



*Friends of the
St. Clair River*



Drinking Water Survey

*Data Collection, Methods, Results
2021*

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FSCR Drinking Water Survey

Background

Objective:

Friends of the St. Clair River is interested in assessing the public perception of St. Clair River tap water health and safety, with the intention to use survey results to inform community outreach and education approaches moving forward.

This effort will benefit the community and the region at large when the St. Clair River's Drinking Water impairment is delisted, removing the final Area of Concern impairment on this waterway, after decades of restoration and care.



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Methods

Target zip codes:

48001	48049
48054	48059
48023	48039
48059	48040
48028	48060
48074	48079

Survey period: March 1 – March 31, 2021

Incentive: \$25 Visa Gift Card drawing

Outreach Strategy: FSCR newsletters & social media, partner newsletters & social media, posters with QR codes



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Survey overview

Length of survey: 17 Questions, including demographic data

Build of Survey: Mixed question types including multiple choice, checkboxes, and short answer

Total responses: 2,497

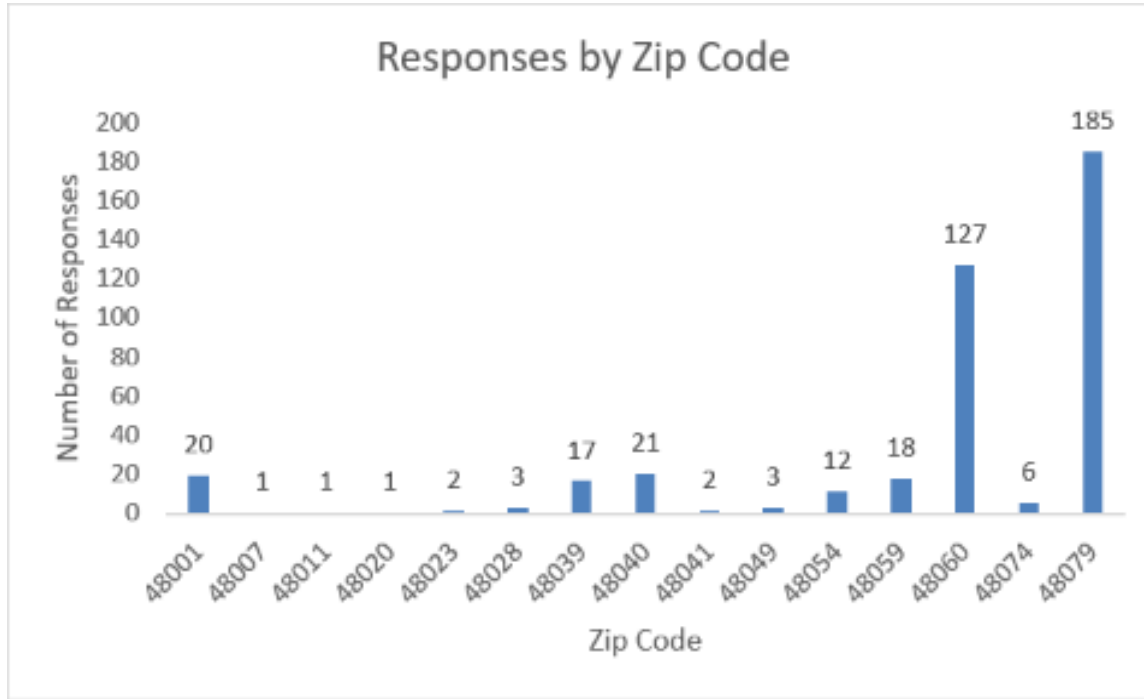
**Total valid responses
(within target zip codes & filtered for spam):** 419



