

# **Report on the H<sub>2</sub>O Water Survey – Part A Chemins Riverside, Clarence, and de la Vallée Summer 2024**

The H<sub>2</sub>O Wakefield team issued a summary on May 18, 2025. Upon further examination, we have supplemented our data to clarify our numbers and findings concerning two specific questions. We regret any initial inaccuracies and the lack of clarity.

**May 26, 2026**

- In the summer of 2024 H<sub>2</sub>O Wakefield surveyed 44 residents of Riverside, de la Vallée, and Clarence
- Survey questions were designed to assess the quantity and quality of current groundwater sources used by households and businesses on these streets (Appendix 1).
- 30 responses to the survey were received (68% response rate).
- 6 individuals indicated that they had experienced problems in the last 10 years related to quantity of water.
- Other problems related to quality of the water were reported by 8 individuals – hard water (high iron, sulphur, manganese, calcium), sulphurous smell, discolouration, sediments/sand/silt in water.
- Well owners are responsible for ensuring that water from their wells is safe to drink, and that their wells are not contaminating the groundwater.
- Residents of these streets have indicated concerns about the impact of previous construction projects on their wells. 4 respondents reported experiencing problems in relation to past construction.
- We hope that the results of this survey will be a useful step towards ensuring water security within our community.

## **Introduction**

H<sub>2</sub>O Wakefield is a small volunteer group of local residents. The group was formed because of concerns that were being expressed by community residents regarding the safety and security of the well water supply.

The goals of H<sub>2</sub>O Wakefield are to:

- develop awareness of water as a human right and a shared community resource.
- encourage residents to understand their wells, in particular, how to protect and maintain wells
- obtain a better understanding of groundwater and well water sources in Wakefield.
- support growth that is sustainable and equitable; and
- engage all levels of government to facilitate their role in understanding our groundwater sources and ensuring these are protected.

The provincial government has mandated intensification of development within Québec villages<sup>1</sup>. However, any intensification must ensure that access to potable water is maintained, to ensure the health and livelihood of residents.

An in-depth survey was conducted in fall-winter 2020, was to assess the quantity and quality of current groundwater sources used by households and businesses on Chemins Burnside, Elmdale and Legion.

The present survey focused on another area of the village of Wakefield. Participation from residents of Chemins Clarence, de la Vallée, and Riverside between de la Vallée and Rockhurst were selected, as these streets are likely to be impacted by current residential development within their vicinity. The study of this micro-community may be applied to other sectors of the village.

As with our earlier study of the Chemins Burnside, Elmdale and Legion area, we expect that the current residents of this micro-community, the municipality, and the local developers will be willing to work together, to ensure sustainability of the village's infrastructure and development.

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<sup>1</sup> <http://legisquebec.gouv.qc.ca/en/showdoc/cs/a-19.1>

## Methods

- The survey questions (see Appendix 1) were developed by members of the group H<sub>2</sub>O Wakefield, based on the survey of Chemins Burnside, Elmdale and Legion (2020; see h2owakefield.com).
- 44 surveys were distributed to property owners of the Chemins Clarence and environs, Riverside Drive between Rockhurst and de la Vallée and de la Vallée itself, by door-to-door contact.
- By September 30, 2024, when data collection ended, 30 surveys had been completed and submitted.
- Signed consent was obtained from each individual submitting answers to the survey questions.
- Each survey was assigned a random number, and the table of number assignments was saved separately from the surveys to assure confidentiality and protect residents' privacy.
- The data from the surveys were collated into an excel spreadsheet.
- Respondents were encouraged to keep a copy of the survey for their records, in particular, the list of water quality parameters that should be evaluated on a regular basis.

## Results

30 responses to the survey were received (68% response rate). Responses to the individual survey questions are detailed below.

### Question 1: Distance of well from main building?

- 27 people answered this question.
- Aside from two properties, where the well was in the basement of the house, the distance ranged from 8 inches to 100 yards (20.3 cm-91.44 metres).
- The average distance was 16.19 metres (14.99 if 2 basement wells included as 0 distance from the house).

### Question 2: Distance of well from septic tank?

- 28 people answered this question.
- Most respondents are on the municipal sewer system, but for a cluster of houses (4 answers to our survey). The distance from well to septic tank for those individuals ranged from 18.29 metres-70 metres).

