Lake Champlain Basin Public Awareness Survey

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Prepared for the Lake Champlain Basin Program by

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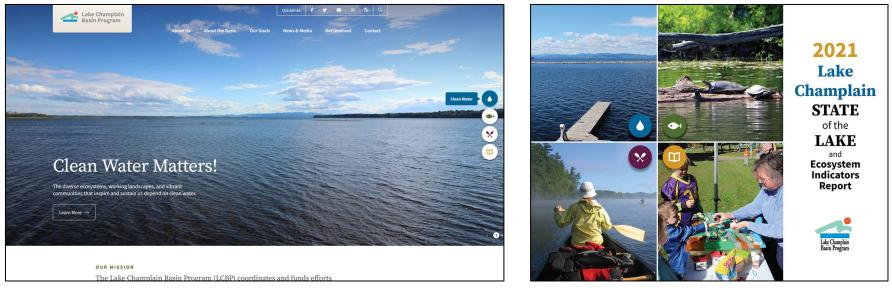
Survey Advisory Committee

- Anthony Barbe
- Judy Dow
- Curt Gervich
- Lauren Glenn-Davitian
- Pierre Leduc
- Marion Melloul

- Lyn Munno
- Danielle Owczarski
- Oliver Pierson
- Kelley Tucker
- Rocci Aguirre
- Amy Kelsey

Why a survey?

Education and Outreach







Not Green.

Education and Outreach

How do we assess these efforts?



Survey Goals

- Knowledge, Attitudes and Engagement
- Information sources
- Target audiences & communication channels

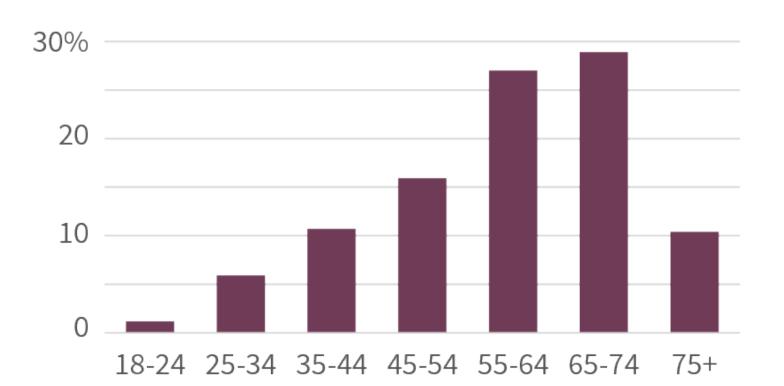


Survey Vitals

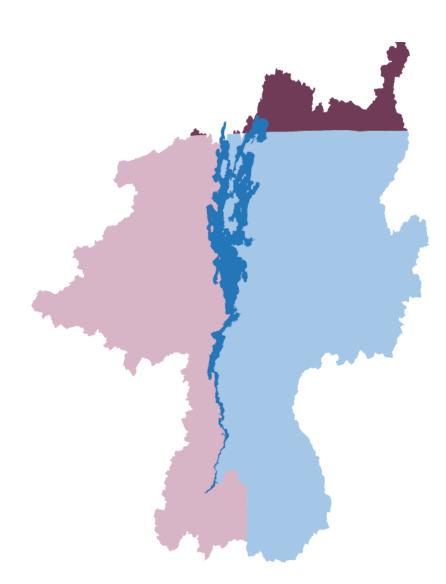
- June October 2021
- 1,675 responses
- 36 questions
- 147-page Report



