



Strategies to Inspire Stewardship of the Lake Champlain Watershed

Voices for the Lake
Phone and Online
Survey Report

Prepared For: ECHO Lake Aquarium & Science Center

July 2010



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Executive Summary

The Voices for the Lake initiative aims to raise awareness and build community around Lake Champlain stewardship. This mixed-methods survey project contributes to that effort by identifying the ways people are likely to take action to improve water quality, determining how they get information about their communities and use social media, and establishing what outreach methods would be most effective to educate the public about water quality issues and encourage lake stewardship.

The UVM Center for Rural Studies collected data for this project through representative telephone polling and an open online survey. The telephone survey had 448 respondents and the online survey had 263 respondents.

This survey project yields new data about how people are getting information about their communities and how they use social media. This type of information is not readily available elsewhere, especially not for rural residents.

The demographic characteristics of the respondents are roughly in line with those of the state as a whole, except in the age and education level categories. Respondents for both the phone and online surveys were generally of a higher age and education level than the general population. Additionally, the online respondents were younger, less rural, had lived in Vermont for a shorter amount of time, had a larger household size, were more educated, and had a lower income than the phone respondents.

Results

Lake Issues and Solutions

- The majority of respondents cited environmental concerns as the most serious issue facing Lake Champlain in the coming decade.
- About 70 percent of all respondents attributed their concerns about the lake to water quality (mostly pollution, run-off, and algae). The second highest concern was invasive species.
- Respondents were less unified when it came to solutions; the top responses were regulation/government action, individual/ source action, education.

Taking Action

- The survey responses suggest that respondents have a high level of personal responsibility related to water quality. A majority said that property owners are responsible for the quality of the water running off their properties, that they believed they could change their neighbors' behaviors through leading by example, and that businesses should pay their employees for community service volunteer time.
- The types of action respondents said they were most likely to take were split between personal and community efforts. More than 90 percent said they were likely to make changes in their personal habits to conserve water and about 80 percent said they were likely to make improvements to their property to protect water quality. Meanwhile, about 60 percent said they were likely to participate in a community service project, attend an evening meeting on

improving water quality in their community, volunteer to help collect water samples in their community, and/or talk to a neighbor about water quality in their community.

Information

- Respondents said they preferred to learn about stormwater management and improving water quality through web sites and brochures. When asked where they would look for information about environmental issues in their communities, respondents primarily cited the Internet and newspapers. The phone respondents identified municipal sources at about the same rate as Internet sources.
- When asked what Vermont media sources they typically access to get general information about news and events in their communities, about the same number of the phone respondents cited television as print newspapers (76.3% and 75.2%, respectively). However, when asked to identify their *primary* source of information, almost double the number of people said print newspapers than said television.
- Meanwhile, the online survey respondents cited radio and print newspapers as their typical sources for information (60.7% and 57.3%, respectively), with slightly fewer mentioning television (50%) and online newspapers (44.7%). However, when asked to identify the *primary* source of information about what's going on in their communities, almost double the number of people said print newspapers than said radio. Television news and online newspapers ranked just below radio as the primary source of information.
- The majority of respondents use e-mail. About 70 percent of all respondents said they pass along online content that they like to other people and more than 80 percent said they typically view online content passed along from other people. Slightly more than a third of phone respondents used online social networking sites (mostly Facebook) and watched videos online (mostly through YouTube). This compares to two thirds of online respondents using social networking and three quarters watching videos online.

Recommendations

Lake Issues and Solutions

- The significant number of responses identifying water quality as a serious issue facing Lake Champlain indicates that there is a high level of awareness about the topic and that the general public may be open to messages targeted at improving water quality. Additional studies could reveal how the public defines “water quality” and what words would resonate in outreach related to reducing runoff and water conservation.
- In answering the open-ended question “What do you think should be done to address this issue?”, only a small percentage of the respondents referred to individual or source action (13% for phone respondents and 9% for online respondents). This indicates that more education is necessary to show the public the direct impact their actions can have.

Taking Action

- Meanwhile, respondents indicated a high level of personal accountability when asked if they agreed or disagreed with specific statements related to responsibility for water quality. A majority agreed that individuals are responsible for the quality of the water running off their properties and said they believe they can change their neighbors’ behaviors through leading by example and that businesses should pay their employees for community service volunteer time. This may seem contradictory to their responses to the open-ended question, but it could be that respondents simply don’t recognize these actions as part of a solution to the water quality issue. This emphasizes the need for outreach strategies that illustrate the direct impact of people’s actions.
- Respondents indicated that they were more likely to take action on an individual level than take part in a community effort. More attention could be placed into incentivizing the public to participate in community efforts.
- Additional studies could investigate what motivates personal behavior change in an effort to determine the right balance of information, education, incentives, and regulation.

Information

- Respondents said they preferred to learn about stormwater management and improving water quality through websites and brochures. When asked where they would look for information about environmental issues in their communities, respondents primarily cited the Internet and newspapers. The phone respondents also identified municipal sources at about the same rate as Internet sources. This indicates that there are a variety of information sources and that a multi-pronged strategy may be effective in reaching a broad population.
- The majority of respondents said they typically pass along online content that they like, and view online content passed along from other people. This data suggest that online outreach campaigns designed to be spread by e-mail may be effective. Using “share with a friend” links may be an effective way to connect people with watershed-related activities. Facebook and other social networking sites may also be good catalysts for community-based water projects.
- Differences in the demographic profiles and information sourcing trends between the phone and online respondents suggest that different outreach strategies may be effective for different groups.

Introduction

Voices for the Lake (VFL) is an ECHO Lake Aquarium and Science Center initiative to inspire Champlain Basin stewardship through social media and digital storytelling. The goal of the project is to raise awareness and build community around lake stewardship by using real stories from people who feel passionate about Lake Champlain.

The VFL outreach program includes the following online components: a Web site at www.voicesforthelake.org; a blog at voicesblog.echovermont.org; a Facebook page at www.facebook.com/voicesforthelake; a dedicated YouTube channel at www.youtube.com/user/voicesforthelake; and a Twitter feed at twitter.com/VoicesVT

As part of the project, the Center for Rural Studies at the University of Vermont implemented telephone¹ and online surveys to learn more about Vermonter's thoughts and ideas regarding Lake Champlain, how they use social media, get information, and spend their time.

The objectives of the surveys are to identify the ways that people can take action to improve water quality, determine how they get information about their communities and use social media, and establish what outreach methods would be most effective to educate the public about water quality issues and encourage lake stewardship.

This report details the results from both the telephone and online surveys.

- **Section 1: Lake Issues** discusses respondents' opinions about the most serious issues facing Lake Champlain in the coming decade and what they think should be done to address these issues, as well as their opinions about responsibility with respect to water quality.
- **Section 2: Taking Action** outlines the measures people have taken, the measures they are likely to take to promote lake stewardship, and how they currently spend their time.
- **Section 3: Information** details how people choose to get information about their communities and use social media,
- **Section 4: Respondent Profile** describes the demographic makeup of the survey respondents.

¹ The full telephone survey results (margin of error +/- 4.5% at a confidence interval of 95%) are detailed in "Strategies to Inspire Stewardship of the Lake Champlain Watershed: Voices for the Lake Telephone Survey Report" available online at: http://www.uvm.edu/crs/reports/2009/ECHO_PhoneSurvey_10.pdf

Telephone Survey

The telephone polling was conducted from Oct. 5 to Oct. 15, 2009 at the University of Vermont between the hours of 10 a.m. and 9 p.m. on weekdays using computer-aided telephone interviewing (CATI). A random sample for the poll was drawn from a Vermont phone list that is updated quarterly. Vermont residents over the age of 18 from Addison, Chittenden, Franklin, Grand Isle, Lamoille, Rutland, and Washington counties were interviewed.

There were 448 respondents to the telephone survey. Since the telephone numbers were randomly selected, the results can be generalized to the population as a whole. The results based on a sample of this size have a confidence interval of 95 percent with a margin of error of plus or minus 4.5 percent. This means that 95 percent of the time, using the same methods, Vermonters will answer any question from this survey within a 9 percent total range of the responses recorded for the phone survey.

The survey contained 53 content questions and 13 demographic questions. See Appendix 4 for the complete telephone survey script.

Fifty-one of the content questions were multiple choice, Likert scale, and short answer. These were coded according to established response categories. Quantitative data were analyzed using Microsoft Excel 2007 and the Statistical Package for the Social Sciences (SPSS) 17.0. P values less than or equal to .10 were deemed significant.

Two of the content questions were open ended, meaning the respondents could answer however they liked. Qualitative (open-ended) data were analyzed by two independent coders, who developed categories based on the responses, then collapsed the categories into broader themes. Their results were then compared and re-evaluated.

Additional content analysis for the open-ended responses was performed using an online text analysis utilities www.online-utility.org and www.wordle.com, with non-content words such as “and,” “in,” “the,” etc., removed.

This telephone survey is a statistically representative of households with landline telephones. According to recent estimates, only 5.1 percent of Vermont households have at least one wireless cellular phone, but no landline telephone. As a state, Vermont has the lowest level of “wireless-only” households in the country.²

Full results of the telephone survey are detailed in the “Strategies to Inspire Stewardship of the Lake Champlain Watershed: Voices for the Lake Telephone Survey Report.” It is online at http://www.uvm.edu/crs/reports/2009/ECHO_PhoneSurvey_10.pdf

² Blumberg et al. (2009). Wireless Substitution: State-level Estimates from the National Health Interview Survey, January - December 2007. National Health Statistics Report, 14.

Online Survey

The online survey was conducted from January 8 to February 1, 2010 using Survey Monkey (Professional Account). Participants were recruited through the Voices for the Lake blog, Facebook page, Twitter, and e-mail. There were 236 respondents to the online survey.

A gift package consisting of an ECHO Small Family Membership, ECHO tote bag, and ECHO travel mug (total value of \$125) was offered as an incentive to survey participants. Participants were given the option of including their e-mail address at the end of the survey to be entered in the gift drawing.

The survey contained the same 53 content questions and 13 demographic questions as the telephone survey, and one additional content question (“Do you own or rent your home?”). Fifty-two of the content questions were multiple choice, Likert scale, and short answer. These were coded according to established response categories. Quantitative data were analyzed using Microsoft Excel 2007 and the Statistical Package for the Social Sciences (SPSS) 17.0.

Two of the content questions were open ended, meaning the respondents could answer however they liked. Qualitative (open-ended) data were analyzed by two independent coders, who developed categories based on the responses, then collapsed the categories into broader themes. Their results were then compared and re-evaluated. Additional content analysis for the open-ended responses was performed using the online text analysis utility www.wordle.com.

The question order for the online survey differed from the phone survey. See Appendix 5 for the complete online script.

The online survey was posted on a public site and was open to anyone with computer access. Since the sampling was not random, the results from the online survey pertain to the actual survey respondents, and cannot be generalized to the population as a whole.

Section 1: Lake Issues and Solutions

Overview

The majority of respondents cited environmental concerns when asked the open-ended question “What do you feel is the most serious issue facing Lake Champlain in the coming decade?” Their full responses were categorized by content, then collapsed into broader themes.

For example, responses that included “the lake is dirty,” “pollution,” “algae,” or “run-off from farms” were all grouped into the “water quality” category and responses that included “lamprey,” “milfoil,” or “zebra mussels” were grouped into the “invasive species category.” See Table 2 and Figures 3 and 4 for a breakdown of the response categories.

About 70 percent of all respondents attributed their concerns about the lake to water quality (mostly pollution, run-off, and algae). The second highest concern was invasive species.

Slightly more than half of **phone respondents** and slightly less than half of **online respondents** disagreed with the statement “Lake Champlain is clean.” Less than a third agreed. See Table 1.

Respondents were less unified when it came to solutions. When asked the open-ended question “What do you think should be done to address this issue?” **phone respondents** cited regulation/ government action and individual/ source action as the two top solutions. **Online respondents** cited regulation/ government action and education as the top ways to address the issues.

About 12 percent of **phone respondents** and 5 percent of **online respondents** said the solution was simply to “clean it up,” but didn’t offer any suggestion for ways to do so. Similarly, some respondents alluded to work being done by unnamed entities (“They are doing something already, aren't they?”) or expressed skepticism about proposed solutions (“I really don't know. I hear a ton of ideas from environmentalists; none of them make enough sense or solve the problem. It seems that it's just to give a lot of people jobs.”).

Of those who identified regulation or other government action as a solution, 12% suggested coordination with New York state (and a few of these also mentioned Quebec) for clean-up and policy work.

Meanwhile, about 10 percent of **phone respondents** identified research as a solution, compared to about 6 percent of **online respondents**. Also, nearly 25 percent of **online respondents** identified education as a solution, compared to just under eight percent of **phone respondents**. Eight percent of all respondents mentioned farms. A few said that farmers have been unfairly targeted and that they need more support. The rest of the farm mentions were split between controlling agricultural runoff and enacting/enforcing agricultural regulations. See Figures 3-6 for detailed breakdown of responses.

The following quotes illustrate the broad range of responses to “What do you think should be done to address this issue?”

- “If we properly educate people around the area, then we will take care of [the lake]. I don't think scare tactics work – people ignore that – we just need education on what we can do to help.”
- “More action, less studies. Spending too much time and money on the studies and not enough on the action.”
- “Collaboration between state officials, local watershed groups, and people who live and recreate on the lake and on the watersheds.”
- “I don't think it's possible. First of all, I think that farmers have been targeted too much. And I think that more attention should be paid the cities, towns and residential.”