Demographic Data

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Demographic data: Zip code

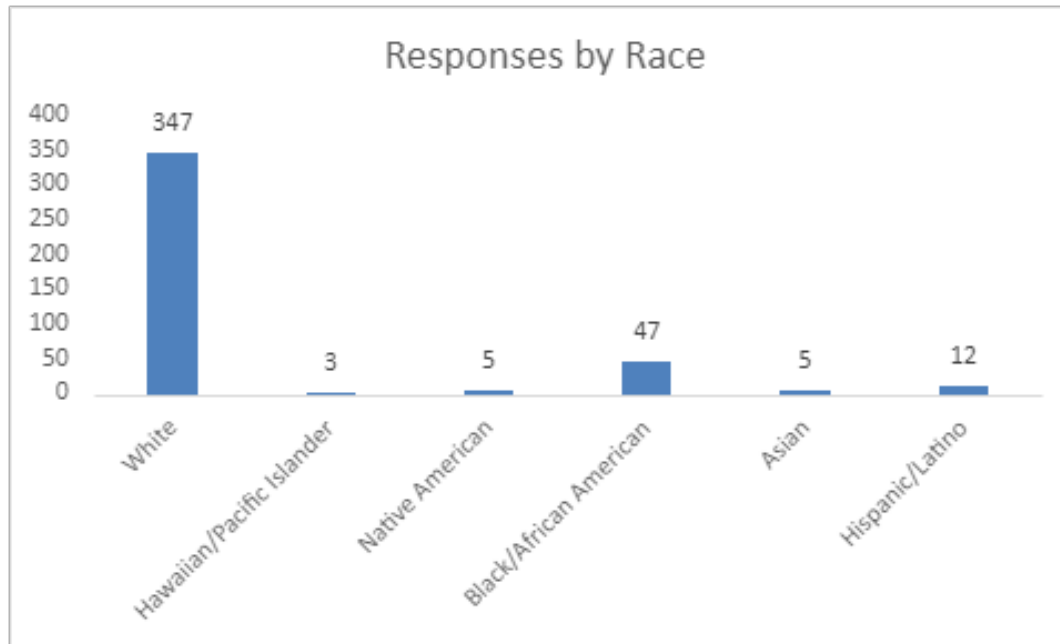


The majority of respondents came from 48060 (contains the City of Port Huron and Port Huron Township) and 48079 (contains the City of St. Clair).

Zip Code:	Count of Zip Code:	Percent
48001	20	4.77%
48007	1	0.24%
48011	1	0.24%
48020	1	0.24%
48023	2	0.48%
48028	3	0.72%
48039	17	4.06%
48040	21	5.01%
48041	2	0.48%
48049	3	0.72%
48054	12	2.86%
48059	18	4.30%
48060	127	30.31%
48074	6	1.43%
48079	185	44.15%
Grand Total	419	100%

