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**Annual Consumer Confidence Report**

**Reporting Year 2022**

 **Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.**

OUR MISSION CONTINUES

The District’s mission is to effectively manage the water resources in our care for the benefit of residents and the environment though resource and environmental stewardship, technical innovation, and responsible fiscal management.

The District will continue to focus on finding solutions to the water management challenges we face, both in the day-to-day operation of our system and the development of long-term programs to meet future needs. We will encourage innovation, creativity, and ingenuity, recognizing that the best solutions often have not been tried before.

We partner with local water suppliers to provide water conservation programs that help save water by encouraging more effective and efficient use.

We believe that the Districts most valuable asset is its people. We respect the diversity of our staff and promote teamwork and mutual respect among all departments of the District. We also believe that a creative and empowered workplace can inspire staff to use their talents and commitment to fulfill the District’s mission.

We will proactively, innovatively, and continuously improve the quality and efficiency of our operations and service. We support and retain a highly trained staff that is knowledgeable, engaged, team oriented and responsive to the community.

Drawing upon the experience of our staff and needs of our employees, our customers, and our community, we will strive to make decisions in a sound and reasonable manner. We believe that our communication with our residents should be honest and sincere.

We strive to provide high-quality service to those who rely on our water supply and sanitation services, which provide wastewater collection and treatment, and recycled water distribution to the Oak Tree Golf Course.

Over the years, we have dedicated ourselves to delivering drinking water that meets all State and Federal standards. As new challenges in drinking water regulations emerge, we remain vigilant in meeting the goals of source water protection, water conservation and community education while continuing to serve the needs of all our water users.

YOUR WATER SYSTEM obtains its drinking water from underground aquifers from both Bear Valley Springs and Cummings Valley. The system relies on a combination of natural disinfection of source water for its wells by flow through the ground structure and continuous chlorination for disinfection to protect against microbial contaminants. The District’s water department serves approximately 5600 customers from a system comprised of 110 miles of water lines, 16 ground water wells (some of which are in the process of rehabilitation), and 43 storage tanks with a total storage capacity of 4.57 million gallons.

You can help protect your water supply by following label instructions when using lawn and garden chemicals. When disposing of household chemicals, used oil, paint and other hazardous waste, contact the Kern County Environmental Health Department at (661) 335-7315. Please do not pour hazardous materials down drains

or on the ground and be conscious of our fragile watershed areas when hiking, fishing or enjoying other outdoor activities. While enjoying our beautiful outdoors, please be aware that pets, litter and human waste may contaminate the water supply.

**You are invited** to attend our regular Board of Directors meetings held on the second Thursday of the month at 6:00pm at the District office. Please feel free to participate in these meetings. Board Meetings are also televised on YouTube with a link provided on our website: [www.bvcsd.com](http://www.bvcsd.com) for those who are unable to attend in person. The Bear Valley Community Services District office is located at 28999 S. Lower Valley Rd. and is open Monday through Friday from 8:00 a.m. to 4:30 p.m. Our phone number is (661) 821-4428, for questions regarding your water quality.

Please go to our <https://www.thebvexchange.com> and sign up for our community interactive website. You may also visit our Facebook page or follow us on Twitter. Our website has links to all points of contact for receiving information from the Bear Valley Community Services District.

The sources of drinking water (both tap 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 constituents resulting from animal or human activity. In order to ensure that the tap water is safe to drink, the US Environmental Protection Agency (USEPA) and the State Water Resources Control Board prescribe regulations limiting the number of certain contaminants in water provided by public water systems. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of these 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 USEPA’s Safe Drinking Water Hotline (1-800-426-4791)

**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. These can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas productions, mining or farming.
* *Pesticides and Herbicides* which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
* *Organic chemical contaminants* include synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, gas stations, urban storm water runoff, agricultural application and septic systems.
* *Radioactive contaminants* can be naturally occurring or be the result of oil and gas production and mining activities.

**Important Health Information**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as those undergoing chemotherapy, organ transplants, individuals with HIV/ AIDS or immune disorders, infants and elderly can be particularly at risk of infections. These individuals should seek advice about drinking water from their health care providers. The USEPA/Center for Disease Control guidelines and 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) or http://water.epa.gov/drink/hotline

**Irrigate Landscape, Not Roadways!**

Be conservative while watering outside. Drip irrigation systems are a low-flow way to water landscapes. Soaker hoses or hand watering are less expensive alternatives and a great way to water narrow strips or oddly shaped gardens to prevent overspray from sprinklers. You can also install devices that shut off automatic sprinklers when it senses rain. The key to proper outside irrigation is not to allow water to run off landscape or flow into gutters. The roadways don't need water!