In Their Words

An informal text analysis of responses to the open-ended questions “What do you feel is the most serious issue facing Lake Champlain in the coming decade?” and “What do you think should be done to address this issue?” illustrates the responses and the frequency certain words were mentioned. For this analysis, responses to each question for both the **phone** and **online** surveys were combined. Non-content words such as “and,” “in,” “the,” etc., were removed and word categories were collapsed. For example, all instances of the words “pollute” and “polluting” were changed to “pollution” to strengthen the frequency count. Figures 1 and 2 show the word frequencies; the larger the font size, the more often the word occurred. See Figures 3-6 for a formal, inductive content analysis of the same responses.

Figure 1
What do you feel is the most serious issue facing Lake Champlain in the coming decade?

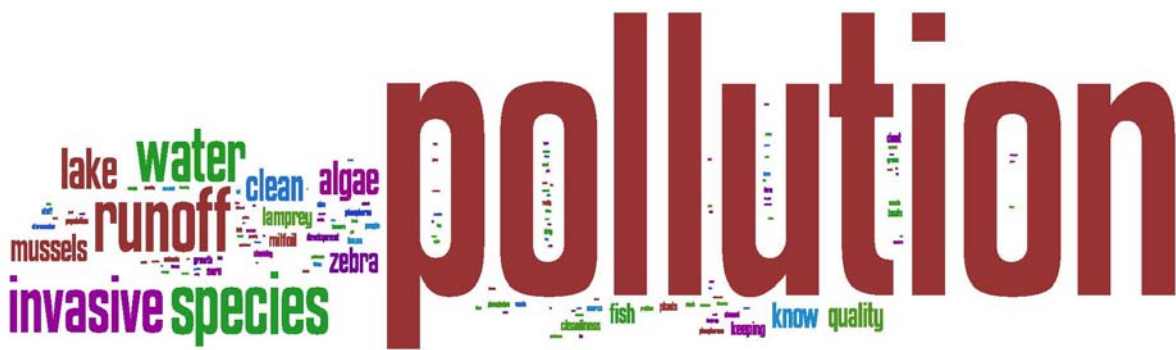


Figure 2
What do you think should be done to address this issue?



Table 1
Lake Champlain is clean

| | Online | Phone |
|----------------------------|---------|---------|
| Strongly Agree | 1.5% | .7% |
| Agree | 18.6% | 27.6% |
| Neither Agree nor Disagree | 31.4% | 19.1% |
| Disagree | 38.7% | 42.8% |
| Strongly Disagree | 9.8% | 9.9% |
| Total Responses | 204 | 435 |
| | (N=236) | (N=448) |

Table 2
What do you feel is the most serious issue facing Lake Champlain in the coming decade?

| Issue | Online | Phone |
|-------------------------|---------|---------|
| Water Quality | 70.0% | 69.4% |
| Invasive Species | 15.9% | 15.6% |
| Development and Overuse | 1.1% | 3.1% |
| Fish/Wildlife Issues | 2.2% | 1.6% |
| Global Warming | 2.7% | 0% |
| Boats | 0.5% | 0% |
| Other | 2.7% | 4.5% |
| Don't know | 3.3% | 5.8% |
| Total Responses | 182 | 448 |
| | (N=236) | (N=448) |

Table 3
What do you think should be done to address this issue?

| Solution | Online | Phone |
|---------------------------------------|--------|-------|
| Regulation & Government Action | 24.7% | 17.0% |
| Individual & Source Action | 8.8% | 12.7% |
| Unspecified Action "Just Clean It Up" | 4.7% | 11.5% |
| Research | 5.9% | 9.7% |
| Education | 24.7% | 7.7% |
| Boat-related | 0.6% | 3.6% |
| Community Action | 2.9% | 2.5% |
| Funding | 0% | 2.5% |
| Other | 8.8% | 6.6% |
| Don't know | 17.1% | 26.2% |
| Total Responses | 170 | 442 |

The content analysis of the open ended responses shows the depth and breadth of the answers. The figures below show a detailed comparison of the response categories from the phone and online responses. This formal, inductive analysis corroborates the informal, visual analysis illustrated in Figures 1 and 2.

Figure 3
What do you feel is the most serious issue facing Lake Champlain in the coming decade? (phone survey)

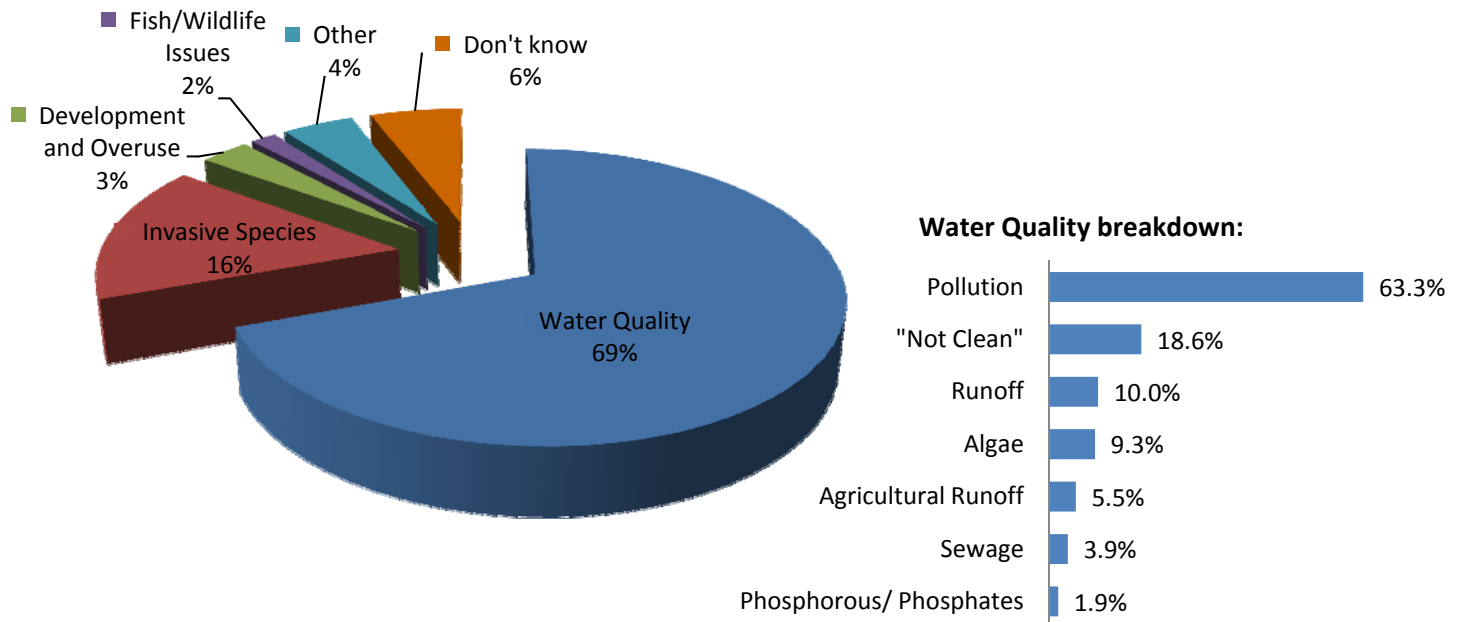


Figure 4
What do you feel is the most serious issue facing Lake Champlain in the coming decade? (online survey)

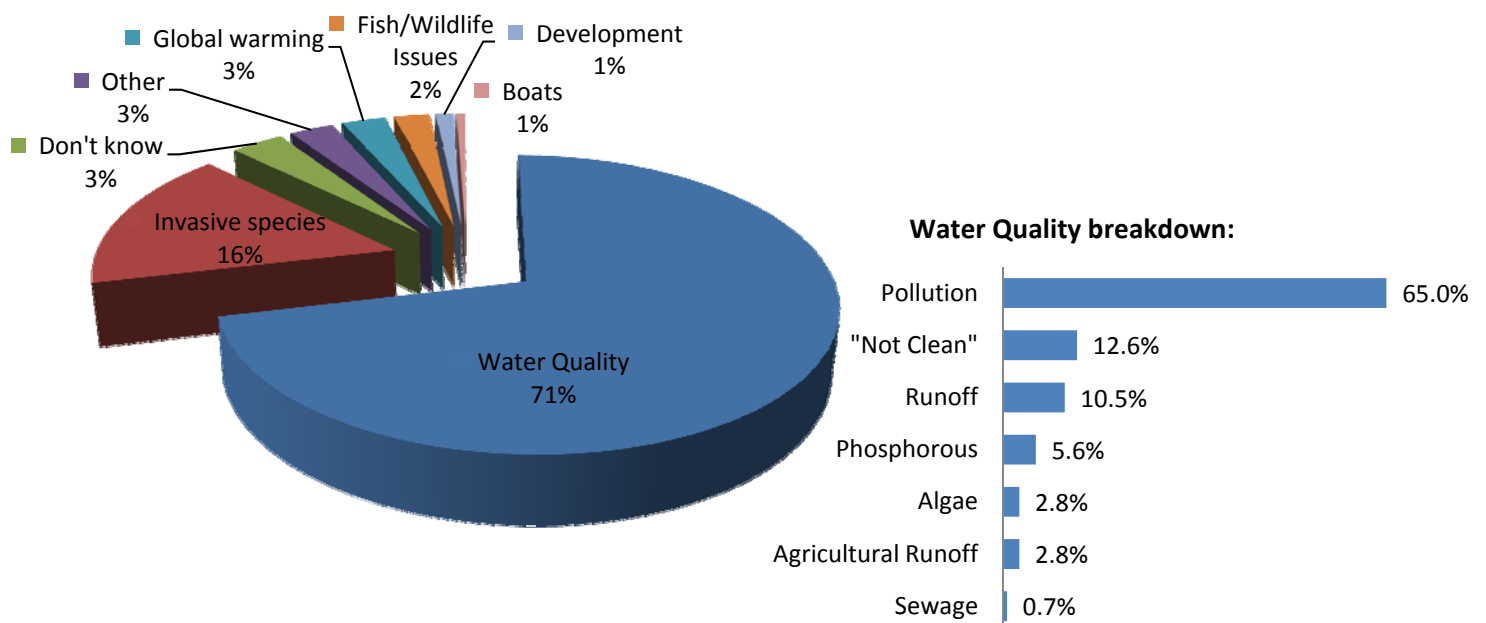


Figure 5
What do you think should be done to address this issue? (phone survey)

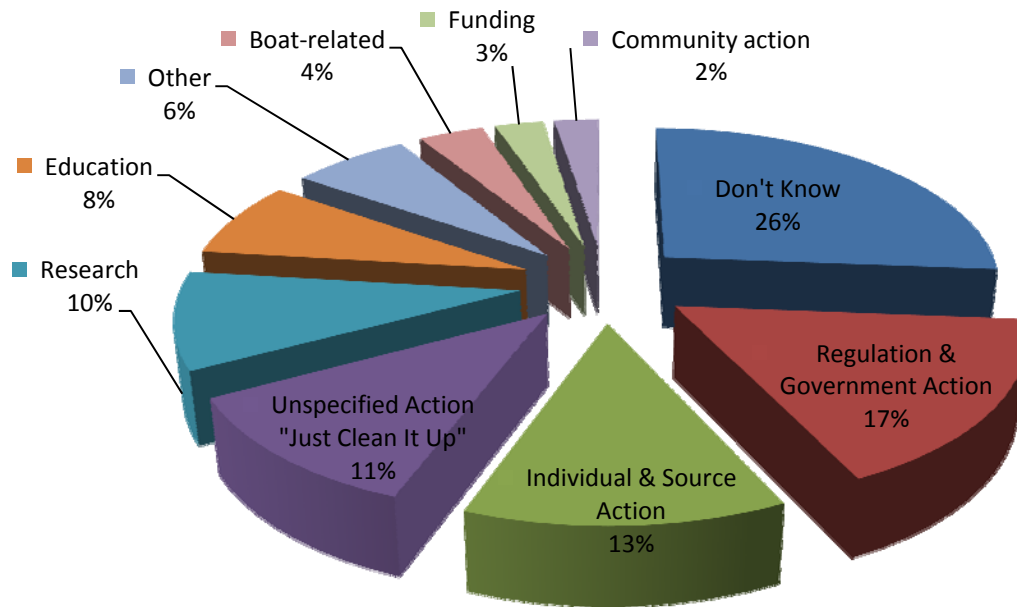
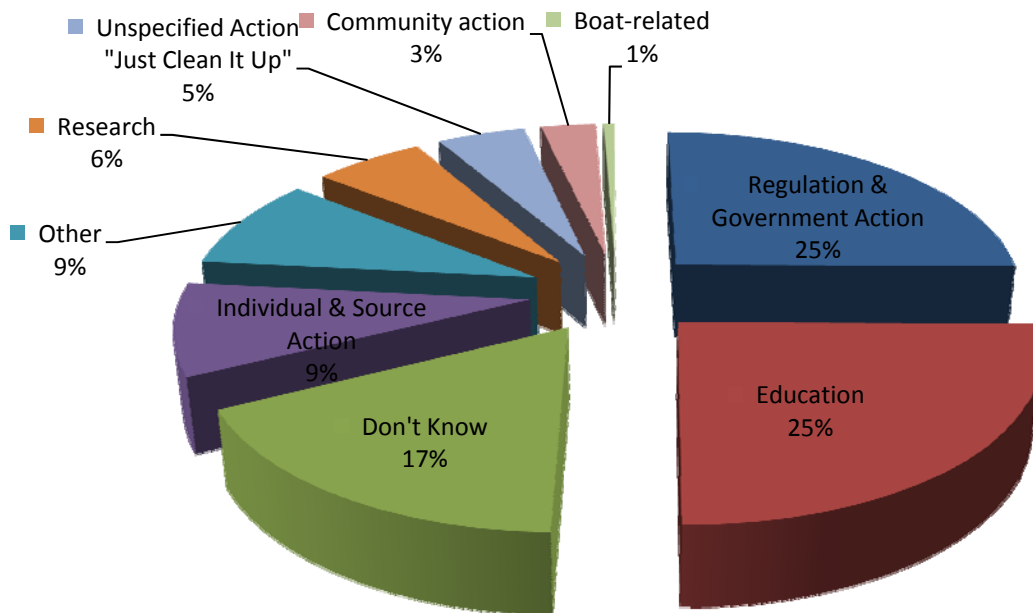