### Question 3: Approximate depth of well?

- 28 people answered this question.
- 9 people didn't know the depth of the well.
- The depth of the wells ranged from 4 shallow (surface) of unknown depth, 10 ft to 350 ft (3.05-30.48 metres).
- Using the Quebec government definition of a shallow well<sup>2</sup> (no more than 9 m [29 ft 6 in.] below ground surface), of the 17 property owners who were aware of the depth of their well, 5 properties had shallow wells (albeit an additional one is 30 ft).
- The depth of the other wells ranged from 40 ft to 350 ft (12.19 – 30.48 m).

**Question 4: Difficulties in the last 10 years (list all)?**

- 28 people answered this question.
- 13 individuals stated they had not experienced any difficulties during the time that they have owned the property.
- 13 people reported problems with their well water.
- Two people answered n/a; of the remaining 26 people who answered the question 6 people had experienced problems with quantity of water (one was a dead pump).
- 8 people reported problems with the quality of their water.
- Problems related to water quality included bacterial contamination, discolouration, sediments/sand/silt in water.
- One individual reported arsenic in their well.

**Question 5: Have there been any changes to your water coinciding with nearby blasting or construction?**

- 28 people answered this question.
- 23 respondents had not experienced any changes due to blasting or construction.
- 4 respondents indicated that they had experienced changes.
- The other respondent had not experienced any difficulty after drilling a new well.

**If yes, what type of changes occurred? And if yes, what was needed to address difficulties or changes?**

- The changes reported included a reduction or loss of water (1 individual), and an increase in iron, sulfur.
- One individual reported arsenic levels above the provincial limit, resulting in a need to update the water treatment system.
- One individual had experienced rainwater run off into the well, requiring them to build a wall to prevent water from entering their well.
- One individual commented that their" well emptied during a test of another well" (4-4,2023

**Question 6: If this is a residential property, number of residents.**

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<sup>2</sup> Chapter Q-2. R6. Groundwater catchment regulation of the Environment Quality Act (revised 2014)

- 23 people answered this question.
- Average number of 2.6 residents per residence
- Range of 1-6 residents per residence

# of residents	# of residential properties with the indicated number of residents
1	5
2	9
3	2
4	6
5	0
6	1

**Question 7: If this is a commercial property**

**a) Average number of users per week?**

**b) Number weeks per year in operation?**

- 7 properties identified themselves as commercial.
- The average # users per week was 350 (approximately).
- The range of # users per week was 3->1000

**Question 8: Did you complete a basic (microbiological only) or comprehensive (microbiological and physico-chemical) water test within the last year?**

**a) Basic**

- 28 respondents answered this question.
- 10 individuals answered yes to having carried out a basic test within the past year .
- 4 individuals stated they had done a basic water test at some point since they lived there (e.g., when they built, when they moved in, installed a water softener, or several years ago).
- 15 individuals had not carried out a basic water test within the past year.

**b) Comprehensive**

- 6 respondents had carried out a comprehensive water test in the past year.
- 1 respondent indicated a comprehensive test was overdue.

**Question 9: If yes to either a basic or comprehensive test, are you willing to submit a copy of your water test results to H<sub>2</sub>O Wakefield?**

- 16 individuals indicated a willingness to share their information as part of the survey.

**Question 10: If you have not had a basic water test over the past year, are you willing to get a basic water test within the next 60 days?**

- 19 individuals indicated a willingness to have a basic water test.
- 4 individuals were not interested in having a basic water test.
- 5 individuals indicated n/a, maybe, or were unsure.

**Question 11: If yes, are you willing to submit the results to H<sub>2</sub>O Wakefield for the purposes of data collection?**

- 19 individuals were willing to submit the results of the basic water test once completed.
- 1 individual answered no.
- 8 individuals answered n/a or were unsure.

**Question 12: Are you interested in completing a comprehensive water test?**

- 16 individuals were interested in having a comprehensive analysis of their water.
- 6 individuals were not interested.
- 5 individuals answered n/a.

**a) Reasons for wanting (or not wanting) a basic or comprehensive test**

Some respondents were willing to have a comprehensive test because they felt that it was important information to have to protect their well water and for their own information. Other individuals felt it was unnecessary as they hadn't experienced any problems. Three individuals indicated that it was costly.

**Question 13: How much water can you draw from your well before you run out of water?**

- 29 people answered this question.
- 28 respondents did not know how much water they can draw from the well before they run out.
- 1 individual indicated 800 litres could be drawn before running out.