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Demographic data: Race

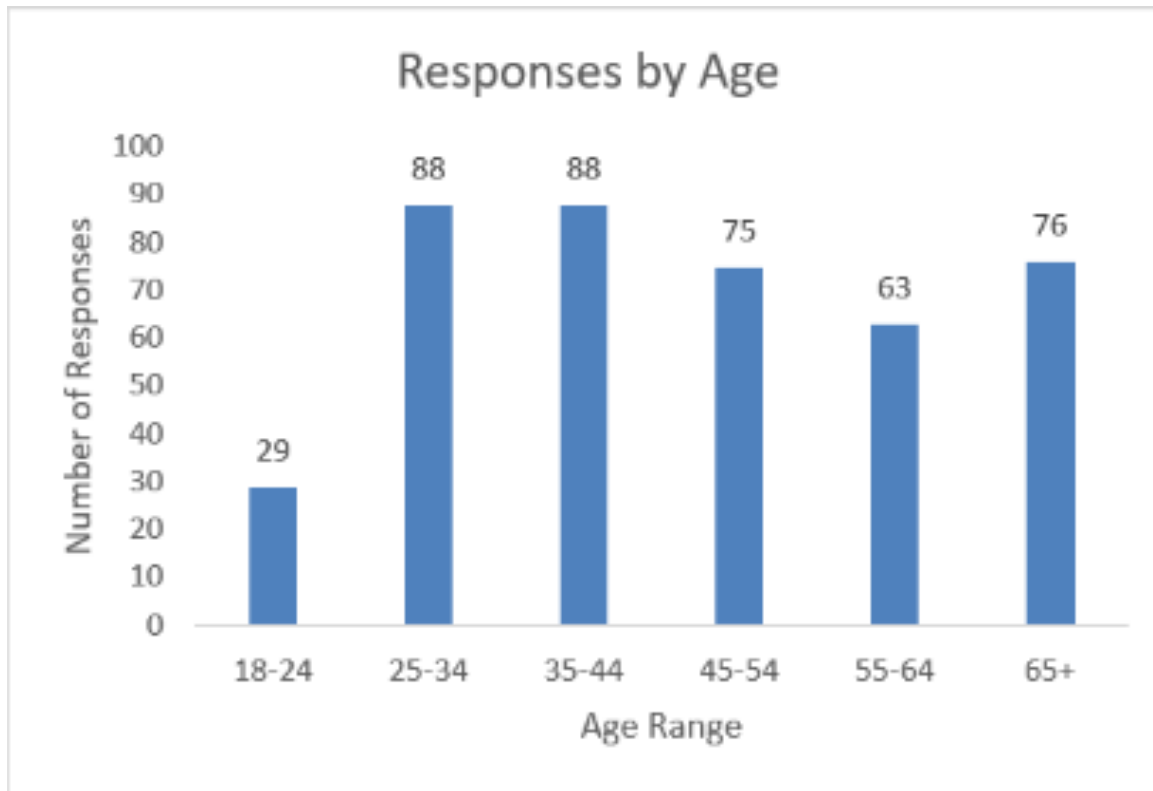


The majority of respondents identified as white, which tracks with the US Census data for the data provided in V2019, where the reported percentage of the population that identifies as white is 94%.

Race	Count of Race	Percent
White	347	82.82%
Hawaiian/Pacific Islander	3	0.72%
Native American	5	1.19%
Black/African American	47	11.22%
Asian	5	1.19%
Hispanic/Latino	12	2.86%
TOTAL	419	100%

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Demographic data: Age

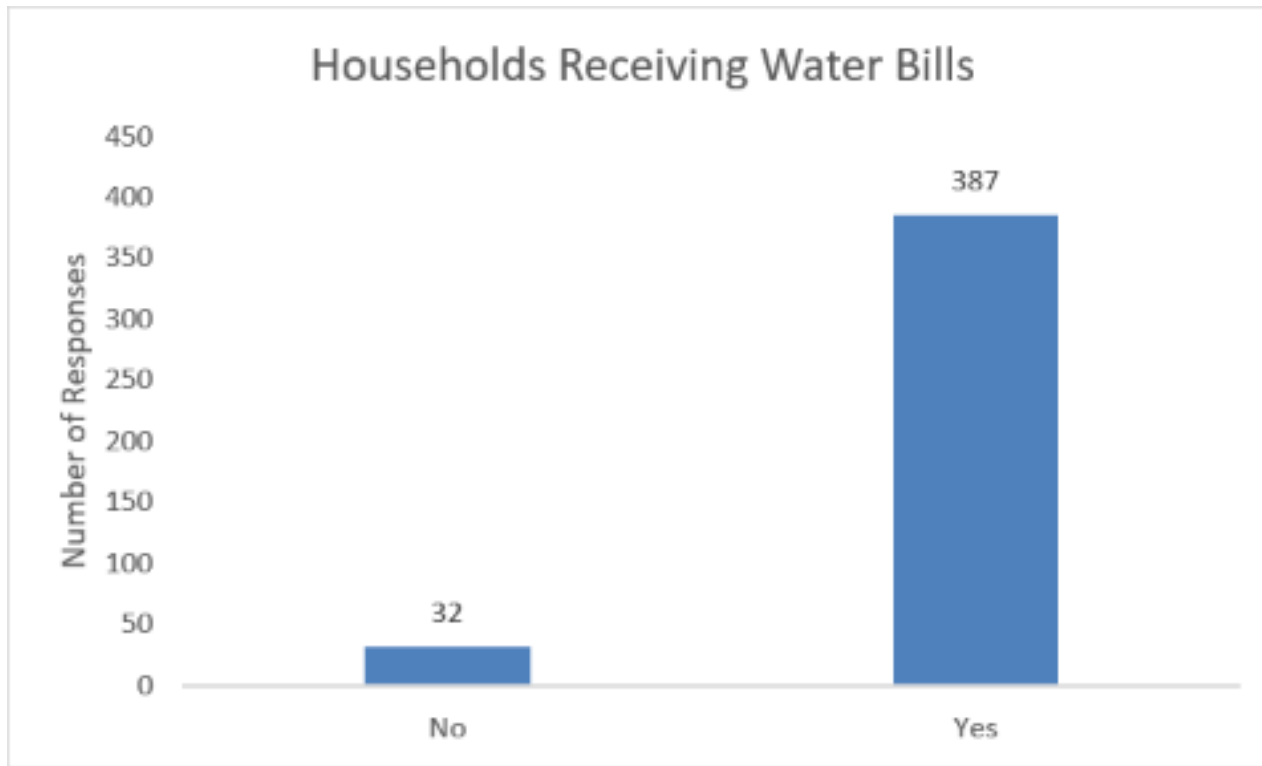


Age	Count of Age	Percent
18-24	29	7%
25-34	88	21%
35-44	88	21%
45-54	75	18%
55-64	63	15%
65+	76	18%
Grand Total	419	100%