Figure 6
What do you think should be done to address this issue? (online survey)



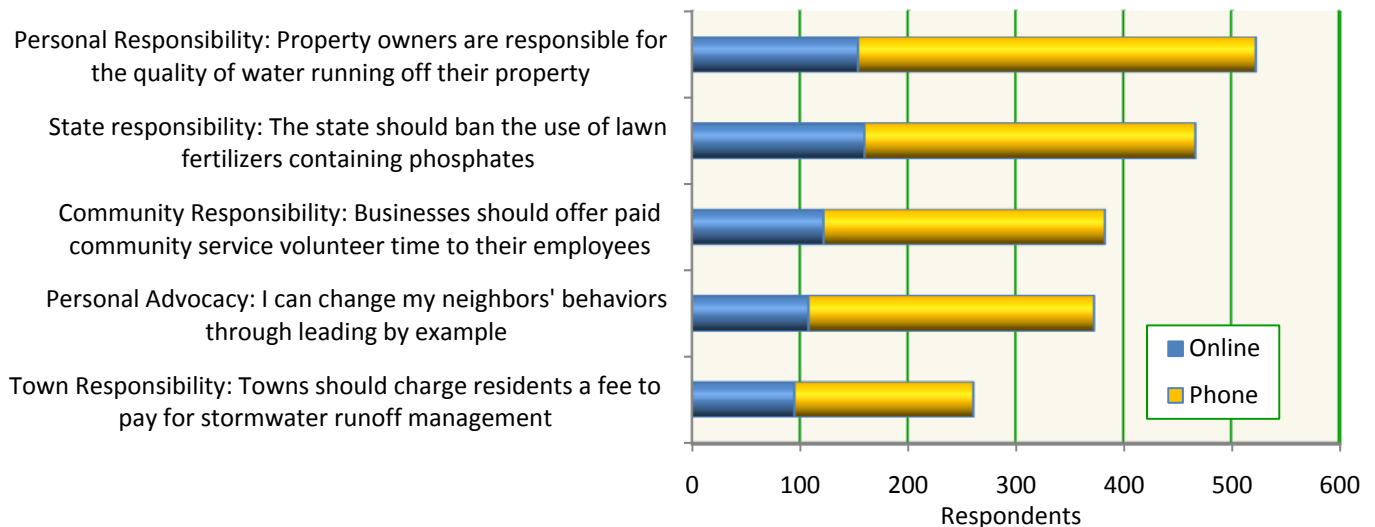
Who is Responsible?

Respondents were asked if they agreed or disagreed with several statements related to personal responsibility for water quality. These questions indicate a baseline for the public’s opinion about their personal, business, municipal, and state responsibilities with respect to water quality.

Responses indicate a high level of personal responsibility related to water quality, which suggests that respondents are inclined to take action. A majority agreed with the statements that property owners are responsible for the quality of the water running off their properties, that they could change their neighbors’ behaviors through leading by example, and that businesses should pay their employees for community service volunteer time. Meanwhile, fewer respondents said that towns should charge a fee to pay for stormwater runoff management. This could indicate that they felt towns were less responsible, or that they were less in favor of having to pay a fee.

Comparing the total combined “Strongly Agree” and “Agree” responses from the **phone** and **online** surveys shows where respondents prioritize some of the responsibilities with respect to water quality. See Appendix 1 for detailed responses to each question.

Figure 7
Responsibility for water quality



Section 2: Taking Action

Action Taken

When asked to respond positively or negatively to statements about their behavior, respondents said they had performed a variety of activities related to water quality. The following list shows the percent of **online** and **phone** respondents who said that they had done each activity.

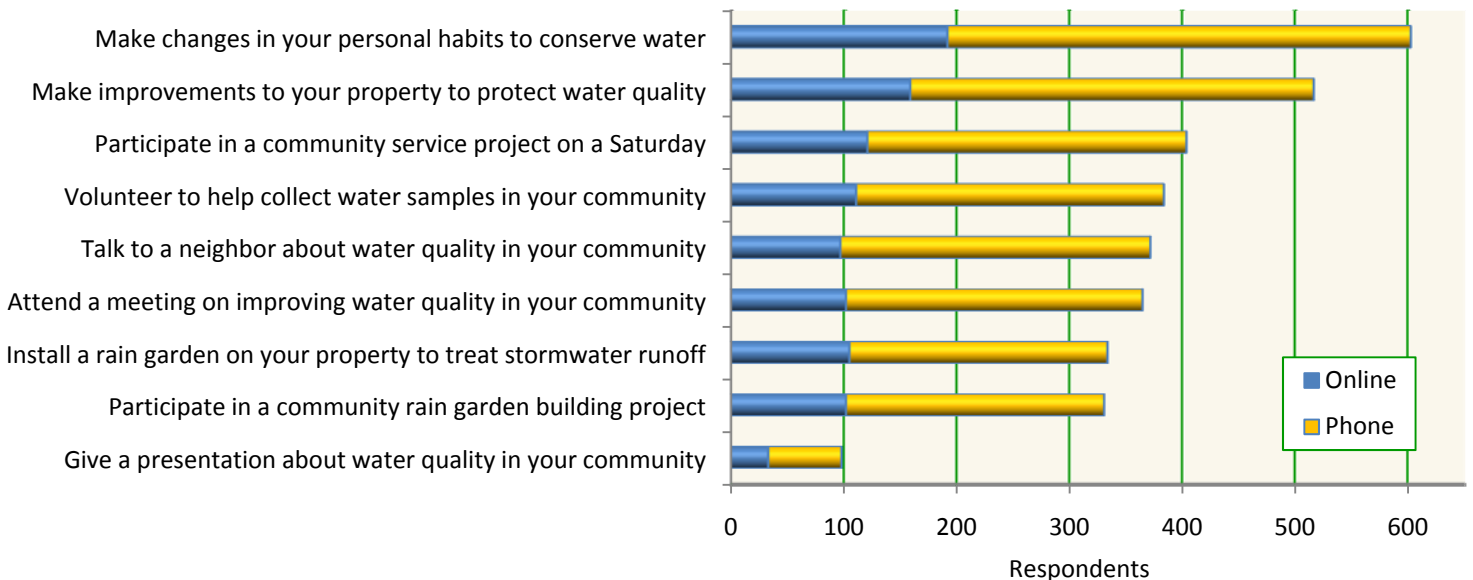
Table 4
Say yes if you have ever done any of the following activities:

| | Online | Phone |
|---|---------|---------|
| Limited the length of a shower to conserve water | 88.2% | 82.6% |
| Washed a car on a lawn or at a commercial car wash instead of a driveway | 86.6% | 71% |
| Performed a water-quality improvement project (rain garden, planting trees) | 35.3% | 50% |
| Talked to a neighbor about water quality | 36.3% | 34.6% |
| Collected water samples | 24.1% | 27.5% |
| Attended a meeting about water quality | 26.1% | 25.7% |
| Used a phosphate-based fertilizer on your lawn | 17% | 14.3% |
| Total Responses | 203 | 432 |
| | (N=236) | (N=448) |

Likely to Take Action

In contrast to the previous section, which detailed *actual actions*, respondents were also asked *how likely they would be to take action* in the future. Respondents were given a list of activities related to water quality and were asked to state how likely they were to do each activity. Figure 8 shows the combined “very likely” and “likely” responses for the **online** and **phone** responses. See Appendix 2 for detailed responses to each question.

Figure 8
State how likely you would be to do each of the following:



Time use

In order to determine how people are spending their time, respondents were asked approximately how many hours they spend each week doing a variety of activities. Of those who spent at least some time, Table 25 shows the average time spent in each activity.

Table 5
Average number of activity hours per week

| ACTIVITY | Online | Phone |
|----------------------------------|---------------|--------------|
| Working for pay | 33.4 | 37.9 |
| Relaxing and socializing | 10.7 | 12.8 |
| Outdoor recreation | 5.1 | 8.3 |
| Education | 6.7 | 8.1 |
| Volunteering | 3.6 | 5.7 |
| Other physical fitness | 4.0 | 5.0 |
| Workshops | 1.4 | 3.4 |
| Town or city government meetings | 1.5 | 2.9 |
| Faith-based meetings and events | 2.1 | 2.4 |
| Community meetings and events | 1.8 | 2.1 |
| Political meetings and rallies | 0.9 | 1.2 |
| Commuting/ travel time | 4.6 | N/A |
| | (N=211) | (N=439) |

Section 3: Information

Outreach Preferences

In order to determine what outreach methods may be effective to inform people about water quality issues and encourage them to take action, respondents were asked to rate different modes for learning about stormwater management and improving water quality.

For the **phone respondents**, the most popular choice for learning about stormwater management was a brochure (26.4%), followed by web site (17%) and then a field trip, online video, presentation, and home video (13.2%-10.9%). However, combining the “website” and “online video” options brought the online category up to the top choice. The ranking was fairly similar for learning about changes **phone respondents** could make in their homes or on their properties to improve water quality.

For the **online respondents**, almost half of respondents preferred online information options. The most popular choice for learning about stormwater management was a website (30.5%), followed by an online video (16.7%) and then a presentation, field trip, and brochure (14.8%-11.3%).

When asked how they would prefer to learn about changes they could make in their homes or on their properties to improve water quality, **online respondents** identified web sites as their first choice (29.6%), followed by brochures (16.3%), online videos (13.3%), having someone visit their homes (11.3%) and attending a presentation (10.3%).

Table 6 & Figure 9

Of the following options, what is your top choice for how you would like to learn about stormwater management in your community?

| | Online | Phone |
|--------------|---------|---------|
| Brochure | 11.3% | 26.4% |
| Website | 30.5% | 17.3% |
| Field trip | 11.3% | 13.2% |
| Online video | 16.7% | 13.2% |
| Presentation | 14.8% | 11.8% |
| Home video | 7.4% | 10.9% |
| Home visit | 0.5% | 1.4% |
| Other | 4.9% | 4.3% |
| Total | 203 | 440 |
| | (N=236) | (N=448) |

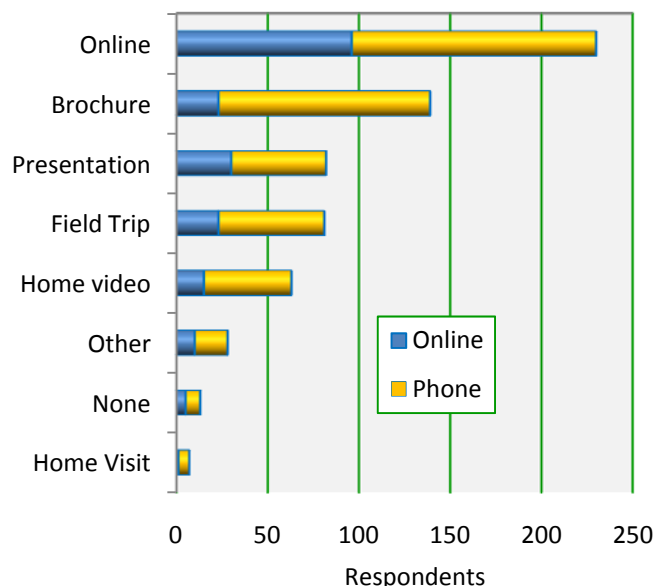
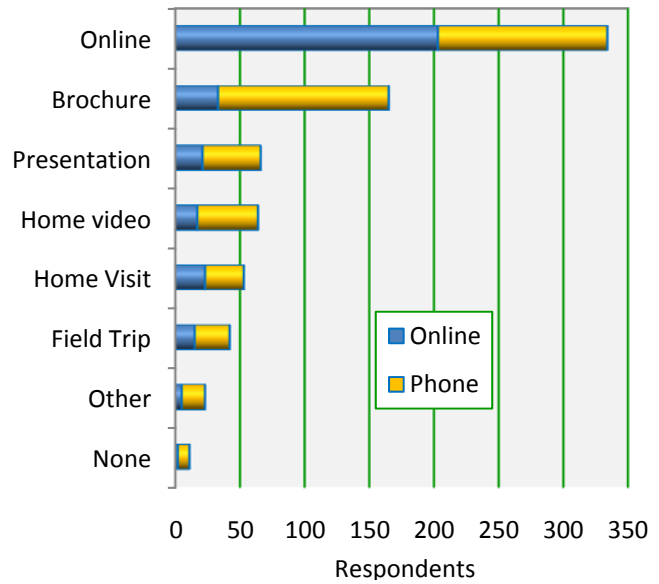


