reach New York residents that could warrant higher response (e.g., using trusted sources to send the email request within a county). This finding is also relevant for considering how to reach and engage New York audiences in educational efforts.

- The survey was so extensive that analysis of results could continue even beyond results presented here. In addition, to address their own outreach needs, numerous partner organizations have interest in survey results beyond what have been presented here. LCBP might consider financially supporting additional analyses based on a suite of requests from partner organizations.

Appendix A – Complete 2021 LCBP Public Awareness Survey

Q1 The following study titled: ***Understanding Lake Champlain Basin Awareness***, is being conducted by the Center for Rural Studies and the Rubenstein School of Environment and Natural Resources at the University of Vermont. You are invited to take part in this research because you live within the Lake Champlain Basin. Your address or email was randomly selected from a list of commercially available addresses provided by ExactData.com. The purpose of this study is to learn more about the ways people interact with water and their knowledge of water quality in the Lake Champlain Basin. The knowledge gained from this study will help inform future water quality outreach and education programs in the region. The Lake Champlain Basin, also known as the Lake Champlain Watershed (see map) is defined as the area of land where the streams, rivers, ponds, lakes and other water bodies directly or indirectly drain into and feed Lake Champlain. This complex system includes humans and wildlife communities and a diverse mix of lands including mountains, swamps, wetlands, forests, agricultural fields, and other lands that make up the landscape. The Lake Champlain Basin spans more than 120 miles (193 km) north to south and more than 70 miles (113 km) east to west, and includes parts of Quebec, Canada, and Vermont and New York in the United States.

Study Procedures Taking part in this study is voluntary. If you choose to participate, you will be asked to answer a series of questions that could take about 20 minutes to complete. You may refuse to answer any questions and you may quit the survey at any time. As a study participant there may be no direct benefit for you; however, information from this study may be of benefit to outreach and education program development now or in the future. All information collected during this study is confidential. We do not collect any information that can identify you to protect your confidentiality. There is no cost to you for participation in this research study, and you will not be paid for taking part. To encourage your participation, respondents who complete the study may choose to enter into a random prize drawing to potentially win a $50.00 (USD) cash card. Thirty winners will be chosen at random from those who enter. Current residents over 18 years of age are eligible to participate.

Questions If you have any questions about this study now or in the future you may contact Jane Kolodinsky at jane.kolodinsky@uvm.edu or Kris Stepenuck at kstepenu@uvm.edu. If you have questions or concerns about your rights as a research participant, you may contact the Director of the University of Vermont Research Protections Office at 1 (802) 656-5040. Consider copying this information for your records before continuing. Please move through the survey using arrows at the bottom of the screen.

Q2 Please select your age category.

- ○ Under 18 years of age (10)
- ○ 18 to 24 years (1)
- ○ 25 to 34 years (2)
- ○ 35 to 44 years (3)
- ○ 45 to 54 years (4)
- ○ 55 to 64 years (5)
- ○ 65 to 74 years (6)
- ○ 75 years and over (7)
- ○ Refuse (9)

Skip To: End of Block If Please select your age category. = Under 18 years of age

Skip To: End of Block If Please select your age category. = Refuse

End of Block: Block 1

Start of Block: EXIT Block

Start of Block: Default Question Block

Page Break

Q3 Please select the State or Province in which you currently reside.

- ○ New York (1)
- ○ Quebec (2)
- ○ Vermont (3)

Display This Question:

If Please select the State or Province in which you currently reside. = New York

Q4 Please select the name of the town in New York where you currently live.

▼ Altona (1) ... Wilmington (56)

Display This Question:

If Please select the State or Province in which you currently reside. = Quebec

Q5 Please select the name of the town in Quebec where you currently live.

▼ Abercorn (1) ... Venise-en-Québec (29)

Display This Question:

If Please select the State or Province in which you currently reside. = Vermont

Q6 Please select the name of the town in Vermont where you currently live.

▼ Addison (1) ... Worcester (145)

Q7 Let's start by getting to know a little bit about your relationship to Lake Champlain and the local waterways near you.

Please tell us one reason having clean water in your community is important to you.

_____

Q8 About how many days per year do you typically visit a river, stream, pond or lake in your community or anywhere in the Lake Champlain Basin for the following activities.

	Number of Days 0 365
Fishing, hunting or gathering food ()	
Swimming ()	
Motorized boating ()	
Non-motorized boating ()	
Recreating on or near waterways like walking, bicycling, skating, camping, etc. ()	
Accessing entertainment like dining, special events, shopping or other activities near the water ()	
Wildlife or nature viewing like bird watching or sunsets, etc. ()	
Some other activity (please describe) ()	
Some other activity (please describe) ()	
Some other activity (please describe) ()	

Q9 How often do you think about the water quality of…

	Always (1)	Often (2)	Sometimes (3)	Rarely (4)	Never (5)	Unsure (6)
A local water body (that is not Lake Champlain) (2)	○	○	○	○	○	○
Lake Champlain (3)	○	○	○	○	○	○

Q10 Now we have some questions about water quality in your community and in Lake Champlain specifically.

In general, how clean do you think that Lake Champlain is?

- ○ Very clean (1)
- ○ Somewhat clean (2)
- ○ Somewhat unclean (3)
- ○ Very unclean (4)
- ○ Unsure (5)

Q11 In general, how clean do you think that the local water bodies in your community are?

- ○ Very clean (1)
- ○ Somewhat clean (2)
- ○ Somewhat unclean (3)
- ○ Very unclean (4)
- ○ Unsure (5)

Q12 What do you feel is the most serious challenge impacting the health of streams, rivers, ponds and lakes in your community?

_____

Q13 What should be done to address the issue you just mentioned?

_____

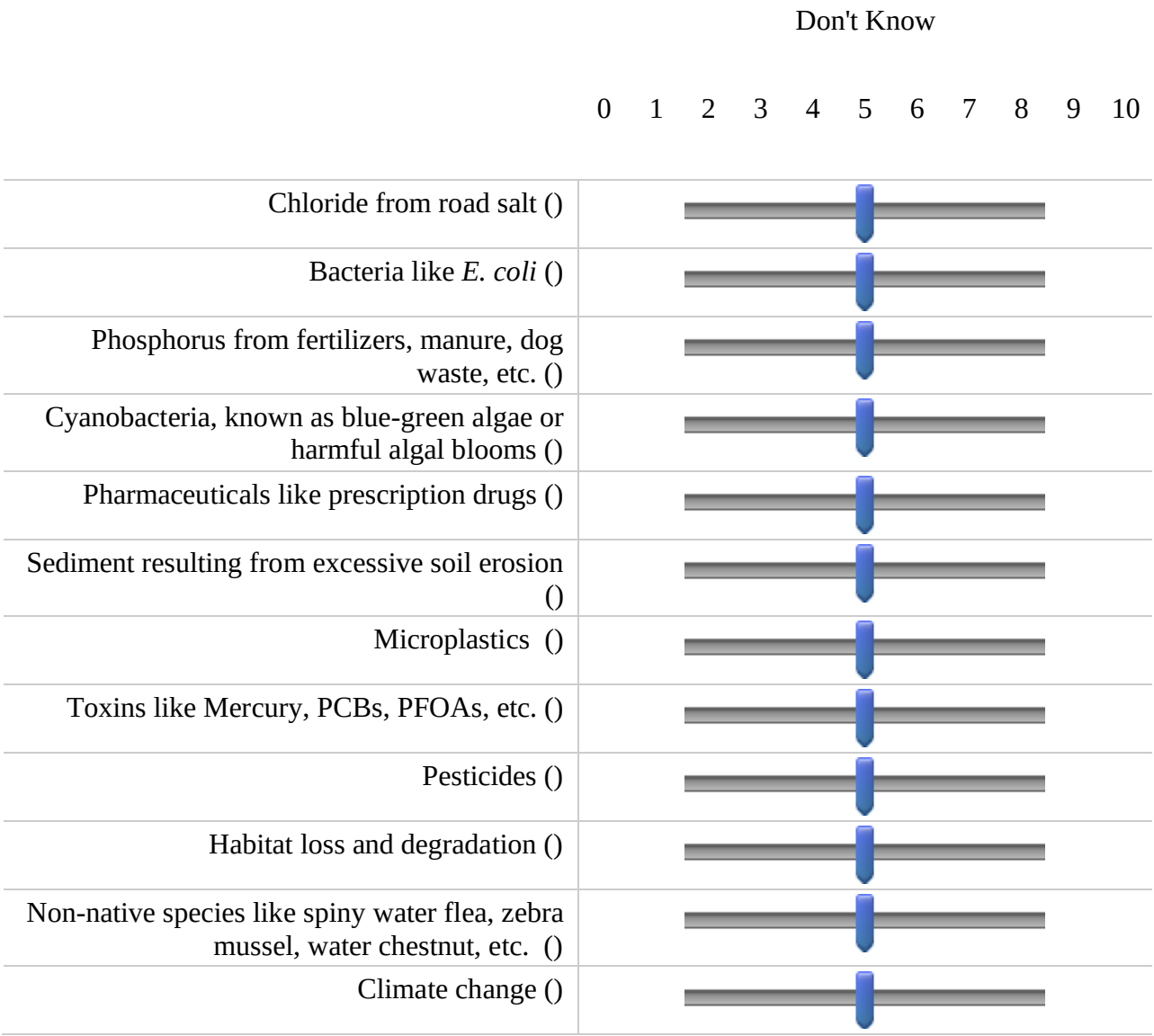
Q14 Who should be responsible for taking action to address this issue?