There was a fairly even distribution of responses across the age categories, with a slight under-representation of respondents in the 18-24 year old range.

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Demographic data: Respondents Receiving Water Bills

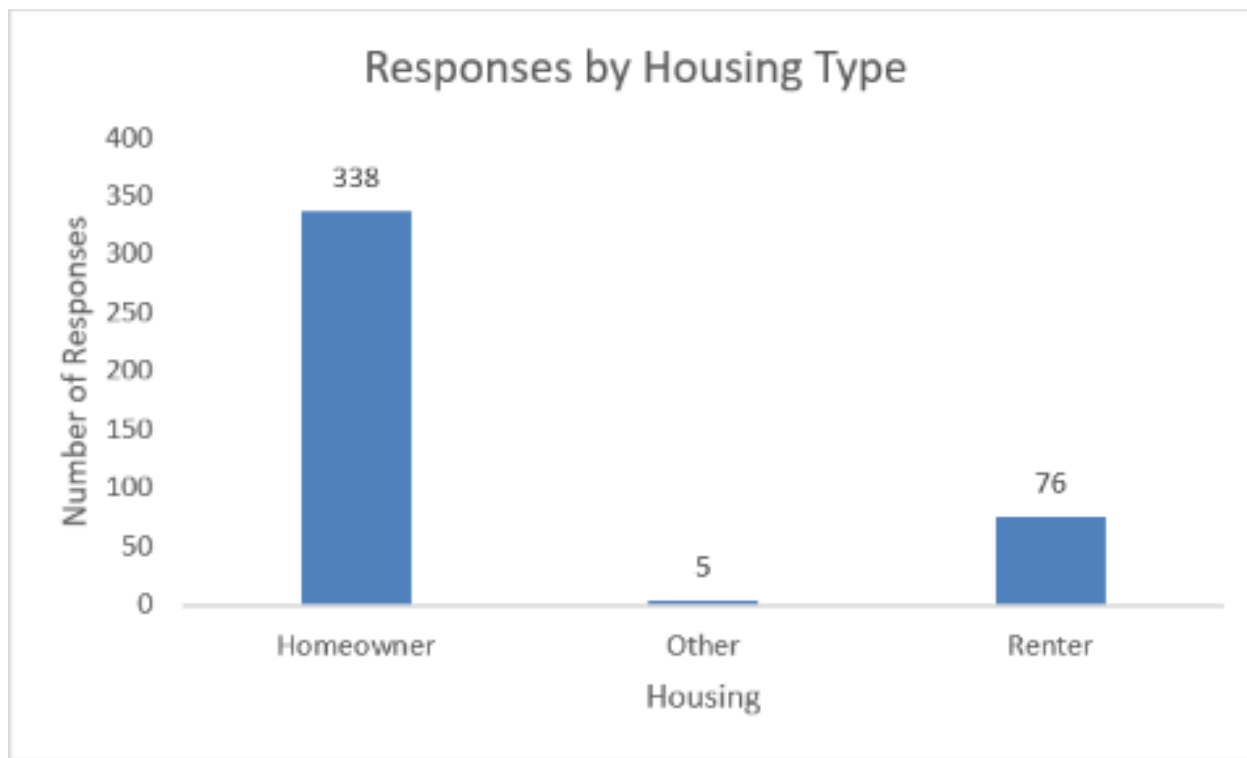


Almost all survey respondents receive a water bill; those that answered "No" are likely renters or individuals in other similar living situations where utilities are included in a housing payment.

Does your household receive a water bill?	Count of Does your household receive a water bill?	Percent
No	32	7.64%
Yes	387	92.36%
Grand Total	419	100%

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Demographic data: Housing



A majority of survey respondents are homeowners, with less than 1/5 identifying as renters or in "other" housing situations.

