

## 2022 Consumer Confidence Report

*This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to California state standards.*

### Water System Information

Water System Name: **CATHEDRAL WOOD MUTUAL WATER CO., INC.**

**Report Date:** July 1, 2023

**Type of Water Source(s) in Use:** Surface, ground

**Name and General Location of Source(s):** North Spring, Sugar Valley Road; South Spring, Sugarloaf Road; Well, Carl Drive. Scotts Valley, Santa Cruz County, California

**Drinking Water Source Assessment Information:** As mentioned last year, the State Water Board inspected our system/facilities in December 2019 and December 2021. Cathedral Wood shareholders conducted a sanitary survey of the spring watersheds and completed an update to the survey report in January 2020. Associated reports are available for your review by calling Bonnie Overgaard at 831-539-3201 or sending an email to cathedralwoodmutualca@gmail.com

**Time and Place of Regularly Scheduled Board Meetings for Public Participation:** The date, time, and place (and related agendas) for board meetings and shareholder/residents meetings are published 30 days in advance, if possible. The annual meeting usually is scheduled for late February or early March, prior to the end of the fiscal year (March 31).

**For More Information:** Contact: Bonnie Overgaard, by telephone at 831-539-3201, by email at cathedralwoodmutualca@gmail.com.

### About This Report

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2022 and may include earlier monitoring data.

### Importance of This Report Statement in Spanish

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse con CATHEDRAL WOOD MUTUAL WATER CO., INC. a Bonnie Overgaard, 831-539-3201 para asistirlo en español.

## Terms Used in This Report

| Term                                             | Definition                                                                                                                                                                                                                                                                  |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level 1 Assessment                               | A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.                                                                                             |
| Level 2 Assessment                               | A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions. |
| Maximum Contaminant Level (MCL)                  | The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.            |
| Maximum Contaminant Level Goal (MCLG)            | The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).                                                                                                |
| Maximum Residual Disinfectant Level (MRDL)       | The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.                                                                                             |
| Maximum Residual Disinfectant Level Goal (MRDLG) | The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.                                                                      |
| Primary Drinking Water Standards (PDWS)          | MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.                                                                                                                                |
| Public Health Goal (PHG)                         | The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.                                                                                                      |
| Regulatory Action Level (AL)                     | The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.                                                                                                                                            |
| Secondary Drinking Water Standards (SDWS)        | MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.                                                                                                                     |
| Treatment Technique (TT)                         | A required process intended to reduce the level of a contaminant in drinking water.                                                                                                                                                                                         |
| Variances and Exemptions                         | Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.                                                                                                                  |
| ND                                               | Not detectable at testing limit.                                                                                                                                                                                                                                            |
| ppm                                              | parts per million or milligrams per liter (mg/L)                                                                                                                                                                                                                            |
| ppb                                              | parts per billion or micrograms per liter (µg/L)                                                                                                                                                                                                                            |
| ppt                                              | parts per trillion or nanograms per liter (ng/L)                                                                                                                                                                                                                            |
| ppq                                              | parts per quadrillion or picogram per liter (pg/L)                                                                                                                                                                                                                          |
| pCi/L                                            | picocuries per liter (a measure of radiation)                                                                                                                                                                                                                               |

## **Sources of Drinking Water and Contaminants that May Be Present in Source Water**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

## **Regulation of Drinking Water and Bottled Water Quality**

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

## **About Your Drinking Water Quality**

### **Drinking Water Contaminants Detected**

Tables 1, 2, 3, 4, 5, 6, and 8 and the Appendix list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

**Table 1. Sampling Results Showing the Detection of Coliform Bacteria**

| Microbiological Contaminants | Highest No. of Detections | No. of Months in Violation | MCL | MCLG | Typical Source of Bacteria   |
|------------------------------|---------------------------|----------------------------|-----|------|------------------------------|
| <i>E. coli</i>               | 0                         | 0                          | (a) | 0    | Human and animal fecal waste |

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

**Table 2. Sampling Results Showing the Detection of Lead and Copper**

| Lead and Copper | Sample Date | No. of Samples Collected | 90 <sup>th</sup> Percentile Level Detected | No. Sites Exceeding AL | AL  | PHG | Typical Source of Contaminant                                                                                                 |
|-----------------|-------------|--------------------------|--------------------------------------------|------------------------|-----|-----|-------------------------------------------------------------------------------------------------------------------------------|
| Lead (ppb)      | 9/2021      | 5                        | ND                                         | 0                      | 15  | 0.2 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm)    | 9/2021      | 5                        | 0.31                                       | 0                      | 1.3 | 0.3 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives               |

Next sampling for Lead and Copper is due in September 2024.