_____

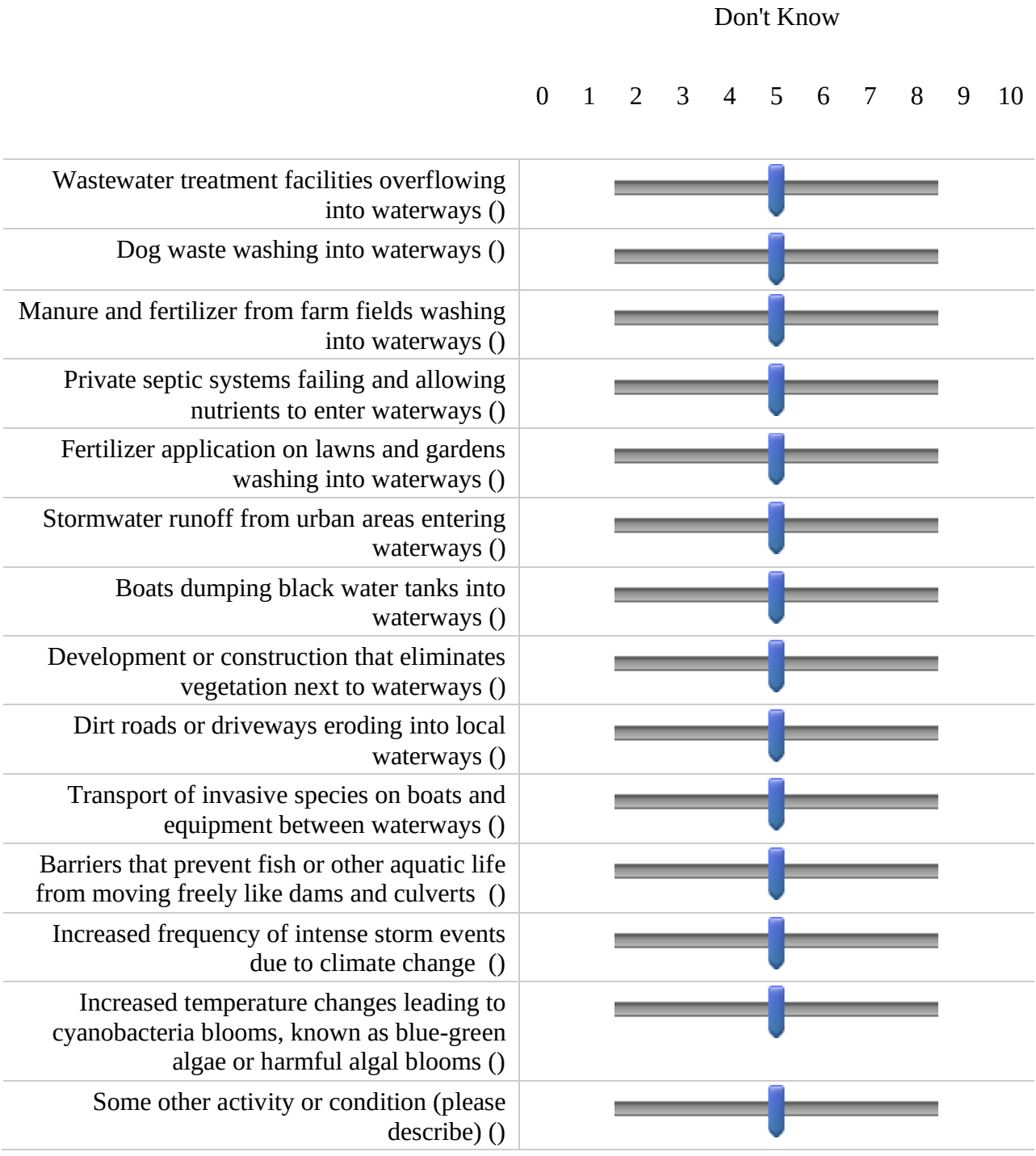
Q15 What is one action you personally can take to improve or protect water quality in your community?

_____

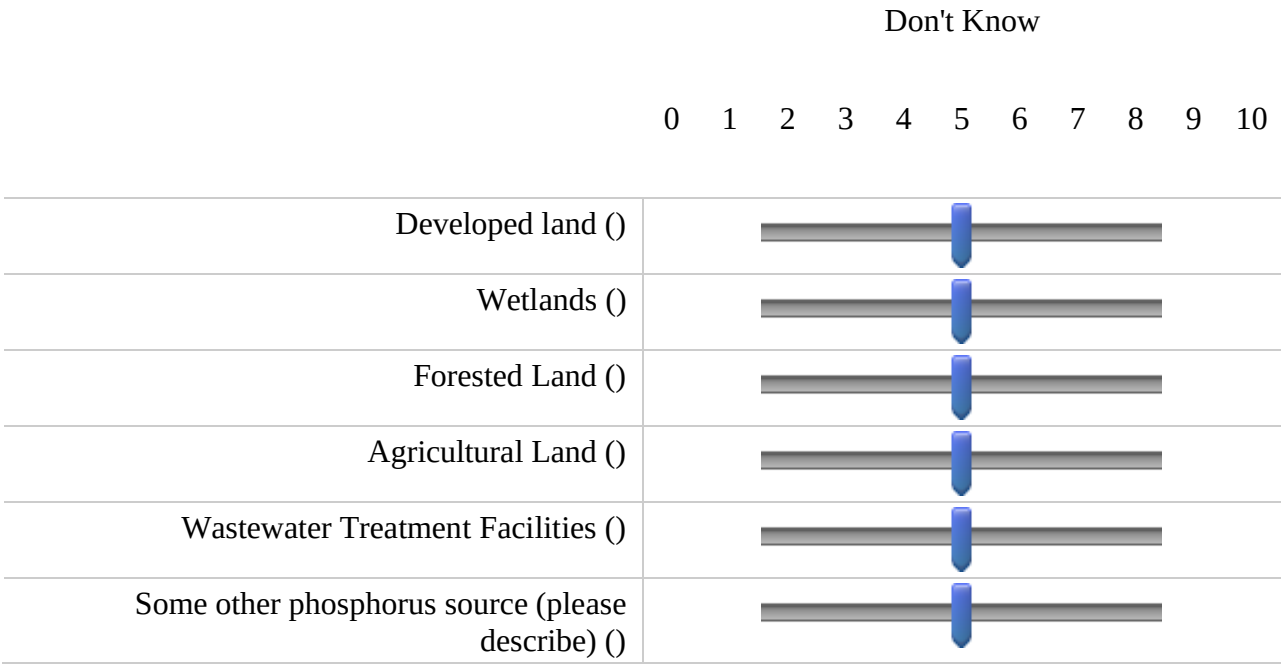
Q16 Please rate the following items on a scale of 0-10 with 0 having no impact to 10 having the greatest impact on the health of streams, rivers, ponds and lakes in the Lake Champlain basin.



Q17 Please rate the following items on a scale of 0-10 with 0 having no impact to 10 having the greatest impact on the health of streams, rivers, ponds and lakes in the Lake Champlain basin.



Q18 Phosphorus is a nutrient that can contribute to cyanobacteria—or blue-green algae—blooms when there is too much of it in a water body. Please rate the following sources of phosphorus on a scale of 0-10 with 0 having no impact to 10 having the greatest impact on water quality of streams, rivers, ponds and lakes in the Lake Champlain Basin area.



Q19 For each of the following statements, please tell us your level of agreement.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)	Don't know (6)
I know things I can do to reduce water pollution where I live (1)	○	○	○	○	○	○
I know how to find information about protecting water quality (2)	○	○	○	○	○	○
I know about efforts in my community to protect or improve water quality (3)	○	○	○	○	○	○
Planting native trees and shrubs along waterways helps protect water quality (4)	○	○	○	○	○	○
Healthy waterways are a critical part of thriving communities (6)	○	○	○	○	○	○
Planting native trees and shrubs along waterways improves flood resilience (7)	○	○	○	○	○	○
I rely on Lake Champlain and its resources for my wellbeing (8)	○	○	○	○	○	○
Climate change negatively impacts water quality (9)	○	○	○	○	○	○

Q20 Now just a few questions about accessing water quality information.
Which option best describes your personal familiarity with what a watershed is?

- ○ I have heard about watersheds and I could explain what they are to someone else (1)
- ○ I've heard of watersheds, but I could NOT explain what they are to someone else. (2)
- ○ This is the first time I've heard of a watershed. (3)

Q21 Can you recall learning about water quality in your community or in the Lake Champlain Basin through any of the following sources? Please provide the name, if you know it.

- ☐ Radio reports (1) _____
- ☐ Newspaper reports (2) _____
- ☐ Local television station or show (3) _____

Display This Choice:

If Please select the State or Province in which you currently reside. = New York

Or Please select the State or Province in which you currently reside. = Vermont

- ☐ Front Porch Forum or other Community listserve (4) _____
- ☐ Online social media (5) _____
- ☐ Online web sites (6) _____
- ☐ Outreach from a water or environmental organization (7) _____
- ☐ Municipal/Town/City meetings (8) _____
- ☐ Outreach or Training Webinars (13) _____
- ☐ Events (14) _____
- ☐ LCBP State of the Lake report (9)

Display This Choice:

If Please select the State or Province in which you currently reside. = Quebec

☐ Plan Directeur de L'eau (12)

☐ Some other source? (11) _____

Q22 Please name up to five organizations you know that are working to clean up, protect or educate about water quality of the rivers, streams, ponds, lakes or other bodies of water in the Lake Champlain Basin.

○ 1 (4) _____

○ 2 (5) _____

○ 3 (6) _____

○ 4 (7) _____

○ 5 (8) _____

Q23 Please number the top three ways you would prefer to learn about protecting or improving water quality. (Enter 1, 2 and 3 into the boxes to the left of your selected choices.)

_____ Attend an in-person presentation (1)
_____ Attend a webinar (2)
_____ Participate in a hands-on workshop (3)
_____ Read a brochure or informational document (4)
_____ Read information on a web site (5)
_____ Watch a video on a web site (6)
_____ Have someone visit your home (7)
_____ Hear information on a local TV or radio station (8)
_____ Visit an educational table at a local event (9)
_____ See information on social media (like Facebook, Instagram, Twitter) (10)
_____ Listen to a podcast (11)
_____ Participate in an educational field trip (12)
_____ Receive information in the mail (13)
_____ I am not interested in learning about ways to protect or improve water quality (14)
_____ Some other way (16)

Q24 The following questions are about activities and actions related to water quality in surface waters nearby your home. How often do you do each of the following specifically to reduce impacts to the health of waterways?