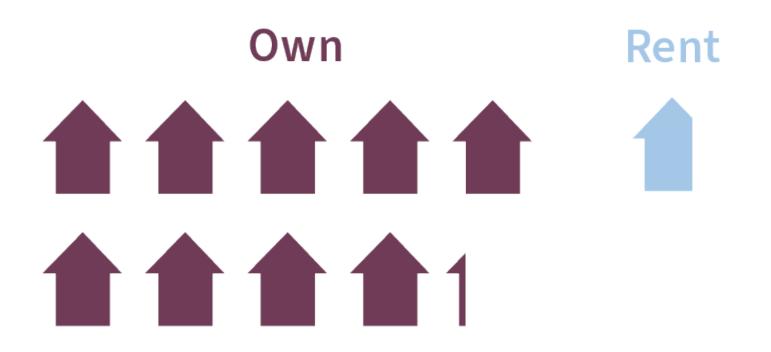




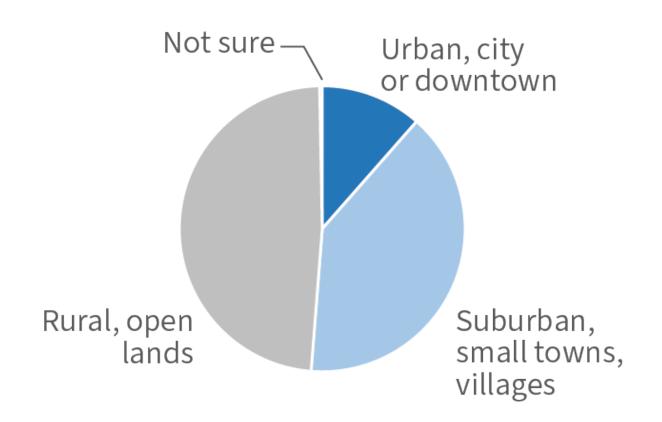
New York: 382 Vermont: 711 Québec: 582



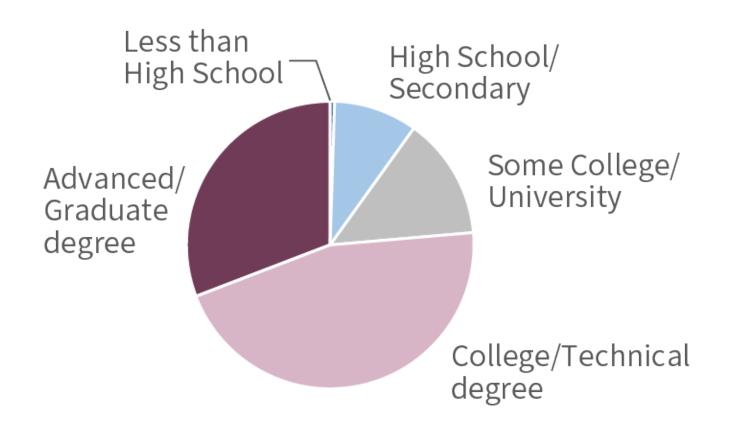
Home Ownership



Residential Setting



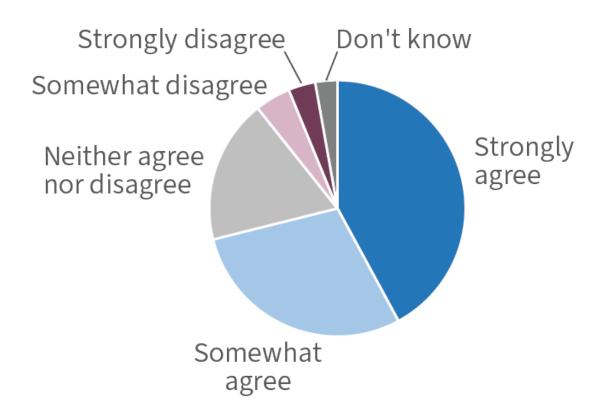
Education



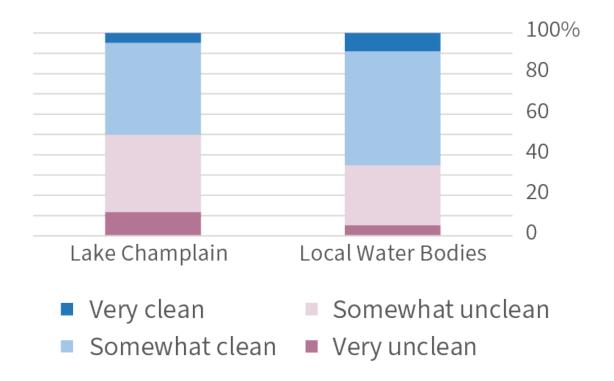


- **85.8%** Healthy waterways are a critical part of thriving communities.
- **96%** Addressing water quality should be a priority for communities.
- 85% Town budgets should help pay for stormwater runoff management.