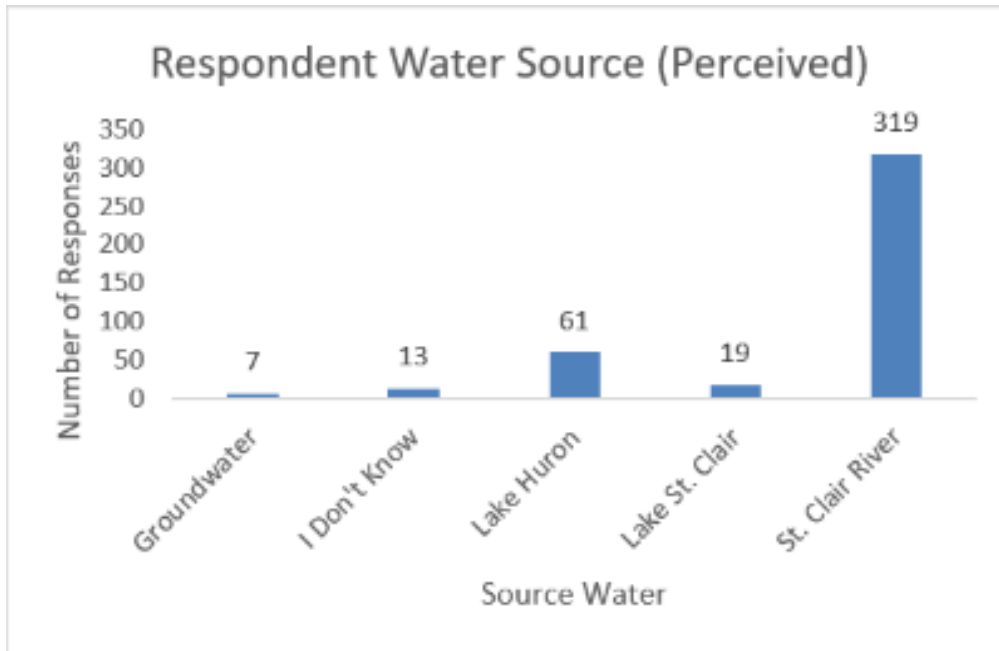
Are you a renter or homeowner?	Count	Percent
Homeowner	338	80.67%
Other	5	1.19%
Renter	76	18.14%
Grand Total	419	100.00%