**Question 14: What is your well flow rate?<sup>3</sup>**

- 29 people answered this question.
- 25 respondents did not know their well flow rate.

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<sup>3</sup> Although this question pertained to well flow rate, respondents may have used a variety of testing methods to estimate well flow rates - some data may just reflect the pump rate not the well supply rate.

- Of the 4 respondents who indicated a water flow rate, one well provided 65 litres/hr (0.22 gal/hr) one well provided 1,181 litres/hr (400 gal/hr). One individual answered good and another gave the water pressure as 80 psi

**Question 15: If you do not know, can you give an example of how much water you can use before you “run out”?**

- 22 people answered this question.
- 5 people reported they run out of water.
- Most people indicated that they do not run out of water.
- For the handful of residents that indicated problems with running out of water, the well depths were shallow, except for one well at 30.48 metres and another at 350 feet. Reasons for running out of water included a stuck toilet handle; too many showers; filling a children’s pool; and letting the hose run.

**Questions 16 & 17: What was your water pressure like 5 years ago? What is your water pressure like now?**

- 29 people answered this question

Water pressure (subjective perception)	5 years ago # of respondents	Now # respondents
n/a	4	2
weak	0	0
Somewhat weak	0	0
Adequate	7	9
Good	10	9
Very Good	7	9
1 property had seen their water pressure drop over the last five years. 3 properties had their water pressure improve over the past 5 years. 22 properties had their water pressure stay the same.		

**Question 18: How do you use your water?**

- 29 people answered this question.

Uses	# Respondents
Drinking	25
Showers	19
Baths	20
Laundry	25

Cleaning	28
Garden	19 (+ 1 infrequent users)
Other	1 playing

**Question 19: Do you use water efficient appliances?**

- 27 people answered this question.
- 17 respondents use at least some water efficient appliances.
- 7 users do not have water efficient appliances.
- 2 individuals did not understand the question

**Question 20: Do you have any further comments or questions?**

- 5 people made comments.
- These included being thankful/supportive of the survey and offering test results. One individual commented that the problems arise from not having an aqueduct, recognizing that the population voted against it a couple of decades ago.

**Discussion**

This present survey was organized by H<sub>2</sub>O Wakefield in response to concerns raised by residents about continued access to a sufficient supply of water that is safe to drink.

The United Nations recognizes access to water and sanitation as a human right.

*“On 28 July 2010, through [Resolution 64/292](#), the United Nations General Assembly explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realisation of all human rights. The Resolution calls upon States and international organisations to provide financial resources, help capacity-building and technology transfer to help countries, in particular developing countries, to provide safe, clean, accessible and affordable drinking water and sanitation for all.”*<sup>4</sup>

There was a strong response to the survey with 30 out of 44 surveys completed and returned (68% response rate), indicating a strong interest in well water and groundwater protection among residents on Chemins Clarence, Riverside and de la Vallée.

The survey sought to gain an understanding of respondents’ awareness of their water quantity and quality. For example, not everyone was aware of the depth of their well. Out of 28 people

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<sup>4</sup> [https://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/64/292](https://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/64/292)

who answered the question concerning well depth, 9 individuals were unaware of the depth of the well.

Some residents reported problems with the quantity of water. Six individuals of the 28 respondents had experienced problems within the past 10 years, i.e. 21%. However, 2 individuals responded n/a as they had not experienced problems during the time that they had owned the property, so their response did not reflect any problems that might have been experienced prior to their ownership. Two people have had to drill new wells in the past 10 years.

Most respondents (86%) were unaware of their well flow rate (25 respondents out of 29 responses to that question), and among those responding some did not understand what this meant.

We asked survey participants whether they had carried out a basic water test (microbiological only) or a comprehensive test (microbiological and physico-chemical) within the past year. Ten individuals had carried out a basic test within the past year, and 7 individuals had carried out a comprehensive test within the same time frame. In addition 4 individuals reported that they had tested their water at some point during their residency.

The Québec Ministère de l'Environnement et de la Lutte contre les changements climatiques recommends which tests should be done for well water and how often.

*“The Ministère ... recommends that you have your water analyzed by an accredited laboratory:*

- *at least twice a year, in the spring and fall, for microbiological parameters;*
- *at least once during a well's usage period for physico-chemical parameters that are related to soil characteristics and that vary only slightly.”<sup>5</sup>*

The survey revealed that 15 residents had not tested their water during the past year, and some may never have tested their water. This may indicate a lack of awareness or understanding of well water and wells in general, or could reflect concerns about cost, and so could be of concern.