Table 7 & Figure 10

Of the following options, what is your top choice for how you would like to learn about changes you could make in your home or on your property to improve water quality?

| | Online | Phone |
|-----------------|---------|---------|
| Brochure | 16.3% | 30.1% |
| Website | 29.6% | 17.5% |
| Online video | 13.3% | 12.3% |
| Home video | 8.4% | 10.7% |
| Presentation | 10.3% | 10.3% |
| Home visit | 11.3% | 6.8% |
| Field trip | 7.4% | 6.2% |
| Other | 2.5% | 4.1% |
| None | 1% | 2.1% |
| Total responses | 203 | 439 |
| | (N=236) | (N=448) |



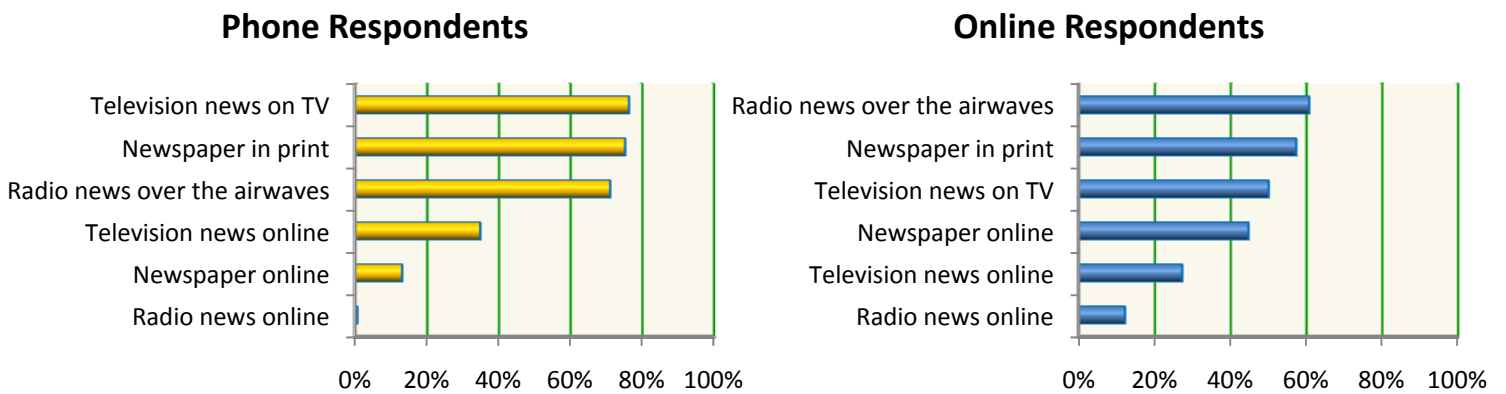
Information Sourcing: News

Respondents were asked to choose their primary news source. When asked what Vermont media sources they typically access to get general information about news and events in their communities, about the same number of the **phone respondents** cited television as print newspapers (76.3% and 75.2%, respectively). However, when asked to identify their *primary* source of information, almost double the number of people said print newspapers than said television.

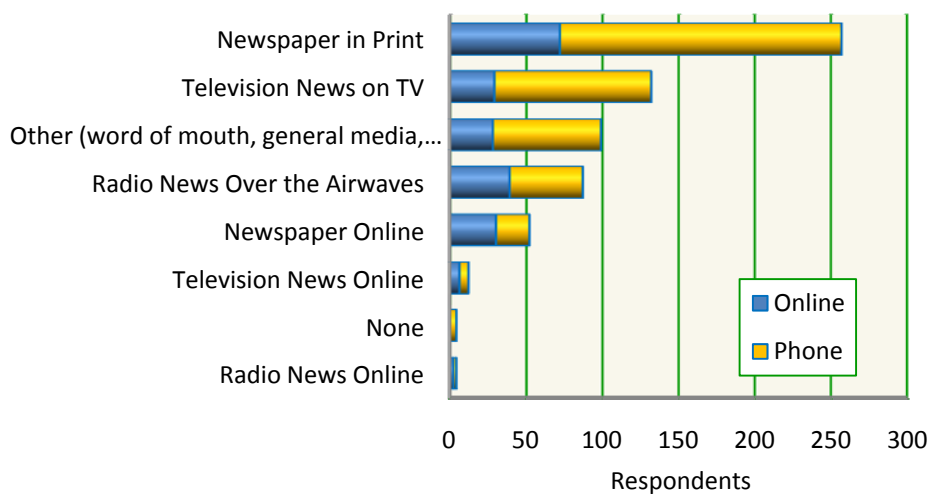
Meanwhile, the **online respondents** cited radio and print newspapers as their typical sources for information (60.7% and 57.3%, respectively), with slightly fewer mentioning television (50%) and online newspapers (44.7%). However, when asked to identify the *primary* source of information about what's going on in their communities, almost double the number of people said print newspapers than said radio. Television news and online newspapers ranked just below radio as the primary source of information.

Figure 11

Regular News Sources



Primary Source of Local News



Information Sourcing: Environmental Issues

When asked where they would look for information about environmental issues in their communities, **phone respondents** cited the Internet (36.6%), newspapers (22.5%), and municipal sources such as town hall, town web site, town official, or town board (20.5%) as the top three sources, compared to **online respondents**, who cited Internet (50.8%), newspapers (23.1%), and environmental organizations such as Vermont Natural Resources Council, Vermont Youth Conservation Corps, and Vermont Public Interest Research Group (7.2%). See Appendix 3 for detailed results.

Figure 12
Environmental Information Source : Phone Respondents

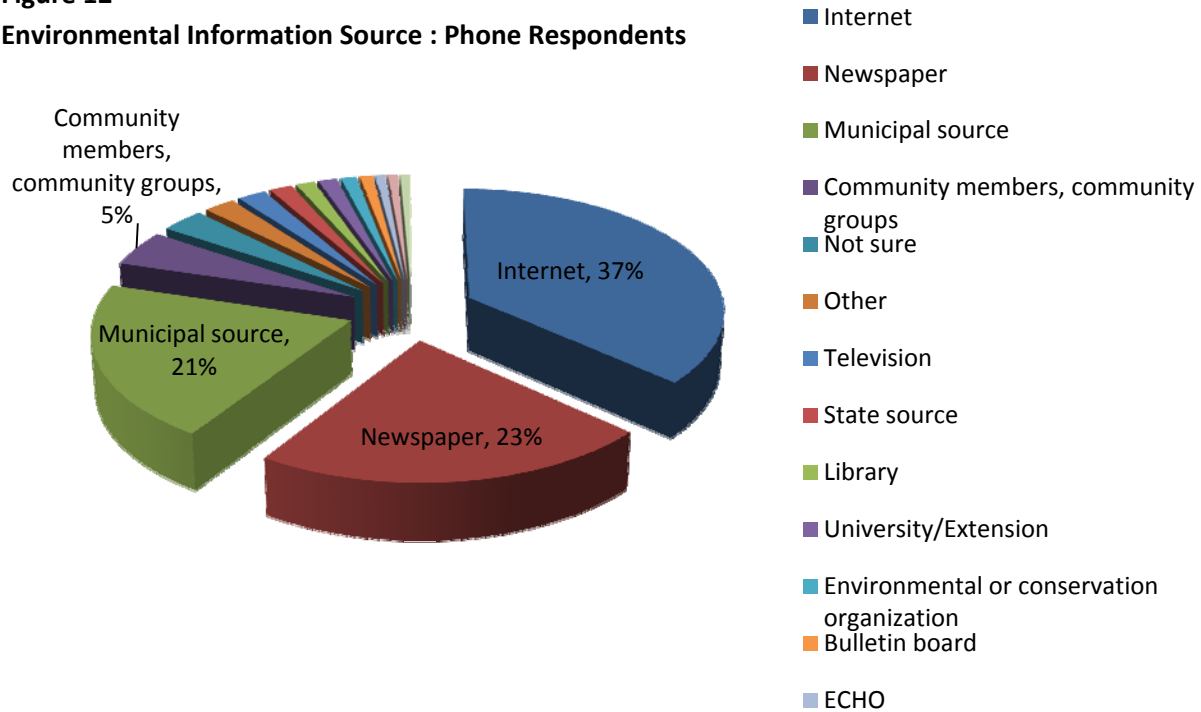
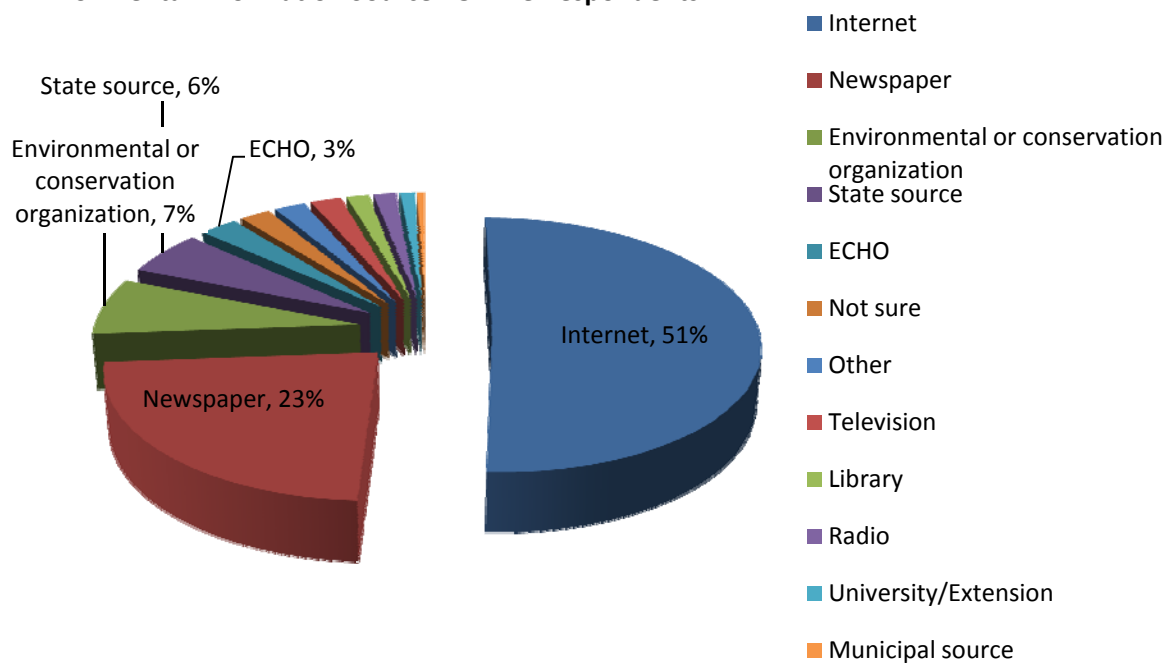


Figure 13
Environmental Information Source : Online Respondents



Social media

Since the Voices for the Lake initiative is driven by social media, it was important to understand the general public's use of e-mail, online video, and social networking tools such as Facebook, MySpace, and Twitter. The majority of **phone respondents** (73.7%) and **online respondents** (99.6%) said they used a computer for e-mail; Facebook, MySpace, or other social networking; Twitter or other blogging; or watching videos.

Slightly more than 70 percent of **phone respondents** said they pass along online content that they like to other people and 83.8 percent said they typically view online content passed along from other people. This compares to 69.9% of **online respondents** who said they pass along online content that they like to other people and 87.2% percent who said they typically view online content passed along from other people.

Slightly more than a third of **phone respondents** (115 people) who used computers said they watched videos online. This compares to three quarters (75.3%) of **online respondents**. The majority of both groups used YouTube to view the videos. The most common ways that respondents found videos of interest to them were through search engines and being sent to them from other people. More of the **online respondents** said they received videos of interest from other people, than through a search engine.

Only 22.8 percent of the **phone respondents** who are online had ever posted a video online, compared to 25.1 percent of the **online respondents**. The most common place to post was YouTube, followed by Facebook.

Only 4.6 percent of **phone respondents** who are online used Twitter, compared to 9.5 percent of the **online respondents**. The maximum number of tweets per day was 30 and the average was 3.13 for the **phone respondents**, compared to a maximum of 7 and average of 1.88 for the **online respondents**.

Slightly more than a third of **phone respondents** use Facebook , compared to two thirds of **online respondents**. The overwhelming majority of all respondents said they use Facebook for family and friend connections.

Table 11
Which of the following is the most important reason you use Facebook?

| REASON | Online | Phone |
|------------------------------------|--------|-------|
| Family and friend connections | 90.3% | 89.6% |
| Marketing business or organization | 0% | 4.8% |
| Work and professional connections | 2.8% | 2.4% |
| Organization connections | 1.4% | 1.6% |
| News and information | 1.4% | 0% |
| Other | 4.2% | 1.6% |
| Total | 144 | 125 |

Section 4: Respondent Profile

The demographic characteristics of the respondents are roughly in line with those of the state as a whole, except in the age and education level categories.³ Respondents for both the phone and online surveys were generally of a higher age and education level than the general population. Additionally, the **online respondents** were younger, less rural, had lived in Vermont for a shorter amount of time, had a larger household size, were more educated, and had a lower income than the **phone respondents**.