	Always (1)	Often (2)	Sometimes (3)	Never (4)	Not applicable (5)
Pick up dog waste (1)	○	○	○	○	○
Dispose of prescriptions at a designated site or on a Drug Take Back Day (2)	○	○	○	○	○
Dispose of toxic materials at a hazardous waste drop-off center (3)	○	○	○	○	○
Raise lawnmower blades so they cut no shorter than three inches (4)	○	○	○	○	○
Limit use of salt on driveways or sidewalks during winter (5)	○	○	○	○	○
Keep food waste out of sink garbage disposal (6)	○	○	○	○	○
Get a soil test before applying phosphorus fertilizer to lawns or gardens (7)	○	○	○	○	○
Practice general water conservation at home (8)	○	○	○	○	○
Participate in an invasive species removal project (9)	○	○	○	○	○
Clean, Drain, Dry watercraft to prevent the spread of invasive species (10)	○	○	○	○	○

Q25 In the past three years have you done any of the following specifically to reduce runoff?

	Yes (1)	No (2)	Not applicable (3)
Installed a rain barrel or rain garden to catch or slow rainwater (1)	○	○	○
Reduced the size of your lawn or replaced it with native plantings (2)	○	○	○
Replaced a paved or concrete driveway or walkway with other materials so water can flow into the ground (3)	○	○	○
Planted or allowed vegetation to grow alongside a waterway (4)	○	○	○
Assisted in a waterway cleanup (6)	○	○	○
Something else? (Please describe) (5)	○	○	○

Q26 In the past three years have you ever done any of the following to help protect or improve water quality?

	Yes (1)	No (2)	Not applicable (3)
Attended a meeting about water quality (1)	○	○	○
Assessed water quality in your community (2)	○	○	○
Talked to others about what they can do to protect water quality (3)	○	○	○
Participated in a water quality improvement project (4)	○	○	○
Donated money to a water quality organization, program or activity (5)	○	○	○
Voted for initiatives, funding or candidates that support protection of water resources (6)	○	○	○
Something else? (Please describe) (7)	○	○	○

Q27 Please indicate your level of agreement to each of the following statements.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)	Don't know (6)
Addressing water quality should be a priority for communities (1)	○	○	○	○	○	○
Town budgets should help pay for stormwater runoff management (2)	○	○	○	○	○	○
My personal actions affect the health of streams, rivers, ponds, and lakes (3)	○	○	○	○	○	○
Property owners are not responsible water running off their property (4)	○	○	○	○	○	○
More should be done to address water quality in the Lake Champlain Basin (5)	○	○	○	○	○	○
State/provincial and federal government should be responsible for local water quality (6)	○	○	○	○	○	○

	Q28 In the future, **how likely would you be to** do each of the following specifically to address water quality of streams, rivers, lakes, or ponds in your community?					
	Very likely (1)	Somewhat likely (2)	Neither likely nor unlikely (3)	Unlikely (4)	Not at all likely (5)	Not Applicable (6)
Participate in an erosion control or invasive species removal project (1)	○	○	○	○	○	○
Keep food waste out of sink garbage disposal (2)	○	○	○	○	○	○
Talk to others about what they can do to protect water quality (3)	○	○	○	○	○	○
Donate money to a water quality organization, program or activity (4)	○	○	○	○	○	○
Replace or reduce lawn with native plants (5)	○	○	○	○	○	○
Install a rain garden or rain barrel (6)	○	○	○	○	○	○
Install low flow faucet, shower head or toilet (7)	○	○	○	○	○	○
Dispose of medicine or prescription drugs at a designated site or on a Drug Take Back day (8)	○	○	○	○	○	○
Pick up your dog's waste (9)	○	○	○	○	○	○
Raise your lawnmower blade so that it cuts no shorter than three inches (10)	○	○	○	○	○	○
Limit use of salt on driveways or sidewalks during winter (11)	○	○	○	○	○	○
Limit lawn or garden watering to prevent overflow into streets or gutters (12)	○	○	○	○	○	○

Get a soil test before putting fertilizer on your lawn or gardens (13)	○	○	○	○	○	○
Reduce pesticide use in or around your home, like ant spray or poison for rodents (14)	○	○	○	○	○	○
Reduce herbicide use for controlling weeds in your yard (15)	○	○	○	○	○	○

Q29 Thank you for all your responses so far! We have just a few demographic questions before the survey concludes. Please remember, your answers are anonymous. After responding, you'll be asked to click a link to a separate form where you can provide contact information if you choose to be included in the prize drawing. Thank you!

Q30 What is the highest level of education you've completed?

- ○ Less than High School/Secondary School (no diploma, certificate, etc.) (1)
- ○ High School/Secondary School graduate (2)
- ○ Some College or University (no degree, certificate, etc.) (3)
- ○ College, University, Technical degree, Certificate, etc. (4)
- ○ Advanced degree, Graduate degree (6)

Display This Question:

If Please select the State or Province in which you currently reside. = New York

And Please select the State or Province in which you currently reside. = Vermont

Q31 Please select the income category that most closely represents your total household income in 2019 (USD).

- ○ Less than $25,000 (1)
- ○ $25,000-$50,000 (2)
- ○ $50,000-$75,000 (3)
- ○ $75,000-$100,000 (4)
- ○ More than $100,000 (5)

Display This Question:

If Please select the State or Province in which you currently reside. = Quebec

Q32 Please select the income category that most closely represents your total household income in 2019 (CAD).

- ○ Less than $25,000 (1)
- ○ $25,000-$50,000 (2)
- ○ $50,000-$75,000 (3)
- ○ $75,000-$100,000 (4)
- ○ More than $100,000 (5)

Q33 Please tell us your gender.

_____

Q34 Do you own or rent your current residence?

- Own (1)
- Rent (2)

Q35 Which of the following options best describes the area in which you live?

- Urban, city or downtown (1)
- Suburban, small towns and villages (2)
- Rural, open lands with sparse development (3)
- Not sure (4)

Q36 If there is something you'd like to learn more about related to watersheds or water quality, or if you have any additional comments, please feel free to add them here.

_____

Q37 After submitting your survey by clicking on the arrow at the right below, you can choose to click a link to enter the random prize drawing to possibly be selected to win one of thirty $50 (USD) Visa gift cards.

Appendix B – Full-Texts of Open Responses

Q16 & 17 Please rate the following items on a scale of 0-10 with 0 having no impact to 10 having the greatest impact on the health of streams, rivers, ponds, and lakes in the Lake Champlain basin. - Some other activity or condition.

Acid rain- 2	
Activité industrielle	Industrial activity
Agriculture drainage	
ATVs digging up roads causing erosion	
autos not being maintained,oiiii leaks ect..	
Bateaux à essence créant l'érosion et polluant, les déchets métaux et bois près des cours d'eau	Gasoline boats creating erosion and polluting metal and wood waste near rivers
Beavers	
Boat waste	
Carefree politicians	
Causeways	
Chemicals in the water caused by humans (make-up, sunscreen, detergent etc.)	
Chemin de campagne sans avoir de bon faussé	Country lane without having a good skew
Continue educating	
Cormoran waste polluting the lake and killing trees	
Coupe d'arbres et arbustes	Cutting trees and shrubs
Cultivateurs aucun respect des cours d eau	Farmers no respect for waterways
Déboisement	Deforestation
Dechets	Waste
Déchets laissés par les utilisateurs sur le Lac	Waste left by users on the Lake
Déforestation pres des cours d'eau et lac	Deforestation near rivers and lakes
Déjections de bernaches	Geese droppings
Direct dumping of grey water	
embarcation a gaz	gas boat
Embarcation à moteur	Motor boat
Érosion des berges par la navigation (tout type embarcations motorisées	Erosion of the banks by navigation (all types of motorized boats
Erosion of lake banks due to motorboat use.	
Essence	Gasoline
Excessive agricultural drainage	

Facilitating wastewater removal from roads, drainage of land 7 directing contaminated water disposal causing great damage to Lake Champlain as well as destruction, damage, and pollution to private land owners, the lake, and destroying wild life habitat.	
Fosse septique non légale	Septic tank not legal
fosses septiques	Septic
Fuel and oil from leisure boating	
Human activity in the water including urinating	
human attitude, carelessness, "not my problem"	
HUMAN POLLUTION	
Humans	
I think there can be too much man made activity on the waters . We need to leave things alone, in order that it can rejuvenate	
Ice fishing	
Ignorance et indifférence des citoyen.ne.s	Ignorance and indifference of citizens
Illegal Excavation in river lake shoreline	
Inadequate personal, private and public educaionedu	
Increase in Canadian roundup standards will allow higher levels of roundup	
increased boat dockings	
INTELLECTUALS WHO THINK THEIR DECREES ARE FACTUAL	
invasives arriving through canals etc	
lack of awareness, caring	
Large animal waste (horses, alpacas...	
Le savon qu'on utilise dans nos maisons	The soap we use in our homes
Dumping/Littering- 20	
loisir	leisure
lumbering, suburban housing developments	
Motorboats- 9	
mowing/cutting/clearing out aquatic plants in marinas and deltas & not capturing the decaying waste	
Multiplication embarcations à moteur	Multiplication of motor boats
No mention of the Ticonderoga Mill?	
No sewers in Colchester	
Non protection de milieu sensible sur plusieurs Kilometres en aval et en amont des Chutes Hunter a Frelighsburg (méandre)	No protection of sensitive environment for several kilometers downstream and upstream of Hunter Falls in Frelighsburg (meander)

non-bio-degradable waste in storm water runoff	
obstruction artificielle dans la rivière en particulier les ponceaux de l'autoroute 10 à Eastman	artificial obstruction in the river especially the culverts of Highway 10 in Eastman
oil spills from tankards	
Ordures rejetées par les navigateurs (bateaux)	Garbage rejected by mariners (boats)
Over fishing	
overuse by tourism	
PCB pollution from industrial sources like General Electric	
people building on lake lots	
petroleum products	
Pond building	
retention altering seasonal flow	
Reversal of Act 250 in towns such as Winooski.	
Sewer plant overflow	
Specific in north hero there is a house that cut the ledge to put a footing drain around the house to dump into the lake now there is a growth of green slime that runs into the lake property is adjacent to log cabin lane houses where built by Negle and Chase builders	
Spreading human waste in flood plains.	
storm water seems to be an easy fix	
tires	
Tourisme idiot	Silly tourism
Tourists peeing in the river	
Two headed perch	
Usage récréotouristique	Recreational tourism
Usine	Factory
Vermont overpopulation	
Worries of the Asian Carp.	