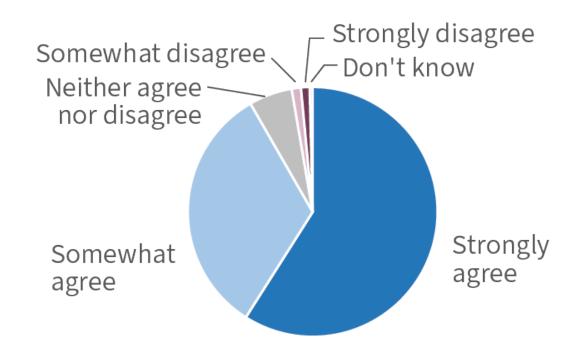
I rely on Lake Champlain for my wellbeing.

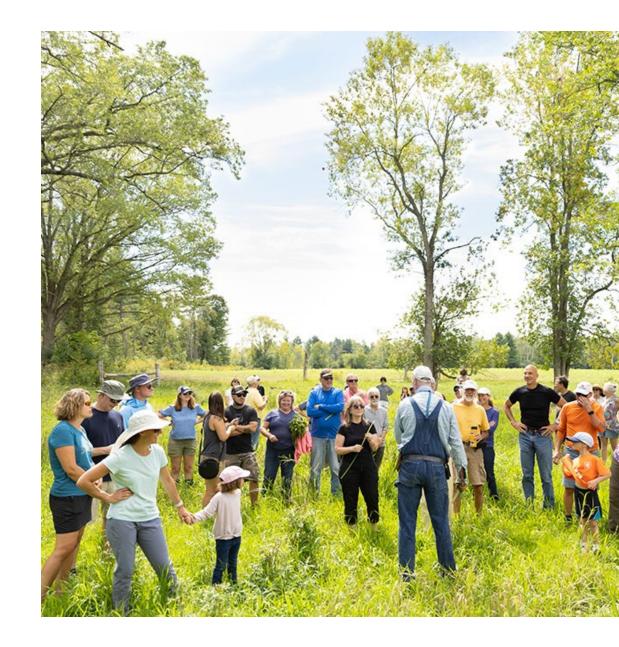


In general, how clean do you think waters are?



My personal actions affect the health of streams, rivers, ponds, and lakes

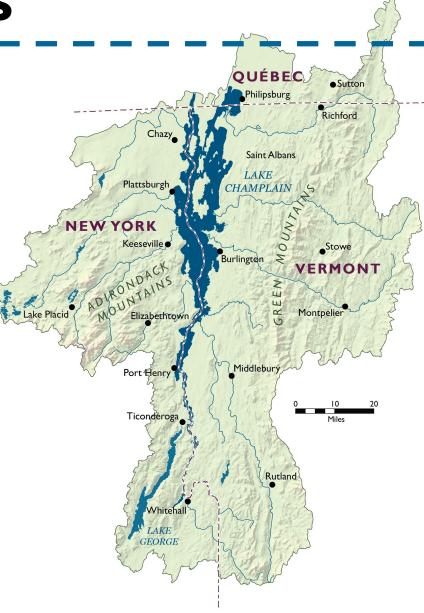




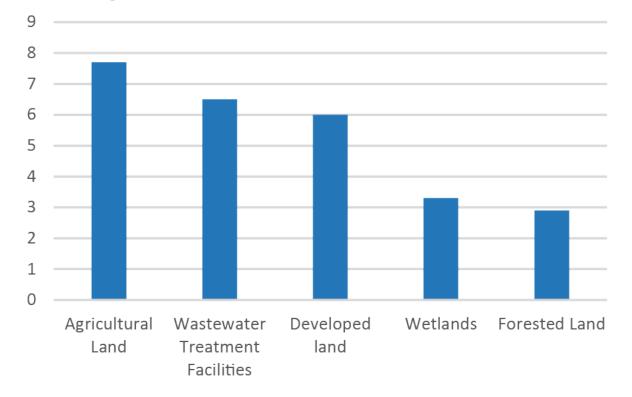
Which option best describes your personal familiarity with what a watershed is?

This is the first time I've heard of a watershed.

I've heard of watersheds, but I could NOT explain what they are to someone else. I have heard about watersheds, and I could explain what they are.