**Table 3. Sampling Results for Sodium and Hardness**

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL  | PHG (MCLG) | Typical Source of Contaminant                                  |
|-----------------------------------------------|-------------|----------------|---------------------|------|------------|----------------------------------------------------------------|
| Sodium (ppm)                                  | 6/2022      | 20             | 18-22               | None | None       | Salt present in the water and is generally naturally occurring |

|                |        |     |         |      |      |                                                                                                                      |
|----------------|--------|-----|---------|------|------|----------------------------------------------------------------------------------------------------------------------|
| Hardness (ppm) | 6/2022 | 261 | 168-355 | None | None | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |
|----------------|--------|-----|---------|------|------|----------------------------------------------------------------------------------------------------------------------|

**Table 4. Detection of Contaminants with a Primary Drinking Water Standard**

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL [MRDL] | PHG (MCLG) [MRDLG] | Typical Source of Contaminant |
|-----------------------------------------------|-------------|----------------|---------------------|------------|--------------------|-------------------------------|
| Please See Appendix                           |             |                |                     |            |                    |                               |

**Table 5. Detection of Contaminants with a Secondary Drinking Water Standard**

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | SMCL | PHG (MCLG) | Typical Source of Contaminant |
|-----------------------------------------------|-------------|----------------|---------------------|------|------------|-------------------------------|
| Please See Appendix                           |             |                |                     |      |            |                               |

**Table 6. Detection of Unregulated Contaminants**

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | Notification Level | Health Effects |
|-----------------------------------------------|-------------|----------------|---------------------|--------------------|----------------|
| None                                          |             |                |                     |                    |                |

## Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Cathedral Wood MWC is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

While your drinking water meets the federal and state standard for arsenic, at times it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U. S., EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

## Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

| Violation | Explanation | Duration | Actions Taken to Correct Violation | Health Effects Language |
|-----------|-------------|----------|------------------------------------|-------------------------|
| None      |             |          |                                    |                         |
|           |             |          |                                    |                         |

## For Water Systems Providing Groundwater as a Source of Drinking Water

**Table 8. Sampling Results Showing Fecal Indicator-Positive Groundwater Source Samples**

| Microbiological Contaminants<br>(complete if fecal-indicator detected) | Total No. of<br>Detections | Sample<br>Dates | MCL<br>[MRDL] | PHG<br>(MCLG)<br>[MRDLG] | Typical Source of<br>Contaminant |
|------------------------------------------------------------------------|----------------------------|-----------------|---------------|--------------------------|----------------------------------|
| <i>E. coli</i>                                                         | (In the year)<br>0         | Monthly         | 0             | (0)                      | Human and animal fecal waste     |
| Enterococci                                                            | (In the year)<br>0         | NA              | TT            | N/A                      | Human and animal fecal waste     |
| Coliphage                                                              | 0                          | NA              | TT            | N/A                      | Human and animal fecal waste     |

### Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

**Special Notice of Fecal Indicator-Positive Groundwater Source Sample: None**

**Special Notice for Uncorrected Significant Deficiencies: None**

**Table 9. Violation of Groundwater TT**

| Violation | Explanation | Duration | Actions Taken to<br>Correct Violation | Health Effects<br>Language |
|-----------|-------------|----------|---------------------------------------|----------------------------|
| None      |             |          |                                       |                            |
|           |             |          |                                       |                            |

