# 2022 Consumer Confidence Report

## Water System Information

Water System Name: Rancho Santa Teresa Mutual Water Co.

Report Date: May 17, 2023

Type of Water Source(s) in Use: Groundwater

Name and General Location of Source(s): Well 02, Well 04, water treatment facility for uranium

Drinking Water Source Assessment Information: A Drinking Water Source Assessment has been completed for well 2 of the Rancho Santa Teresa Mutual Water Company

Time and Place of Regularly Scheduled Board Meetings for Public Participation: Annual meeting in May 2022

For More Information, Contact: Ralph Mattern at (858) 354-5073

## 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.

Rancho Santa Teresa Mutual Water Company is required to have a T2 operator on staff. We failed to have a certified treatment operator during January 2022 through November 2022. In November 2022 an outside contractor with a T2 license was hired to oversee the operation.

## 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 Rancho Santa Teresa Mw Co. a P.O. Box 1586, Ramona, CA 92065 or 763-213-3026 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: P.O. Box 1586, Ramona, CA 92065 or 763-213-3026.

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa P.O. Box 1586, Ramona, CA 92065 o tumawag sa 763-213-3026 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 Rancho Santa Teresa Mw Co. tại P.O. Box 1586, Ramona, CA 92065 or 763-213-3026 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 Rancho Santa Teresa Mw Co. ntawm P.O. Box 1586, Ramona, CA 92065 or 763-213-3026 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 *E. coli* 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 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

E. Coli was not detected in any of the samples taken as shown in Table 1. Neither was any of the samples tested positive for coliform. However see Table 7 for violations in the sampling and testing requirements.

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

1. 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

Complete if lead or copper is detected in the last sample set.

| **Lead and Copper** | **Sample Date** | **No. of Samples Collected** | **90th Percentile Level Detected** | **No. Sites Exceeding AL** | **AL** | **PHG** | **No. of Schools Requesting Lead Sampling** | **Typical Source of**  **Contaminant** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lead (ppb) | 08/29/2022 | 5 | ND | 0 | 15 | 0.2 | N/A | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 08/29/2022 | 5 | 0.235 | 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) | 2020 | 40 | 37-43 | None | None | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 2020 | 255 | 220-290 | 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** |
| Uranium (pCi/L) | 2022 | 4.3a) | 3-6 | 20 | 0 | Erosion of natural deposits |
| GrossAlpha Particles (pci/L) | 2022 | 99.15 | 18.3-180 a) | 15 | 0 | Erosion of natural deposits |
| Radium 226 and 228 (pCi/L) | 2022 | ND | N/A | 5 | 0 | Erosion of natural deposits |
| Fluoride (mg/L) | 2020 | 0.12 | 0.12 | 2.0 | N/A | Erosion of natural deposits; water  additive which promotes strong  teeth; discharge from fertilizer and aluminum factories |
| Nitrate as N (mg/L) | 2022 | 3.9 c) | 0.6-7.4 | 10 | 1 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |

1. These values are for the source (wells 2 And 4) prior to uranium removal. The treated water (while not officially required to be tested ) was tested in November 2022 and contained 5.15+/-1.53 pCi/L

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** |
| Chloride (mg/L) | 2020 | 49 | 43-55 | 250 | N/A | Runoff/leaching from natural deposits; seawater influence |
| Manganese (µg/L)\* | 2022 | 42 | 0-**83** | 50 | N/A | Naturally occurring or residue from mining and industrial discharges |
| Sulfate (mg/L) | 2020 | 39 | 26-52 | 250 | N/A | Runoff/leaching from natural deposits; industrial wastes |
| Zinc (mg/L) | 2020 | 0.033 | 0 -0.066 | 5 | N/A | Runoff/leaching from natural deposits; industrial wastes |

Table 6. Detection of Unregulated Contaminants

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Chemical or Constituent (and reporting units)** | **Sample Date** | **Level Detected** | **Range of Detections** | **Notification Level** | **Health Effects** |
| N/A | N/A | N/A | N/A | N/A | N/A |

### 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).

Lead-Specific Language: 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. Rancho Santa Teresa Mutual Water Co. 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. [Optional: 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>.

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### 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** |
| Manganese Exceedance and failure to implement quarterly testing | Manganese values in well 2 have exceeded the MCL of 50 ug/L in 2020. RSTMWC failed to act and establish quarterly testing as required. | Since 2020 | In the last quarter of 2022, a quarterly testing regiment was implemented to establish a base line and determine compliance with the MCL | Manganese occurs naturally in many surface water and groundwater sources and in soils that may erode into these waters. It may also be introduced through industrial pollution.  Manganese exposures resulted in neurological effects. High levels of manganese in people have been shown to result in adverse effects to the nervous system. |
| Failure to collect the required bacteriological samples | In February and April 2022 the required monthly bacteriological samples were not collected and therefore not tested | February and April 2022 | RSTMWC has since developed a comprehensive written test plan that was approved by the state water board is accessible to all board members as well as the outside T2 operator | Due to the lack of data it cannot be excluded that bacterial contamination was present in the distribution in February and April 2022.  Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. |
| Failure to collect and test quarterly source bacteriological samples | In addition to the monthly samples taken from the distribution system quarterly samples need to be tested from wells 2 and 4. January through September 2022 this requirement was not met. | January through September 2022 | RSTMWC has since developed a comprehensive written test plan that was approved by the state water board is accessible to all board members as well as the outside T2 operator | Due to the lack of data it cannot be excluded that bacterial contamination was present in the wells January through September 2022.  Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. |
| Failure to report analytical results within required time frame | Analytical results must be reported within a month by the 10th day of the following month. RSTMWC has missed the that deadline January, September and November 2022 | January, September and November 2022 | The sampling dates have been moved to earlier in the month to allow for additional time at the laboratory to analyze and report the data | N/A |
| Failure to collect and test uranium post treatment | RSTMWC is required to test the post-treatment effluent on a monthly basis. RSTWMC failed to do so in February and April 2022 | February and April 2022 | RSTMWC has since developed a comprehensive written test plan that was approved by the state water board and is accessible to all board members as well as the outside T2 operator | While unlikely (given that uranium was below MCL before February 2022 and after April 2022 and in between) we cannot exclude that uranium exceeded the MCL in February and April 2022 due to the lack of data. Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer. |
| Failure to collect nitrate samples | RSTMWC is required to collect quarterly nitrate samples. RSTMWC failed to do so in the second quarter on 2022 | Second quarter 2022 | RSTMWC has since developed a comprehensive written test plan that was approved by the state water board and is accessible to all board members as well as the outside T2 operator | 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 may also affect the oxygen-carrying ability of the blood of pregnant women. |
|  |  |  |  |  |

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

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

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| --- |
| **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 Correct Violation** | **Health Effects Language** |
| N/A | N/A | N/A | N/A | N/A |

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

If a water system is required to comply with a Level 1 or Level 2 assessment requirement that is not due to an *E. coli* MCL violation, include the following information below [22 CCR section 64481(n)(1)].

#### Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were not required to conduct Level 1 assessment(s).

During the past year no Level 2 assessments were required to be completed for our water system.

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

*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 [Insert Number of Corrective Actions] corrective actions and we completed [Insert Number of Corrective Actions] of these actions.

We were not required to complete a Level 2 assessment because we did not find *E. coli* in our water system.