Impact of Phosphorus Sources on Cyanobacteria Blooms (0-10)



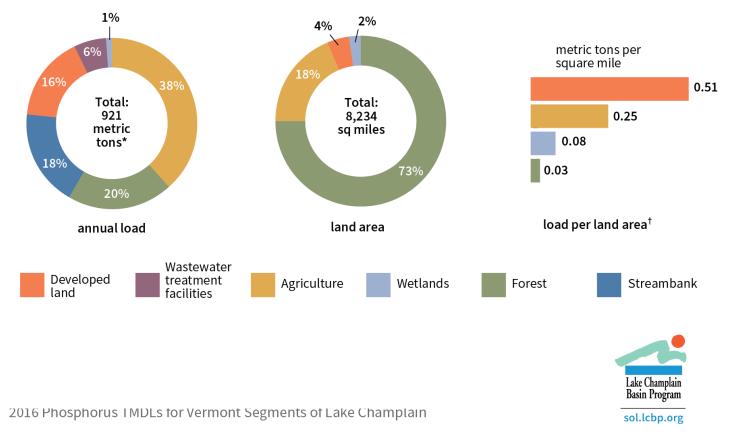
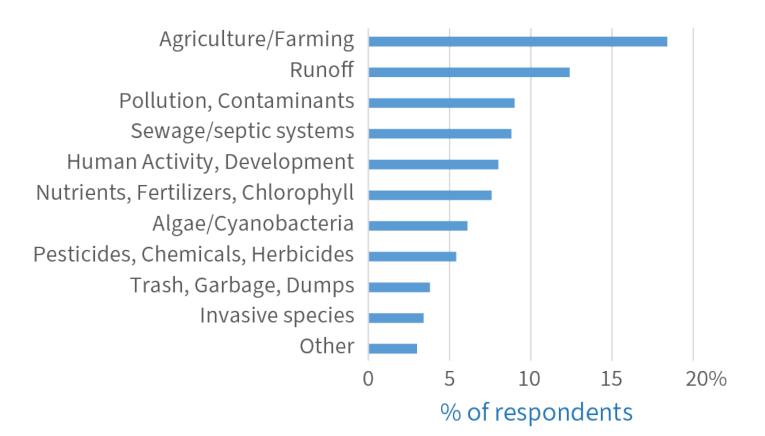
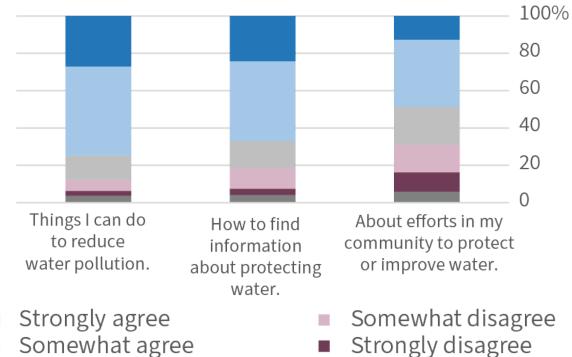


Figure 5 | Annual phosphorus loading to Lake Champlain by land cover

What do you feel is the most serious challenge impacting the health of waterways.



I know...