Figure 14 compares the **phone** and **online respondents**. Figure 14 shows the U.S. Census statistics. (The U.S. Census does not track average years in Vermont.)

Figure 14

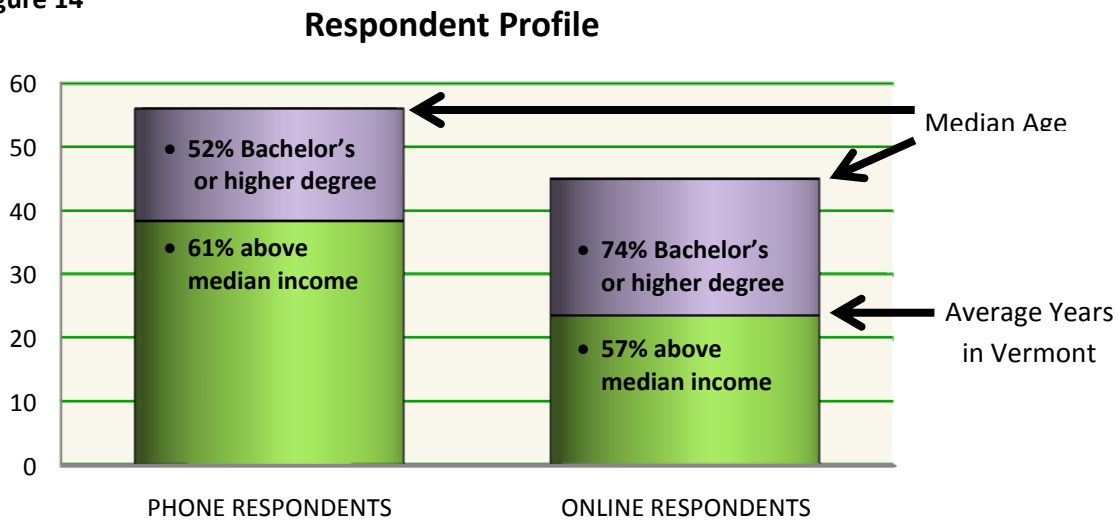
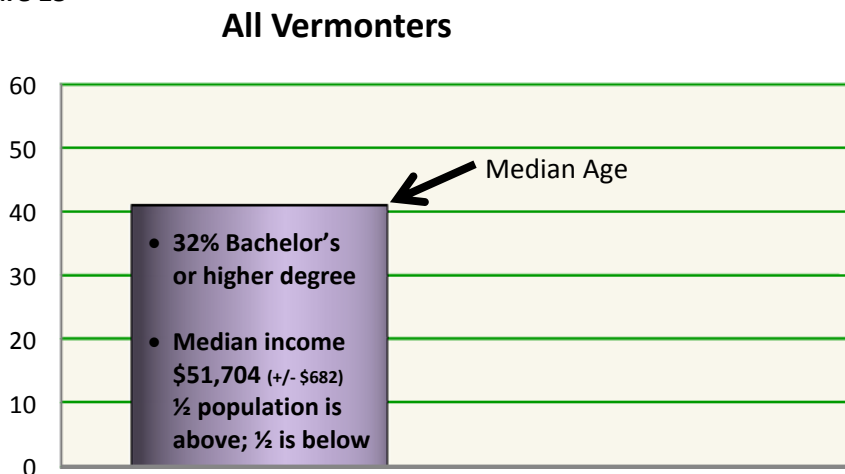


Figure 15



The age of the **phone respondents** ranged from 19 to 90, with a median age of 56. The age of the **online respondents** ranged from 14 to 81, with a median age of 45. The median age of Vermonters is 41 years. More women than men answered the survey (**phone respondents**: 63.5% female, 36.5% male; **online**

³ U.S. Census Bureau, 2006-2008 American Community Survey.

respondents: 77.2% female, 22.3% male, 0.5% other). Statewide, the population is 51 percent female and 49 percent male.

Phone respondents reported an average of 2.6 household members, with a range of one to 14, and the average number of household members under the age of 18 of .6, with a range of zero to eight. **Online respondents** reported an average of 3.2 household members, with a range of one to nine, and the average number of household members under the age of 18 of 1.8, with a range of zero to seven. The average household size for the state is 2.4 people.

The total number of years that **phone respondents** reported having lived in Vermont, including all earlier periods, ranged from less than one to 90 years, with an average of 38.3 years. The total number of years that **online respondents** reported having lived in Vermont, including all earlier periods, ranged from less than one to 66 years, with an average of 23.5 years.

Almost all the respondents had graduated high school and more than half had Bachelor’s or higher degrees. According to the U.S. Census, 89.8 percent of Vermonters aged 25 and older are high school graduates and 32.4 percent have Bachelor’s or higher degree (see Table 12).

Table 12
Education level

| | Online | Phone |
|----------------------------------|---------|---------|
| <9th grade | 0.5% | 0.9% |
| 9-12 grade (no diploma) | 0% | 2.5% |
| High school graduate (incl. GED) | 3.5% | 21.2% |
| Some college (no degree) | 14.1% | 12.5% |
| Associates/technical | 8.1% | 11.4% |
| Bachelor | 34.8% | 28.9% |
| Graduate/professional | 38.9% | 22.6% |
| Total Responses | 198 | 439 |
| | (N=236) | (N=448) |

More than half of respondents had household incomes roughly above the median for Vermont.⁴ The **phone respondents** reported higher income than the **online respondents** (see Table 27). Just under 10 percent of **phone respondents** (9.4%) said that their jobs were related to water quality, compared to 4.1% of **online respondents**.

Table 13
Income

| | Online | Phone |
|-------------------|---------|---------|
| <\$25,000 | 11.8% | 13.0% |
| \$25,000-\$49,999 | 17.6% | 25.9% |
| \$49,999-\$74,999 | 22.5% | 24.4% |
| \$75,000-\$99,999 | 18.2% | 18.1% |
| >\$100,000 | 16.6% | 18.7% |
| Total Responses | 162 | 386 |
| | (N=236) | (N=448) |

⁴ U.S. Census Bureau, 2006-2008 American Community Survey (\$51,704 with a +/- \$682 margin of error of, 2008 inflation-adjusted dollars).

The majority of **phone respondents** said they lived in rural areas (62.5%), compared with 21.4 percent in a suburban areas and 13.3 percent in urban areas (see Table 31). The **online respondents** had a higher level of suburban and urban residence (32.3% and 21%, respectively) and a lower level of rural residence (44%).

Just over 80 percent of **online respondents** owned their homes. (This question was not asked of the phone survey respondents.)

Table 14
Do you live in a rural, suburban, or urban area?

| | Online | Phone |
|-----------------|---------|---------|
| Rural | 44.1% | 62.5% |
| Suburban | 32.3% | 24.1% |
| Urban | 21% | 13.3% |
| Total Responses | 195 | 435 |
| | (N=236) | (N=448) |

The phone survey used a random sample of numbers from the sampling area (Addison, Chittenden, Franklin, Grand Isle, Lamoille, Rutland, and Washington counties). The proportion of numbers from each county was determined by population size and the proportion of **phone respondents** was roughly in line with that of the population for each county. The **online respondents** were self-selecting. In addition to the counties listed below, **online respondents**, reported living in Clinton, Putnam, and Saratoga counties, N.Y; Quebec, Hampshire County, Mass., and Connecticut.

Table 15
Respondent town of residence by county

| COUNTY | Online | Phone |
|-----------------|---------|---------|
| Addison | 5.6% | 14.4% |
| Bennington | 1% | N/A |
| Caledonia | 0.5% | N/A |
| Chittenden | 60.2% | 40.6% |
| Essex | 1.5% | N/A |
| Franklin | 5.1% | 12.9% |
| Grand Isle | 1% | 3.8% |
| Lamoille | 3.6% | 3.2% |
| Orange | 2% | N/A |
| Orleans | 0% | N/A |
| Rutland | 4.1% | 8.6% |
| Washington | 7.7% | 16.3% |
| Windham | 0% | N/A |
| Windsor | 1% | N/A |
| Other | 6.6% | N/A |
| Total Responses | 196 | 443 |
| | (N=236) | (N=448) |

Discussion

The significant number of responses identifying water quality as a serious issue facing Lake Champlain indicates that there is a high level of awareness about the topic and that the general public may be open to messages targeted at improving water quality. Additional studies could reveal how the public defines “water quality” and what words would resonate in outreach related to reducing runoff and water conservation.

In answering the open-ended question “What do you think should be done to address this issue?”, only a small percentage of the solutions referred to individual or source action (13% for phone respondents and 9% for online respondents). This indicates that more education is necessary to show the public the direct impact their actions can have.

Meanwhile, respondents indicated a high level of personal accountability when asked if they agreed or disagreed with specific statements related to responsibility for water quality. A majority agreed that individuals are responsible for the quality of the water running off their properties and said they believe they can change their neighbors’ behaviors through leading by example, and that businesses should pay their employees for community service volunteer time. At first blush, this may seem contradictory to their responses to the open-ended question, but it could be that they simply don’t recognize these actions as part of a solution to the water quality issue. This emphasizes the need to illustrate the direct impact of people’s actions.

Additional studies could investigate what motivates personal behavior change in an effort to determine the right balance of information, education, incentives, and regulation.

Respondents indicated that they were more likely to take action on an individual level than take part in a community effort. More attention could be placed into incentivizing the public to participate in community efforts.

Respondents said they preferred to learn about stormwater management and improving water quality through websites and brochures. When asked where they would look for information about environmental issues in their communities, respondents primarily cited the Internet and newspapers. The phone respondents also identified municipal sources at about the same rate as Internet sources. This indicates that there are a variety of information sources and that a multi-pronged strategy may be effective in reaching a broad population.

The majority of respondents said they typically pass along online content that they like, and view online content passed along from other people. This data suggest that online outreach campaigns designed to be spread by e-mail may be effective. Using “share with a friend” links may be an effective way to connect people with watershed-related activities. Facebook and other social networking sites may also be good catalysts for community water projects.

Differences in the demographic profiles and information sourcing trends between the phone and online respondents suggest that different outreach strategies may be effective for different groups.

These data and outreach recommendations should be considered in the context of Vermont Internet use and broadband availability.

For more than a decade, the Center for Rural Studies *Vermont Poll* has collected data on computer ownership and Internet connectivity among Vermont households.⁵ The percentage of households with computers has held steady just above 80% for several years and household Internet connectivity has risen to nearly match computer ownership. Overall, 85.5% of Vermont households connected to the Internet have broadband in 2010. However, rural households are also less likely to have broadband available to them (77%) than urban and suburban households (both 83%).

Despite the increase in household broadband, there is still evidence of a digital divide. According to the 2010 *Vermont Poll*, 57% of responding households making less than \$25,000 a year have computers, compared to 90% of households making more than \$25,000. Households making less than \$25,000 that do have computers are also slightly less likely to have Internet than those households making more.

⁵ Sawyer, W. (2010). Results and Updates from Vermont Poll 2010. University of Vermont Center for Rural Studies.

Appendix 1

Who is Responsible?

Respondents were asked to indicate their level of agreement with a series of statements related to responsibility for water quality. The following tables detail their answers, comparing the phone and online responses.

Table 1a
Property owners are not responsible for the quality of the water running off their property

| | Online | Phone |
|----------------------------|---------|---------|
| Strongly Agree | 6.4% | 1.4% |
| Agree | 6.4% | 8.7% |
| Neither Agree nor Disagree | 11.3% | 5.7% |
| Disagree | 37.9% | 45.7% |
| Strongly Disagree | 37.9% | 38.6% |
| Total Responses | 203 | 438 |
| | (N=236) | (N=448) |

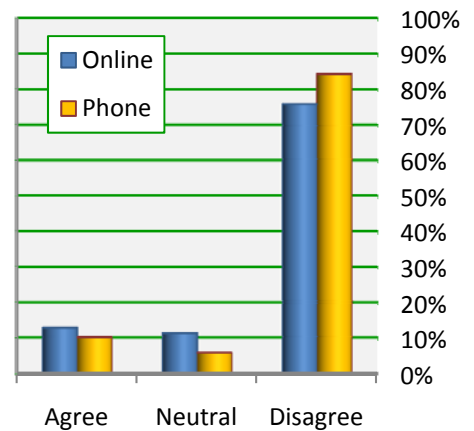


Table 2a
I can change my neighbors' behaviors through leading by example

| | Online | Phone |
|----------------------------|---------|---------|
| Strongly Agree | 15.6% | 14.4% |
| Agree | 37.1% | 45.4% |
| Neither Agree nor Disagree | 22.4% | 15.3% |
| Disagree | 21.0% | 19.2% |
| Strongly Disagree | 3.9% | 5.6% |
| Total | 205 | 443 |
| | (N=236) | (N=448) |