Q18 Please rate the following sources of phosphorus on a scale of 0-10 with 0 having no impact to 10 having the greatest impact- Some Other Source

Boaters not properly cleaning boats as they use numerous bodies of water	
Camps	
Certain produit ménagers	Certain household products
Certains produits chimiques, pesticides et engrais chimiques	Certain chemicals, pesticides and chemical fertilizers
Champs épuration - savons	Purification fields - soaps
Compost	
Dairy products	
decades of untreated sewage dumped into the lake (especially mississqou bay). P is cycling in the benthic muck.	
decaying aquatic plants	
Deforestation	
Dog feces/seaweed	
Domestique	
Élevages de porcs	Pig farms
Elise Stefanik	
engrais	fertilizer
Erosion	
Erosion of land by directing road run off to Lake Champlain which caused erosion, leakage to private property, loss of wild life habituate, and runs through old dumping grounds and chemically contaminated soil on its way to dumping into Lake Champlain.	
Étalement urbain.	Urban sprawl.
Manure/farm runoff- 5	
Fertilizers	
forestry (timerbland)	
Fumier liquéfier épandu sur les terres agricoles	Liquefied manure spread on agricultural land
gardens	
Geese	
Human	
Industrie	Industry
Lawn fertilizer	
Les plages (cause humaines)	The beaches (human cause)
Manuees and fertilizers, pesticides, herbicides	

Moronic out of staters	
Overuse of fertilizer on farms and in private yards	
partout où il y a usage d'engrais et lessive	wherever there is use of fertilizer and washing powder
Pelouse fertilisée	Fertilized lawn
pesticides, farm run-off	
Phosphorus bound in the soil	
Produits menager	Household products
Produits menager	Household products
Produits nettoyants	Cleaning products
Residential	
Residential fertilizer	
roads	
Savons- 6	
septic systems- 6	
sunscreen etc.	
uninformed people	
Urban/Suburban lawns- 2	
urée	urea
Usage domestique pelouse	Home use lawn
Waste water treatment facilities releasing untreated waste in to rivers and the lake.	

Q21 Can you recall learning about water quality in your community or in the Lake Champlain Basin through any of the following sources? Please provide the name, if you know it.

Radio

92.9 fm
Aucun- 2
Boom104.1- 2
CBC- 10
94.5 fm
Msybe
NIL
Niveau cyanobacterie
Nouvelles- 2
NPR- 19
VPR- 56
News channel 5
PBS- 3
Public Radio- 4
Radio-Canada- 8

SRC
VHF
WDEV- 3
NCPR- 3
Wcax
WIR- 2
wncs
woko
WSYB- 2
WVMT- 2

Newspaper

Seven days- 21
Addison Independent- 9
Burlington Free Press- 44
New York Times- 6
Adirondack Express, Adirondack Explorer
news and citizen- 2
Vermont Digger- 14
Brome County News- 4
La Voix de l'Est, Le Tour
Shelburne News
Chronicle- 2
Coup d’oeil- 3
Canada Français
democrat
E. coli report
Lake George Mirror
Islander- 2
Journal Saint-Armand- 6
L’armand voix de l’est
L’Avenir et des Rivières- 3
La semaine verte- 5
Lake Look in Northend Newspaper
L'Avenir & des Rivières- 2
Le Devoir
Le Guide- 4
le Journal
Le journal de magog
lifetime
Local newspaper- 18
Saint Albans Messenger- 4
Montreal Gazette- 4
LaPresse- 2

Newport paper
NIL
Post Star- 23
Chronicle- 2
Times Union
Postes télé américains
Press Republican- 23
Proliférations des algues bleues
Rutland Herald- 9
Sherbrooke Record- 3
Townshipper
SRC
stowe reporter
Sun Community- 2
The Chronicle- 2
Granville Sentinel
The Sun- 3
Times Argus- 6
Herald of Randolph
Hardwick Gazette
TVA- 4
Williston observer

T.V.

cnn
Across the fence- 10
ASS. PRODUCTEURS AGRICOLES (APA)
CBC- 6
Channel 4
Channel 5 NBC WPTZ- 56
Channel 3 WCAX CBS- 86
Channel 44- 3
Channel 22 WVNY - 2
CTV
Découverte- 2
Documentaires- 2
Duck Unlimited
La semaine Verte- 15
Local news- 4
Mlpbs- 4
Vermont PBS- 9
MSNBC
PBS- 19
Peg

canal savoir
WNYT 13- 3
Spectrum news- 2
WTEN10 Albany

List Serves

Coop paper.
Front Porch Forum- 35
Age Well, AARP Magazine
Lake Ch. Basin Program
Lake George Park Commission monitors activities on the lake that could be potentially hazardous to the water
North End News Articles by LCC on Lake Champlain
Point Au Roche
Water quality monitors

Social Media

Appalachian Corrider website
ARPELA
Association des propriétaires du lac Nick
Bulletin municipel
Twitter- 3
CyanoTracker
Dish and Wildlife
Documentaires Youtube
EcoWatch
Instagram- 6
Facebook- 47
Journal de Montréal - document sur la qualité des plans d'eau au Québec
Journal Le Saint-Armand (journalstarmand.com)
land trust
Le reflet du lac
Lake Champlain Fishing Forum
Lynne Bessette
MSN
Municipalité
Newpapers
NY Times
OBVBM- 2
Par les grands journaux et localement
QC
Sea Grant
Site municipalité
UVM

Vermont Nature Conservancy
Ville de Bolton-Est
Vt pbs
VTDigger

Website

APELS, VILLE DE DUNHAM
Apels, lacselby.com
Associations de protection des lacs - Eastman
Bedford town site
Birds Canada
burlington parks and rec
Champlain Watershed Improvement Coalition of NY
conservation nature canada
David Zuzuki foundation, green peace
ECHO.com
Environnement Canada
EPA.gov, water.ny.gov, riverkeeper.org
Facebook
Fishing websites
Google
Google, Bing, Wikipedia
http://lacstukely.com/
http://vtherpatlas.org/
James Ehlers
Journal montreal
Lacnick.com
Lactrousers.com
Lake Champlain Basin Program- 4
Lake Champlain Committee- 2
Lake George Assn
Lake mempremagog preservation association
Organisme de bassin-versant de la baie Mississquoi- 6
Mettawee Valley Conservation District
morrisvtownvt.org
Mrc brome Missisquoi- 3
Municipalité- 3
Municipalité Pike River
Municipalité St Etienne de Bolton
Nature Conservancy- 2
NYS DEC website- 3
Plantes indigènes bonnes pour les cours d’eau
Potton.ca
Radio-Canada news website

Regroupement du lac Trousers
River Conservancy
Science daily and others
Seven Days
Sutton Weekly Newsletter
UVM- 2
Vermont Digger- 4
Vermont Fish and Wildlife- 2
Vermont.gov websites
Ville de Bolton-Est
VT Agency of Natural Resources- 4
VT Dept of agriculture and water quality
Vt web sites
VPR
WCAX TV
windguru
Youtube

Organizations

À Philipsburg
Action lac champlain
Addison County River Watch
lake George land conservancy
Adirondack Explorer Magazine- 3
Annual report from Champlain water district
ANR
APELS- 11
OBVBM- 28
APIPP training
APLN
Appalachian Corridor- 7
Bolton-Est Environmental Agent- 3
ARPELA- 4
Association de Lac Long Pond- 2
Association du lac
association lacs Trouser et Libby- 5
Association pour la protection des lacs
Bassin versant du Lac Brome
bassin versant lac champlain- 2
Bassin versant rivière aux Brochets
BHA
Boat launch info booths
Branch out burlington
Brome Lake group: Renaissance Lac Brome

BT Lakes and Ponds
Camp Colby
CIME haut richelieu
CLF, City of SB
Comité local
Conservation des vallons serpentines
Conservation du bassin du lac Champlain
Consolidated water board
County Potton
Covabar- 2
DEC
Ducks Unlimited- 2
eau secour
ECHO- 9
Lake Champlain Basin Program- 13
Fiducie foncière Ruiter Vallée
Friends of Northern Lake Champlain- 3
Friends of the mad river
Friends of the Winooski- 3
GCEC
Glen Lake Association
Green peace- 3
Water Canada
Groupe protection lac Selby
groupes agricoles
https://rappel.qc.ca/
Jamais
Jefferson Project
Lac Selby Association newsletter
Lake Champlain Committee- 11
Lake Champlain maritime Museum
Lake George Association
ADK Explorer
Audubon Vermont
LCI Fishing Derby
Lewis Creek Association
LGA- 2
LGLC
Local LCB Action group
Local MRC
Lori Fisher
MCI
Meetings of Organismes de bassin versant de la baie Missisquoi and Yamaska
Memphrémagog conservation- 2
Menviq

Missisquoi Basin Assoc.- 2
mrc brome missiskoi
Municipalité de Bolton est
Nature Conservancy- 4
NRCS and Farm Service Agency
NRDC, World Wildlife Fund
NYDEC
Nypirg
O.S.B.L sur l'eau (j'ai oublié le nom)
Organisation de protection du lac trousers
1 FOIS
APELS du lac Selby à Dunham.
Oui dans notre municipalité
P.e.n.s.
Par municipalité
Parcours Missisquoi-Nord
Parfois
Phosphore Lac Bromont
Plantation d arbuste par les versants de la baie missisquoi
potton.ca
Pure Water for The World
Rappel, Arpela
Reçu documentation par la poste
Responsable lac Champlain suite aux inondations 2011
River Conservancy- 2
River Keepers- 3
Sea Grant
Shelburne Farms
Greenpeace, NRDC, etc.
South County Riverwatch
State of Vermont
state of vermont dept of environmental conservtion
Trout Unlimited- 7
NY State conservation magazine
Sierra club- 2
USDA and county SWCD
UVM- 4
Vermont Fish and Wildlife Website
VNRC
VPIRG- 6
VT DEC
Walbridge Conservation Area Foundation
Washington Soil Conservation
Paul Smith College
MRBA