## For Systems Providing Surface Water as a Source of Drinking Water

**Table 10. Sampling Results Showing Treatment of Surface Water Sources**

|                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Treatment Technique <sup>(a)</sup> (Type of approved filtration technology used)                      | Direct filtration of the combined flow from the sources. Well water is pretreated (filtered) to remove iron and manganese. Then all source water is treated by the addition of a coagulating polymer, traveling through a pipeline flocculator and then a sand filter. Finally, chlorine is added for disinfection and the water is stored in two potable water tanks until distribution. |
| Turbidity Performance Standards <sup>(b)</sup> (that must be met through the water treatment process) | Turbidity of the filtered water must:<br>1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month.                                                                                                                                                                                                                                                                          |

|                                                                                     |                                                                                                  |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|                                                                                     | 2 – Not exceed 1 NTU for more than eight consecutive hours.<br>3 – Not exceed 5 NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | 100                                                                                              |
| Highest single turbidity measurement during the year                                | 0.3 NTU                                                                                          |
| Number of violations of any surface water treatment requirements                    | 0                                                                                                |

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

### Summary Information for Violation of a Surface Water TT

**Table 11. Violation of Surface Water TT**

| Violation | Explanation | Duration | Actions Taken to Correct Violation | Health Effects Language |
|-----------|-------------|----------|------------------------------------|-------------------------|
| None      |             |          |                                    |                         |

### Source Water Protection Tips for Consumers

Protection of drinking water is everyone's responsibility. You can help protect this community's drinking water sources in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water sources.
- Pick up after your pets.
- Properly maintain your septic system to reduce leaching to water sources.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use the US EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.





## Appendix

### Sampling Results for 2022

These tables list the drinking water contaminants that were detected during the 2022 samplings of raw, untreated water. Their presence in the water does not necessarily indicate that the water poses a risk. As mentioned earlier, the State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

*To provide some context, one ppm (one part per million) is comparable to one second in 11.5 days;  
one ppb (one part per billion) is comparable to one second in nearly 32 years.*

#### Regulated Contaminants with PRIMARY DRINKING WATER STANDARDS

| CHEMICAL OR CONSTITUENT                                           | SAMPLE DATE                | LEVEL DETECTED                                                                | MCL [MRDL]                        | PHG (MCLG) [MRDLG] | TYPICAL SOURCE OF CONTAMINANT HEALTH EFFECTS                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------|-----------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Radioactive Contaminants</b>                                   |                            |                                                                               |                                   |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Gross Alpha Particle Activity<br>No. Spring<br>So. Spring<br>Well | 12/27/2017<br>(pCi/L)      | 0.216+/-0.682 MDA 1.04<br>0.491+/-0.886 MDA 1.27<br>0.140+/-0.751 MDA 1.19    | 15                                | (0)                | Decay/erosion of natural deposits. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters or Ra-226 or Ra-228 in excess of the MCL over many years may have an increased risk of getting cancer.<br><br><b><i>Next sampling for Radioactive Contaminants is due in December 2026.</i></b>                                                    |
| Radium 226<br>No. Spring<br>So. Spring<br>Well                    | 12/27/2017<br>(pCi/L)      | 0.032+/-0.078 MDA 0.304<br>0.145+/-0.114 MDA 0.304<br>0.000+/-0.063 MDA 0.304 | 5<br>(Ra-226 and Ra-228 Combined) | (0.05)             |                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Radium 228<br>No. Spring<br>So. Spring<br>Well                    | 12/27/2017<br>(pCi/L)      | 0.403+/-0.586 MDA 0.400<br>0.063+/-0.517 MDA 0.505<br>0.000+/-0.507 MDA 0.400 |                                   | (0.019)            |                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Inorganic Contaminants</b>                                     |                            |                                                                               |                                   |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Aluminum<br>No. Spring<br>So. Spring<br>Well                      | 6/2022<br>6/2022<br>6/2020 | 8<br>4600<br>ND                                                               | SMCL<br>200<br>ppb                | 600                | Erosion of natural deposits; residue from some surface water treatment processes. Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal effects. (Secondary Drinking Water Standards)                                                                                                                                                                         |
| Arsenic<br>No. Spring<br>So. Spring*<br>Well                      | 6/2022<br>6/2022<br>6/2020 | 2<br>35 (Footnote 1)<br>ND (Footnote 2)                                       | 10<br>ppb                         | 4                  | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes. Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.                                                                                                                                            |
| Barium<br>No. Spring<br>So. Spring<br>Well                        | 6/2022<br>6/2022<br>6/2020 | 37<br>61<br>83                                                                | 1000<br>ppb                       |                    | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits. Some People who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.                                                                                                                                                                                                              |
| Chromium (Total)<br>No. Spring<br>So. Spring<br>Well              | 6/2022<br>6/2022<br>6/2020 | ND<br>15<br>ND                                                                | 50<br>ppb                         | (100)              | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits. Some people who use water containing chromium in excess of the MCL over many years may experience allergic dermatitis.                                                                                                                                                                                                                             |
| Fluoride<br>No. Spring<br>So. Spring<br>Well                      | 6/2022<br>6/2022<br>6/2020 | 0.16<br>0.16<br>0.12                                                          | 2<br>ppm                          | 1                  | Erosion of natural deposits; water additive that promotes strong teeth (Cathedral Wood does not add); discharge from fertilizer and aluminum factories. Some people who drink water containing fluoride in excess of the federal MCL of 4 ppm over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 ppm may get mottled teeth. |
| Nickel<br>No. Spring<br>So. Spring<br>Well                        | 6/2022<br>6/2022<br>6/2020 | 1<br>12<br>ND                                                                 | 100<br>ppb                        | 12                 | Erosion of natural deposits; discharge from metal factories. Some people who drink water in excess of the MCL over many years may experience liver and heart effects.                                                                                                                                                                                                                                                                   |
| Nitrate<br>No. Spring<br>So. Spring<br>Well                       | 6/2022<br>6/2022<br>6/2020 | 0.300<br>ND<br>ND                                                             | 10<br>ppm                         | 10                 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits. Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of                                                                                                     |