Well owners are responsible for ensuring that water from their wells is safe to drink, and that their wells are not contaminating the groundwater.<sup>6</sup>

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<sup>5</sup> <http://www.environnement.gouv.qc.ca/eau/potable/depliant/index-en.htm>

<sup>6</sup> How well is your well? Homeowners Guide to Safe Wells and Septic Systems [www.h2o.mrcdescollinesdeloutaouais.qc.ca](http://www.h2o.mrcdescollinesdeloutaouais.qc.ca) (link no longer active)

*“It is recommended that private homeowners be made aware that periodic monitoring of ground water quality is necessary, especially if the water exhibits a change in taste, odour or colour.”<sup>7</sup>*

Four individuals reported changes to their well water that had occurred at the same time as there was nearby blasting or construction. Of these, one reported a loss of supply and the other three reported changes in the smell or appearance of the water. One individual experienced run off into the well, which resulted in cloudy water for more than 10 days. While this represents about 15% of all respondents, this happened when there had been blasting or construction events. It is very difficult to know (and we are not in a position to state) whether any blasting or construction caused these changes.

Respondents to the survey were clearly interested in understanding more about the quality of their water. The high survey return rate (68%) is indicative of the level of interest, with 19 respondents interested in carrying out a basic test and 16 respondents stating that they would be willing to carry out a comprehensive test. We will be following up with respondents who indicated a willingness to share the results of their water tests. However, although we did not inform participants of the cost of testing, several participants mentioned cost as a potential obstacle to having their water tested.

We are aware that over 25 years ago residents voted for a municipal sewer system, but the proposal for a municipal water system was narrowly defeated. Nonetheless, one respondent to our survey indicated that they felt that a municipal water system is now needed, to ensure water security.

## **Conclusion**

We hope this restricted survey will lead to a complete survey of the entire village of Wakefield, as well as an improvement in knowledge about the importance of protecting well water and groundwater more generally. We are requesting that the Municipality of La Pêche and the MRC des Collines de l’Outaouais, in conjunction with other regulatory bodies, start to examine the whole village’s need for potable water for every resident and thus ensure that water insecurity is a non-issue.

We are grateful to everyone who participated in the survey. We hope that you found the exercise useful, and that you have retained a copy of the survey for your records. Members of H<sub>2</sub>O Wakefield will be following up with those respondents who indicated a willingness to provide water testing data. This data will also be collated, anonymized and shared in Part B of the report, to further encourage awareness of maintaining access to good quality potable water.

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<sup>7</sup> Golder Associates Ltd (1990) Hydrogeological study report to the Municipality of Chelsea

In the meantime, we are in consultation with community groups to further develop water awareness in the community. The municipality recently added more information on its website concerning well water. In support of these efforts, we will be sharing this report with local developers and community groups, the Municipality of La Pêche and the MRC des Collines, and others with expertise or interest in this topic.

**Survey circulated to the residents of Chemins  
de la Vallée, Riverside, Clarence, and  
Rockhurst – Summer 2024**

**Appendix 1**

Hello,

As Wakefield continues to grow, it is vital to ensure access to reliable drinking water for all. To assist in this, a group of concerned citizens is attempting to accurately assess the quantity and quality of current groundwater sources used by households and businesses in the area approximately bounded by Valley Drive, River Road, Clarence, and Rockhurst. Our group – H<sub>2</sub>O Wakefield – seeks to collect data in a way that ensures confidentiality and then make the compiled results available to the public as well as to the Municipality of La Pêche and the MRC des Collines. The results will be presented in a form that respects privacy and gives everyone an accurate picture of the current situation.

It is our understanding that neither the Municipality nor the MRC have an accurate map/survey of water sources in the village.

This is a preliminary survey to identify the quantity and quality of drinking water sources. We hope that this information and data will be used to inform orderly development, protecting current residents' water sources and ensuring future residents also have a viable water source.

In 2019 and 2020, H<sub>2</sub>O Wakefield conducted well-water surveys of Burnside, Elmdale, and Legion residents in response to the then-proposed Wakefield Hills development.