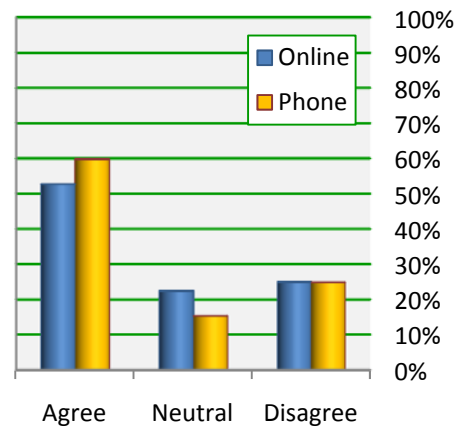


Table 3a
I think businesses should offer paid community service volunteer time to their employees

| | Online | Phone |
|----------------------------|---------|---------|
| Strongly Agree | 26.0% | 16.3% |
| Agree | 33.8% | 43.7% |
| Neither Agree nor Disagree | 27.9% | 13.1% |
| Disagree | 8.3% | 22.8% |
| Strongly Disagree | 3.9% | 4.1% |
| Total Responses | 204 | 435 |
| | (N=236) | (N=448) |

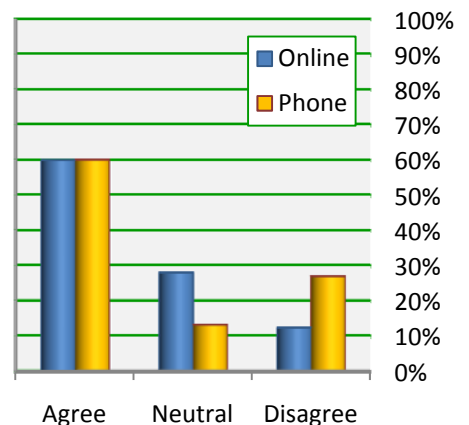


Table 4a
Towns should charge residents a fee to pay for stormwater runoff management

| | Online | Phone |
|----------------------------|---------|---------|
| Strongly Agree | 12.7% | 3.2% |
| Agree | 33.8% | 35.2% |
| Neither Agree nor Disagree | 33.8% | 21.3% |
| Disagree | 13.7% | 30.3% |
| Strongly Disagree | 5.9% | 10.0% |
| Total Responses | 204 | 432 |
| | (N=236) | (N=448) |

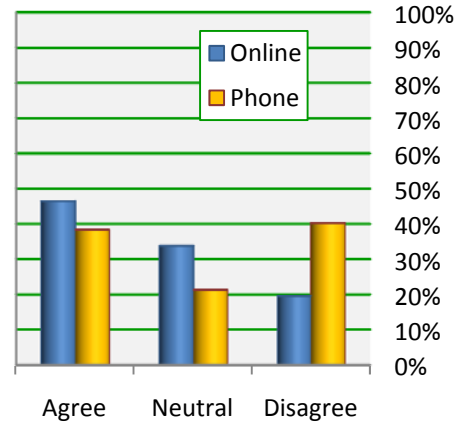
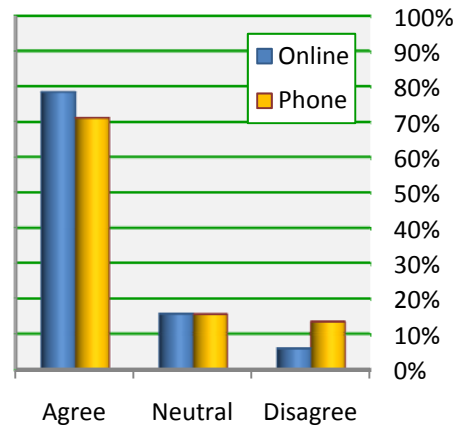


Table 5a
The state should ban the use of lawn fertilizers containing phosphates

| | Online | Phone |
|----------------------------|---------|---------|
| Strongly Agree | 48.5% | 21.8% |
| Agree | 29.9% | 49.3% |
| Neither Agree nor Disagree | 15.7% | 15.5% |
| Disagree | 3.4% | 11.1% |
| Strongly Disagree | 2.5% | 2.3% |
| Total Responses | 204 | 432 |
| | (N=236) | (N=448) |



Appendix 2

Likely to Take Action

Respondents were asked how likely they would be to take action in the future. Respondents were given a list of activities related to water quality and were asked to state how likely they were to do each activity. The following tables detail their answers, comparing the phone and online responses.

Table 6a
Participate in a community service project on a Saturday

| | Online | Phone |
|-----------------------------|---------|---------|
| Very Likely | 13.2% | 15.1% |
| Likely | 46.1% | 48.6% |
| Neither Likely nor Unlikely | 24.5% | 11.5% |
| Unlikely | 11.3% | 17.8% |
| Very Unlikely | 4.9% | 7% |
| Total Responses | 204 | 444 |
| | (N=236) | (N=448) |

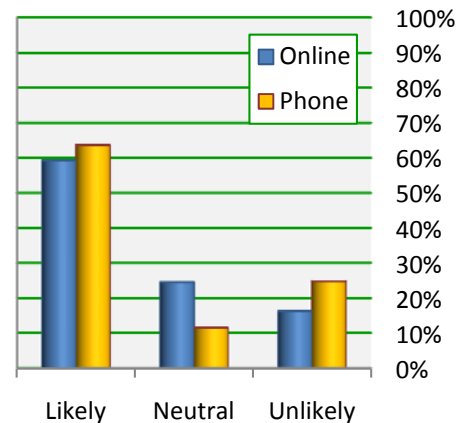


Table 7a
Attend an evening meeting on improving water quality in your community

| | Online | Phone |
|-----------------------------|---------|---------|
| Very Likely | 12.3% | 13.3% |
| Likely | 37.7% | 46.0% |
| Neither Likely nor Unlikely | 22.1% | 9.7% |
| Unlikely | 22.1% | 24.8% |
| Very Unlikely | 5.9% | 6.1% |
| Total Responses | 204 | 443 |
| | (N=236) | (N=448) |

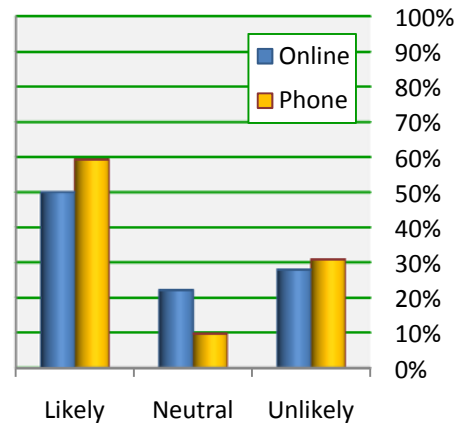


Table 8a
Volunteer your time to help collect water samples in your community

| | Online | Phone |
|-----------------------------|---------|---------|
| Very Likely | 17.1% | 15.4% |
| Likely | 37.1% | 46.4% |
| Neither Likely nor Unlikely | 22% | 7.5% |
| Unlikely | 19.5% | 22.9% |
| Very Unlikely | 4.4% | 7.9% |
| Total Responses | 205 | 442 |
| | (N=236) | (N=448) |

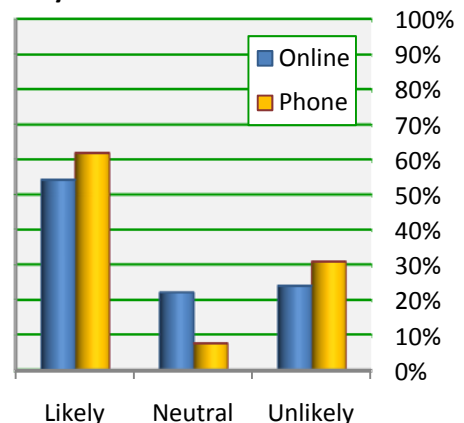


Table 9a
Talk to a neighbor about water quality in your community

| | Online | Phone |
|-----------------------------|---------|---------|
| Very Likely | 16.6% | 16.7% |
| Likely | 30.7% | 45.5% |
| Neither Likely nor Unlikely | 25.4% | 10.6% |
| Unlikely | 22.4% | 21.7% |
| Very Unlikely | 4.9% | 5.4% |
| Total Responses | 205 | 442 |
| | (N=236) | (N=448) |

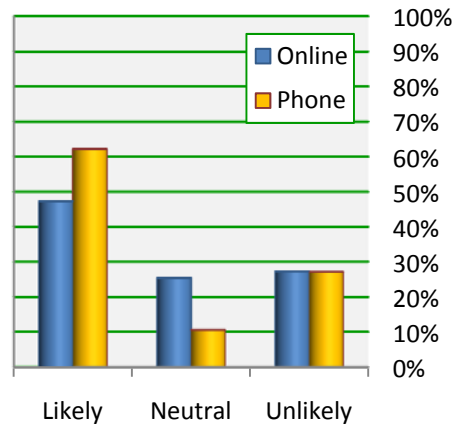


Table 10a
Install a rain garden on your property to help treat stormwater runoff

| | Online | Phone |
|-----------------------------|---------|---------|
| Very Likely | 15.1% | 16.9% |
| Likely | 36.1% | 36.2% |
| Neither Likely nor Unlikely | 30.2% | 16.0% |
| Unlikely | 12.2% | 22.7% |
| Very Unlikely | 6.3% | 8.1% |
| Total Responses | 205 | 431 |
| | (N=236) | (N=448) |

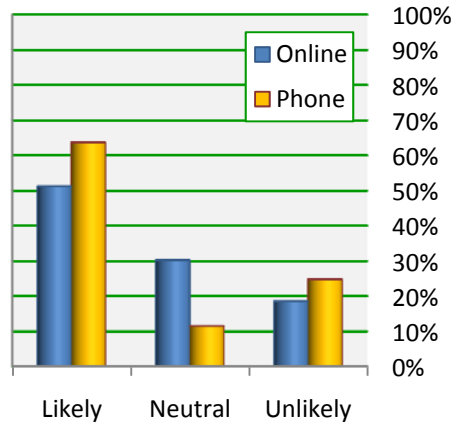


Table 11a
Participate in a community rain garden building project

| | Online | Phone |
|-----------------------------|---------|---------|
| Very Likely | 14.4% | 13% |
| Likely | 36.1% | 39.3% |
| Neither Likely nor Unlikely | 29.7% | 13.5% |
| Unlikely | 13.9% | 27.9% |
| Very Unlikely | 5.9% | 6.4% |
| Total Responses | 202 | 438 |
| | (N=236) | (N=448) |

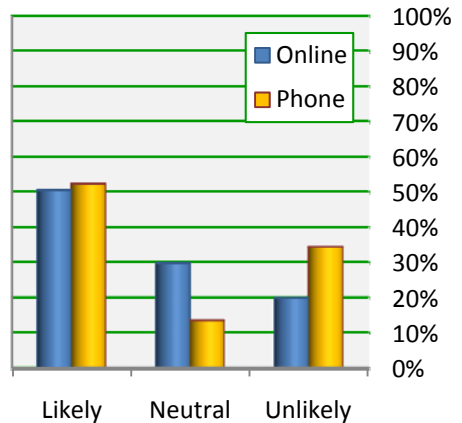


Table 12a
Give a presentation about water quality in your community

| | Online | Phone |
|-----------------------------|---------|---------|
| Very Likely | 5.9% | 3.4% |
| Likely | 10.4% | 11.3% |
| Neither Likely nor Unlikely | 16.8% | 8.2% |
| Unlikely | 41.6% | 46% |
| Very Unlikely | 25.2% | 31.1% |
| Total Responses | 202 | 441 |
| | (N=236) | (N=448) |

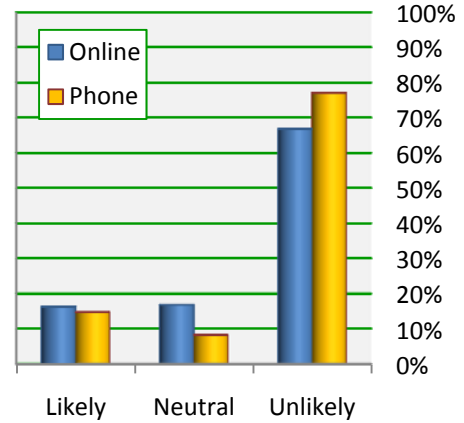


Table 13a
Make changes in your personal habits to conserve water

| | Online | Phone |
|-----------------------------|---------|---------|
| Very Likely | 43.1% | 46.4% |
| Likely | 51% | 46.2% |
| Neither Likely nor Unlikely | 4.9% | 2.3% |
| Unlikely | 0.5% | 3.2% |
| Very Unlikely | 0.5% | 2% |
| Total Responses | 204 | 444 |
| | (N=236) | (N=448) |

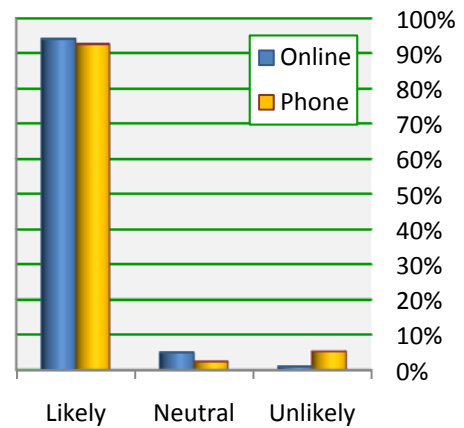
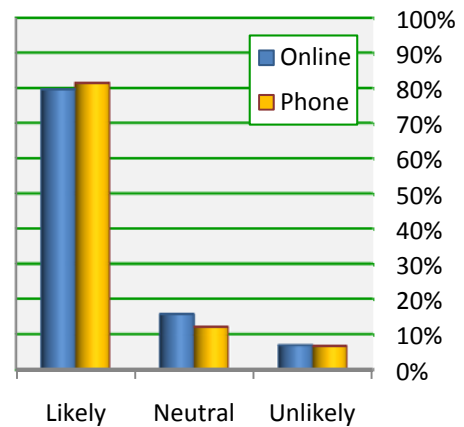