|  |  |  |  |  |                                                                                                                                                                                                    |
|--|--|--|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  |  |  | the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels also may affect the oxygen-carrying ability of the blood of pregnant women. |
|--|--|--|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Disinfection Byproducts (DBPs): TTHMs and HAA5s (Also Primary Drinking Water Standards)

This sampling is done on treated water sampled at the last house in the distribution system: 564 Sugarloaf Road.  
Disinfection byproducts are formed when chlorine interacts with natural organic materials in the drinking water.

Since we first started monitoring DBPs, the TTHMs and HAA5s have bounced up and down, sometimes to levels above the MCL. Ventilation and aeration were added to the 20k tank in an effort to keep these contaminants below the MCL, and at times these have kept the measured numbers at satisfactory levels. When the sampling results are good, the State approves annual sampling; when they are not, the State requires quarterly sampling. Due to high HAA5s in October 2022, we now are required to sample quarterly.

The results of the March 2023 samples are included here because there's been an encouraging improvement.

| CONSTITUENT                            | SAMPLE DATE                                                  | LEVEL DETECTED                   | MCL | MAJOR SOURCES IN DRINKING WATER          | HEALTH EFFECTS                                                                                                                                                                                        |
|----------------------------------------|--------------------------------------------------------------|----------------------------------|-----|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TTHMs (ppb)<br>(Total Trihalomethanes) | 10/2019<br>10/2020<br>10/2021<br>9/2022<br>12/2022<br>3/2023 | 49<br>77<br>42<br>54<br>64<br>56 | 80  | Byproduct of drinking water disinfection | Some people who drink water containing TTHMs in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer. |
| HAA5s (ppb)<br>(Haloacetic Acids)      | 10/2019<br>10/2020<br>10/2021<br>9/2022<br>12/2022<br>3/2023 | 34<br>59<br>51<br>70<br>77<br>49 | 60  | Byproduct of drinking water disinfection | Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.                                                            |

### Regulated Contaminants with SECONDARY DRINKING WATER STANDARDS

There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.

