

## 2021 Consumer Confidence Report

### Water System Information

Water System Name: River Highlands CSD

Report Date: June 14, 2022

Type of Water Source(s) in Use: Groundwater

Name and General Location of Source(s): North Side Well, Well #3, Well #1. Wells are located at the Gold Village Subdivision and at a 32 acre property across Hammonton Smartsville Road

Drinking Water Source Assessment Information: A source water assessment was conducted in October 2002. No contaminants were detected in the sources, however, they were considered vulnerable to wastewater treatment plants, high density housing and/or surface water.

Time and Place of Regularly Scheduled Board Meetings for Public Participation:

9:00AM

2<sup>nd</sup> and 4<sup>th</sup> Tuesdays

Yuba County Government Center, 915 8<sup>th</sup> Street, Marysville, CA 95901

For More Information, Contact: Sam Bunton at 530-749-5430

### 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, 2021 and may include earlier monitoring data.

### Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse River Highlands CSD a 915 8th Street, Marysville, CA 95901 or 530-749-5430 para asistirlo en español.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 [Enter Water System Name]以获得中文的帮助: 915 8th Street, Marysville, CA 95901 or 530-749-5430.

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa 915 8th Street, Marysville, CA 95901 o tumawag sa 530-749-5430 para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ River Highlands CSD tại 915 8th Street, Marysville, CA 95901 or 530-749-5430 để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau River Highlands CSD ntawm 915 8th Street, Marysville, CA 95901 or 530-749-5430 rau kev pab hauv lus Askiv.

## 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.

Term	Definition
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter ( $\mu\text{g/L}$ )
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 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>	(In the year) 5	1	(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 1.A. Compliance with Total Coliform MCL between January 1, 2021 and June 30, 2021**

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a month) 0	0	1 positive monthly sample (a)	0	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	(in the year) 0	0	0	None	Human and animal fecal waste

(a) For systems collecting fewer than 40 samples per month: two or more positively monthly samples is a violation of the total coliform MCL

**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	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	8/14/20	5	ND	0	15	0.2	N/A	Internal corrosion of household water plumbing systems; discharges from industrial

Lead and Copper	Sample Date	No. of Samples Collected	90 <sup>th</sup> Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
								manufacturers; erosion of natural deposits
Copper (ppm)	8/14/20	5	0.1968	0	1.3	0.3	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

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)	5/6/16	23.6 (NS) 30.8 (#3) 30.3 (#1)	N/A	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	5/6/16	330 (NS) 180 (#3) 179 (#1)	N/A	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
Arsenic (ppb)	8/3/21 4/4/16	8.5 (NS) 2.5 (#3)	N/A	10	0.004	Erosion of natural deposits; runoff from orchards; glass & electronics production wastes
Nickel (ppb)	4/4/16	11 (NS) 17 (#3) 16 (#1)	N/A	100	12	Erosion of natural deposits; discharge from metal factories

Barium (ppb)	4/4/16 4/6/07	0.054 (NS) 0.037 (#3)	N/A	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Gross Alpha (pCi/L)	8/8/12 2014	0.035 (NS) 1.75 (#3) 0.72 (#1)	N/A 0.638-0.876	15	(0)	Erosion of natural deposits
Radium 228 (pCi/L)	2014	0.26 (#1)	ND – 0.432	5	(0)	Erosion of natural deposits

**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
Iron (ppb)	8/3/21 10/1/21	390 (NS) 1100 (#3)	N/A	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb)	8/3/21 10/1/21 5/6/16	123.4 (NS) 520.6 (#3) 53 (#1)	N/A	50	N/A	Leaching from natural deposits
Zinc (ppm)	5/6/16	0.0562 (NS) 1.49 (#3) 1.34 (#1)	N/A	5	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	5/6/16	491 (NS) 281 (#3) 260 (#1)	N/A	1000	N/A	Runoff/leaching from natural deposits
Specific Conductance (uS/cm)	5/6/16	780 (NS) 511 (#3) 525 (#1)	N/A	1600	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	5/6/16	17.7 (NS) 3.5 (#3) 3.4 (#1)	N/A	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	5/6/16	151 (NS) 7.1 (#3) 7.1 (#1)	N/A	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Copper (ppm)	5/6/16	0.017 (#3) 0.017 (#1)	N/A	1	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits

Color (Units)	5/6/16	30 (NS) 3 (#3) 3 (#1)	N/A	15	N/A	Naturally-occurring organic materials
Turbidity (Units)	5/6/16	17 (NS) 0.90 (#3) 1.2 (#1)	N/A	5	N/A	Soil runoff

**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. River Highlands CSD 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, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a material known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2017-2019, we did not complete all monitoring for lead and copper and therefore, cannot be sure of the quality of your drinking water during that time.

**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**

<b>Violation</b>	<b>Explanation</b>	<b>Duration</b>	<b>Actions Taken to Correct Violation</b>	<b>Health Effects Language</b>
Iron & Manganese	Iron & Manganese were found in the North Side well & Well #1 at levels that exceed the secondary MCLs of 300 & 50 ug/L	2014-2021	Annual testing is being conducted to ensure the iron & manganese levels are not getting significantly higher	The iron & manganese MCLs were set to protect you against unpleasant aesthetic effects (e.g., color, taste & odor) and the staining of plumbing fixtures and clothing while washing. The high iron & manganese levels are due to leaching from of natural deposits.

**Summary Information for Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements**

**Level 2 Assessment Requirement Due to an *E. coli* MCL Violation**

We had an *E. coli*-positive repeat sample following a total coliform positive routine sample.

*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) identify problems and to correct any problems that were found during these assessments.

We were required to complete a Level 2 assessment because we found *E. coli* in our water system. In addition, we were required to take 10 corrective actions and we completed 9 of these actions. The corrective action that was not completed was the requirement for cement surface slabs at each well. This work was not completed due to inclement weather at the time the corrective action was required.