**Should I Use a Home Treatment Device?**

Your water is safe to drink straight from the tap. If you decide to install a home device, please be advised that you must properly maintain it or you may, in fact, make your water unsafe. The District does have hard water. Because of this, many residents may choose to install a water softener system. Sodium or potassium exchange systems are the only method known to work effectively. Despite the presence of hard water, rest assured that hard water does not threaten the overall quality of health for residents receiving water.

**Definitions of Terms Used in this Report**

* *Maximum Contaminant level (MCl):* The highest level of contaminant allowed in drinking water. Primary MCls are set as close to the PHGs (or MClGs) as is economically and technologically feasible.
* *Maximum Contaminant level Goal (MClG):* The level of contaminant in drinking water below which there is no known or expected risk to health. MClGs are set by the USEPA.
* *Maximum Residual Disinfectant level (MRDl):* The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.
* *Maximum Residual Disinfectant Level Goal (MRDlG):* The level of disinfectant added for water treatment below which there is no known or expected risk to health. MRDlGs are set by the USEPA.
* *Primary Drinking water Standards (PDWS):* MCls for contaminants that affect health along with 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 USEPA.
* *Regulatory Action level (Al):* The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water purveyor must follow.
* *Secondary Drinking Water Standards (SOWS):* MCls for contaminants that affect taste, odor or appearance of the drinking water. SDWS contaminants do not affect health at the MCl level.

**Abbreviations Used in this Report**

NA: not applicable ppb: parts per billion or micrograms per liter (ug/l).

ND: not detected at testing level ppt: parts per trillion or nanograms per liter (ng/l).

ppm: parts per million or milligrams per liter (mg/L). pCi/L: Picocuries per liter (a measure of radiation).

*(ppm is equivalent to 1 second in 115 days)*

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board prescribe regulations that limit the quantity of certain Contaminants in water provided by public water systems. The DHS regulations also establish limits for Contaminants in bottled water that must provide the same protection for the public health.

**SAMPLING RESULTS** During the past year, your water was tested for chemical, physical, radiological, and bacteriological parameters. We also test for additional organic and inorganic chemicals that are not regulated. The tables included in this report list all the substances detected. The presence of these substances in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from the testing performed last year. The State allows us to monitor less often for certain substances where concentrations do not change frequently. In these cases, the most recent sample data are included, along with the

**TABLE 1 - MICROBIOLOGICAL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Microbiological Contaminants** | **MCL** | **PHG** **(MCLG)** | **Highest number of detections** | **Number of months in violation** | **Typical source of bacteria** |
| Total Coliform Bacteria | No more than one positive monthly sample | 0 | In a month0 | 0 | Naturally present in the environment |
| Fecal Coliform or E. Coli | A routine sample and a repeat sample are total Coliform positive and one of these is also fecal Coliform or E. Coli positive | 0 | In the year0 | 0 | Human and animal fecal waste |

**TABLE 2 – LEAD AND COPPER**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Lead and Copper** | **Action** **Level** **(AL)** | **PHG****(MCLG)** | **90th Percentile Detected** | **Number of sites Sampled** | **Number of samples exceeding (AL)** | **Typical source of contaminant** |
| LEAD (ppb) | 0.015 | 2 | .0052 | 20 | 0 | Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits |
| COPPER(PPM) | 1.3 | 0.17 | 0.46 | 20 | 0 | Internal corrosion of household water plumbing systems; leaching from wood preservatives; erosion of natural deposits |

**The Lead and Copper results are from the 2020 sampling and are scheduled to be taken in 2023.**

**TABLE 3 – SODIUM AND HARDNESS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Chemical or constituent (and reporting units)** | **MCL** | **PHG****(MCLG)** | **Level Detected (average)** | **Range of Detection** | **Typical source of contaminant** |
| Sodium (ppm) | None | None | 34.5 | 28-41 | Generally found in ground and surface water |
| Hardness (ppm) | None | None | 165 |  160-210 | Generally found in ground and surface water |