General Survey Data

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Drinking Water Source

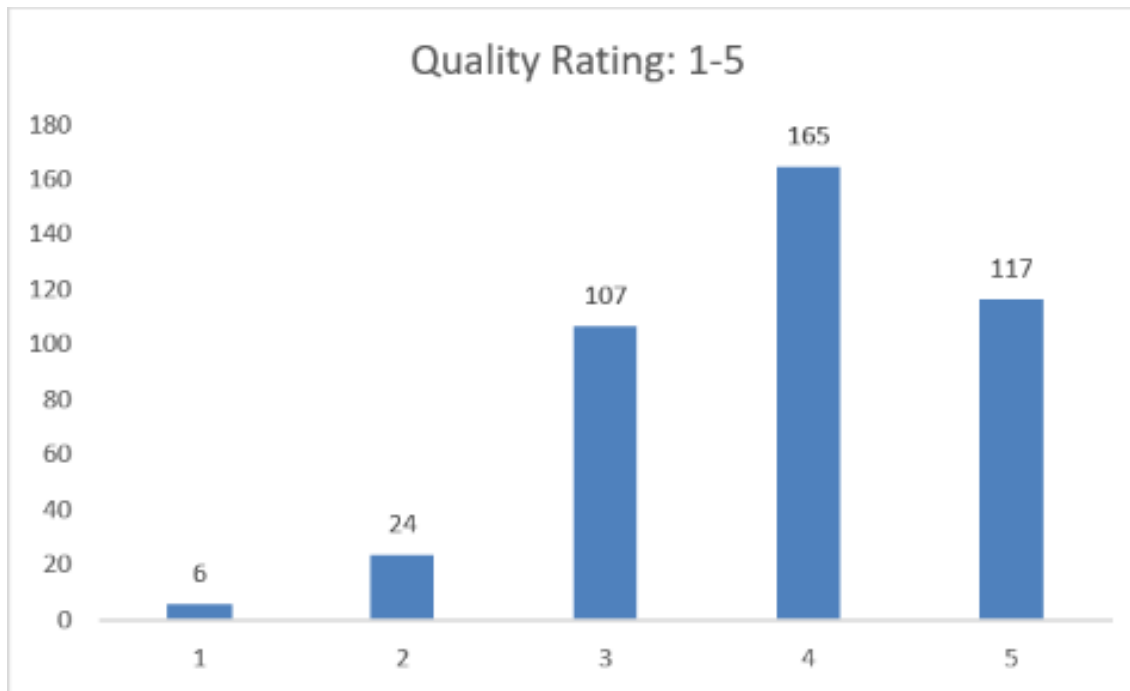


A majority of survey respondents correctly identified the St. Clair River as the source of drinking water for their community.

Where do you think your tap water comes from?	Count	Percent
Groundwater	7	1.67%
I Don't Know	13	3.10%
Lake Huron	61	14.56%
Lake St. Clair	19	4.53%
St. Clair River	319	76.13%
Grand Total	419	100.00%

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Drinking Water Quality (Perceived)



Scale of 1-5	Count	Percentage
1	6	1.43%
2	24	5.73%
3	107	25.54%
4	165	39.38%
5	117	27.92%
Grand Total	419	100.00%

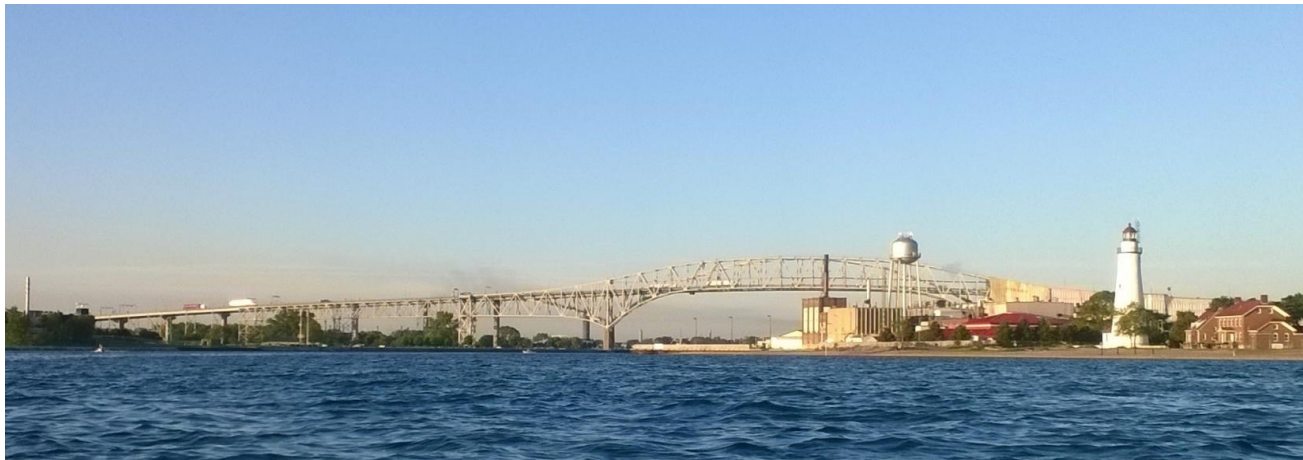
Most respondents ranked their drinking water quality as a "3" or higher, indicating that most respondents find their water quality to be average, good, or very high. Quality was defined as the taste, smell, appearance, and perceived health & safety of a respondent's drinking water.

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Additional Qualitative Findings Re: Water Quality

Concerns/reasons for low-ranking on perceived water quality:

- Reference to history of previous events (eg, hexavalent chromium spill, "chemical valley")
- Peer impact (ie, word-of-mouth or influence by others)
- General concern regarding contaminants in the news (eg, PFAS)
- Color/aesthetic or odor (eg, chlorine smell, sediment, etc.)



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Drinking Water Products

Product	Count	Percent
Purchased Water	171	40.81%
Filtered Tap Water	254	60.62%
Unfiltered Tap Water	204	48.69%

Respondents were allowed to choose more than one option when asked which drinking water products they use at home. The most popular option was filtered tap water (such as using a water pitcher, faucet filter, or other filtration product). Many respondents used more than one product.