Meetings

ARPELA
OBVBM- 2
Bassin versant
Bedford town communications- 3
Beekmantown town meeting.
Bolton-Est presentations- 4
Brome Missiquoi MRC- 3
Burlington City Meetings- 3
Cabot Town Mtg
charlotte
Chittenden County Regional Planning Commission
City Hall- 2
City of Plattsburgh
City of SB
Clarenceville municipality- 4
Colchester meetings- 3
Conseil ville Eastman
Contre l'établissement de porcherie industrielle
Cornwall
Dunham- 7
Bedford, Philipsburg
Eastman town- 3
Ferrisburgh town meetings
Feuillet d'information de la municipalité de Saint-Armand
Frelighsburg- 4
friends of lake Champlain
Georgia town
Glens Falls City
Hardwick
Hinesburg- 2
in LG
Lacolle +/- 2000
meetings at lake carmi
MIddlebury Township
Middletown Springs Meeting
Montpelier City Council
Morrisville
Municipal/Council meeting- 9
Municipality of Potton- 4
Municipality of Stanbridge East meetings.
national conferences/seminars but not local
Northfield

Noyan Municipal Newsletter
MRC
Oui nettoyage des fossés et préservation de la végétation près de ceux-ci pour limiter l'érosion près de la rue de la Chute
Sutton mrcbm
Plainfield Water Commission
Plattsburgh City- 2
municipal bulletin- 4
Queensbury, NY- 3
Roxbury Meetings
Saint-Ignace-De-Stanbridge- 2
Shelburne and Charlotte
So Hero
South Burlington- 3
St Etienne de Bolton- 3
St. Albans Town
Starksboro- 2
St-Armand- 3
St-Georges de Clarenceville
ST-SÉBASTIEN
Sutton town meetings- 6
Ticonderoga
Tinmouth Pond Milfoil Association
Town of Bedford
Town of Brome Lake website
Town of Sutton Newsletter
Venise and clerenceville
Venise en Quebec- 4
Village of Dannemora
Ward 5 NPA; City Board Meetings
westford
Woodbury Cons. Comm.

Trainings

Adirondack Park Invasive Plant Program
Ag Department
AIA environmental and sustainable work groups
At BRMS
bassin versant
Boating safety certification course
CBEI
Champlain basin program
Classes at CCV
Colchester recreation
Conservation de la nature Canada

Cooperative Extension Meetings
Echo center- 2
VINS
Gander Mountain
Invasive Species @ Fresh water Institute in Bolton Landing
Lake Elmore Assn presentations
LCBP- 2
Local groups for free trees, shrubs
OBV Yamaska
online webinars sponsored by Bolton-Est
obvbm
Outreach in the Press-Republican
River watch
School field trips with my children in elementary school
State of Vt water resource
Through town hall
TLC
University of Vermont- 2
Water Stewards
Wild Center and PAR Nature Center
YouTube, MIddlebury College

Events

Act 250 hearings
Affiches du gouvernement du Canada, baie de Missiquoi.
AGA du RAPPEL
Article sur espèces indigènes
beach closures
Booths at community events
Champlain festival
champlain valley fair
Corridor Appalachien
Council meetings
Defi Missisquoi
Descente de la rivière Missisquoi organisé par la municipalité de Bolton Est
Ducks Unlimited
Echo center, education
Echo traveling exhibits
Festival Mikinak (Pike River)- 5
Fête dans le rang
Fishing derbys.
Floods
Geography and geology classes at UVM
Glen Lake Association

Green waste collection
Hurricane Irene
information through our municipality
Jamais
Mayor’s Cup
Mississquoi
Municipal events
municipalité
Municipality giving away native plants
Obvbm- 2
Lake Champlain Bassin Program
kiosques obvbm
Permaculture workshops
Brome Fair
removing invasive plants from Indian Brook resevoir.
Rencontre d’information municipale
Riverkeeper
Rutland Fair
School fmt Macdonald
SevenDays
Shoreline cleanup
Town meetings
Tyler Place Annual Dinner
Vermont Drinking Water Week, Water Days event
VPIG
Vt my qc
Wild Center

Some Other Way

3 acre ruling
4-H
APELS association de protection du la Stukely
attention to LIFE
Avec Isabelle Grégoire éducatrice en éducation relative à l'environnement
Avis TV
Barrage de lamproie
Boy Scouts
Burlington water dept.
CBP ROAM
Channel 5 news
Club Lions Memphrémagog-Ouest
Commission Mixte
communauté
Communication ecrite de notre municipalité

conesus lake Ass.
Conservation magazine
courrier local
Dec
Dépliant de l'association de l'étang Sugar Loaf
Députe Denis Paradis il y a quelques annees
ECHO- 13
Facebook
Federal government sponsored projects
Federal member of parliament
Health Dept. cyanobacteria tracker
Hebdo
Hôtel de ville pike river
http://lacstukely.com/
journal l'armandie
Journal le Reflet du Lac
Journal Le Saint-Armand- 2
Journal local -le Canada Français
journal local LeTour
Journal local, "L'avenir et des rivières "
Journal Le Reflet
Journaux municipal, locale- 15
La voix de l’est
Lake Carmi (not sure of the name)
Lake Champlain committee
LCC Book Lake Champlain a Natural History by Mike Winslow
Le bulletin de l’Association du lac Libby
Le journal de l'Armandie- 2
le journal de saint Armand
Le journal Le Saint-Armand couvre très bien le sujet.
Lejournal de St-Armand et les informations sur pancarte au quai du lac Champlain
LG Waterkeeper
Local events like through Cooperative Extension
Local lake association
Marinas, boaters
média écrit, hebdo régional
met steward at perkins peir
MRC Brome Missisquoi- 2
Municipal newsletters from the town of Eastman
professional career- 5
NRCS, NRCD
Ollie
On line news sourced
Organisme de Bassin Versant de la Baie Mississquoi -https://www.obvbm.org/territoire

Overlook park display, signs at other parks, inspections at boat ramps, signage at boat ramps, information boards at hiking trails
Pamphlet remis l'an passé
Pamphlets, town hall's website and the county facebook page
Panneau d, information à Philipsburg
Panneau de la municipalité interdisant la baignade
people at state parks and put ins at lakes
Personal observation- 5
Quebec Bill 22 Environmental Laws
rapport de ma député
Renaissance lac brome
Rotary- 2
In School- 30
Shadow Lake association
Shelburne Farms
Sutton monthly letter
This survey
Trout unlimited, fishing and hunting videos
U.P.A -union producteurs agricole
Un journal lequel ?
Un peu toute ces réponses par ici et par là, par intérêt général et personnel
UPA
usda
UVM
Uvm extension programs through Wcax
UVM RACC and BREE
Vermont Farm Bureau
Vermont Fish and Wildlife- 2
Waste water resource
annual water quality reports in the mail- 5
Word of mouth/Family & Friends- 16

Q22 Please name up to five organizations you know that are working to clean up, protect or educate about water quality of the rivers, streams, ponds, lakes or other bodies of water in the Lake Champlain basin.

Adirondack Land Trust
Adirondack Park Agency
Adk
Agency of Agriculture
Agency of Natural Resources
AGRICULTURE CANADAA
ALLP
ALT

ANCA
APA
apalor
apelor
APELS/APPELS-15
Appalachian corridor association-4
ARPELA-7
Association de Lac Long Pond
Association de protection de l environnement du lac stukely
Association des amis du lac Trousers
Association des propriétaires du bassin versant du lac Libby-5
Association des propriétaires du Lac Trousers-2
Associationd u Lac Stuckely
Associations de protection des lacs Eastman
Audubon society
AuSable River
Baie Missisquoi
bassin versant HY
bassin versant lac champlain
Bassins des versants
bassins versants qc
benevole du lac champlain
Boat inspection stations in NY
BoatUS
Brass
Brome Missisquoi MRC
Burlington Parks and recreation
Center for Rural Studies
Charles Lussier
church
Cime
Citizen Action for a Healthy Lake
City
City Of Burlington
Civic Groups
Cleaning program
Clear group
CLF
Clinton county health department
club agroenvironnemental de l'estrie
CMI
Comité étude sur le bassin versant de lac Champlain
Comité mixe BV
Commission mixte internationale
Conservation baie Missisquoi-2

Consolidated water
Cornell Cooperative Extension
Corporation du Bassin versant lac Champlain côté Québec
Corridor Appalachien-5
Covabar-2
DEC-10
DEC state of Vermont
DEP
Ducks Unlimited-5
eau secour
ECHO-13
ELPOA
Environnement Canada-2
Environnement Estrie
EPA-3
Fish and game-3
FofNLC
Foil the Foil on Moody Pond
Fondation Sethy
Friends of Lake Champlain
Friends of Moody Pond
Friends of Northern Lake Champlain-3
Friends of the Lake Champlain Watershed
Friends of the Mad River-3
Friends of the Winooski River-5
Friends of Trousers Lake Association
Gouvernement
Gouvernement du quebec
Gov of Canada
Greenpeace-3
Green up day?
IRS
Lac Brome Resource
Lac Selby Association
Lake Champlain Research Institute
Lake Champlain trust
Lake Champlain water
lake champlain water district
Lake Eden Association
Lake Elmore Lake Assn
Lake George Association-6
Lake George Clean Water Commision
Lake George Conservancy
Lake George park Commission
Lake Iroquois Association

L'avenir et des Rivieres paper
Lake Champlain Basin Program-31
Lake Champlain Committee-11
Lake Champlain International- 7
Lewis Creek Association
Liberal party
Lake George project
Local Municipalities
Marais Venise en Québec
Maritime museum
MCI
Memphrémagog Conservation inc-2
MIddlebury College Geology Dept
Ministère de l'environnement
Mirror Lake Watershed Association
Missisquoi Basin Assoc
Mount Pinnacle Land Trust
MRBA
MRC
MRC Brome Missisquoi-5
Mrc haut richelieu
Municipalité-3
Municipalité Bolton
Municipalité Eastman-2
Municipality of Lacolle
Municipality of Venise en Quebec-3
Ville de Bolton Est
Ville de St armand
Nature Conservancy-9
NEIWPCC
New York State-2
Nrcs
NYPIRG
NYS DEC-4
Nyseg
Organisme de Bassin Versant de La Baie Missisquoi-44
oceana
Optimiste
Our Lake organization
Parc Environnement Nature Sutton-2
Parks and recreation
Paul Smith College
Potton
RAPPEL-3
Regional planning board Lamoille

