# 2021 Consumer Confidence Report

## Water System Information

Water System Name: **[U.C. KEARNEY FIELD STATION]**

Report Date: **[June 29, 2022]**

Type of Water Source(s) in Use: **[Ground Water ]**

Name and General Location of Source(s): **[Well #3 and Well #7 ]**

Drinking-Water Source Assessment Information:

**A Source Water Assessment was completed for Kearney Research & Extension Center in 2001. This Survey indicated source water is most vulnerable to agricultural drainage, machinery repair activities, septic systems, accidental chemical spills, known dibromo chloropropane, and 123 Trichloropropane contaminant plumes. A copy of the Source Water Assessment is available at the Kearney Research & Extension Center, 9240 S. Riverbend Ave. Parlier, CA 93648. You may request a copy of the Source Water Assessment be sent to you by contacting Marvin Flores (559) 646-6013**

**Time and Place of Regularly Scheduled Board Meetings for Public Participation: [NA]**

**For More Information, Contact: [ Marvin E. Flores Aguilera, 559-646-6013]**

## 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 [Enter Water System’s Name Here] a [Enter Water System’s Address or Phone Number Here] 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 Here]以获得中文的帮助: [Enter Water System’s Address Here][Enter Water System’s Phone Number Here].

Langauge in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa [Enter Water System’s Name and Address Here] o tumawag sa [Enter Water System’s Phone Number Here] 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 [Enter Water System’s Name Here] tại [Enter Water System’s Address or Phone Number Here] 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 [Enter Water System’s Name Here] ntawm [Enter Water System’s Address or Phone Number Here] rau kev pab hauv lus Askiv.

## Terms Used in This Report

**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 the addition of a disinfectant is necessary for the 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 that, if exceeded, triggers treatment or other requirements that a water system must follow.

**Secondary Drinking Water Standards** (SDWS): MCLs for contaminants that affect the 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:** Permission 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 the 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 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 applications, and septic systems.
* Radioactive contaminants 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 protections for public health.

## About Your Drinking Water Quality

### Drinking-Water Contaminants Detected

Tables 1, 2, 3, 4, 5, and 6 lists 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 (complete if bacteria detected) | Highest No. of Detections | No. of Months in Violation | MCL | MCLG | Typical Source of Bacteria |
| --- | --- | --- | --- | --- | --- |
| Total Coliform Bacteria (state Total Coliform Rule) | (0) | 0 | 1 positive monthly sample (a) | 0 | Naturally present in the environment |
| Fecal Coliform or *E. coli* (state Total Coliform Rule) | (0) | 0 | A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or *E. coli* positive | 0 | Human and animal fecal waste |
| *E. coli*  (federal Revised Total Coliform Rule) | (0) | 0 | (b) | 0 | Human and animal fecal waste |

(a) Two or more positive monthly samples is a violation of the MCL

(b) Routine and repeat samples are total coliform-positive and are either *E. coli*-positive or the system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze the 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 | 90th Percentile Level Detected | No. Sites Exceed-ing AL | AL | PHG | No. of Schools Request-ing Lead Sampling | Typical Source of Contaminant |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lead (ppb) | 05/21/21 | 5 | 0 | 0 | 15 | 0.2 | Not applicable | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 05/21/21 | 5 | 0 | 0 | 1.3 | 0.3 | Not applicable | 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) | 7/24/01 | 13.7 |  | None | None | The salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 7/24/01 | 73.4 |  | 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 |
| --- | --- | --- | --- | --- | --- | --- |
| Gross Alpha, pCi/L | 3/20/13 | ND | 0-1.82 | 15 | 0 | Decay of natural and man-made deposits |
| Aluminum, ppm | 01/22/20 | ND | N/A | 1000 ppb | 0.06 | Erosion of natural deposits; residue from some surface water treatment processes |
| Arsenic, ppb | 01/22/20 | 2.7 ppb | 0-3.0 | 10 ppb | 0.004 | Erosion of natural deposits; runoff from orchards; glass and electronics production waste. |
| Barium, ppb | 01/22/20 | ND | 00-0.073 | 1000 ppb | 2 | Discharge of oil drilling wastes and from metal refineries; erosion of  natural deposits |
| Beryllium | 01/22/20 | ND |  | 4 ppm |  |  |
| Cadmium | 01/22/20 | ND |  | 5 ppb |  |  |
| Chromium total , ppb | 01/22/20 | ND | N/A | 50 | (100) | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| Dibromo chloropropane (DBCP) ppt | 01/26/21 | Well 3: 72 ppt  Well 7: 95 ppt  Avg: 83.5 ppt | 5 - 200 ppt | 200 ppt | 1.7 ppt | Banned nematicide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit |
| Ethylene Dibromide (EDB) ppb | 01/26/21 | ND | 10-200 ppb | 50 | 1.7 ppb | In 1983, the EPA suspended the use of ethylene dibromide (EDB). It was used extensively as soil and post-harvest fumigant for crops, and as a quarantine fumigant for citrus and tropical fruits and vegetables. |
| Nickel, ppb | 01/22/20 | ND | N/A | 100 | 12 | Erosion of natural deposits; discharge from metal factories |
| Nitrate ppm | 01/26/21 | Well 3: 2.7 ppm  Well 7: 2.9 ppm  Avg: 2.8 ppm | 0 -10 | 10 ppm | 5 ppm | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| Nitrate - Nitrite ppm | 01/22/20 | Well 3: 1.8 ppm  Well 7: 2.0 ppm  Avg: 1.9 ppm | 0 -10 | 10 ppm | 1 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| Perchlorate ppb | 01/22/20 | ND | 0-3 | 6 | 6 | Historic aerospace or industrial operations associated with rocket propellant, fireworks, explosives, flares, matches, and a variety of industries |
| Selenium ppb | 01/22/20 | ND |  | 50 ppb | 5 ppb |  |
| Thallium ppb | 01/22/20 | ND |  | 2 ppb | 0.1 ppb |  |
| 1,2,3- Trichloropropane ppt | 10/29/21 -01/26/21 | Well 3: 10.25 ppt  Well 7: 12.75 ppt  Avg: 11.5 ppt | 5-10000 | 5.0 ppt | 0.7 ppt | Banned nematicide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit |