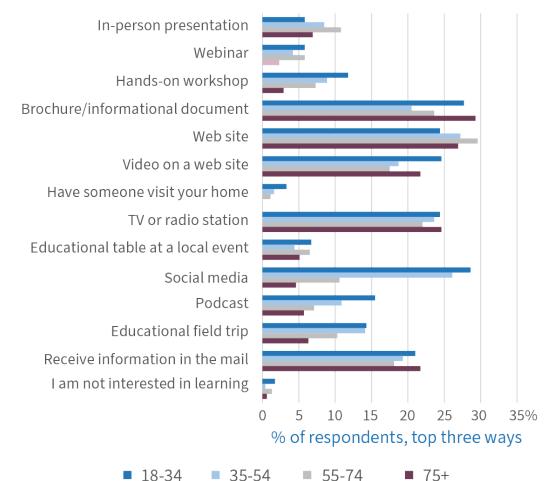


Neither agree nor disagree

- Strongly disagree
- Don't know



Preferred ways of learning about water issues by age

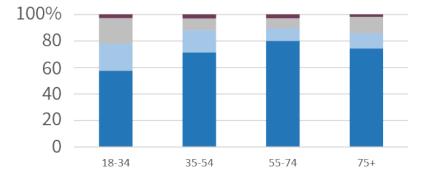


% Respondents who never take actions

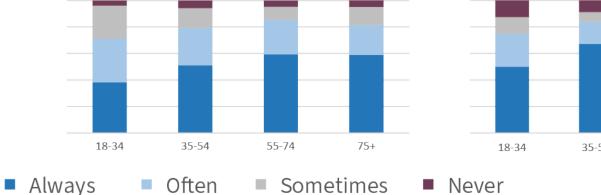


Frequency of Action by Age

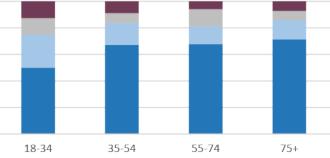
Dispose of toxic materials at a hazardous waste drop-off center



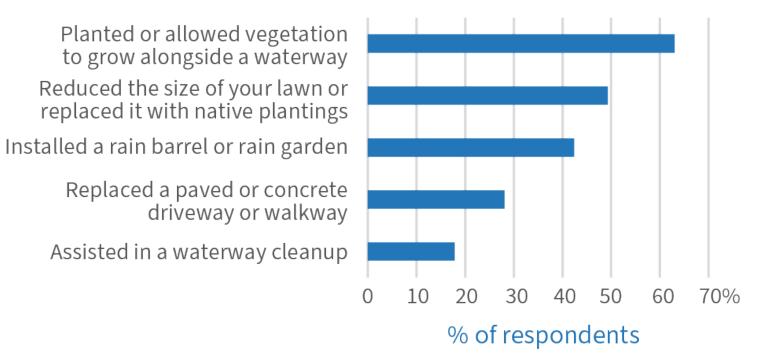
Limit use of salt on driveways or sidewalks during winter



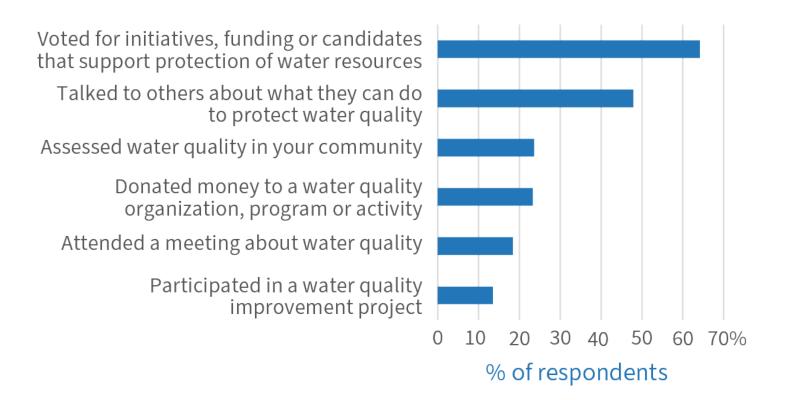
Clean, Drain, Dry watercraft to prevent the spread of invasive species



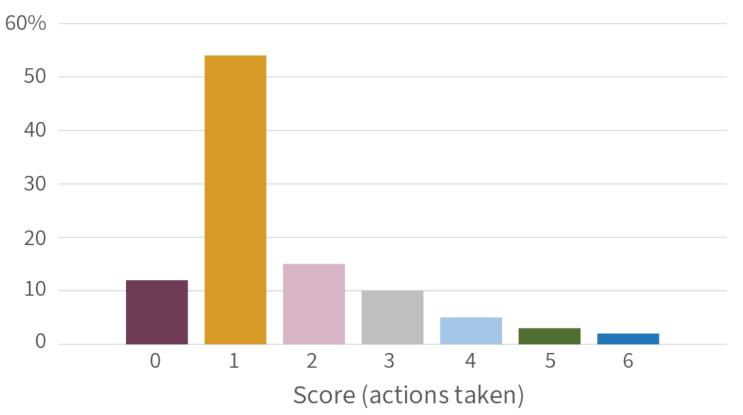
In the past three years have you done any of the following specifically to reduce runoff?