Regroupement des bassin versant
Renaissance Brome Lake
River Keepers-2
River watch-2
Ruiter valley land trust
SAAWA-4
Schools
service naturel
Sierra Club-3
SNAP
sos richelieu
South Burlington Water dept.
St armand
Starksboro Conservation Commission
STATE AGENCIES
State Dept-2
State Natural Recourse's
State of Vermont-5
SUNY Plattsburgh-2
The Lake Champlain Committee 2021 Cyanobacterial Monitoring Team
The state environmental board
Tinmouth Pond Milfoil Project
Town of Clarenceville
Town of Sutton
Trout Unlimited-9
US Gov
University of Vermont-17
UVM BREE
UVM Extension
UPA-2
USCG
usda
Vermont AAFM
Valérie René conservation nature
Vermont Drinking Water Week Committee
Vermont Environmental Protection
Vermont Housing Conservation Board AmeriCorps
Vermont Natural Resources Council
Vermont Public Interest Research Group-5
Vermont clean water net
Vermont DEC-2
Vermont epa
Vermont Fish and Wildlife-3
Vermont land trust-2
Vermont River Conservancy

Vermont ANR
WCAX
winooski valley conservation district-2
Yamaska Valley Water Quality Commitee
Yamaska Valley Watershed

Q23 Please number the top three ways you would prefer to learn about protecting or improving water quality.- Some other way

continue tv info
contact with people who manage programs
Documentary movies or investigational reports
Email- 3
End-to-end lake canoe fact finding trip
Fairs
live-update feed of actions being taken and data collected concerning the water quality
Info lettre
hearing concrete results from inter-governmental cooperation
Journal Le Saint-Armand
littérature scientifique
Live scientific demonstration of how pollution effects waterways
mail that refers to specific web sites
Mon association de lac
MY OWN UNBIASED RESEARCH
Newspapers- 4
Online or hardcopy Newsletter
Panneau explicatif extérieur près des cours d'eau et lac (Outdoor explanatory panel near streams and lake)
Par le différents paliers de gouvernements (By the different levels of government)
pay attention to your surroundings
Read comprehensive documents
Seeing enforcement of current laws/rules
Signage
Stop educating and start doing it
Teach in schools- 3

Q25 In the past three years have you done any of the following specifically to reduce runoff- (Something else)

rain barrels	
add a bump in the driveway to divert water	
Allow parts of pour land to grow wild	
Aménager étang pluvial	Develop a rain pond
buffer improvements	
built settling pond area	
Chemin de terre et roches	Dirt road and rocks
Chemin privé en poussière	Private road in dust
Choose not to use no organic pesticides or fertilizers	
Cleaning out debris from culverts	
Collecter et consommer l'eau de pluie du toit.	Collect and consume rainwater from the roof.
consolidation zones érosions	consolidation of erosion zones
Contacted state officials to inform them of pollution and damage and lack of enforcement of laws/rules	
Cover Crops	
cultiver mon potager	cultivate my vegetable garden
divert culvert storm flow into wetland	
Don’t fertilizer lake frontage at all	
Faire connaître l'importance de l'eau souterraine dans le voisinage en milieu rural	Raise awareness of the importance of groundwater in the rural neighborhood
fortify my soil with compost that holds water better than the hardpack that is around my condo.	
Greenup	
Grow plants not needing to much water	
Had property inspected by VT YCC. Passed with praise	
Handled runoff appropriately	
I am always picking up trash	
I have hand harvested milfoil from adk lake on a daily basis in the summer	
I manage water on our land	
I use my waist home water to water my plants (animal dishes, and fishtank	
Inform others about the problem	
installed more culverts in pasture to direct run-off to man-made pond	
Intercroping	

Journaled about the water, bought a rain gauge (Cocoras)	
Laver notre linge avec des boules réutilisables sans savon	Wash our laundry with reusable soap-free balls
Letting wild flowers take over my lawn and flower beds	
manage my farm by maintaining stable soil conditions	
Mise aux normes installation septique de notre plein gré	Upgrading the septic system of our own free will
Nettoyage bord lac selby	Lake selby cleaning
Not strive for a grass lawn - choose a variety of native green foliage as "grass"	
Only shower a couple of times a week, sponge bath other days.	
Pick up after slob dog owners	
Plante indigènes	Native plant
Planted several perennial beds with mulch for flowers and shrubs.	
Planted sustainable plants in our new pond	
Planted trees and plants	
Planter des arbres a proximité d’un c ours d’eau	Plant trees near water
Pressure on all levels of government	
Rain gardens	
Rake up decomposing plant material on my beach	
Ramasser des déchets	Pick up trash
Redirected roof water runoff to the back yard	
Reduced consumption...more efficient use	
remove fallen trees from river	
remplacé de la pelouse par des arbres et laisser la foret repousser	replaced lawn with trees and let the drill grow back
Renaturaliser la berge	Renaturalize the bank
Stop using roundup	
Support Bee Hive Company	
Sur mon terrain , j'ai 3 famille d'arbre , chaque saison , je fais un jardin avec 10 à 15 variété de plante , et je donne que des nutriment bio	On my land, I have 3 tree families, each season, I make a garden with 10 to 15 plant varieties, and I only give organic nutrients
Talked to people to help promote positive actions	
Testing pond	
Use rainwater for plants as often as possible	

Valoriser l'utlisation des plantes envahissantes afin de promouvoir leur élimination (ex. tressage de spirales décoratives avec phragmite)	Promote the use of invasive plants to promote their elimination (eg braiding decorative spirals with phragmite)
Water the flowers beds as little as possible.	
We keep a buffer strip between our (organic) crops and the small streams that cross our land.	
We've opted for biodegradable soaps and are avoiding synthetic fabrics	

In the past three years have you ever done any of the following to help protect or improve water quality? (Something Else)

Active fund raising for Lake Assn	
Activité avec Charles Lussier sur la Pike River / Lac Champlain	Activity with Charles Lussier on the Pike River / Lac Champlain
Analysed phosphorus levels at entrance and exit in brook	
attended webinar on invasive veg control	
Called my State Reps.	
Clean the trash out of my bay	
Contacted numerous state workers to inform of pollution and destruction which is ongoing.	
Convaincre les intervenants en environnement de cesser de culpabiliser mais stimuler les usagers aux changements.	Convince those involved in the environment to stop making people feel guilty but encourage users to make changes.
Councilman	
donated land to the nature conservancy canada	
Donated money to organic farming organization	
DU Committee Volunteer	
Eau secours et fondation rivières	Relief water and river foundation
Had consultation with horticulturist	
Heavily involved in conservation organization (local)	
I educate people about the ultimate solution and our responsibility to teach others	
Installed a new septic system and paid for septic tank emptying	
J'ai travaillé pour l'OBVBM	I worked for the OBVBM
Kept from using contaminants	
nettage des rives	shoreline cleaning
regulated state facilities, municipalities and individuals	

Restore vegitation after Irene	
Trop peu d'activités de ce genre ici à Saint-Armand.	Too few activities of this kind here in Saint-Armand.
Writing articles about water pollution	

Q36 If there is something you'd like to learn more about related to watersheds or water quality, or if you have any additional comments, please feel free to add them here.

À quand les mesures obligatoires à respecter	When are the mandatory measures to be observed?
alternative pest control on plants	
Any publications or on line information on this subject would be appreciated.	
As a CA native I do not like Lake Champlain but as a former (CA license T2 & D2) water operator I know about the importance of water quality. Ultimately I don't care what happens as I don't won't to live in VT	
Barrage pour garder notre eau du lac	Dam to keep our lake water
Best of luck doing this vital research	
Best way to remove invasive plants like burdocks from watershed areas	
Bon succès dans votre étude.	Good luck in your study.
Bravo pour cette étude. J'espère que cette fois il y aura non seulement un rapport mais surtout des actions concrètes récurrentes de la part de nos élus. .	Thank you for this study. I hope that this time there will be not only a report but above all recurring concrete actions on the part of our elected officials. .
Burlington should be mandated to upgrade their wwtp, it seems their having issues yearly!!!	
burlington vt waste water treatment needs a long look this has been going on for to long!	
Certaines questions on pas rapport pour résidents de montagnes	Some questions do not apply to mountain residents
Comment, don't fertilitize, water lawn, mow 4 times per year hedges getting bigger lawn smaller	
Continued feedback on fish population...they tell us a lot	
Current state of the Basin	
Don't know very much about water quality.	
education of small things we all can do should be more readily spoken of	
Est-ce que des analyses de la qualité de l'eau de la rivière aux Brochets (Pike River) sont effectuées régulièrement en différents points le long de la rivière et les résultats rendus publics et disponibles?	Are water quality analyzes of the Rivière aux Brochets (Pike River) carried out regularly at various points along the river and the results made public and available?
Félicitations pour votre projet :)	Congratulations on your project :)
Good luck with your studies,...	