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Drinking Water Contaminant Concern

Are you concerned about drinking water contaminants?	Count	Percent
I don't know	8	1.91%
No	43	10.26%
Yes	368	87.83%
Grand Total	419	100.00%

An overwhelming number of survey respondents reported that they are concerned about drinking water contaminants in general.

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Drinking Water Contaminants (Perceived)

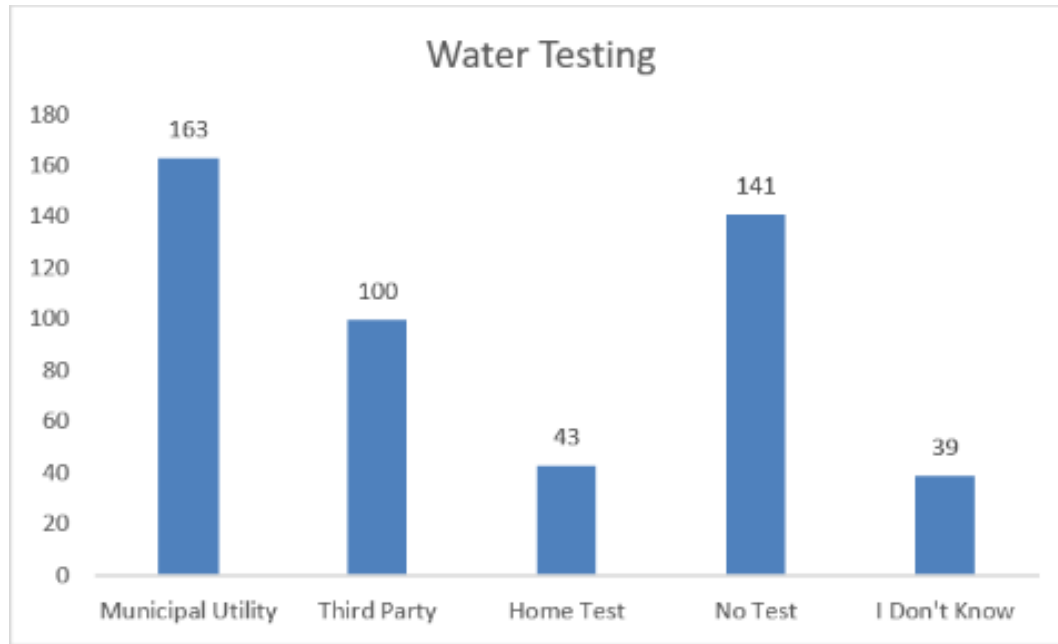
Values		Percentage
Unreported Spills	249	59.43%
PFAS	118	28.16%
Litter	186	44.39%
Bacteria	223	53.22%
Permitted Discharges	228	54.42%
Copper	109	26.01%
Lead	183	43.68%
None	32	7.64%
Other	22	5.25%

Respondents were allowed to choose more than one option when asked which contaminants they were specifically concerned about. Unreported spills and permitted discharges were of great concern, followed closely by bacteria, litter, and lead.

Among "other" responses were parasites, hexavalent chromium, prescription drug disposal, toxic underground waste, hormones, and agricultural runoff.

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Respondent Water Testing



Water Testing	Count	Percentage
Municipal Utility	163	38.90%
Third Party	100	23.87%
Home Test	43	10.26%
No Test	141	33.65%
I Don't Know	39	9.31%

Out of all survey respondents, 38.9% have had their water tested by the utility/municipality. Some respondents reported using home test kits daily.



Comparative Survey Data

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Drinking Water Quality vs. Age

Age	1	2	3	4	5	Grand Total
18-24	1	1	8	16	3	29
25-34		4	24	36	24	88
35-44	2	12	36	22	16	88
45-54	2	1	21	36	15	75
55-64		4	13	28	18	63
65+	1	2	5	27	41	76
Grand Total	6	24	107	165	117	419

Out of those who ranked their quality as a "5" 35% were over 65 years old, and ~26% were 45-64 years old: this makes up the majority of the age groups who rank their water quality as "very high."

Younger people were more likely to rank their drinking water quality as average or good, whereas older people were more likely to rank the quality as good or "very high."