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



Action Index Score Distribution

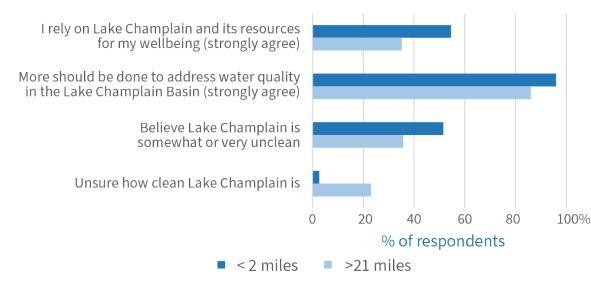


Relationships of Multiple Factors

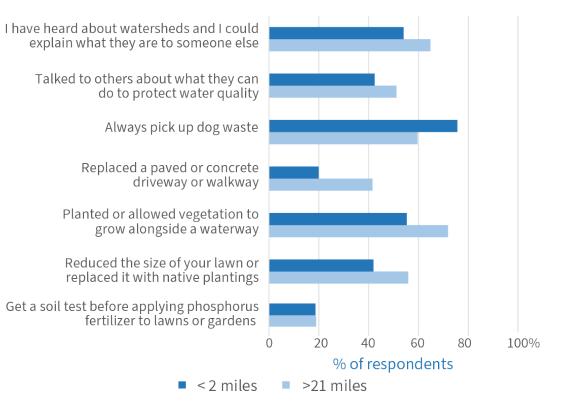


Relationships of Multiple Factors

Difference in Attitudes with Distance from Lake



Difference in Action/Knowledge with Distance from Lake



Québec Connection

Strongly agreed or agreed they knew what actions to take to reduce water pollution

- 80% Québec
- 68% Vermont
- 66% New York



Likeliness to take actions to address water quality in the future

12/15 QC > VT and NY

Survey Applications



Survey Applications

			MISSISQUOI BAY		NORTHEAST ARM*		MALLETTS BAY		MAIN LAKE		SOUTH LAKE	
		Trend Start	STATUS	TREND	STATUS	TREND	STATUS	TREND	STATUS	TREND	STATUS	TREND
CLEAN WATER	Phosphorus in Lake (p. 13)	1990		~		ą.		~		~		~
	Phosphorus from rivers (p. 14)	1991		P				~		\sim		~
	Phosphorus from WWTFs ^{† §} (p. 15)	1995										
	Cyanobacteria blooms (p. 11)	2013		~	\bigcirc	ą.	\bigcirc	~	\bigcirc	~		~
	Fish consumption advisories [†] (p. 7)	2018	\bigcirc	~	\bigcirc	~	\bigcirc	~	\bigcirc	~		~
HEALTHY ECOSYSTEMS	Sea lamprey wounding [†] (p. 24)	2003			\bigcirc							
	New aquatic invasive species (p. 22)	2018	\bigcirc	P	\bigcirc	P L	\bigcirc	q i	\bigcirc			ą.
	Invasive water chestnut coverage (p. 26)	2018			\bigcirc	ą.		~		~		

CLIMATE IMPACTS Lake Champlain freeze-over (p. 21)

Trend: Lake surface freezing over less frequently.

* Northeast Arm indicator statuses and trends for in-lake phosphorus concentrations, tributary phosphorus loading to the Lake, and cyanobacteria blooms do not include data from St. Albans Bay.

1906

† These lake-wide indicators are the same for all segments.

§ Wastewater treatment facilities

Some trends may be impacted by year-to-year differences in data collection and reporting. This is especially true for cyanobacteria bloom data, which is collected by a network of volunteer community scientists.

Survey Applications

70% Healthy waterways are a critical part of thriving communities.

27% I know things I can do to reduce water pollution.

5%

Scored 5 or 6 in Action Index

Survey Applications

70% Healthy waterways are a critical part of thriving communities. **27%** I know things I can do to reduce water pollution.

5% Scored 5 or 6 in Action Index

Recommendations

- Partner with local TV and radio news shows
- Partner with newspapers
- Developing short informational documents from *State of the Lake*
- Highlight efforts in local communities
- Reinvigorate "Don't P on the Lawn"
- Select a suite of critical practices that are predicted to have the biggest environmental benefits.

Thank you

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