**TABLE 4 – PRIMARY DRINKING WATER STANDARDS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Radioactive Contaminants** | **Units** | **MCL** | **PHG****(MCLG)** | **Level Detected****(average)** | **Range of Detections** | **Violation****(Yes/No)** | **Typical source of contaminant** |
| Gross AlphaActivity | pCi/L | 15 | 0 | 7.05 | ND-11.2 | No | Erosion of natural deposits |
| Uranium | pCi/L | 20 | 0.5 | 9.5 | ND -11 | No | Erosion of natural deposits |
| Combined radium (226 & 228 (total) | pCi/L | 5 | (0)(b) | ND | ND-ND | No | Erosion of natural deposits |
| **Inorganic Contaminants** | **Units** | **MCL** | **PHG****(MCLG)** | **Level Detected (average)** | **Range of Detections** | **Violation (Yes/No)** | **Typical source of contaminant** |
| Arsenic | ppb | 10 | NA | ND | ND  | No | Erosion of natural deposits, runoff from orchards; glass and electronics production wastes |
| NitrateAs N | mg/L | 10 | 10 | 4.68 | ND-9.8 | No | Runoff from leaching from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits |
| **Disinfection Byproducts** | **Units** | **MCL** | **PHG****(MCLG)** | **Level Detected (average)** | **Range of Detections** | **Violation (Yes/No)** | **Typical source of contaminant** |
| TTHM’s (Total Trihalomethane’s) | ppb | 80 | NA | 23.1 | 5.2-41 | No | Byproduct of drinking water Disinfection |
| HAA5’s (Haloacetic Acids) | ppb | 60 | NA | 2.7 | <1.0 - 5 | No | Byproduct of drinking waterDisinfection |

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Constituent** | **Units** | **MCL** | **PHG (MCLG)** | **Level Detected (average)** | **Range of Detections** | **Violation (Yes/No)** | **Typical source of contaminant** |
| Iron | ppb | 300 | NA | 0.3 | ND-0.3 | No | Leaching from natural deposits; industrial waste |
| Total Dissolved Solids (TDS) | mg/L | 1000 | NA | 250 | 150-350 | No | Runoff / Leaching from natural deposits |
| Sulfate | mg/L | 500 | NA | 31 | ND-31 | No | Runoff / Leaching from natural deposits; natural waste |
| pH (1) | Ph Units |  | NA | 7.5 | 7.0-8.08 | No |  |

***Note:*** *There are no PHGs or MCLGs for constituents with secondary drinking water standards because these are not health-based levels. Secondary MCLs are established by the DHS and address taste, odor, or appearance of drinking water.*

**SUMMARY INFORMATION FOR CONTAMINANTS**

**Nitrate Information:**

***Nitrate*** in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. High nitrate levels in drinking water can interfere with the capacity of the infant’s blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. High nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant or are pregnant, you should ask advice from your health provider.

**Arsenic:**

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 mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**Coliform Bacteria:**

***Coliforms*** are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

**Radionuclide in Groundwater:**

***Uranium and Gross Alpha*** were detected at the concentrations above the Primary MCL in four (2) active wells. These wells exhibit slightly elevated concentrations and have been on an expedited sampling program since 2011. Radium 226/228 was taken and did not exceed the MCL.

Certain minerals are Radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer Naturally occurring uranium has been detected in groundwater throughout many areas of California, particularly in areas that have deep bedrock wells where the uranium leaches into groundwater from natural mineral deposits within the bedrock. Areas with an abundance of uranium mineralization, and where uranium concentrations have been detected in water-supply wells above the MCL, include Kern County, San Bernardino County, and Riverside County.

Some people who drink water containing Uranium in excess of the MCL over many years may have kidney problems or increased risk of getting cancer. Some people who drink water containing radium 226 or 228 in excess of MCL over many years may have increased risk of getting cancer.

**SUMMARY INFORMATION FOR CONTAMINANTS**

**Nitrate Information:**

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**Coliform Bacteria:**

***Coliforms*** are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

**Radionuclide in Groundwater:**

There were no detections of concentrations above the Primary MCL in 2021.

Certain minerals are Radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk for cancer Naturally occurring uranium has been detected in groundwater throughout many areas of California, particularly in areas that have deep bedrock wells where the uranium leaches into groundwater from natural mineral deposits within the bedrock. Areas with an abundance of uranium mineralization, and where uranium concentrations have been detected in water-supply wells above the MCL, include Kern County, San Bernardino County, and Riverside County.

Some people who drink water containing Uranium in excess of the MCL over many years may develop kidney problems or an increased chance of getting cancer. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have increased risk for cancer.

**Public Safety Power Shut-off (PSPS)**

During 2022, there were no Public Safety Power Shut-off (PSPS), which were implemented by Pacific Gas & Electric and Southern California Edison.