Table 14a
Make improvements to your property at your own cost to protect water quality

| | Online | Phone |
|-----------------------------|---------|---------|
| Very Likely | 21% | 32.3% |
| Likely | 58.6% | 49.1% |
| Neither Likely nor Unlikely | 15.6% | 12% |
| Unlikely | 3.4% | 5% |
| Very Unlikely | 3.4% | 1.6% |
| Total Responses | 205 | 440 |
| | (N=236) | (N=448) |



Appendix 3

Information Sourcing

Table 15a

During a typical week, which of the following Vermont media sources do you access to get information about news and events?

| SOURCE | Online | Phone |
|--------------------------------------|---------|---------|
| Vermont television news on TV | 50% | 76.3% |
| Vermont newspaper in print | 57.3% | 75.2% |
| Vermont radio news over the airwaves | 60.7% | 71.0% |
| Vermont newspaper online | 44.7% | 13.0% |
| Vermont television news online | 27.2% | 34.8% |
| | (N=236) | (N=448) |

Table 15a

Primary source of information

| SOURCE | Online | Phone |
|--|---------|---------|
| Newspaper in Print | 35% | 42% |
| Television News on TV | 14.1% | 23.4% |
| Other (word of mouth, general media, etc.) | 13.6% | 16.1% |
| Radio News Over the Airwaves | 18.9% | 10.9% |
| Newspaper Online | 14.6% | 5% |
| Television News Online | 2.9% | 1.4% |
| Radio News Online | 1% | 0.5% |
| Total | 206 | 441 |
| | (N=236) | (N=448) |

Table 17a

If you wanted information about local environmental issues, where would you look?

| | Online | Phone |
|---|--------|-------|
| Internet | 50.8% | 36.6% |
| Newspaper | 23.1% | 22.5% |
| Municipal source (town hall, town web site, town official, town board) | 0.5% | 20.5% |
| Community members, community groups | 0% | 4.7% |
| Television | 2.1% | 2.0% |
| State source (Agency of Ag., Agency of Natural Resources, other state resource) | 5.6% | 1.6% |
| Library | 1.5% | 1.3% |
| University/Extension | 1% | 1.3% |
| Environmental or conservation organization (VYCC, VPIRG, VNRC, LCBC) | 7.2% | 1.1% |
| Bulletin board | 0% | 0.9% |
| Radio | 1.5% | 0.7% |
| Yellow pages | 0% | 0.7% |
| ECHO | 2.6% | 0.7% |
| Other | 2.1% | 2.2% |
| Not sure | 2.1% | 3.1% |

Appendix 4

Phone Survey Questions

Q: Intro1

Hello, my name is _____ and I'm calling from the University of Vermont on behalf of the ECHO Lake Aquarium & Science Center. ECHO is asking Vermonters to share their ideas and opinions as part of its Voices for the Lake initiative.

Your household was randomly selected for our research study.

The survey will take about 10 minutes and your participation is completely voluntary. Do you have time to answer some questions?

1. Yes
2. No

Q: Intro2

Are you a Vermont resident 18-years-old or older?

1. Yes
2. No

Q: q1

Thank you for agreeing to participate! All of your answers will remain strictly confidential and the survey should take about 10 minutes.

What do you feel is the most serious issue facing Lake Champlain in the coming decade?

[OPEN RESPONSE]

Q: q2

What do you think should be done to address this issue?

[OPEN RESPONSE]

Q: q3- 8

Now I'm going to read you a list of statements. Please state your level of agreement with each statement:

- Lake Champlain is clean.
- Property owners are not responsible for the quality of the water running off their property.
- The state should ban the use of lawn fertilizers containing phosphates.
- I can change my neighbors' behaviors through leading by example.
- I think businesses should offer paid community service volunteer time to their employees.
- Towns should charge residents a fee to pay for stormwater runoff management.

1. Strongly agree
2. Agree
3. Neither agree nor disagree
4. Disagree
5. Strongly disagree
6. Don't know [DO NOT READ]
7. Refused [DO NOT READ]

Q: q9-17

Next I'm going to read you a list of activities. Please state how likely you would be to do each of the following:

- Participate in a community service project on a Saturday.
- Attend an evening meeting on improving water quality in your community.
- Volunteer your time to help collect water samples in your community.
- Make changes in your personal habits to conserve water.
- Make improvements to your property at your own cost to protect water quality.

- Install a rain garden on your property to help treat stormwater runoff.
- (A rain garden is a bowl-shaped garden designed to capture and absorb rainfall and snowmelt.)
- Participate in a community rain garden building project.
- Talk to a neighbor about water quality in your community.
- Give a presentation about water quality in your community.
 1. Very likely
 2. Likely
 3. Neither Likely nor Unlikely
 4. Unlikely
 5. Very unlikely
 6. Don't know [DO NOT READ]
 7. Refused [DO NOT READ]

Q: q18

Now please say yes if you have ever done any of the following activities:

- Performed a water-quality improvement project (rain garden, planting trees).
- Attended a meeting about water quality.
- Collected water samples.
- Limited the length of a shower to conserve water.
- Used a phosphate-based fertilizer on your lawn.
- Washed a car on a lawn or at a commercial car wash instead of a driveway.
- Talked to a neighbor about water quality.
- Gave a presentation about water quality.

Q: q19

Stormwater runoff is rainfall that does not soak into the ground, but instead flows over hard surfaces like roofs and parking lots into a storm drain or the nearest water body. This can be a problem because stormwater carries pollution and can affect water quality.

Of the following options, what is your top choice for how you would like to learn about stormwater management in your community?

1. Attend a presentation
2. Go on a field trip
3. Read a brochure
4. Read information on a web site
5. Watch a video on a web site
6. Watch a video that was sent to your home
7. Have someone visit your home
8. Other (specify)
9. None [DO NOT READ]
10. Don't know [DO NOT READ]
11. Refused [DO NOT READ]

Q: q20

Of the following options, what is your top choice for how you would like to learn about changes you could make in your home or on your property to improve water quality?

1. Attend a presentation
2. Go on a field trip
3. Read a brochure
4. Read information on a web site
5. Watch a video on a web site
6. Watch a video that was sent to your home
7. Have someone visit your home
8. Other (specify)

- 9.None [DO NOT READ]
- 10.Don't know [DO NOT READ]
- 11.Refused [DO NOT READ]

Q: q21 -31

Now I'm going to ask you a question about how you spend your time.

- During a typical week, approximately how many HOURS do you spend doing the following activities?
 - Working for pay
 - Volunteering
 - Outdoor recreation
 - Other physical fitness (indoor exercise, fitness classes, etc.)
 - Relaxing or socializing
 - Education
 - Workshops
 - Town or city government meetings (selectboard, local commission, etc)
 - Community meetings and events (non-government)
 - Faith-based meetings and events
 - Political meetings or rallies
- [# OF HOURS]

Q: q32

The next questions are related to how you get information about your community.
If you wanted information about local environmental issues, where would you look?
[OPEN RESPONSE]

Q: q33

During a typical week, which of the following Vermont media sources do you access to get information about news and events? Just say yes if you access any of these.

- Vermont newspaper in print
- Vermont newspaper online
- Vermont television news on TV
- Vermont television news online
- Vermont radio news over the airwaves
- Vermont radio news online

Q: q34

What is your PRIMARY source of information about what's going on in your community?

- 1.Newspaper in print
- 2.Newspaper online
- 3.Television news on TV
- 4.Television news online
- 5.Radio news over the airwaves
- 6.Radio news online
- 7.Other (please specify)
- 8.None [DO NOT READ]
- 9.Don't know [DO NOT READ]
- 10.Refused [DO NOT READ]

Q: q35

Now I have some questions for you about your computer use. Do you use a computer for any of the following:
E-mail; Facebook, MySpace, or other social networking; Twitter or other blogging; or watching videos?

- 1.Yes
- 2.No
- 3.Don't know [DO NOT READ]
- 4.Refused [DO NOT READ]

IF (q35>1) SKIP TO d0

Q: q36-40

During a typical DAY, approximately how many MINUTES do you spend doing the following activities?

- Checking and responding to e-mail
 - Using Facebook
 - Using MySpace
 - Using Twitter
 - Using YouTube
- [# OF MINUTES]

Q: q41

Do you watch videos online? (NOT including movies or television shows)

- 1.Yes
- 2.No
- 3.Don't know [DO NOT READ]
- 4.Refused [DO NOT READ]

Q: q42

What web sites do you typically use to view videos?

- YouTube
- Facebook
- Myspace
- Yahoo! Video
- Flickr
- Other (specify)

Q: q43

How do you find videos of interest to you?

- Search engine (google, yahoo,MSN, etc.)
- Search on video site
- Through Facebook
- Web surfing
- Sent to me by other people
- Word of mouth
- Other (specify)

Q: q44

Have you ever created and posted a video online?

- 1.Yes
- 2.No
- 3.Don't know [DO NOT READ]
- 4.Refused [DO NOT READ]

Q: q45

Where have you posted your video or videos?

- YouTube
- Facebook
- Myspace
- Yahoo! Video
- Flickr
- Other (specify)

Q: q46

Do you use Twitter?

- 1.Yes
- 2.No
- 3.Don't know [DO NOT READ]
- 4.Refused [DO NOT READ]

Q: q47

During a typical day, how many tweets do you post?
[# OF TWEETS]

Q: q48

Do you use Facebook?

- 1.Yes
- 2.No
- 3.Don't know [DO NOT READ]
- 4.Refused [DO NOT READ]

Q: q49

Which of the following is the most important reason you use Facebook?

- 1.Friend and family connections
- 2.Work and professional connections
- 3.Organizational connections
- 4.Marketing your business or organization
- 5.News and information
- 6.Other (specify)
- 7.Don't know [DO NOT READ]
- 8.Refused [DO NOT READ]

Q: q50

Which of the following is the secondary reason you use Facebook?

- 1.Friend and family connections
- 2.Work and professional connections
- 3.Organizational connections
- 4.Marketing your business or organization
- 5.News and information
- 6.Other (specify)
- 7.Don't know [DO NOT READ]
- 8.Refused [DO NOT READ]

Q: q51

Do you use any other online social networking?

- 1.Yes (specify)
- 2.No
- 3.Don't know [DO NOT READ]
- 4.Refused [DO NOT READ]

Q: q52

Do you pass along online content that you like to other people?

- 1.Yes
- 2.No
- 3.Don't know [DO NOT READ]
- 4.Refused [DO NOT READ]

Q: q53

Do you typically view online content passed along to you from other people?

- 1.Yes
- 2.No
- 3.Don't know [DO NOT READ]
- 4.Refused [DO NOT READ]

DEMOGRAPHICS

Finally, I have just a few demographic questions to ask you. All of your responses will be kept strictly confidential.

Q: d1

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

- 1.<9th grade
- 2.9-12 grade (no diploma)
- 3.High School graduate (incl. GED)
- 4.Some college (no degree)
- 5.Associates/technical
- 6.Bachelor
- 7.Post graduate/professional
- 8.Don't Know [DO NOT READ]
- 9.Refused [DO NOT READ]

Q: d2

How many members are there in your household?

- #
- 98 DON'T KNOW [DO NOT READ]
 - 99 REFUSED [DO NOT READ]

Q: d3

How many people in your household are under the age of 18?

- #
- 98 DON'T KNOW [DO NOT READ]
 - 99 REFUSED [DO NOT READ]

Q: d4

How many years have you lived in Vermont, including any earlier periods?

#

998 DON'T KNOW [DO NOT READ]

999 REFUSED [DO NOT READ]

Q: d5

In what year were you born?

#

9998 DON'T KNOW [DO NOT READ]

9999 REFUSED [DO NOT READ]

Q: d6

In what city or town do you live?

[OPEN RESPONSE]

Q: d7

In what county is that?

1.Addison

2.Bennington

3.Caledonia

4.Chittenden

5.Essex

6.Franklin

7.Grand Isle

8.Lamoille

9.Orange

10.Orleans

11.Rutland

12.Washington

13.Windham

14.Windsor

15.Don't know [DO NOT READ]

16.Refused [DO NOT READ]

Q: d8

Do you live in a rural, suburban, or urban area?

1.Rural

2.Suburban

3.Urban

4.Don't know [DO NOT READ]

5.Refused [DO NOT READ]

Q: d8a

Is your job related to water quality?

1. Yes [DO NOT READ]

2. No [DO NOT READ]

3. Don't have a job [DO NOT READ]

4. Don't Know [DO NOT READ]

5. Refused [DO NOT READ]

Q: d9

Was your household's TOTAL income in 2008 more or less than \$50,000?

1. More
2. Less
3. Don't Know [DO NOT READ]
4. Refused [DO NOT READ]

IF (d9 = 1) SKIPTO d11
IF (d9 = 3) SKIPTO d13
IF (d9 = 4) SKIPTO d13

Q: d10

Was it more or less than \$25,000?

1. More
2. Less
3. Don't Know [DO NOT READ]
4. Refused [DO NOT READ]

IF (d10 = 1) SKIPTO d13
IF (d10 = 2) SKIPTO d13
IF (d10 = 3) SKIPTO d13
IF (d10 = 4) SKIPTO d13

Q: d11

Was it more or less than \$75,000?