Good survey and reminded me that I need to learn more and do more.	
Homeowners and businesses on and near rivers entering Lake Champlain should be subject to the same regulations as Lakefront owners if not more so.	
How blue green algae can be best mitigated	
How do we eliminate or reduce invasive species already in our water ways	
How to help	
how to rid invasive snales	
I am curious about watersheds	
I appreciate the attention this study brings to the issue	
I believe education is key. Many do not know their role in water quality at home and I also believe too much of the dumping and poor land management is overlooked by local officials in rural communities.	
I have a lake champlain waterfront property and the village uses salt all winter long , it's a bab practice	
I have access already to information	
I live in a "green" agri community	
I live part time in a city; water is a concern. My answers reflect my part time life at my cottage. Water is critical there as well but I trust it more.	
I look forward to hearing the results of your survey. Good work. Keep it up!	
I never water the lawn and we mow it only when it is very long.	
I own my home but rent the land and no hazardous chemicals are used on my lawn nor in my home	
I support biodiversity, sustainability and pollution reduction- as long as you understand CO2 is NOT a pollutant.	
I think of ways to help water systems was posted visibly in communities people would become more aware and respectful	
I was not aware that we were connected to the Champlain Watershed...it would be interesting to visuablize this using video or animation to get a good understanding of the breadth of area this covers	
I was shocked to learn that our area DOT departments use salt/water to blast frozen culverts. Also, the politics involved in road salt usage. In	

our travels out west they use so much less salt in winter and it seems to work. I also think there is far too much use of the liquid road brine in winter. PPE	
I would like more cross border partnerships and involvement worth First Nation decision makers. We should have an organization for the Missisquoi River, from Eastman, QC, to Missisquoi Bay.	
I would like some scientific info on this issue, not just casual comments made in the newscasts.	
I would like to be directed to educational resources on line about watersheds.	
I would like to be inform about the water quality of the region	
I would like to be made aware of cleanup and restoration projects I can participate in by email, mailing or through my townhall's facebook page both here in my county and in Vermont and New York	
I would like to know where all the impact fees have gone since the 1980's (seriously))	
I would like to learn more about the water quality in my area, however I feel there is nit much published in the local newspaper or other media. Maybe there is but it’s poorly advertised & consequently I miss it.	
I would like to see more action pertaining to agricultural runoff which I believe is the biggest problem in my area.	
I would like to teach children more about watersheds	
I would realaly like to know the current status of pollution in Lake Champlain and Silver Lake (Lac Argent) in Eastman.	
I'd like to see the unfiltered science without the leftwing global warming agenda. I believe the climate always changes but prove to me, one we caused an abnormal change, and two how it affects our waterways. I'm not a denier. I'm just skeptical of the garbage being spoon fed without hard proof. Show me the undeniable science and I'll buy in 100%, contribute, and participate. We need to start seeing some unbias reporting in order to identify, educate, and address our waterways issues! Likewise, I'm skeptical of questions in this survey, and believe they're steered to a desired result. I got an A+ in advanced statistics, I know what I'm talking about a little. Also, not all	

policies are created equal. A rule that applies to a 1acre urban lot will not have the same effect of a 20acre lot. For example, the height I mow my lawn is inconsiquencial. I have 400 yards of shoulder high field before the closest waterway. Don't put a tourniquet on a sliver. The correct fix is going to require qualitative not quantitative dataa. Additionally, one policy fits all is not a realistic approach. Government should work with local farmers and residents instead of direct policy without buying to the effects. We need a solution that strategically, and unbiasly allows grants to areas that result in the greatest impact based on expert unbias professional assessment! For example, one land owner who has 400yds of wetlands might get a small subsidy to plant 50 trees, with a cap limit. Incentives good deeds that promote and protect watershed without raising taxes. I hope this survey helps and is not part of an anecdotal survey. Please contact me for other ideas: 802-363-5436	
I'd love to learn more about helping to improve water quality.	
I'm glad you are doing this work. Thank you!	
I've been interested in the VIP program to identify and remove invasive species from the waterways, but the workshops have not happened yet. Last year cancelled due to the pandemic.	
I'd be interested in information	
I'd like information on rain barrels	
I'm not sure Well aware others are the problem of people using the lake as there own personal bathroon, I learned several years ago about voters who make no effort to find facilities and instead leave them selves in the lake given all the boats that we have on Lake Champlain I believe this is a huge problem but I'm not sure if it's addressed at all I start swimming in the lake long ago because of attitude I learned from local Boaters I'm not sure if I'm right about this issue but personally I don't see another leg because of attitudes I've heard from people about relieving themselves in the Lake Or dumping from their boats I would like to know if this is something that looked at or not and if this is a correct opinion but I don't know how I would find that out. I think entirely too much blame is based on farmers I know farmers kill greatly about the environment and do their best not to pollute, farmers have enough	

trouble making living without having laws that make it even harder by implementing All the restrictions on them. I think the human factor he's much more damaging to the waters then are farmers. I definitely think educating Our Young is the best way to improve water quality in the future. I also believe giving the public more access to Lake Champlain quality access that does not always cost money, people would care more about keeping it cool if there are more invested in it.	
il faudrait être plus informé sur ce que nous pouvons faire pour aider	we should be more informed about what we can do to help
Il faut arrêter de viser seulement les agriculteurs, ils ont fait beaucoup d'éfforts et le problème vient maintenant d'ailleurs.	We have to stop targeting only farmers, they have made a lot of effort and the problem now comes from elsewhere.
Interesting point regarding fertilizers and native plants	
Intolérable à mes yeux que la municipalité refusé de faire analyse l eau de la baie pour ne pas éloigner les touristes des plages et risque la santé des touristes et des résidents avec les algues-bleues en ne donnant aucuns avertissement avant le départ des touristes incroyables mais vrai	Intolerable in my eyes that the municipality refused to analyze the water of the bay so as not to keep tourists away from the beaches and risk the health of tourists and residents with blue-green algae by not giving any warning before the departure of incredible tourists but true
It would be nice to have some concerted efforts around all the US/Canada communities that share the Champlain Bassin to take concrete actions together (from small to large ones)	
j'aimerai en savoir plus sur l'état du bassin versant champlain	i would like to know more about the state of the champlain watershed
J'ai vu dans ma jeunesse l'arrive Des Cyanobacteria arrivé au la Champlain spécialement dans la baie Missisquoi sur le côté Canadien. À l'époque les authorities évoquait l'enlevement Je la jeté du pont de Swanton comme remède. Alors que le problème venait des porcheries et de la popularité du drainage bricolé.drainage agricole	I saw in my youth the arrival of Cyanobacteria arrived at Champlain especially in Missisquoi Bay on the Canadian side. At the time, authorities cited kidnapping and throwing her off Swanton Bridge as a remedy. While the problem came from piggeries and the popularity of DIY drainage. agricultural drainage
J'aimerais avoir une carte des cours d'eau qui font partie du bassin versant de ma region à Sutton au quebec	I would like to have a map of the waterways that are part of the watershed of my region in Sutton, Quebec
Je crois personnellement , qu'avec les politiques modernes , il y a pas assez d'investissement envers la nature , l'etre humain est destructeur , et meme aujourdhui avec tout les changements climatiques, l'homme veut s'enrichir et non sauver la planete qui est notre habitat	I personally believe that with modern policies, there is not enough investment in nature, human beings are destructive, and even today with all the climate change, man wants to get rich and not save nature. planet which is our habitat....

Je ne sais pas ce qu'est un bassin versant (un terme qui m'est inconnu). Je doit me renseigner sur ce sujet.	I don't know what a watershed is (a term that is unfamiliar to me). I need to find out about this.
Je ne suis pas pour la récupération de l'eau de pluie via les gouttières de toit car dans mon cas, l'eau ruisselle sur des bardeaux d'asphalte et entraîne des particules, ce qui selon moi est impropre pour l'arrosage de plantes et de jardins puisque les bardeaux sont faits de produits pétroliers. Ai-je raison?	I am not in favor of collecting rainwater via roof gutters because in my case, the water runs off asphalt shingles and carries particles, which in my opinion is unsuitable for watering plants and gardens since the shingles are made of petroleum products. Am I right?
Je souhaite être mieux informé par la voie électronique et apporter ma contribution	I want to be better informed electronically and contribute
Je suis contente que quelqu'un se penche sur la question de la qualité de l'eau. Lorsque j'étais enfant, nous allions jouez à Venise en QC et l'eau du lac Champlain m'a toujours dégouté	I'm glad someone is looking into the water quality issue. When I was a kid we used to go play in Venice QC and the water in Lake Champlain always gross me out
Je suis intéressée à recevoir toutes formes d'informations sur ce sujet.	I am interested in receiving any form of information on this subject.
Je trouve que nous n'en somme plus à en savoir le niveau d'information que les citoyens sont rendu car la science nous a déjà démontré tout ca et que étant donné l'urgence de la situation (changement climatique, toxicité des pesticides, herbicides etc..) nous devrions en tant que société etre en mode agir, et rapidement en ce fiant à la science qui a déja tout démontré la chose. autrement dit, cest très noble ce que vous faites mais les instances le savent déjà et il faut agir. ici au canada on en ai encore avec les lobby qui décide tout, bayeur veut faire changer la réglementation pour permettre plus de glyphosate... cela n'a pas de sens. merci.	I find that we no longer know the level of information that citizens are given because science has already shown us all that and that given the urgency of the situation (climate change, toxicity of pesticides, herbicides etc.) we should as a society be in a mode of action, and quickly, relying on science which has already demonstrated this. in other words, what you are doing is very noble, but the authorities already know this and we must act. here in canada we still have it with the lobby that decides everything, bayeur wants to change the regulations to allow more glyphosate... it doesn't make sense. thank you.
keep the public informed and seriousness of the importance of it.	
La municipalité de St-Paul de l'Ile-aux-Noix ne figure pas dans la liste	The municipality of St-Paul de l'Ile-aux-Noix is not listed
La qualité de l’eau dans la baie et la rivière Missisquoi est très importante en raison des changements climatiques qui accélèrent le développement des algues bleues on doit sensibiliser les producteurs de porcs particulièrement du côté du Vermont de respecter une bande riveraine et ne pas épandre du purin trop tôt en saison lorsque le sol est encore saturé et que le purin se rend directement dans la rivière Missisquoi pour ce faire il faut que la charge bof soit mesurée à la frontière à Richford est et à	The quality of the water in the bay and the Missisquoi River is very important because of climate change, which is accelerating the development of blue-green algae. Pork producers, particularly on the Vermont side, must be made aware of respecting a riparian strip and not spreading slurry too early in the season when the soil is still saturated and the slurry goes directly into the Missisquoi River to do this the bof load must be measured at the border at East Richford and Swanton in order to measure the