| CHEMICAL OR CONSTITUENT                           | SAMPLE DATE                | LEVEL DETECTED             | MCL (MRDL)               | TYPICAL SOURCE OF CONTAMINANT HEALTH EFFECTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------|----------------------------|----------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chloride<br>No. Spring<br>So. Spring<br>Well      | 6/2022<br>6/2022<br>6/2020 | 15<br>14<br>21             | 500 ppm                  | Runoff/leaching from natural deposits; seawater influence                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Copper, Free<br>No. Spring<br>So. Spring<br>Well  | 6/2022<br>6/2022<br>6/2020 | ND<br>9<br>ND              | 1000 ppb<br>AL = 1.3 ppm | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. Copper is an essential nutrient but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. |
| Iron<br>No. Spring<br>So. Spring<br>Well*         | 6/2022<br>6/2022           | 39<br>ND<br>(Footnote 2)   | 300 ppb                  | Leaching from natural deposits; industrial wastes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Manganese<br>No. Spring<br>So. Spring*<br>Well*   | 6/2022<br>6/2022           | 10<br>528<br>(Footnote 2)  | 50 ppb                   | Leaching from natural deposits.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Sulfate (ppm)<br>No. Spring<br>So. Spring<br>Well | 6/2022<br>6/2022<br>6/2020 | 47<br>133<br>120           | 500 ppm                  | Runoff/leaching from natural deposits; industrial wastes                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Zinc<br>No. Spring<br>So. Spring<br>Well          | 6/2022<br>6/2022<br>6/2020 | 7<br>27<br>18              | 5000 ppb                 | Runoff/leaching from natural desposits' industrial wastes.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Color (Units)<br>No. Spring<br>So. Spring<br>Well | 6/2022<br>6/2022<br>6/2020 | 12<br>ND (Footnote 1)<br>8 | 15                       | Naturally-occurring organic materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|                                                            |                            |                   |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------|----------------------------|-------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Specific Conductance<br>No. Spring<br>So. Spring<br>Well   | 6/2022<br>6/2022<br>6/2020 | 442<br>687<br>560 | 1600<br>uS/cm | Substances that form ions when in water; seawater influence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Total Dissolved Solids<br>No. Spring<br>So. Spring<br>Well | 6/2022<br>6/2022<br>6/2020 | 325<br>465<br>420 | 1000<br>ppm   | Runoff/leaching from natural deposits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Turbidity<br>No. Spring<br>So. Spring<br>Well              | 6/2022<br>6/2022<br>6/2020 | 0.5<br>120<br>20  | 5<br>NTU      | Soil runoff. Turbidity refers to suspended particles or sediment in the water. It is important because it can interfere with disinfection and provide a medium for microbial growth. Turbidity has no health effects but may indicate the presence of disease-causing organisms including bacteria, viruses, and parasites that can cause nausea, cramps, diarrhea, and associated headaches. The results here are for untreated source water; our treated water meets all federal and state requirements for turbidity, as noted earlier in this report. |

#### Footnotes:

(1) Since the June 2022 annual sampling results for the south spring were 35 ppb for Arsenic, the State is requiring quarterly sampling for this contaminant in this source. Subsequent results in September and December were ND. In fact, the south spring is sampled quarterly for Aluminum, Arsenic, Color, and Odor. In 2022, the range of results for Aluminum ranged from ND-4600 ppb; Arsenic from ND-35; Color from ND-4.

(2) The well is sampled quarterly for Arsenic, Iron and Manganese. In 2022, the range of results for Arsenic was ND-7.8; for Iron, 4800 to 68000; for Manganese, 560-830. Well water is pretreated by the injection of chlorine and filtering before the usual sand filter treatment process. The water from the sand filter is tested monthly for Iron and Manganese and results for 2022 were ND.

## Water Conservation Tips for Consumers

Did you know that the average US household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature!

- Take short showers – a 5 minutes shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Shut off water while brushing your teeth, washing your hair, and shaving – and save up to 500 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for leaks, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Water plants only when necessary, outdoors 2 days a week or less. Reimagine your yard by changing landscaping to water-efficient options.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Cover your pool to reduce evaporation.
- Teach your children about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next year's water assessment!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