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

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL | PHG (MCLG) | Typical Source of Contaminant |
| --- | --- | --- | --- | --- | --- | --- |
| Odor, Units | 7/7/98 | 1 | N/A | 3 | N/A | Naturally-occurring organic materials |
| Total Dissolved Solids (TDS) ppm | 7/24/01 | 137 | N/A | 1000 | N/A | Runoff/leaching from natural deposits |
| Specific Conductance, Micro mols | 1/22/20 | Well 3: 240 US  Well 7: 250 US  Avg: 245 US | N/A | 1600 | N/A | Substances that form ions when in water; seawater influence |

Table 6. Detection of Unregulated Contaminants

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | Notification Level | Health Effects Language |
| --- | --- | --- | --- | --- | --- |
| Chromium, Hexavalent  ppb | 12/10/14 | Well 3: 1.2 ppb  Well 7: 1.3 ppb  Avg: 1.25 ppb | ND -12 | 50 ppb | Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer. |
| Vanadium, ppb | 12/11/01 | 15.5 | ND - 71 | 50 | The babies of some pregnant women who drink water containing  vanadium in excess of the action level may have an increased risk of developmental effects, based on  studies in laboratory animals |

### 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. [Enter Water System’s Name Here] 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>.

Additional Special Language for Nitrate, Arsenic, Lead, Radon, and *Cryptosporidium*: [Enter Additional Information Described in Instructions for SWS CCR Document Here]

Federal Revised Total Coliform Rule (RTCR): [Enter Additional Information Described in Instructions for SWS CCR Document Here]

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

Violation: **[1,2,3 -Trichloropropane (1,2,3 TCP), PPT]**

Violation Type: Exceedance of MCL

Explanation: [Drinking water wells exceeded the 123 TCP 5 PPT MCL]

Duration: [Q1, Q2, Q3, Q4 of 2021]

Actions Taken to Correct the Violation: [Point of Use filtration systems have been installed throughout the facility for drinking water for short-term compliance.]

Health Effects Language: [Some people who drink water containing 1,2,3-TCP exceeding the MCL level; over many years may have an increased risk of getting cancer, based on studies in laboratory animals]

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

Table 7. 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* | (0) |  | 0 | (0) | Human and animal fecal waste |
| Enterococci | (0) |  | TT | N/A | Human and animal fecal waste |
| Coliphage | (0) |  | 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: [Enter Special Notice of Fecal Indicator-Positive Groundwater Source Sample Here]

Special Notice for Uncorrected Significant Deficiencies: [Enter Special Notice for Uncorrected Significant Deficiencies Here]

Groundwater TT Violation: [Enter Violation Here]

Explanation: [Enter Explanation of Violation Here]

Duration: [Enter Duration of Violation Here]

Actions Taken to Correct the Violation: [Enter Actions Taken to Correct the Violation Here]

Health Effects Language: [Enter Health Effects Language Here]

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

Table 8. Sampling Results Showing Treatment of Surface Water Sources

|  |  |
| --- | --- |
| Treatment Technique (a) (Type of approved filtration technology used) | blank |
| Turbidity Performance Standards (b) (that must be met through the water treatment process) | Turbidity of the filtered water must:  1 – Be less than or equal to [Enter Turbidity Performance Standard to Be Less Than or Equal to 95% of Measurements in a Month Here] NTU in 95% of measurements in a month.  2 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded for More Than Eight Consecutive Hours] NTU for more than eight consecutive hours.  3 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded at Any Time] NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | blank |
| Highest single turbidity measurement during the year | blank |
| Number of violations of any surface water treatment requirements | blank |

(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 that meet performance standards are considered to comply with filtration requirements.

### Summary Information for Violation of a Surface Water Treatment Technique

Surface Water TT Violation: [Enter Violation Here]

Explanation: [Enter Explanation of Violation Here]

Duration: [Enter Duration of Violation Here]

Actions Taken to Correct the Violation: [Enter Actions Taken to Correct the Violation Here]

Health Effects Language: [Enter Health Effects Language Here]

### Summary Information for Operating Under a Variance or Exemption

[Enter Additional Information Described in Instructions for SWS CCR Document Here]

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

#### 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 an assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year, we were required to conduct [Insert Number of Level 1 Assessments Here] Level 1 assessment(s). [Insert Number of Level 1 Assessments Here] Level 1 assessment(s) were completed. In addition, we were required to take [Insert Number of Corrective Actions H ere] corrective actions and we completed [Insert Number of Corrective Actions Here] of these actions.

During the past year [Insert Number of Level 2 Assessment Here] Level 2 assessments were required to be completed for our water system. [Insert Number of Level 2 Assessments Here] Level 2 assessments were completed. In addition, we were required to take [Insert Number of Corrective Actions Here] corrective actions and we completed [Insert Number of Corrective Actions Here] of these actions.

[For Violation of the Total Coliform Bacteria TT Requirement, Enter Additional Information Described in Instructions for SWS CCR Document Here]

#### 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 an assessment(s) to 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 Here] corrective actions and we completed [Insert Number of Corrective Actions Here] of these actions.

[For Violation of the *E. coli* TT Requirement, Enter Additional Information Described in Instructions for SWS CCR Document Here]