Swanton de manière à mesurer l'impact sur la baie Missisquoi il faut donc une entente entre USA et le canada	impact on Missisquoi Bay therefore requires an agreement between the USA and Canada
Le taux de mercure dans le lac Champlain ?	Mercury levels in Lake Champlain?
Les villes ne devraient pas avoir le droit de déverser les eaux usées non traités dans les cours d'eaux.	Cities should not be allowed to dump untreated sewage into waterways.
Liens pour Rapports sur qualité de l'eau de Saint-Paul-de-lîle-aux-Noix et environs	Links for Reports on the water quality of Saint-Paul-de-l'île-aux-Noix and surroundings
Mailed information	
make sure there's a link to the knowledge of man helping nature in a basin	
Many of your questions are best answered by "I need more, better information"	
Me baignant régulierement aux USA vos plages sont très bien et meilleures que chez nous!!	Bathing me regularly in the USA your beaches are very good and better than at home!!
Merci de vos efforts	Thank you for your efforts
merci et bonne initiative	thank you and good initiative
Merci pour vos démarches!	Thank you for your steps!
Merci pour vos études	Thank you for your studies
Merci!	Thank you
More effort to get people not to spread algae in ponds and lake with kayaks and canoes.	
More info on watersheds in general.	
More information	
More information should be taught to city people who think farmers are the cause of water pollution when it is the CITY PEOPLE who are LOADING water runoff/sewers with THEIR concentrated herbicides, pesticides, etc	
More media blitzes - drill in the head business owners operating for profit the impact their paying customers are having on this river.	
My personal concern is for those who lease land, the impact of the 3 acre ruling in those communities for lease holders in an over 55, retiree area. More awareness disseminated directly to theses residential sites with helpful sources of funding if their community Stormwater permit is affected by the 3 acre ruling.	
N/A	
Need for improved hot wAter heaters that save on both electricity and water at the same rime	
No	
No	
No	
no	
No	

No	
No	
No	
No thanks	
Non	
Non, pas pour l'instant	No, not for the moment
Nothing that I can't seek and find on the internet as needed	
Nous apprécions ces études et les efforts déployés pour améliorer la qualité des eaux.	We appreciate these studies and the efforts made to improve water quality.
Okay	
Open up the route 2 and bike path causeway	
People need to pick up their dog waste and human waste when using waterways	
Plusieurs de vos questions n'offrent pas le choix : ne s'applique pas, c'est à dire si nous avons déjà modifier nos habitudes, nous ne pouvons pas répondre que nous les changerons….	Several of your questions do not offer a choice: not applicable, i.e. if we have already changed our habits, we cannot answer that we will change them….
Possédant un bassin dans le jardin, j'ai cette année pour la premier fois pas rajouté d'eau du puit .Et surprise aucune algue verte n'est présente cette année, à la différence des 5 années précédentes ! Nous sommes à Bedford depuis 2016.	Having a pond in the garden, this year for the first time I did not add water from the well. And surprise no green algae is present this year, unlike the previous 5 years! We have been in Bedford since 2016.
Pour certaines questions, il y aurait du y avoir la réponse « ne s'applique pas ».	For some questions, there should have been the answer "not applicable".
Pourquoi je n'ai jamais entendu parler de protection des berge et du milieu sensible que represente l'amont et l'aval des Chutes Hunter de Frelighsburg.	Why I have never heard of protecting the banks and the sensitive environment that represents the upstream and downstream of the Hunter Falls of Frelighsburg.
Quand l'étude sera telle disponible? En français et en Anglais?	When will the study be available? In French and in English?
Quaterly public reports from yours and other organization.	
Quelle est la qualité de l'eau de la rivière richelieu à l'entrée du Lac Champlain ? Est-il sécuritaire de si beigner ?	What is the water quality of the Richelieu River at the entrance to Lake Champlain? Is it safe to donut?
Quels ont été les suites des nombreuses études de la Commission bilatérale sur ces questions?	What have been the results of the numerous studies of the Bilateral Commission on these questions?
Questions are phrased as if water treatment would be source of pollution, but is just the point where it appears	
Questions trop pointues pour beaucoup de personne, à moins de faire partie d'un organisme de protection de la nature...	Questions too specific for many people, unless they are part of a nature protection organization...

several of the actions you ask if I will take are actions I have already taken. That was difficult when I was asked if I was likely to take them in the future since I have already taken them.	
Several of the things mentioned in this survey (dog waste, water runoff) are things I never associated with lake/water quality until taking this survey	
Sodium is the major problem from salt on roadways, not chloride!	
Some of my responses are based on my being a partial paraplegic	
Some town in eastern township request a developper to have a undeveloped lot to be used as a park or similar. Would it be a good idea to force them to build a retention pond for their ditches before letting water flowing to the other existing ditches?	
State money do not burden local with their "great ideas"	
Subsidies for cover crops	
Surprised you didn't ask my source of water!	
Svp me tenir au courant:	Please keep me posted: truestylejc@gmail.com
Thank you for doing this	
Thank you for doing this!	
Thank you for working towards a better environment!	
Thank you, I want to help	
thanks for studying this important issue	
Thanks for your efforts with water quality	
The growth of algae in Lake Champlain is now a perennial problem. The lake used to be clean and present no danger to swimmers. The quality of the water has deteriorated a lot over the past fifty years for apparently lack of concern over the use of chemicals in this agricultural region. I am grateful that the authorities are finally waking up to the problem, hopefully not too late as it seems to be for climate change!	
the link on the flyer that was left in my mailbox yesterday in Pike River brought me to some Taiwanese site. My town changed its name to Pike River in 2012 dropping the St-Pierre-de-Veronne-	
The more education the better.	
The page that asks you to rank ways in which you want to leran about improving water quality doesn't work.	

The page that is blank on this survey is due to your software insistence that there was text entered incorrectly and each time after filling it out correctly and hitting the advance arrow, red pop up messages alerted me that text was entered incorrectly and to correct it or remove it. I must have wasted 20 minutes of my valuable time on that page. I answered your questions on that page but your software would not accept them. I had to remove all of them in order to advance to the next page. I was so annoyed that I almost decided not to complete the survey that was only supposed to take 20 minutes, but I did anyway.	
Through this survey I've learned that I know so little and I need to change that!	
Une fois votre étude terminée, intéressé de recevoir l'information par courriel Merci	Once your study is complete, interested in receiving the information by email Thank you
Until the state makes big decisions about the sewage problem in Burlington, and the fertilizers used by farms, people are not going to really engage. If the big elephants in the room are not addressed, mobilizing a campaign to pick up dog poop (which most people already do) just isn't going to be taken seriously. The City of Burlington needs to stop pumping human waste into the lake. Let's start there.	
Volunteer opportunities	
Vous ne mentionnez rien à propos des puits artésiens pourtant en campagne la majorité des habitations prennent leur eau de puits artésiens.	You do not mention anything about artesian wells yet in the countryside the majority of homes get their water from artesian wells.
Vt gov and its agencies are totaly ineffective in prevention of comtamination of lake champlain. All bark...no bite.	
water aquifer quantity and health, forecasts and predictions for the next few decades.	
Water quality improvements can succeed only by working together with the local residents, education, and solutions that help people. I am not interested in supporting initiatives that are radical and disregard the well being of the local people.	
Watershed quality is important and there will be a day when the quality of watersheds all over the world will be pristine and everyone will be responsible to maintain the watersheds. It will cost nothing to do this. The key is the government supporting and teaching the inhabitants. Jw.org	
We have a brook (small river) on the edge of our land. Even though we planted shrubs to limit erosion of our land, the municipality is not	

permitting us to try and re-inforce the edge so in the spring when waters come down from mountains, we're losing more and more land from erosion.. what could be done..	
We have a neighbor who, because of personal, unfriendly, neighborly reasons, dumped an enormous pile of his dog's wastes on the property line and on the seawall. I contacted local animal control who spoke to the owner, but he did not remove the waste. I contacted the Vermont ANR with photos and information. Their response was it was not an issue because it could be considered as compost. This was an unacceptable response. I posted the Lake Champlain Committee poster about "April Stools' Day" to hopefully get the message across. This person also placed a large amount on the grass area next to the roadway where many people walk, bike. I am glad your survey mentioned dog waste as we believe, if not handled/disposed of properly, it is another detrimental source of pollution to the lake. Thank you. .	
We should do more with home grey water recycling	
Well done survey. Will continue to try and protect our environment, thank you.	
what are provincial & federal governments doing to solve big local water pollution issues?	
What if anything is being done to remove existing nutrient load from vermont waters	
What is a Watershed?	
What is a watershed?	
What is being done to control spiny water fleas? The problem is getting worse!	
Why is there not more emphasis on planting, harvesting, and using plants for soil ehancement along side river and farm fields to reduce nutrient waste in waterways	
Winter webinars through either ANR or organizations like North Branch Nature Center work well for me	
Workshops, removal projects etc.	
Would like to hear about conservation conferences and on site tours we can participate in (after the border opens)	
Would like to know if picking up dog waste from an open field and forested areas really matters in terms of improving water quality of the watershed.	

Would like to receive more information (by internet) on water quality.	
yes what are you doing about stormwater runoff, and vegetative roofing systems on your million, of parking spaces and flat roofs on campus and why are you building housing on the agricultural campus rather than trees?	
youtube video	

Appendix C – Development of the Action Index

Two action indices were created to compare those to one another to assess the veracity of the methods. As the two generated similar results, one was selected for use in the report. A description of the two methods follows.

Action index 1

For the first action index, we determined the median of the sum of responses for those who answered all six questions. The median was 2. We then used that median as the surrogate value for all missing values across all six questions. That is, we filled in a value of 2 for any of the six questions that a respondent had skipped. We then summed scores for all respondents across all six questions. Finally, we determined the percent of respondents that scored each possible value in the action index. When the median of 2 was assigned to all missing values for the six questions, the action index scores and percent of respondents achieving that action level were:

0 – 11% of respondents
1 – 14%
2 – 60%
3 – 8%
4 – 4%
5 – 2%
6 – 1%

Action Index 2

For the second action index, we determined the mode (the most common value – either 1 or 0) for each of the six questions. We then inserted that value as a surrogate score for any missing answers for each of the six questions, summed the scores for each respondent, and then determined the percent of respondents for each action index score.

0 – 12% of respondents
1 – 54%
2 – 15%
3 – 10%
4 – 5%
5 – 3%
6 – 2%

The two methods produced similar results. The method in which the mode for each question was selected to present in the report.