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Drinking Water Quality vs. Housing

Housing	1	2	3	4	5
Homeowner	1.48%	5.92%	23.67%	37.87%	31.07%
Renter	1.32%	5.26%	34.21%	47.37%	11.84%

In general, renters perceive their water quality to be average or good, whereas homeowners are more likely to perceive their water quality as good or "very high."

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Contaminant Concern vs. Zip Code

Are you concerned about drinking water contaminants?	Response		
Zip Code:	I don't know	No	Yes
48001		2	18
48007			1
48011			1
48020			1
48023			2
48028		1	2
48039		4	13
48040	2	3	16
48041			2
48049			3
48054		4	8
48059	1	5	12
48060	5	18	104
48074		1	5
48079		5	180
Total	8	43	368

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Specific Contaminants (Perceived) vs. Age

	Accidental Spills	Bacteria	PFAS	Litter	Permitted Discharges	Lead	Copper
18-24	4.42%	7.17%	7.63%	6.45%	7.02%	5.46%	9.17%
25-34	19.68%	21.52%	8.47%	23.12%	20.61%	16.39%	16.51%
35-44	22.49%	22.42%	16.95%	22.04%	23.25%	16.39%	20.18%
45-54	18.47%	17.04%	16.10%	12.37%	16.67%	20.22%	23.85%
55-64	13.65%	14.80%	20.34%	17.20%	13.60%	19.13%	14.68%
65+	21.29%	17.04%	30.51%	18.82%	18.86%	22.40%	15.60%

Out of all respondents who reported concern about accidental spills, 18-24 year-olds only accounted for 4.42%. There aren't any solid trends here, but in general there seems to be greater concern of all contaminants amongst middle-aged to senior respondents.

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Respondent Water Testing vs. Housing

Housing Status	Have you had your drinking water tested?				
Are you a renter or homeowner?	Municipal Utility	Third Party	Home Test	No Test	I Don't Know
Homeowner	124	77	32	127	30
Other	1			4	1
Renter	38	23	11	10	8
Grand Total	163	100	43	141	39

Housing Status	Any Testing	No Testing/Unsure
Homeowner	59.74%	40.26%
Renter	80.00%	20.00%
Other	16.67%	83.33%

Renters are more likely to have their water tested than homeowners, but there are no solid trends showing that renters or homeowners prefer a specific kind of testing.

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Respondents Receiving Water Bills and Info Access

Where do you access information?							
Water Bill?	Utility/Municipal Website	WQR/CCR	Local News/Newsletter	Direct Communication with Utility	I Don't Know	Other Source	Have Not Accessed
No	21.88%	46.88%	37.50%	37.50%	6.25%	0%	12.50%
Yes	16.28%	49.61%	29.46%	25.06%	1.03%	1.03%	14.47%

Out of the 32 households who do NOT receive a water bill, 12.5% (4) report that they do not access any information about their water quality.

Out of the 387 households that DO receive a water bill, nearly 14.5% (56) report that they do not access any information about their water quality.

Water Quality Reports and Consumer Confidence Reports are the most popular sources of information among both groups.

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Respondent Water Products vs. Housing

Are you a renter or homeowner?	Unfiltered Tap Water	Purchased Water	Filtered Tap Water
Homeowner	170	140	212
Other	5	2	2
Renter	29	29	40
Grand Total	204	171	254

	Unfiltered Tap Water	Purchased Water	Filtered Tap Water
Homeowner	50.30%	41.42%	62.72%
Renter	38.16%	38.16%	52.63%
Other	100.00%	40.00%	40.00%

Respondents were allowed to choose more than one option when asked what kind of water products they use at home. Renters and homeowners alike responded that they use more than one type of water product, and filtered tap water remained the most used among both groups.

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Conclusions

- While most residents of the targeted zip codes understand where their drinking water comes from (source water: St. Clair River), most do not understand how water gets to the tap and what the water treatment process involves
- Most residents perceive their drinking water to be of average, good, or high quality; a relatively low amount ranked their water quality as poor or below average; however:
 - There is abundant concern over drinking water contaminants, mostly related to industrial activity along the river (unreported spills & permitted discharges)
- Most residents are filtering their tap water using filtration products at home, and/or testing their drinking water, to ease their concerns and improve confidence

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More Information



www.scriver.org



www.rivernetwork.org