Given continuing development pressures in the village, H<sub>2</sub>O Wakefield proposes to conduct the same survey in the Valley Drive-River Road-Clarence-Rockhurst area. Please be assured that any information you submit will have your name and address redacted, and the data and information you submit will be anonymized (e.g., assigned a number at random). Every precaution will be taken to protect your privacy. Only the members of the group H<sub>2</sub>O Wakefield will have access to the raw data from the survey, which will be kept in a secure location.

The information from the survey will be put into a spreadsheet and be used as a community resource to advocate for water protection at the municipality and MRC. We will not indicate any specific residence or individual residents.

Thank you for your support.

Nancy Baker

Nancy Hooker

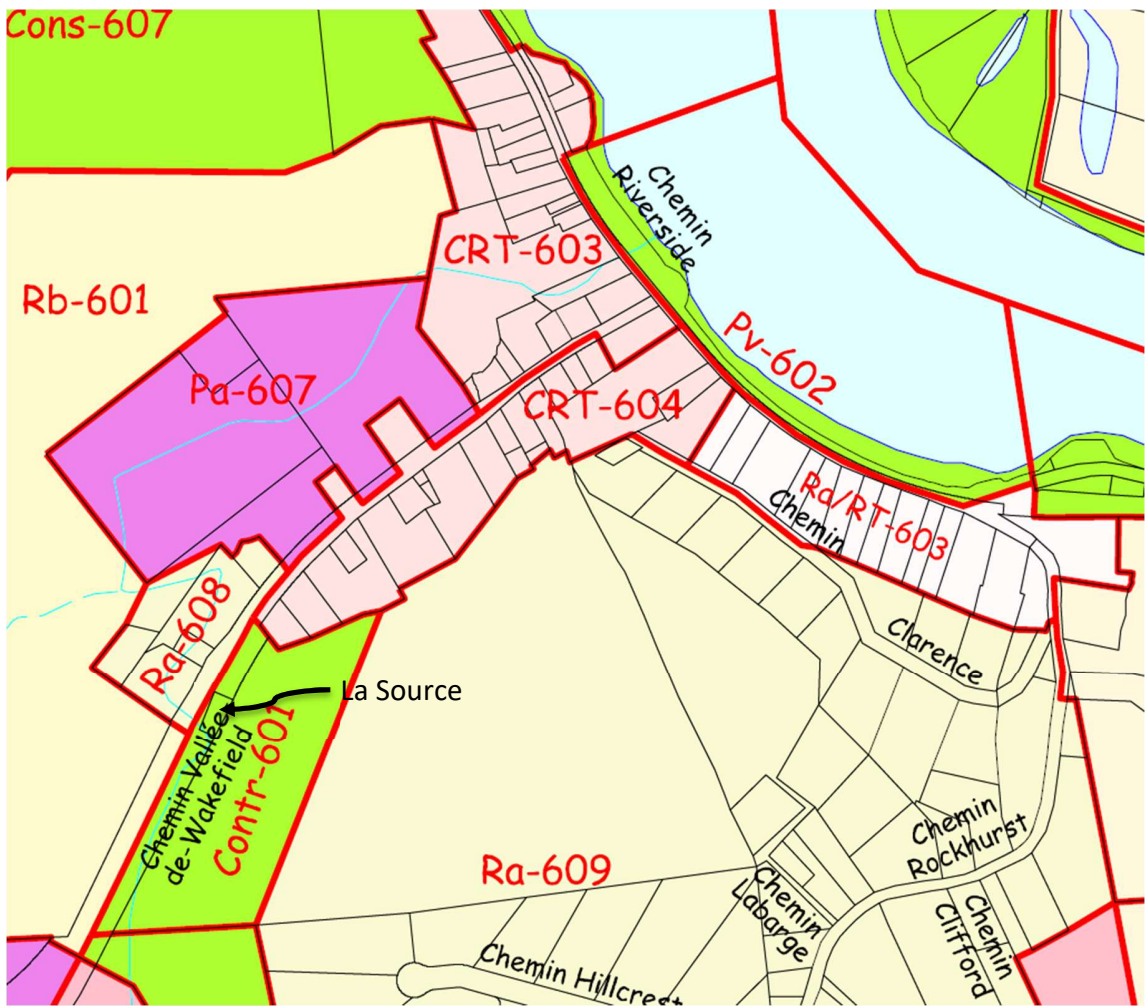
Jill Watkins

Huffy Griffin

Gillie Griffin

**Email: [H2OWakefield@gmail.com](mailto:H2OWakefield@gmail.com)**

Map 1: Location of area to be surveyed. New developments are being considered in the CRT-604 and Ra-609 zones.