1. More
2. Less
3. Don't Know [DO NOT READ]
4. Refused [DO NOT READ]

IF (d11 = 2) SKIPTO d13
IF (d11 = 3) SKIPTO d13
IF (d11 = 4) SKIPTO d13

Q: d12

Was it more or less than \$100,000?

1. More
2. Less
3. Don't Know [DO NOT READ]
4. Refused [DO NOT READ]

Q: d13

Now, I have two quick questions regarding your ethnicity and race.

First, are you one of the following: Hispanic, Latino, or of Spanish origin?

1. Yes
2. No
3. Don't Know [DO NOT READ]
4. Refused [DO NOT READ]

Q: d14

Next, listen to the following list and indicate the race category with which you identify.

- 1.White
- 2.Black or African American
- 3.American Indian or Eskimo
- 4.Asian or Pacific Islander
- 5.Something else (specify)
- 6.Don't know [DO NOT READ]
- 7.Refused [DO NOT READ]

Q: d15

And finally, please state your gender?

- 1.Male
- 2.Female
- 4.Don't Know [DO NOT READ]
- 5.Refused [DO NOT READ]

Q: End1

That was my final question. Thank you for your time. If you would like to learn more about Voices for the Lake, you can visit the ECHO web site at www.echovermont.org

Appendix 5

Online Survey

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VOICES FOR THE LAKE Exit this survey

1. The fun starts here!

This is an opportunity to share your thoughts and ideas about Lake Champlain and tell us a little about how you use social media, get information, and spend your time.

The survey will take about 10 minutes. Your participation is voluntary and all your responses will remain confidential.

When you've completed the survey, you can enter a drawing to win an ECHO Small Family Membership (2 adults, 2 children), ECHO tote bag, and ECHO travel mug, valued together at \$125.

Thank you for taking the time to share!

1. Do you use a computer for ANY of the following: E-mail; Facebook, MySpace, or other social networking; Twitter or other blogging; or watching videos?

Yes

No

1 / 16 6%

Next

Done

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VOICES FOR THE LAKE Exit this survey

2. Social media and you

2. During a typical day, approximately how many hours do you spend doing the following activities?
*If you spend less than an hour per day, please use 0 for none, .25 for a quarter hour, .5 for a half hour, and .75 for three quarters of an hour.

Checking and responding to e-mail

Using Facebook

Using MySpace

Using Twitter

Using YouTube

3. Do you ever watch videos online?
*NOT including movies or television shows

Yes

No

2 / 16 12%

Prev Next

Done

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VOICES FOR THE LAKE Exit this survey

3. I like to watch

4. What web sites do you typically use to view videos?
*Check all that apply

- YouTube
- Facebook
- Yahoo! Video
- Flickr
- Other (please specify)

5. How do you find videos of interest to you?
*Check all that apply

- Search engine (google, yahoo, MSN, etc.)
- Search on video site
- Facebook
- Web surfing
- Sent to me by other people
- Word of mouth
- Other (please specify)

6. Have you ever created and posted a video online?

Yes

No

3 / 16 19%

Done

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VOICES FOR THE LAKE Exit this survey

4. Lights, camera, action

7. Where have you posted your video(s)?
*Check all that apply

- YouTube
- Facebook
- Yahoo! Video
- Flickr
- Other (please specify)

4 / 16 25%

Done

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VOICES FOR THE LAKE [Exit this survey](#)

5. Tweet

8. Do you use Twitter?

Yes

No

5 / 16 31%

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Done

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VOICES FOR THE LAKE [Exit this survey](#)

6. Tweet tweet

9. During a typical day, how many tweets do you post?

6 / 16 38%

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VOICES FOR THE LAKE [Exit this survey](#)

7. Social networking

10. Do you use Facebook?

Yes

No

7 / 16 44%

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Done

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VOICES FOR THE LAKE [Exit this survey](#)


8. Status update

11. Which of the following is the most important reason you use Facebook?

- Friend and family connections
- Work and professional connections
- Organization connections
- Marketing your business or organization
- News and information
- Don't know
- Other (please specify)

12. Which of the following is the SECOND most important reason you use Facebook?

- Friend and family connections
- Work and professional connections
- Organization connections
- Marketing your business or organization
- News and information
- Don't know
- Other (please specify)

8 / 16  50%

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VOICES FOR THE LAKE [Exit this survey](#)

9. Other social networking

13. Do you use any other online social networking site(s)?

- No
- Yes (please specify)

9 / 16  56%

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VOICES FOR THE LAKE [Exit this survey](#)

10. Look at this

14. Do you typically pass along online content that you like to other people?

Yes

No

15. Do you typically view online content passed along to you from other people?

Yes

No

10 / 16 62%

Done

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VOICES FOR THE LAKE [Exit this survey](#)

11. News and information

16. If you wanted information about local environmental issues, where would you look?

17. During a typical week, which of the following Vermont media sources do you access to get information about news and events?
*Check all that apply

VT newspaper in print

VT newspaper online

VT television news on TV

VT television news online

VT radio news over the airwaves

VT radio news online

Other VT media source (please specify)

18. What is your PRIMARY source of information about what's going on in your community?

VT newspaper in print

VT newspaper online

VT television news on TV

VT television news online

VT radio news over the airwaves

VT radio news online

Other (please specify)

Done

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19. During a typical week, how many HOURS do you spend doing the following activities?
***If you spend less than an hour per week, please use 0 for none, .25 for a quarter hour, .5 for a half hour, and .75 for three quarters of an hour.**

Working for pay

Relaxing or socializing

Other physical fitness (indoor exercise, fitness classes, etc.)

Outdoor recreation

Workshops

Education

Volunteering

Commuting/travel time

Town or city government meetings (selectboard, local commission, etc.)

Political meetings or rallies

Faith-based meetings and events

Community meetings and events (non-government)

11 / 16 69%

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Done

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VOICES FOR THE LAKE [Exit this survey](#)

12. It's all about the lake

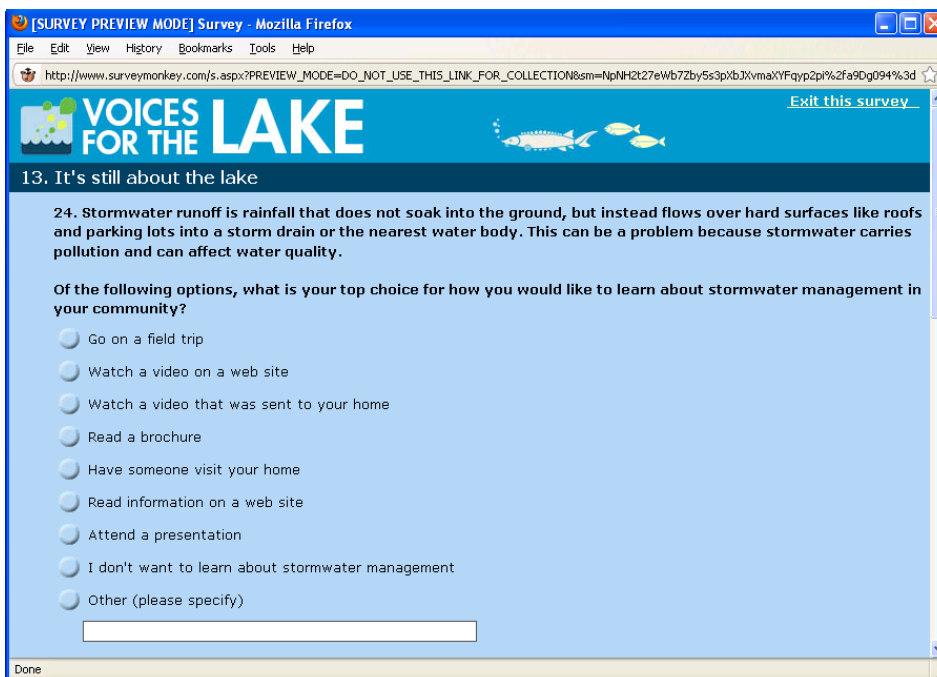
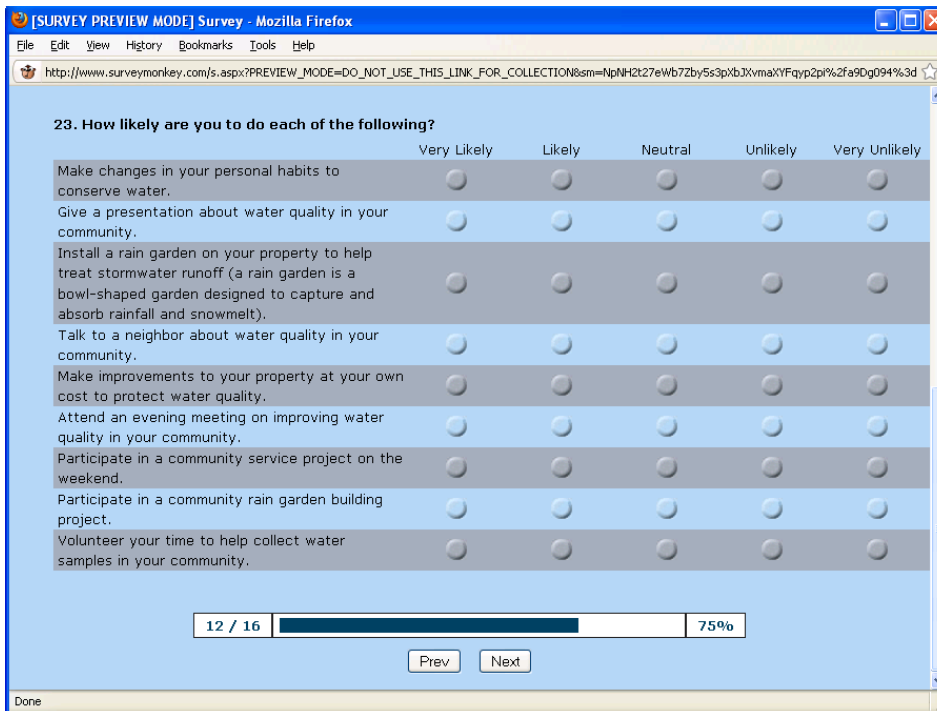
20. What do you feel is the most serious issue facing Lake Champlain in the coming decade?

21. What do you think should be done to address this issue?

22. Please state your level of agreement with each the following statements:

| | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Lake Champlain is clean. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Property owners should not be responsible for the quality of the water running off their property. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I can change my neighbors' behavior through leading by example. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think businesses should offer paid community service volunteer time to their employees. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The state should ban the use of lawn fertilizers containing phosphates. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Towns should charge residents a fee to pay for stormwater runoff management. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Done



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VOICES FOR THE LAKE [Exit this survey](#)

14. Demographics

This final section asks for some basic demographic information. All of your responses are strictly confidential.

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

- Less than 9th grade
- 9th-12th grade (no diploma)
- High School Graduate (including GED)
- Some College (no degree)
- Associates or Technical Degree
- Bachelors Degree
- Graduate or Professional Degree
- Don't Know

28. How many people are there in your household?

29. How many household members are under the age of 18?

30. Do you own or rent your home?

- Own
- Rent

31. How many total years have you lived in Vermont, including any earlier periods?

32. In what year were you born?

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25. Of the following options, what is your top choice for how you would like to learn about changes you could make in your home or on your property to improve water quality?

- I don't want to learn about changes I could make to improve water quality
- Watch a video that was sent to your home
- Have someone visit your home
- Go on a field trip
- Read a brochure
- Attend a presentation
- Watch a video on a web site
- Read information on a web site
- Other (please specify)

26. Have you ever done any of the following activities?

| | Yes | No |
|--|-----------------------|-----------------------|
| Given a presentation about water quality. | <input type="radio"/> | <input type="radio"/> |
| Attended a meeting about water quality. | <input type="radio"/> | <input type="radio"/> |
| Collected water samples. | <input type="radio"/> | <input type="radio"/> |
| Limited the length of a shower to conserve water. | <input type="radio"/> | <input type="radio"/> |
| Talked to a neighbor about water quality. | <input type="radio"/> | <input type="radio"/> |
| Used a phosphate-based fertilizer on your lawn. | <input type="radio"/> | <input type="radio"/> |
| Participated in a water-quality improvement project, such as installing a rain garden or planting trees. | <input type="radio"/> | <input type="radio"/> |
| Washed a car on a lawn or at a commercial car wash instead of a driveway. | <input type="radio"/> | <input type="radio"/> |

13 / 16 81%

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32. In what year were you born?

33. In what city or town do you live?

34. What county is that?
 *Use pull-down menu to select

35. Do you live in a rural, suburban, or urban area?
 Rural
 Suburban
 Urban
 Don't Know

14 / 16 88%


Prev Next

Done

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 [Exit this survey](#)

15. Almost done!

36. Is your job related to water quality?
 Yes
 No
 Don't Know

37. What was your total household income in 2009?
 Less than \$25,000
 \$25,000 to \$49,999
 \$50,000 to \$74,999
 \$75,000 to \$99,999
 \$100,000 or more
 Don't Know

38. Are you of Hispanic, Latin, or Spanish origin?
 Yes
 No
 Don't Know

39. With which race category do you identify?
 White
 Black or African American
 Native American or Inuit
 Asian or Pacific Islander
 Other (please specify)

Done