Source: Municipal bylaw 03-429 (<https://www.villelapeche.qc.ca/wp-content/uploads/2023/06/03-429-Plan-3-de-5-Wakefield.pdf>, accessed June 28, 2024).

**Consent**

I consent to provide the information requested about my water situation. I understand that any information I provide will have my name and address redacted, and the information will be assigned a random number to protect my privacy.

The information will be put into a spreadsheet and be used as a community resource to advocate for water protection at the municipal and MRC levels. There will be no indication that the results are from any particular residence or individual resident(s).

\_\_\_\_\_                      \_\_\_\_\_                      \_\_\_\_\_  
Name                                      Signature                                      Date

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Address

## H<sub>2</sub>O Wakefield – Well Water Survey – Valley, River, Clarence, Rockhurst

If you are renting, please pass this survey to the owner of the property, or provide name and contact information of your landlord to H<sub>2</sub>O Wakefield at: **H2OWakefield@gmail.com**

If you have more than one well, please provide information for each well.

1) Distance of well from main building \_\_\_\_\_

2) Distance of well from septic tank \_\_\_\_\_  n/a - on the municipal sewage system

3) Approximate depth of well \_\_\_\_\_

4) Difficulties in the last 10 years (list all)

_____	_____
_____	_____
_____	_____

5) Have there been any changes to your water coinciding with nearby blasting or new construction?

Yes

No

If yes, what types of changes occurred?

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If yes, what was needed to address difficulties or changes?

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6) If this is a residential property, number of residents \_\_\_\_\_

n/a this is a commercial property

7) If this is a commercial property

a) average number of users per week \_\_\_\_\_

b) number of weeks per year in operation \_\_\_\_\_

n/a this is a residential property

## Water testing

According to the Québec government, the two main tests to assess the quality of your well water to ensure it is safe for consumption are:

**\*Basic test includes microbiological parameters**

**\*\*Comprehensive test includes microbiological and physico-chemical parameters**

See <http://www.environnement.gouv.qc.ca/eau/potable/depliant/index-en.htm>

**\*Basic test - Microbiological parameters**

- E. coli bacteria,
- Enterococcal bacteria,
- Total coliform bacteria

**\*\*Comprehensive test - Physico-chemical parameters**

- Arsenic,
- Manganese,
- Barium,
- Nitrates-nitrites,
- Chlorides,
- Sodium,
- Iron,
- Sulfates,
- Fluorides,
- Total hardness based on the calcium and magnesium content

**Plus the following parameters, not in the recommended list from the Quebec government are also important in assessing water quality:**

- pH
- Colour
- Turbidity
- Radon
- Uranium

8) Did you complete a basic or comprehensive water test within the last year? (check all that apply)

Yes, basic

Yes, comprehensive

If yes to comprehensive, please indicate reasons here:

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No to either basic or comprehensive test

9) If yes to either a basic or comprehensive test, are you willing to submit a copy of your water test results to H<sub>2</sub>O Wakefield?

Yes

No

Note: your water test results will be kept confidential and results will be aggregated to produce benchmark water composition and quality data for determining changes over time.

10) If you have not had a basic water test over the past year, are you willing to get a basic water test within the next 60 days?

Yes

No

11) If yes, are you willing to submit the results to H<sub>2</sub>O Wakefield for the purpose of data collection?

Yes

No

12) Are you interested in completing a comprehensive water test?

Yes

No

Please indicate reasons for either answer:

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If submitting any water test results, please submit to **H2OWakefield@gmail.com**, or request pick up at this email address.

13) How much water can you draw from your well before you run out of water? \_\_\_\_\_

I don't know

14) What is your well flow rate? \_\_\_\_\_

I don't know

15) If you do not know, can you give an example of how much water you can use before you "run out"?

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16) What was your water pressure like five years ago (check one)

N/A

Weak

Somewhat weak

Adequate

Good

Very good

17) What is your water pressure like now (check one)

N/A

Weak

Somewhat weak

Adequate

Good

Very good

18) How do you use your water (check all that apply)

Drinking

Showers

Baths

Laundry

Cleaning

Garden

Other \_\_\_\_\_

19) Do you use water efficient appliances?

Yes (please list)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

No

20) Do you have any further comments or questions?

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Thank you for completing this survey!